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TRACING A TRANSITION: THE POLITICAL ECONOMY OF BRONZE AND IRON AGE MONGOLIA

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ABSTRACT

It would seem that pastoral nomads have ceaselessly occupied a distinct space in our world, imaginations, and academic discourse, often revolving around the concept of periphery. Pastoral nomads inhabit interstitial spaces, adjacent and secondary to urban centers and the refinement of civilization. Further, pastoral nomads are caught in popular imaginations as simple, barbarous, warlike, and constantly peripatetic—characteristics perceived to be antithetical to sedentary agriculturalists.

These essentializations of pastoral nomadism have had real consequences in academic scholarship, and it is here this dissertation makes its intervention. Accordingly, early North American and Soviet intellectual trajectories in archaeology and the social sciences led scholars to have a predisposition to burial excavation and seriation, solidify false connections between subsistence and political forms, and to focus on the pastoral nomad's connection with urban centers. In the examination of political economic shifts in prehistoric Late Bronze to Late Iron Age Mongolia (ca. 1200 BCE-100 CE), I place nomads at the forefront of inquiry looking to detail internal dynamics and mechanisms of social change at work over time. I ask: How did the adoption of pastoralism alter economic practices on the landscape, and what were the rhythms? How did shifts in economic life change political structures and the social processes used to (re)make those relationships? In short, I advocate for the analyses of malleable and active social processes over concepts that employ static systems of change.

This study brings together the results of 76 km² of pedestrian survey and the recovery and recording of thousands of features and artifacts in Bayankhongor province, Mongolia. These data are scrutinized through an epistemological framework called occupational landscapes which finds its strength in breadth of focus and flexibility of scale. As such, the tripartite scheme of

occupational landscapes takes an ecological, vocational, and semiotic approach to artifacts and assemblages, utilizing scales of analysis ranging from a single chemical element to the regional spatial patterning of material culture.

In doing so, each aspect of the occupational landscape emphasized various social processes that encourage a reevaluation of pastoral nomadic communities themselves, and as members in wider social entanglements. Thus, this dissertation attempts to revise the way in which we investigate, discuss, and chronologically represent pastoral nomadic communities, refracting cultural change through active and agentive social processes. As such, the social processes that are explored in this study include: (im)mobility, place-making, flake and stone tool production, habitation patterning and pasture politics, semiotic usurpation of funerary rites and messaging, the production of ceramic and chains of craft-knowledge, skill or specialization, and the navigation of unsolidified extents of (de)centralized authority.

In contrast to a reliance on ideas of a "grand narrative," linear neoevolutionary progress, or burial forms as the preeminent marker for cultural change or replacement, I find that the shifts in political economy during the Mongolian Late Bronze and Late Iron Ages are subtle, yet intricate and vibrant. In pursuing a people-centered approach to prehistory, I argue that the first-half of the first millennium BCE in Bayankhongor Mongolia was a time fraught with uncertainty, experimentation, and fluidity—both economically and politically—and should not be continually described using linear temporalities of complexity or the diachronic presence or absence of particular burial forms.

Keywords: archaeology, Mongolia, prehistory, occupational landscapes, space and place, GIS, temporality, diachronic culture change, portable X-Ray Fluorescence, process

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CHAPTER 1: THE PROBLEM WITH PERIPHERIES

Nomads are no longer on the periphery.

At least they ought not to be.

It would seem that nomads have ceaselessly occupied a distinct space in our world, imaginations, and academic discourse, in some manner, closely revolving around the concept of periphery. Peripheral undertones that have essentialized nomadic populations express themselves in three general modes, and each further defines and compounds the nomad definitively as the "Other" (Cobb 2005; Trouillot 2003).

Initially, peripheries articulate with nomadic populations in a space that is absolute and geographic. Nomads often inhabit interstitial spaces throughout the world, areas often assumed to be infertile and inhospitable, even being called "submissive wastes" (Ford 2010: 5; Hole 1978: 130): the Sahara, deserts of the Middle East, the high elevations of the Tibetan plateau, or the hills of the Eurasian steppe. These *secondary* regions are counterpoints to centers of civilization. The Sahara can be juxtaposed to Egyptian kingdoms and the cosmopolitanism of the Mediterranean's southern coasts; the deserts of the Middle East surround the urban centers of Mesopotamia, Persia, and the Levant; and, large parts of Eurasia are framed through the lenses of Chinese dynasties. Nomadic space, then, is viewed as antithetical to civilization (Honeychurch and Markarewicz 2016: 342; Barfield 1993: 211), smooth and untouched spaces compared to the striated spaces of urbanism and civilized life (Deleuze and Guattari 1987).

Nomads also inhabit a conceptual space that is sedimented in popular imagination—one that equates nomads on the periphery as simple, egalitarian, constantly mobile, barbarous, and warlike. Two short quotations help corroborate this statement:

> [Their] soldier[s] are borne by the legs of their war-horses and possess the hearts of wild animals. They come and go like flocks of birds so it is difficult to catch and control them." (*Shiji* 108. 2861, quoted in Ford 2010).
>
> Were they merely pillagers and killers? […] [They] killed ruthlessly—opposing armies as well as hapless noncombatants. [It was one] of the most war torn [periods] in history, probably exceeded in cruelty only by our own" (National Geographic 2016).

The first quotation comes from the 2nd century BCE Chinese historian Sima Qian's *Shiji*—a tome documenting two millennia of Chinese history. When he describes the Xiongnu peoples of Mongolia and northern China (ca. 209 BCE- 93 CE), he clearly emphasizes mounted warfare and mobility, reminding the reader that these people were barely considered human, guided by the "hearts of wild animals." The second passage, from *National Geographic*, refers to the Mongol Empire (ca. 13th century CE), clearly reflecting their standing in popular imagination as peripheral to morality and the refinement of "true civilization." Although these quotations were pronounced over two-thousand years apart, together they demonstrate how nomadic populations have been minimized to a few shocking qualities. Our history books, *National Geographic* articles, History Channel specials, the video-short "Genghis Khan Conquers the Moon," (Yang 2015) and even Netflix's *Marco Polo* series have fallen victim to these generalizations—perhaps unsurprisingly, because they capture our attention through phantasmagoria as a "bizarre or fantastic combination, collection, or assemblage" (Merriam-Webster). Yet, there is often no mention of how Chinggis Khan and his successors helped lift the West out of the Dark Ages through religious tolerance, scientific enterprise, and exchange allowed by *Pax Mongolica* (Atwood 2004a; Weatherford 2004; Allsen 2001, 1997, 1987). Unfortunately, this has very real consequences for academic scholarship as well (Hanks 2010).

Early ethnographic and archaeological investigations into nomadic societies often positioned nomads as secondary or peripheral (i.e. Zeder 2003, 1994; Khazanov 1994; Barfield 1993, 1981; Stein 1987; Hole 1978; Postgate 1975; Evans-Pritchard 1940), focusing on how

mobile populations interacted with, supplied, or raided and disturbed a tranquil urban center. However, more recent scholarship has attempted to confront and challenge the association of nomad and periphery. Instead these seemingly inhospitable and secondary places are now found to be central to social, political, and economic histories of the world (Spengler et al. 2016; Brosseder and Miller 2011; Ryobogina and Ivanov 2011; Sneath and Kaplonski 2010; Hanks 2010; Bemmann et al. 2009; Anthony 2007; Kohl 2007; Weatherford 2004; Di Cosmo 2002; Harris 1996). Current scholarship attempts to reposition the nomad as entangled with, not separate from, urban centers of civilization, ultimately allowing for the investigation of nomadic societies on their own terms, often concentrating on internal social dynamics (i.e. Burentogtokh 2017; Gardner 2016; Makarewicz 2017, 2014; Machicek 2012a, 2012b; Houle 2010, 2009; Jacobson-Tepfer 2010, 2009; Peterson 2007; Popova 2009, 2006). Studies have revealed nomads and their environments play an integral role in the spread of agricultural practices and specific strains of cereals, language, ideology, and technology (i.e. Zhou 2020; Hermes et al. 2019; MacFarland 2017; Frachetti, 2012, 2008; Chang 2012, et al. 2003; Frachetti et al. 2010; Spengler et al. 2017, 2013a, 2013b). Mountain corridors, rolling hills, deserts, and steppe roads— not Silk Roads (Christian 2000)—are part of wider social histories that are only now coming to light. All told, this intellectual trajectory has foregrounded the nuance and diversity of nomadic societies.

It is within this contemporary movement, and the problem of challenging peripheral undertones, that I position this dissertation. This study will investigate the political economic transition from the Late Bronze Age to the Late Iron Age in Mongolia, a country that has largely been left out of a discussion of East Asian archaeology until very recently (Honeychurch 2015). However, the intellectual trajectories of archaeological theory and practice in Mongolia and the wider steppe, I argue, have sometimes recurrently succumbed to the peripheral connotations

constraining nomadic studies and our perception of them. An attempt to move beyond these undertones, what I call the "vestiges of evolution," I ask: How did the adoption of pastoralism spatially alter economic practices upon the landscape? What were the rhythms of pastoral nomadism over time? Concurrently, how did shifts in economic life reinforce or transform the political structures organizing Late Bronze and Iron Age (ca. 1200 BCE- 100 CE) societies? What were the (new) organizational forms to appear, and what processes did the population employ in the (re)making of power relations?

These guiding research questions make certain that this study is sensitive to chronological detail and the dynamism of communities and their populace. As such, in the following manuscript, I will use the term "pastoral nomad" as opposed to the bare moniker of "nomad." This precision is significant as it places restraint on the foregrounding of essentialized characteristics:

> Pastoralism is a lifeway and ideology having many expressions but principally derived from the cultural knowledge needed to sustain relationship of co-community with animals by way of relationships within and among human groups. Nomadism joins the repertoire of pastoralism when the capacity for residential mobility is critical to mediating a regime of human-animal and human-human relationships over time (Honeychurch 2015: 57).

The nuances here are clear and important: the capacity to move as nomad does not mean that it is always practices in herding societies (Honeychurch and Markarowicz 2016: 347; Kelly 1992); and, further, pastoral nomadism can have many economic and political expressions (Atwood 2015). It is rarely ever sustained solely by human-animal relationships and a constant search for pasture (Honeychurch 2015: 57; Khazanov 1994). As such, political economy here will not focus on national or macro-scale supply-and-distribution relationships, but instead takes a broad view of political economy as the production, exchange, and consumption of foodstuffs, fodder, and objects within small household- (*oikonomia*) or valley-wide scales.

With these key definitions in place, Chapter 2 will outline the theoretical and methodological shortcomings that continue to perpetuate a biased, stale, and often chronologically vague account of the "nomad." In this chapter, I argue that both North American and Soviet intellectual genealogies within the social sciences skewed the approach archaeologists take to investigate pastoral nomads. In North America, the culture-historical paradigm set forth rigid applications of units, typologies, and horizons which arranged faceless cultures on maps and time-space grids, but overlooked the internal workings of social life which compounded the peripheral undertones introduced above. The subsequent movements of the "New Archaeology" and the resurgence of neovolutionary thought in the 1960s and 70s also had an objectionable effect on academic discourse. The focus on regional systems and extra-somatic adaptation to the environment of the New Archaeology misplaced the mechanisms shaping cultural formation and change: system was prioritized over agency, strategy, decision making, and the production of community or even conflict in the social sphere. Neoevolutionary frameworks argued that advancements in energy-capture or technology were hallmarks of an advancing society, but this created a hierarchical taxonomy of societies equated with static political and economic forms.

For the Soviets, Marxist theory *was* history, and history *was* science. Thus, archaeological features and artifacts were often analyzed superficially in order to fit within the social sequence, as unvarying cultural groups were slotted according to the degree of their assumed simplicity (and, by extension, the alienation of the laborer within a given mode of production). Moreover, the narrow theoretical agenda was mirrored by a reduced methodological focus on burial excavation and the recovery of extraordinary funerary goods. Burial rites became synonymous with race or culture, as a "mirror of social organization [and] the evolution of ancient civilizations" (Williams 2003: 4). In Mongolia, this had the ultimate effect of equating

eras and culture to burial forms which I would argue, belies the detail that can be gleaned with a multi-faceted approach to archaeological materials.

Together, early American and Soviet archaeology and social thought solidified a peripheral space for pastoral nomads, unwittingly perpetuating the vestiges of social evolution that more contemporary scholars seek to avoid (for critiques of social evolution, see Pauketat 2007; Yoffee 2005; McIntosh 1999). However, even the more contemporary replacement concepts, like community and complexity, often fall short or are inherently imbued with the residues of social evolution. The concept of community, for example, "is far from neutral, as it carries a connotation of harmony and togetherness" reminiscent of the simple and egalitarian assumptions correlated with pastoral nomads (Fuller 2007). Likewise, complexity inherently assumes a linear ascension of social refinement, even though it avoids the thorny issue of evolution (McIntosh 1999; Nelson 1995).

The main thrust of Chapter 2 describes how vestiges of evolution need to be addressed and bypassed, and to do so, I highlight the way these vestiges are perpetuated as I outline the archaeological context of Mongolia. I try to show that the confluence of peripheral undertones in academic discourse overdetermined a reliance on burials, socio-political forms like chiefdoms, and linear ideas of cultural and social evolution as analytics in Mongolia and the wider steppe. As a way to introduce a more dynamic and lively picture of ancient populations, especially pastoral nomads, I then propose a multi-faceted and scalar approach to archaeological datasets, named "occupational landscapes." I continue to sketch the epistemological framework of occupational landscapes, itemizing and describing each facet of the tripartite tactic: Ecological, Vocational, and Semiotic. Ecological facets focus on the human-environment and human-animal relationships; the Vocational aspect emphasizes people, their work, and agency as the fulcrum of

culture change and continuity; and finally, the Semiotic element encompasses how objects and ideas can operate to convey messages of social or cosmological milieus, norms, or oppositions.

The epistemological pieces of the occupational landscape are not mutually exclusive, but bleed into one another allowing archaeologist to holistically reassemble a society. Moreover, the datasets that comprise each facet can be manipulated at various scales, lending a great deal of clarity in chronological resolution and social processes at work in culture change. Honeychurch and Markarowicz (2016) reflect on the importance of scalar flexibility in the analyses of pastoral nomads:

> The recent abundance and inherent scalar flexibility of archaeological data sets are transforming the role of archaeology in pastoral studies from one of somewhat marginal interest among anthropologists to what may be the new forefront in pastoral nomadic theory, with important comparative potential for sociocultural research generally. Given the relatively sparse remains of mobile groups and the variability of pastoral nomadic social formations, archaeologists must rely on multiscalar perspectives. These often combine data sets derived from small-scale activities associated with household and campsites with those generated by pastoralist actions operating at larger subregional and regional scales. (342)

Scalar malleability is combined with an "off-site" approach to archaeological survey, recovery, and analysis of material culture. Collectively, scale and off-site methodological tactics allow for the singular artifact to be the key unit of analyses, but they can also be combined in multiple ways to create assemblages that may better represent social life in antiquity. In this study, the unit of analyses ranges from minuscule chemical elements to large collections of materials that can be linked and articulated with household, valley, and regional magnitudes. I contend that this approach lessens a reliance on burial forms and excavation in the analysis of pastoral nomads, while also moving the perspective from closed homeostatic cultural units and systems, to a perspective that demands the acknowledgement and extraction of active social processes at work—from individual agency to macro-scale networks and organization. Finally, I present a model of socio-political structure from Claudia Chang (2012, et al. 2003) and David Sneath

(2011; 2007). Chang and Sneath put forth a model of social structure based on a dyadic aristocratic-commoner organization, arguing that popularized forms of political structure—namely kinship and chiefdoms—are fictions. What is more, the aristocratic-commoner model allows for hierarchies and heterarchical alternatives, a mixture that I contend fits well with a refashioned view of pastoral nomadic communities.

Chapter 3 introduces the study region in northern Bayankhongor, Mongolia, which is a large *aimag* (province) in the south-central portion of the country. The chapter follows a scalar course, first discussing the two large regional study areas—Shatar Chuluu and Bulgan Uul—before further breaking them down into more manageable divisions. The regions of Shatar Chuluu and Bulgan Uul are located nearly 60 km apart from one another and constitute different ecological zones. Shatar Chuluu is in the steppe proper, at the foothills of the Khangai Mountains, while the region of Bulgan Uul is more arid, flat, and sandy, constituting a desert-steppe environment. Each regional zone is then further broken down into smaller divisions. Locus A and B, representative of valley-scale survey blocks, are in the region of Shatar Chuluu. Accordingly, Locus C and D are the smaller components of Bulgan Uul. These Loci are then furthered apportioned into a collection of individual features which are accompanied by more specific and detailed environmental descriptions, as well maps that plot the local topography and specific archaeological materials that were recovered and recorded at each location. The chapter also summarizes the archaeological methods used in the study: pedestrian survey, excavation, subsurface testing, and electromagnetic prospection.

Chapters 4, 5, and 6 plot congruently onto the facets of the occupational landscape. The focus of Chapter 4 is on the ecological, or human-environment-animal relationship, that is discerned diachronically by the spatial analysis of lithic and ceramic scatters. These lithic and

ceramic distributions are analyzed as singular features as well as combined assemblages, using scalar mutability to considerable benefit. Spatial statistics and aggregates of materials lead me to argue that the Early and Middle Iron Ages (ca. 1000-500 BCE) in Bayankhongor, Mongolia were fraught with uncertainty and experimentation in regards to the adoption of pastoral nomadism and the creation of political authority. I contend that the population was likely familiarizing themselves with the novel subsistence strategy, using admixtures of mobility and sedentary tacks, as well as likely practicing a breadth of subsistence sources beyond herd animals during the first-half of the first millennium BCE. This is evidenced by a reticent and slow diffusion of ceramic and lithic scatters in the Early Iron Age, indices of habitation areas in the initial centuries of the first millennium, with a peak in distributional breath in the middle of the millennium. By the Late Iron Age, the habitation patterns revert to a clustered pattern, demonstrating an increase in intensive land-use and regulatory movements when compared with the Early- to-Mid Iron Age.

Chapter 5 deals with the vocational aspect of occupational landscapes, specifically, potters and their wares. I utilize the large database of ceramic sherds collected during pedestrian survey to assess the stability of technological procedures, chains of knowledge transmission, and landscape-use. In particular, the ceramic attributes central to interpretation are vessel thickness, the color of the interior, exterior, and paste. Through these attributes I find that the technique and procedures of pottery production were interrupted—likely connected to ecological experimentation and the attempt to grapple with pastoralism as part of a new subsistence strategy while populations were articulating differently with the landscape. I argue this may have had adverse effects on the transmission of specialized knowledge within the trade, and may also

intimate that political structures and organization were also susceptible to oscillation and reformation throughout the Early and Mid-Iron Ages.

In addition to attribute analysis, I also investigate the chemical composition of a selection of forty-five sherds using portable X-Ray Fluorescence (pXRF) completed at the Field Museum in Chicago, Illinois. Chemical clustering and dendrogram families strongly suggest that Late Bronze and Early Iron Age clay sources were similar in location, but during the Mid- to Late Iron Age, chemical compositions show that potters started to use clay procurement sites that were more spread-out on the landscape. In summary, the diachronic view of pottery suggests that its production was local, decentralized, and somewhat shoddy during the Late Bronze and Early Iron Ages. However, attributes and chemical compositions indicate an expansion of clay sources and the possibility of potters becoming specialists or more regionally-centralized in terms of production structures when moving through time.

In Chapter 6, I investigate the role of semiotics and how stone features, objects, and ritual are combined to facilitate the communication of legible messages of social and cosmological order. As such, I first spatially analyze burial patterns at a regional level before turning to micro-scale analyses that encompass singular funerary features and ritual performance. Although I argue that burial excavation is often overdetermined on the steppe, the analysis of funerary rites in this study link well to the other facets of the occupational landscape. Accordingly, the investigation of two slab burials from the Early Iron Age—their specific architectural elements, deposited ceramic, sacrificial animals, and human skeletal material—provide a more nuanced view of culture change in south-central Mongolia. In contrast to linear ideas of social evolution, in which Mongolian burial forms from the Late Bronze to Late Iron Age are charted onto, I again find that Early Iron Age life was uncertain and is likely not characterized by the clear emergence

of strict social stratifications and hierarchies maintained by somnolent scholarship and the vestiges of evolution.

In conclusion, this dissertation places pastoral nomads at center stage. The study adds detail and chronological clarity to Mongolian prehistory, as well as having reverberating effects on the epistemological stance archaeologists take when building theoretical frameworks and methodological counterparts. Roger Cribb (1991:1) eloquently encapsulates my argument, while also moving nomads from the periphery to the heart of social science inquiry as a discipline that seeks to celebrate the intricacies, irregularities, and subtleties of human life:

> If […] we intend bringing nomads to boot, then we would do well to concentrate not on the obvious manifestations of nomadic material culture - the tombs, the weapons, the works of art - but instead attempt to understand nomadism as a phenomenon, as a system with its own underlying dynamics and its correlates in space and time.

CHAPTER 2: VESTIGES OF EVOLUTION: FROM STATIC SYSTEMS TO SOCIAL PROCESS

The following chapter will delineate the theoretical and archaeological foundations for this dissertation. I ultimately argue that evolutionary models of progress obscure the dynamics of social life, and, while critiques of progressive social types are present, thorough, and convincing (see for example, Pauketat 2007; Yoffee 2005; McIntosh 1999, Clastre 1987), the assumptions behind the paradigm continue to implicitly seep into our analyses of steppe archaeology and pastoral nomadic societies. Despite our best efforts as archaeologists to avoid the pitfalls of social typologies, the vestiges of evolutionary paradigms remain today, precluding a holistic investigation of the past; social stages label what people *are*, not what they *do* (Yoffee 2005: 20; Abrams 1988). It is in this vein that my dissertation will champion process over system when analyzing economic shifts and the creation of authority in prehistoric Mongolia during the Late Bronze and Iron Ages. In order to bring these residues of evolutionary thought to the fore, and by extension, move beyond them, this chapter will focus on a series of conventions and analytics that continue to hinder our investigation of ancient communities, especially on the steppe.

As such, I will first demonstrate how the horizon concept in culture-history and the unclear and misguided definitions of "process" found within the New Archaeology can confuse the mechanisms shaping social formations; secondly, I will present the questionable coupling of social forms with particular economic strategies and political structures associated with a resurgence of neoevolutionary thought; third, the analytics of "history" and "culture" in Soviet archaeology are shown to trap interpretations into static categories of social progress; finally, I will argue that the vestiges of evolutionary thought have corrupted our methodological orientations, unproblematically determining which sites (and what kind) are deemed important.

Following this exploration into the 'leftovers' of evolutionary thought, I will outline the archaeological background of Mongolia, emphasizing how these issues orient our understanding of Mongolia and the wider steppe and how they guide the way we discuss and investigate the region and its people.

As an alternative that hopefully bypasses these matters to clear a path for a more dynamic concept, I hope to reframe the question of political economy through a study of what I call occupational landscapes. Occupational landscape is a multi-faceted and scalar approach to archaeological analysis refracted through labor and work-related practices. This new theoretical foundation prioritizes agency and strategy, emphasizing the fluidity and ambivalence so common in human communities. It is expected that this new orientation will assist in de-essentializing (Smith 2004) the passive monolithic individual subject, as well as pastoral nomadism as an economic strategy and associated political form in a linear succession of history.

Taking a cue from Ingold's (1993) taskscape and phenomenological dwelling, the occupational landscape is positioned as a constellation of *work* or *labor*. The themes of work and labor are operationalized in a tripartite manner: ecological, vocational, and semiotic. The ecological component situates work and labor within human-environment and human-animal relationships, concentrating on how these interactions are maintained and refined. The landscape is also a space of actual vocation— one of craftsmen, herders, metallurgists, religious leaders, etc., each of whom act within a larger network of socio-political norms and parameters (á la Weber 2013, 1958; Michalowski 1991). Yet, here, agentive action is the fulcrum for potential cultural change, whether it be social, political, or economic; one may work within established norms (Goffman 1983; Bourdieu 1977), or one may choose to challenge those structures as a mechanism for the negotiation of certain lifeways. Semiotics comprise the final element of the

occupational landscape's triad. Landscape itself is an agentive concept that acts upon inhabitants (Ashmore and Knapp 1999; Tilley 1994). It can communicate information that legibly situate ideological, economic, and socio-political ontologies and/or change (Lynch 1960; Lefebvre 1991; Harvey 1990). In this sense, the landscape is at once both shaped and shaping as a space for the exploitation of nature as well as a political arena for the maintenance or reworking of authority. Moreover, life cycles of objects and symbols (Appadurai 1986), and their power to act (Smith 2015; Baldwin 2009; Latour 2005; Meskell 2005; Dietler 1996; Thomas 1991) and move (Feldman 2006; Piot 1991; McCormick Adams 1974) throughout vocational and ecological dimensions provides an additional avenue of investigation into the dynamics of change over time.

To be clear, however, the ecological, vocational, and semiotic components of the occupational landscape are not mutually exclusive. Each facet is intimately connected to the other, guiding the manner in which social expressions are created, viewed, and obeyed (Smith 2015, 2003). It is through these intricate and composite parameters that individual and group actors make decisions about their communities that can have short and long-term impacts on and from the landscape itself. These affects can be material or immaterial, conspicuous or unobtrusive, ranging from ephemeral artifact deposits at a campsite, the construction or desecration of monumental or ritual features, or natural places imbued with cosmological value. I argue that these manifestations of specific decisions and tactics of the inhabitants, *processes* of social construction and their reification, should be at the heart of archaeological theory and interpretation.

Therefore, I look to detailed processes and rhythms that empirically demonstrate the nature of political economic change in Late Bronze and Iron Age Mongolia. Throughout the

dissertation, I follow a hypothesis from Wright (2017: 553), who contends that Bronze and Early Iron Age peoples' grasp on pastoral practices was relatively weak, "and thus [they] would have a great incentive to explore new and stable systems of economic security, mobility and political organization" in an otherwise uncertain period. Likewise, I argue that the first-half of the first millennium BCE (ca. Early and Middle Iron Ages) in Mongolia was fraught with uncertainty and experimentation, leading to revolutions of ecological trials and heterarchical negotiations for authority. Contrary to neoevolutionary schemas, or current claims that characterized these periods by clear hegemonic structures populated atop by an immigrating or locally emerging elite (i.e. Shelach 2009; Tsybiktarov 2003, 1995; Davis-Kimball et al. 1995, Volkov 1995), my studies of landscape, ceramic manufacture, and ritual performance clearly show that the transition into a pastorally-focused subsistence strategy was not without issue. Instead, what appears to be a somewhat slow and reticent fission and distribution of habitation sites throughout the landscape entering into a peak during Middle Iron Age, a focus upon a select few raw clay sources until late into the Iron Age, and a lack of efficacy in the immediate performance and future reverberations of funerary rites in the Early Iron Age, all highlight a tense period of adjustment during this time. Within this conclusion driven by the occupational landscape template, I hope to resituate the epistemological foundations of archaeological theory, moving away from the vestiges of evolutionary thought still extant in our conceptualizations of the past to a position that seeks to inform us about the vibrancy, diversity, and sometimes untidiness (Bender 2001) of social life.

2.1 Perspectives of Social Change

Anthropologists and archaeologists are largely borrowers of theoretical frameworks (Adams and Adams 1991: xv; Yoffee 2005: 181-2; Pauketat 2007: 1-5). Though the disciplines of anthropology and archaeology have their individual formative genealogies aligned with colonial enterprise (Cobb 2005; Trouillot 2003) and antiquarian curio-cabinets (Schnapp 1997), the sources for our social theory are often not of our own creation. Theory is often brought in from other disciplines of the social or hard sciences, effectively allowing paradigmatic social categories to be easily taken up by archaeologists through ready-made ethnographic and ethnological analogies, or based upon checklists of characteristics from other regions like the Near East (Yoffee 2005: 269).

The tradition of viewing societies over time as a sequence of stages has become implicitly embedded in the way we think about progress due to a long history in social thought: developmental dyads propagated by Hobbes and Rousseau, Marx's linear advancement of dialectical property relations, or Lubbock's (1865) and Morgan's (1877) trajectory of savagery-barbarism-civilization are only some of the early examples which have encouraged the creation and use of static social types (see McIntosh 1999 for a full discussion). While I do not wish to unproblematically crystallize hundreds of years of scholarship, we as archaeologists (and laymen) are now implicitly accustomed to an extensive reliance on classifications, types, and categories in attempt to universalize the diversity of communities across the globe. One must simply ask a seminar of undergraduate students to ruminate on the concept of progress: without fail, students suggest more sophisticated technology (weapons, the internet), markets and food production (surplus, agriculture, leisure time, laissez-faire economic structures), or hierarchical and bureaucratic (kings, presidents, codified law) structures as hallmark characteristics of an

advanced society. The next section will discuss how these ideas were formed and continue to linger discreetly within more contemporary archaeological and socio-cultural movements.

2.2. Categories of Culture, System, and Social Evolution

North American and Russian endeavors into formative archaeological theory reveal the close connections archaeology has with taxonomy and hierarchical stages for explanation and description. In their seminal work *Method and Theory in American Archaeology* (1958), Willey and Phillips outlined a new directive for archaeology. Their paradigm of culture-historical integration relied on organizing data in a certain way:

> […] Typology, taxonomy, [the] formulation of archaeological 'units," [and] investigation of their relationships in the contexts of function and natural environment and determination of their internal dimensions and external relationships in space and time (Ibid: 5).

This directive applied observed groupings of similar artifacts and directly linked them with maximal units of "culture types" that could be plotted onto maps to demonstrate their presence or absence in "time-space grids" or aesthetic horizons—driven by migration, diffusion, or conquest (Flannery 1967: 47). However, the explanatory 'processes' of migration, diffusion, or conquest that stimulated these grids, horizons, and cultural types were often mechanically applied, with little focus on internal dynamics of change (Trigger 1989: 192). Although culture-history's time-space grids and horizons were intended to uncover the "Indian behind the artifact," they instead created a fixed and motionless interpretation of human populations, their potential agency, and typological schemes of social progress under the rubric of cultural units (Macfarland 2017; Murdock 1956: 185).

Despite the moniker of "Processual," the New Archaeology of the 1960s and 70s also fell short in explanations of cultural change through time. With Binford (1962, 1964) leading the

charge towards a truer science of archaeology as anthropology, the New Archaeology's focus on extra-somatic systems still could not apprehend the subtleties of human behavior. Instead, the paradigm inferred adaptation to environmental conditions into regional or macro-systems of socio-political structure, political economies, and central-place models. But in focusing on regional or macro-systems of socio-political structure, political economics, and central-place models, the internal logics of cultural formation where humans were not solely reactive (Conkey and Spector 1984; Yoffee 2005: 157), were lost. Flannery (1967) writes that "the process approach results in moving 'decisions' about cultural behavior even farther away from the individual" where systems "automatically set up the limited range of possible moves it can make" at a future historical juncture (106). It is this reliance on systems of adaptation within strict environmental limits that helped to solidify a link between economic subsistence strategies and a specific community's potential for maximal advancement—hunter-gatherers, pastoralists, or agricultural populations, for example, could only adapt in certain ways which in turn regulated any latent development or progress.

Nearly contemporaneous with these sealed, stagnant, and impotent views of culture and their components was a resurgence of a neoevolutionary taxonomy in socio-cultural theory. This framework employed ideas of closed cultural units and systems in similar ways to that of culture-history and the New Archaeology, but with the additional feature of hierarchical seriation. Neoevolution "left no room for the idea that cultural change occurred because gifted individuals used their intelligence and leisure time to devise ways […] to improve the quality of human life" (Trigger 1989: 290). Instead, ethnologists like Leslie White (1959) relied heavily on the hard sciences, framing their concepts alongside Darwinian evolution, ecology, thermodynamics, and

photosynthesis. However, these ideas catalyzed narrow views of cultural progress and the agentive capabilities of individuals, groups, and economic strategies. White writes,

> Animal husbandry and agriculture are alike, therefore, in being means of extending control over the forces of nature and advancing culture as a consequence. But these arts are not equal in the potential capacities for culture building; agriculture has a much greater capacity for culture building than has animal husbandry. The difference in their respective capacities rests upon a simple zoological fact: herds and flocks must feed upon plants; cultivated plants harness solar energy directly. A pastoral system for all its control over animals still rests upon a wild-food basis in the last analysis: the plants upon which the herds or flocks feed. The growth and abundance of these plants lie outside cultural control. If pasturage fails, the herds diminish or die. Control over forces of nature is greater and more immediate in agriculture. (1959: 48)

By placing energy and ecology at the forefront of interpretation, economic approaches became hierarchical, from the simplest hunting and gathering strategy to slightly more complicated pastoralism, and ending with "complex" agriculture. This cemented a dichotomy between the "steppe and the sown" (Peake and Fleur 1928) in regards to potential capacities of the group in question, but the work of Sahlins (1963, 1960) and Service (1962) served as the final act of conflation—one between economic ontologies and political forms.

Reacting against the relativism of Boas (Yoffee 2005), both Sahlins and Service championed a mediated stance that included "specific and general evolution," White's thermodynamic model mixed with "Cultural Dominance," and stages comprised of seriated forms labeled band-tribe-chiefdom-state. The ultimate effect would be the conflation of political forms with subsistence strategies and technology:

> On the primitive level, the unsegmented (except for families) and chiefless bands are least advanced—and characteristically preagricultural. More highly developed are agricultural and pastoral tribes segmented into clans, lineages, and the like, although lacking strong chiefs. Higher than such egalitarian tribes, and based on greater productivity, are chiefdoms with internal status differentiation and developed chieftainship. Similarly, within the level of civilization we can distinguish the archaic form—characteristically ethnically diverse and lacking firm integration of the rural, peasant sector—from the more highly developed, more territorially and culturally integrated nation state, with its industrial technology. (Sahlins and Service 1960: 37)

Academic circles willingly accepted the band-tribe-chiefdom-state evolutionary sequence, but their use by archaeologists started to become more and more unmanageable as, for example,

characteristics of chiefdoms were numerous and ever-changing even into the 1990s (Yoffee 2005: 23). This issue was only compounded in studies of the steppe, and will be highlighted in the following section.

In addition to American theoretical pursuits in the social sciences, Russian theoretical agendas of the early to mid-20th century also had lasting impacts on concepts of progress due to historical materialism entering archaeological discourse in the 1920s. Although I do not wish to conflate Soviet scientific enterprise and Marxism, the trajectories were certainly interrelated. For example, arguably one of the most famous scholars in the field of archaeology, V. Gordon Childe (1936, 1946, 1950), was heavily influenced by Marx's writings late in his career. While Western audiences often ignored or had insufficient access to Soviet archaeological scholarship, Childe's writings allowed for their ideas to be adopted into mainstream academic discourse (Bulkin et al. 1982: 272). After Childe turned away from culture-history, he focused on periods of "revolution" (Neolithic and Urban) where productive forces and technology were the characteristics of the taxonomy and segregated higher forms of sociality from lower ones (Trigger 1989: 253). Childe's interests in the implementation of evolutionary models, then, increased along with his focus on the association of base-superstructure relationships that patterned into specific, but sequential, modes of production; he had "no qualms about pronouncing modern civilization to be superior to all preceding ones" in the ordering and direction of history (Ibid: 262; Trigger 1993: 168).

In general, the analytic of "history" is central to the Russian social sciences (Bulkin et al. 1982: 287). History *is* science, gospel for the Russian academy (Trigger 1993: 165). Yet this focus innately leads to a degree of historical determinism. Following Marx's social stages leading to the culmination of Communism, a similar "Theory of Stages" or "Japhetic theory" set

forth by linguist Nikolai Marr in the early 20th century claimed to explain all socio-cultural and linguistic changes as "revolutions" of productive forces (Bulkin et al. 1982: 275), where "circumscribed societies passed through explicit historical stages of economic development" (Frachetti 2011: 197). Tailing this foundation, the concepts of archaeological cultures (*kul'tury*), ethnic community (*etnos*), nation, and tribe were inserted into Russian academic discourse that propagated a coarse-grained view of archaeological "units" to populate these stages. Unfortunately, no consensus on operational definitions of those metrics ever came to the fore (Bromley and Kozlov 1989; Davis 1983). Instead, Soviet scholars were encouraged to leave behind the "creeping empiricism" of yesteryear and the West, labeling the old generation's conventional study of artifacts as "*goloye veschevedeniye*" (naked artifactology, or literally, naked-things knowledge) (Bulkin et al 1982: 274), for governing laws that would support a Marxist sequential development of history. To provide an example, Soviet archaeological thought linked the historic hordes of Mongol and Turkic groups to Asiatic and Feudal modes of production, ultimately typecasting Eurasian nomadic groups as being highly mobile, militaristic, and socio-economically less complex (Frachetti 2011: 199).

The inclusion of culture, ethnicity, nation, and tribe in the Russian archaeological lexicon ultimately caused additional confusion (and still does). Colleagues discuss chronological and cultural problems in seemingly "different theoretical languages" when trying to reconcile ideology with empiricism (Bromley and Kozlov 1989: 289) or when discussing cultural groupings. Phillip Kohl (2007) comments on the drawbacks of employing a stubborn and static view of culture and history:

> The documentation of greater cultural diversity has not led to a universally agreed-on consensus as to the numbers (and even names) of Bronze Age archaeological cultures on the Eurasian steppes; often the same "culture" is referred to by different names by different scholars, the end result being a bewilderingly complex proliferation of archaeological cultures […] The tendency to split or subdivide these remains into countless archaeological cultures is due not only to the

> recent tremendous accumulation of materials, but also to the interregional breakdown in communication and standardization associated with the dissolution of the Soviet Union. (16, 130)

Collectively, the intellectual frameworks discussed above essentially codified epistemological issues that are still being discussed in the discipline today with continued trepidation as archaeologists still see themselves on weak footing (Pauketat 2007: 1; Yoffee 2005: 182; see also, Taylor 2015; Sørenson 2015).

I suggest that this weak footing derives from the vestiges still implicitly operating within our archaeological projects. McIntosh (1999) and Stahl (1999) argue that the traditions of dichotomous and seriated social formulations linger as veiled "diachronic portmanteaus" (McIntosh 1999: 4) that are often lifted from regions like the Near East or Europe and dubiously applied elsewhere. McIntosh writes that these "functionally related complex of elements" includes agricultural intensification, surplus, increases in population density, heterogeneity, the development of private property, unequal access to resources, and centralized bureaucratic structures (Ibid.)—all well-known characteristics of the Neolithic and urban revolutions in the Near East. Unfortunately, these packages of interrelated elements—for example, agriculture and cities, are viewed as "primary markers of progress" and complexity, and thus garner more interest for research in lieu of others. In short, by stressing their importance to progress and complexity, these analytical assemblages determine which kinds of sites are worth excavating, and therefore "generate an archaeological record constructed in the image of evolution" (Stahl 1999: 40). An example from Cleary (2018) entitled "Social Complexity and Political Capitals in Ancient Eurasia" substantiates this claim. Cleary writes,

> [A lack of textual sources and urban centers] can cause problems for researchers employing neoevolutionary frameworks who use urbanism, large-scale agriculture and sedentism as markers of emerging social complexity. Within Inner Eurasia, these are not necessarily the best indicators of developing states of polities. However, monumental fortified enclosures and ceremonial sites constructed on large scales are a recurrent phenomenon that can be associated with more complex sociopolitical organization. (1)

Note the double-move by Cleary: there is a dismissal of neoevolution and the presence of urban centers as a characteristic of complexity, yet, fortified enclosures are the focus of the essay as being associated with more complex forms of socio-political organization. In this way, Cleary substitutes complexity for evolution, but still carries the metaphor of complexity as vertical hierarchy or population density in cities (McIntosh 1999: 8)—essentially importing some or all of the diachronic portmanteau. These implicit imports are by no means uncommon. Archaeologists, including myself, are now accustomed to employing "complexity" to describe societies with various social groups and degrees of centralization—as well as to simply "avoid the neoevolutionary question […]" all together (Yoffee 2005: 92). Yet, as Ben Nelson (1995) writes, "complexity" should be investigated through the identification of its "dimensions […] along which independent variation may occur within or between societies […] How were they complex?" (599). This dissertation attempts to do just that—locate and explain the dimensions and mechanisms present in Late Bronze and Iron Age Mongolia without the use of static models or conceptual conflations.

In response to the stubborn vestiges of neoevolution, a few highly-visible critiques were produced in recent years. Timothy Pauketat (2007) contends that the use of the chiefdom category in Mississippian literature veils the identities and motivations of actors, arguing that the famous mounds of Cahokia were instead built as a tactic for community strengthening and solidarity. Likewise, in *Myths of the Archaic State* (2005), Yoffee argues against neoevolution as a series of stages but acquiesces to allow for the idea and the term 'social evolution' to endure. In this indecisive stance, he states that types of societies are contentless, often because there are single and simple lines of evidence used to characterize them. Finally, Pierre Clastres' (1987) work in the rainforests of South America reveal alternative paths of social development

unhindered by types, evolution, or hegemonic power structures given *a priori* precedence via typologies; the Tupi-Guarani would actively encumber members' rise to a position of singular authority or excess, in effect admonishing the undeniability of linear social evolution and the production of hierarchies, effectively challenging our implicit portmanteaus. Clastres writes that ancient societies are too often "classed negatively" in terms of lack or inferiority, underpinning the arguments I make above. A full quotation is warranted:

> Primitive societies are societies without a State. This factual judgment, accurate in itself actually hides an opinion, a value judgment that immediately throws doubt on the possibility of constituting political anthropology as a strict science. What the statements says, in fact, is that primitive societies are missing something—the State— […]. Consequently those societies are incomplete, they are not quite true societies—they are not civilized--their existence continues to suffer the painful experience of a lack—the lack of the State—which, try as they may, they will never make up. Whether clearly stated or not, that is what comes through in the explorers' chronicles and the work of researchers alike: society is inconceivable without the state; the State is the destiny of every society. (189)

Although Clastres focuses on the State as a distinguishing 'lack' of ancient communities, congruent assumptions are made elsewhere with applications of bands, tribes, or chiefdoms, as well as the perceived shallow economic strategy of pastoral nomadism. Critiques like these have helped archaeologists move away from linear models of complexity to a focus on politics and economics as a process. But even more is at stake. These unencumbered approaches give meaning, content, and agency (Smith 2011) to epochs that are "faceless" descriptions of general trends. Therefore, the goal of this dissertation is to reinsert agency into the Bronze and Iron Ages of Mongolia, demonstrating peoples' choices and strategies in both everyday life and spectacular ritual. Only then can the Bronze-Iron Age actors of Mongolia be reclaimed "with reference to [the unwritten] histories of who did what, where, and how in the past" (Pauketat 2007: 15). To be clear, on the Eurasian steppe especially, the issue of classification and typology is both problematic and a source of rigorous debate for the reevaluation of theoretical models. Michael Frachetti writes that,

> By rehashing older debates such as culture-history versus middle-range analysis, relative versus absolute chronology, and positivist versus contextual archaeological approaches, today's epistemological confluence places new strains on the traditional archaeological paradigms used to explain prehistoric materials of societies across Eurasia. (2011: 206)

Political history should not be presumed. Instead, the problem of political economic organization must be posed as a question to be addressed through empirical evidence and multiple lines of data as I do in this study.

However, two important caveats must be asserted. Categories act as important heuristic devices for thinking about the development of an individual and their collective aggregate. Natural objects or cultural artifacts seem to only "find their meaning side by side with others" (Agamben 1995: 30, cited in Bouchard 2010) as archaeologists work within established methodologies, yet, categories can also become unproblematic specters that overlook the fluidity and ambiguity characteristic of human behavior. Creating and employing typologies and categories "can never be an automatic or objective process [because] they serve human purposes" of regularity and succession (Adams and Adams 1991: xvi). In short, types and categories are integral to knowledge and understanding, and comprise the keystones of philosophical thought. They also order disparate things and ideas so that their apprehension and descriptions can be made easier; in other words, social and evolutionary categories are simply convenient (Kluckhohn 1956: 134). Yet, the tacit application of categories in anthropology and archaeology still promote a stuttered and static view of cultures in the past, despite being paradoxically necessary to archaeological method and the empirical groupings of artifacts and features. What is more, this study will employ the use of temporal monikers like "Bronze," "Iron," or "prehistory" to refer to certain eras of the past. Unfortunately, some of these epochs are also firmly linked with burial types in Mongolia that overlap or are intertwined chronologically and geographically, such that their straightforward use can unintentionally

invoke evolutionary sentiments due to the vestiges still extant from American and Soviet archaeological genealogies. As such, in this study these designations are meant to be short-hand place-holders as scholars continue to refine the chronological resolution of the area. When appropriate, then, this dissertation will attempt to use absolute chronologies juxtaposed with these designations to provide greater clarity and precision to the archaeological record.

The following section will detail the archaeological background of Mongolia and neighboring regions. Throughout the discussion, I will attempt to highlight how the vestiges of neoevolutionary thought persist in analyses of steppe communities. I will then offer my own theoretical foundations for the present study which I situate within the concepts of process and occupational landscapes. I argue that the use of process and occupational landscapes, which encourages the diverse use of scale and multiple lines of evidence, allows for the analysis of intimate social traditions, norms, and decisions from household to regional levels. Along these lines, process becomes an active manifestation of both people and an ever-emerging landscape to form a reciprocal and symbiotic relationship; it privileges agency and directed engagement over passive systems; process also acknowledges the significance of ecological forces but maintains that human decision-making and the creation of cultural milieus are not completely bound by environment or a priori linkages with social typologies. In sum, I encourage a reorientation to the way archaeologists interpret the past, use material correlates, and compose seriated groupings of cultural "units." Following a discussion on occupational landscapes, I put forth a model of social organization proposed by Claudia Chang (2003) and David Sneath (2011, 2007) which captures the dynamism and flexibility of pastoral nomads often overlooked by the pursuit of nomothetic law.

2.3. Vestiges of Neoevolution in Mongolia and the Wider Steppe

The critiques leveled at neoevolutionary paradigms are by no means new. Thus, while neoevolutionary thought may seem passé, this paradigmatic portmanteau rests heavily in steppe archaeology (for further discussion see Chang 2012; Popova 2009; Parkinson 1999; Dyson-Hudson and Dyson-Hudson 1980), often revolving around Sahlins' and Service's band-tribe-chiefdom-state progression. With this, the chiefdom has likely been the most misused concept of the series, explained by numerous variations ranging from simple, complex, communal, corporate, network, apical, and constituent forms (Pauketat 2007: 13; Blanton et al. 1996; Barfield 1993). Unfortunately, static neoevolutionary political categories cannot account for empirical variability. Still, chiefdoms and kinship as political forms have been structurally linked to neoevolutionary schemas and prolonged by ethnographic analogy—especially on the steppe and within pastoralist contexts (e.g., Salzman 2004, 2000, 1967; Barfield 1993, 1981; Epimakhov 2009; Burnham 1979; Irons 1974). Their assumed mobility within a pastoral strategy and their anticipated egalitarian structures inherently discourage their potential progress. Bound by evolutionary assumptions, chiefdoms and kinship presume certain directions and mechanisms for political and economic history.

In this way, categories tend to be haphazardly reconfigured by academics as new data arise, such that, on the steppe, "super-complex chiefdoms" (Kradin 2011a, 2011b, 2002; Grinin 2011), or "quasi-states" (Khazanov 1994) enter the archaeological lexicon when describing mobile or pastorally reliant communities. Yet, the addition of new vocabulary does little to describe the processes by which actors created social change, but it does re-instill a perceived *lack* of components that steppe communities are supposedly missing. Qualifications notwithstanding, these models retain assumptions about statehood that are unproblematically

draped onto the steppe, privileging sedentary agriculture over mobile pastoralism and fixed political forms over processual ones.

2.4. Archaeological Context

Profiles of prehistoric steppe communities are becoming ever more complex as current archaeological research consistently demonstrates far-flung cultural connections transmitting language, commodities, technology, institutions, and ideologies over vast distances along the steppe corridor and beyond (MacFarland 2017; Hanks 2010 Kohl 2009, 2007; Chernykh 2008; Anthony 2007). But despite these macro-scale advances in understanding the Eurasian steppe zone overall, I maintain, along with others (Johannesson 2011: 3; Kovalev and Erdenebaatar 2009: 149; Houle 2009: 120), that the detailed arrangements of local economic practices and political patterns in Bronze-Iron Age Mongolia remain largely unclear. This, I argue, is principally linked to the vestiges of evolutionary paradigms and a reliance on burial forms for coarse chronological seriation. While reviewing the archaeological context of Mongolia and the wider region, this section will attempt to highlight some of these matters, the effects of which, still reverberate in our discourse today:

1) Russian scientific enterprise had a historical preoccupation with the investigation of conspicuous burials and a focus on more visible periods of Empire (Xiongnu, Turkic, Mongol).

2) The preoccupation with burial excavation led to the assignment of grave forms to seriated stages of evolution; thus Bronze Age khirigsuurs, Iron Age slab burials, and Late Iron Age Xiongnu cemeteries become ranked in stadial and macro-scale succession.

3) Scholars sometimes suggest these communities are lacking essential qualities that catalyze progress and complexity, leading to the idea that nomadic societies are ‘dependent’ on

the assistance of sedentary neighbors, like agricultural China, to develop or attain what they supposedly lack.

4) Viewing steppe history as congruent with seriated burial forms belies the diversity of steppe communities and their local political economic trajectories evident in recent research.

As a quick reference for this section, Table 2.1 shows the various chronologies and general characteristics found on the steppe as well as within Mongolia specifically. It should also be noted that additional archaeological background is provided in future chapters where necessary and appropriate.

Table 2.1. Relative and associated absolute chronologies and their characteristics. The most relevant to this dissertation are the Late Bronze, Iron, and Xiongnu eras.

Relative Chronology, Period	Regional and Mongolia-Specific Characteristics Relevant in this Study	Approximate Dates
Upper Paleolithic	Blade technology, peopling of northern Eurasia; Levallois reduction;	46,000-10,000 BCE
Mesolithic-Early Neolithic	Micro-blades, hunter-gatherer adaptations	10,000-6,000 BCE
Neolithic	Micro-blades, evidence of pit-houses and semi-sedentary and small-scale agricultural lifeways in Mongolia and elsewhere	6,000-3500 BCE
Bronze Age	Spread of animal husbandry, horse domestication, metallurgical traditions and chariots elsewhere on the steppe, towns implementation of far-reaching trade networks	3,500-1,200 BCE
Terminal Late Bronze Age	Unprecedented spark in monument building, khirigsuurs, deer stones, shape burials, mixed subsistence economies, developing pastoral practices, horse culture	1,200-1,000/800 BCE
Early Iron Age	Slab burials, khirigsuurs, mobile pastoralism, presumed emerging hierarchies	1000/800-500 BCE
Middle Iron Age	Slab burials, definitive horse riding	500-300 BCE
Late Iron Age/Xiongnu Empire	hierarchical structures, inter-regional trade, and definitive interaction with sedentary China and Central Asia, ring and elite terrace tombs	300 BCE- 100 AD

Until the dissolution of the command economy in the USSR, nearly all the archaeological research in Mongolia was completed under Soviet direction. However, academic curiosity

surrounding ancient steppe peoples started as early as the 18th century and further matured in the late 19th and early 20th centuries. From 1720-1727, a Russian-German expedition intended to map geographical and topographical features for the benefit of the pharmaceutical industry in Russia also systematically excavated a funerary mound in southern Russia, constituting the first, albeit informal, foray into archaeological research of steppe populations (Gryaznov 1969: 15; Bokovenko 2006: 860). Contemporaneous with this commencement was the establishment of the Russian Academy of Sciences in 1924, followed by an exponential increase in archaeological expeditions. V.V. Radlov documented historical sites in the Orkhon (the region of the capital for Xiongnu, Turk, and Uyghur empires) and Tuul River basins in 1891, followed by N.M Yadrintsev concentrating on Turkic rune inscriptions. Tal'ko-Gryntsevic identified and excavated Xiongnu cemeteries from 1896-1902. P.K. Kozlov, arguably the grandfather of Mongolian archaeological studies, also excavated massive 'elite' Xiongnu graves at Noyon Uul in the early 20s. American Roy Chapman Andrews' expeditions in the 1920s were an exception to the Soviet monopoly on archaeological studies. Andrews and his team collected over 200,000 stone tools and made significant cultural and paleontological discoveries at the site of Bayanzag in the southern Gobi (Johannesson 2011: 42 Burentogtokh 2017: 13-15; Tsevendorj et al. 2002). Many of the finds recovered from these projects were removed from Mongolia (Atwood 2004b: 19).

Following a brief post-war hiatus, archaeological studies in Mongolia resumed, now commonly with joint Soviet-Mongolian expeditions that would train Mongolian scholars. In 1949, A.P. Okladnikov led the Mongolian Joint Historical and Ethnographic Research Expedition which investigated Stone Age and Xiongnu sites, and marks the first project that would instruct Mongolian archaeologists. This trend of collaboration led to many seminal works

from Mongolian archaeologists. Studies on Mongolian urbanism and the Kitan period investigated by Kh. Perlee, and synthesized tomes on the Neolithic, Bronze, and Turk eras by D. Dorj, D. Nawaan, and Ser-Odjaw respectively, were critical additions to the corpus (Atwood 2004b: 19). A focus on the Xiongnu also continued with Ts. Dorjsuren excavating at the cemeteries of Gol Mod-1 and -2 in the 1950s. By the 1960s, researchers had started to conduct fieldwork in all of Mongolia's provinces (Burentogtokh 2017: 17). In the last quarter of the 20th century, collaborative international teams became more common. For example, J. Olsen, J. Brantingham, A.P. Okladnikov, and A.P. Derevianko investigated southern aimags for Paleolithic and Neolithic sites (see Derevianko 2011, 2008, 1996; Olsen 1998; Brantingham 2001, 2000). These sites included the Neolithic settlement of Zuukh, paleolithic Tsagaan and Chiken Agui caves, and Uran Khairkhan—all sites found in the province of Bayakhongor aimag (Günchinsüren 2009: 25), the same area of concentration in this dissertation.

Although only a brief description of early research into Mongolia, Soviet exploration was done on an enormous scale with specific agendas that had long-lasting reverberations in the discipline. For the most part, Soviet methodologies can be exemplified by vehicular reconnaissance and quick excavations of large and conspicuous monuments from a variety of periods, mostly concentrating on States and Empires (i.e., Xiongnu, Turk, Mongol) (Wright 2006). The intention was a one-time-effort to retrieve the most aesthetically impressive funerary objects, but no plan to return for follow-up investigations (Burentogtokh 2017; Wright 2006:50). The seemingly bottomless coffers of the Soviet government supported this peripatetic method of archaeological study. The Russian Academy of Sciences funded some 300-500 expeditions annually through the 1930s, and approximately 8000 scholarly works were published between 1918 and 1940 (Bulkin et al. 1982: 276). With this extensive infrastructure and commitment to

yearly investigations being united with a theory of evolutionary stages, the space for the interpretation of archaeological materials was increasingly restricted; burial types became static proxies for large and sweeping cultural units to be ordered in hierarchical taxonomies of social evolution. These conflations were "simply too integral a part of the classical Marxist doctrine to be painted out of the picture completely" (Davis 1983: 408).

Upper Paleolithic and Neolithic research in Mongolia and the wider steppe are often constituted by surface artifacts that are unassociated with cultural deposits, making chronological association difficult (Seitsonen et al. 2018; Rybin 2014; Zwyns et al. 2014). However, controlled excavations at two caves— Chiken Agui and Tsagaan Agui, which are two of the few stratified Paleo- Neolithic sites in Mongolia, have provided much needed vertical seriation and chronological control in detailing lifeways. Derevianko (2008) and colleagues (Gladyshev et al. 2010; Olsen 1997) argue that these caves in Bayankhongor province show occupation up to 30,000 ya with stratigraphic deposits through late historical periods. Stone tools from excavation units, surface finds, and palynological analyses from Tsagaan Agui suggest that Lower and Middle Paleolithic Mongolia was typified by a cooler and more humid environment dotted with arboreal clusters of birch, pine, and spruce (Derevianko et al. 2000). Levallois-Acheulean techniques were included in knapping reduction sequences to produce a toolkit that included blades, side and end-scrapers, points, and burins, which continue from the Upper Paleolithic and beyond. Researchers conclude that these caves may have been temporary hunting camps rather than long-term occupation loci, leading to a trend that suggests people living prior to the Bronze Age were engaged in varied hunter-gatherer strategies "as opposed to the steadily increasing prominence of domesticated species that is found elsewhere in Central Asia and China" (Janz 2012: 106).

A few well-known sites throughout the country characterize the Mongolian Neolithic: in the eastern portion of the country the sites of Tamsagbulag, Ovoot, Öglögchiin Kherem, and Rashaan Khad mark Neolithic habitations, complementing Bainzag, Zuukh, Bilüüt, and Ust Denzh in central and southern Mongolia. Fieldwork at these locales shows populations lived in oval and rectangular semi-subterranean pit-houses while practicing an economic strategy that focused on hunting. Additionally, unlike other areas of the world such as the Near East, the initial appearance of pottery is characteristic of the Neolithic category on the Northeast Asian steppe (Buentogtokh 2017; Janz: 2012: 34; Kuzmin 2003). The earliest ceramic production was accompanied by microlithic toolkits, adzes, axes, and bi-facial thinning (Janz 2012). To date, there is little evidence for domesticated animal species in the Mongolian Neolithic (Günchinsüren and Bazargür 2009), however, the presence of a minimal amount of faunal remains could imply an early foray into animal husbandry, but these proposals have not been entirely confirmed (Burentogtokh 2017: 24). Further, researchers have recovered some ground stone specimens from Neolithic sites in Mongolia, which confirms a degree of gathering or light agriculture as a part of the subsistence strategy. However, in areas of the western steppe agro-pastoral groups are confidently identified by the fifth millennium BCE (Frachetti 2012: 7; Popova 2009; Sherratt 1981).

The Bronze Age was a critical and transformative moment for populations living throughout the Eurasian steppe. Animal husbandry, horse domestication, metallurgy, and monumental architecture are the hallmarks of this period, each having palpable effects on the region. The pursuit of formal animal husbandry and selective breeding[1] were a central focus

[1] One must distinguish between degrees of human-animal engagement. Ingold (1986) writes that it is important to "distinguish *taming* as a social relation between mana and animal, *herding* as an ecological association between human and animal populations and *breeding* as a technique of artificial selection."

during the Early Bronze Age. While scholars are still debating the origin of pastoralism, the predominant assumption contends that pastoralism was a niche specialization. Arguments propose that the specialization derived from canal-irrigation and farming on the Mesopotamian alluviums and/or the circum-Pontic and Black Seas regions sometime before the 5th century BCE (Frachetti 2012; Anthony 2009, 1995; Lees and Bates 1974). Subsequently, in the mid-to-late fourth-millennium horse domestication, centering on the identification of bit-wear and culling patterns, is evident at Botai, Khazakstan and Derievka, Ukraine (Anthony 2007; Olsen 1996; Levine 1999)—an innovation which radically altered social practices on the steppe as well as opening up the potential for political economic reconfiguration. With domesticated equids, a developing mobile pastoral economy, and the advent of wheeled transport, objects, ideologies, and cultural traits were easily spread throughout Central and Inner Asia by the movements and breadth of the Yamnaya (ca. 3300-2600 BCE), Afanasievo (ca. 3700-2700 BCE), and Andronovo (ca. 2000-900 BCE) cultural groups (Figure 2.1) (Kohl 2007; Frachetti 2012; Anthony 2009). These groups were also responsible for the spread increase in monumental construction of *kurgans* (stone or earthen mounds), which "may hint at important issues surrounding territoriality and the seasonal movement of nomadic groups throughout the year" (Hanks 2002: 371).

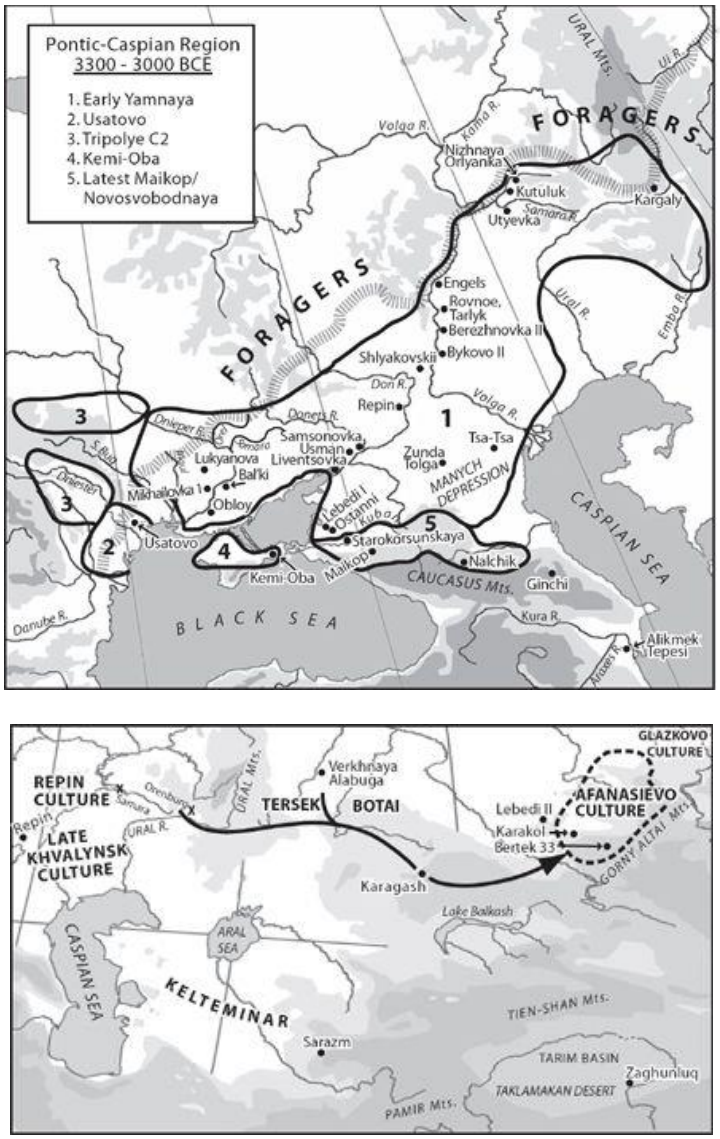


Figure 2.1. Maps showing the distribution of Yamnaya and Afanasievo cultural groups and their proposed migration and the spread of cultural traits (from Anthony 2007).

The earliest domesticated faunal remains and evidence of dairying in Mongolia are dated to the early third millennium BCE (Wilkin et al. 2020a), but the extremely varied ecological contexts in the country may have had diversifying effects on the way local populations adopted pastoralism (Jeong et al. 2018) in the central, southern, and eastern regions of the country (Honeychurch and Makarewicz 2016: 345; Wright 2006). While more research is needed to detail the Early and Middle Bronze Ages in Mongolia, knowledge of the Late Bronze and Iron

Ages is slowly beginning to take shape. However, the political and economic trajectories of prehistoric Mongolian peoples follow the introduction and disappearance of burial forms over time, moving from Late Bronze Age khirigsuurs and deer stones, to Iron Age slab burials, and the Late Iron Age's elite and commoner interments of the Xiongnu Empire. These burial forms are problematically mapped onto a sequence of evolutionary development which can obscure smaller-scale modifications and adjustments so critical to the production of a finer chronological resolution.

Late Bronze Age peoples of Mongolia relied on a varied subsistence strategy of hunting and gathering, fishing, agriculture, and minimal animal husbandry (Honeychurch 2006: 37; Allard and Erdenebaatar 2005). However, at the turn of the Iron Age (ca. 1000 BCE), populations adopted animal husbandry as the primary economic strategy, yet, recent research shows that millet consumption may have been a moderate part of the diet beginning around 800 BCE and increasing into the Xiongnu era (Wilkin 2020b; Spengler et al. 2016). The culmination of this shift is mounted pastoralism, argued to be fully-formed and contemporaneous with Iron Age slab burials (Allard and Erdenebaatar 2005; Derevianko 1996). At the apex of the Xiongnu Empire (ca. 209 BCE- 48 CE), scholars maintain that an extensive hierarchical structure and expanded ties with sedentary communities is evident from the materials recovered from isolated cemeteries of simple ring burials and massive terrace tombs, and the occurrence of small towns (Cleary 2018; Batsaikhan 2011; Brosseder and Miller 2011; Park et al. 2010; Chiksheva 2009; Miller 2009; Linduff 2008; Keyser-Traqui et al. 2003).

Until very recently, Late Bronze and Iron Age archaeology in Mongolia was "comprised entirely of the excavation of mortuary monuments," in line with Soviet ideological and methodological predispositions to seriate evolutionary stages of coarse cultural groups across

space and time (Wright 2006: 55; Johannesson 2011). In short, Soviet ideas of history and science forcefully dictated which sites were deemed important enough for exploration. Data from these excavations suggest that political structures became more entangled in the Late Bronze Age, evident by an unprecedented surge in monument-building concurrent with the deer stone-khirigsuur complex, carbon dated to ca. 1500-700 BCE (Burentogtokh 207; Fitzhugh 2009a;). Consistent with Soviet frameworks, Tsybiktarov (1995) claims that khirigsuurs, as monumental architecture within the diachronic portmanteau, are evidence of an elite segment of the population; he argues that hierarchical organization would be necessary to mobilize the required labor to build the features.

Khirigsuur construction is variable, but circular or square fences enclosing a stone cairn are archetypal, though sometimes they are found without a fence. Khirigsuurs do not have funerary goods within the grave shaft (Frohlich et al 2008; 2005), which led many early scholars to largely ignore the feature. However, ritual horse head deposits in approximately 15% of surrounding satellite features (Johannesson 2011: 23) demonstrate the increasing importance of equestrian mastery as a status symbol and their importance to sustenance strategies—a trend found throughout Mongolia and the steppe during the Bronze Age (Wilkin 2020a; Fuka 2018; Taylor et al. 2017; Taylor 2016; Frachetti 2012). The often-accompanying deer stones are stelae adorned with intricately carved zoological and/or anthropomorphic features and symbols (Frohlich et al. 2008: 101). The role of deer stones is still unclear, but they are often equated with shamanic practice (Jacobson 1993) or as symbolic cenotaphs of high-status individuals (Fitzhugh 2009a, b).

Excavations of Early Iron Age monuments, namely slab burials (ca. 800-500 BCE), suggest an increase in social stratification, the possibility of inter-communal violence, and

formalized nomadic pastoralism based on the discovery of certain grave goods (Shelach 2009; Honeychurch et al. 2009). During the 1960s and 70s, Victor Volkov (1995: 321) recovered prestige items and weaponry such as bronze knives, celts, arrowheads, horse trappings, and helmets in slab burials located in Bayankhongor province. The burial form, a non-descript rectangular shape of thin stones that vary in size from 2 to 10s of meters, is also tentatively associated with earlier traditions of the Okunev (2600-1700 BCE) Karasuk (1300-800 BCE), and Tagar cultures (ca. 800-700 BCE) of the Minusinsk Basin in southeastern Russia (Legrand 2006; Wright 2006; Bokovenko 2006; Antonini 1994). Further, Novgaroda (1989) argued that the distribution of slab burials were mainly relegated to eastern portions of Mongolia, with khirigsuurs populating the western regions, but additional research suggests that this geographical break was too rigid—researchers find monuments of both types throughout the country (Burentogtokh 2017: 31). Although the direct relationship between these two burial forms (and thus coarse cultural groups posited in an evolutionary sequence) is still quite vague, slab burial intrusions into khirigsuur monuments have been noted, as well as their spatial proximity to one another (Honeychurch et al 2009). These funerary associations and intrusions possibly acted as a reverent association and attempted continuity with prior monument styles, or a desecration attempt to distance the new monument form from previous cosmological or socio-political configurations (Johannesson 2011a, 2011b; Batsaikhan 1996).

Yet, again the reliance on Mongolia's diverse burial forms and types when assessing its political economy is strained by sweeping geographic locations of monument forms, or the uneven application of definitions and terminology. In Mongolia, "various researchers," writes Johannesson (2011a: 19), "[use] terminology interchangeably to refer to a broad range of site types that may or may not be associated with one another." Johannesson continues by providing

a concrete example, in which the English term "slab burial" is problematically disassociated with the Mongolian counterpart, *dörvölzhiin bulsh*, meaning simply, quadrangular burial—a significant difference due to the English counterpart identifying upright slabs as the primary characteristic, while the Mongolia phrase only requires a burial plan that is generally square in form (Ibid.: 38). Ultimately, these trends catalyze the splitting of culture groups based on slight variation in grave form (Houle 2016; Kovalev and Erdenebaatar 2009; Kohl 2007). Herein lies one part of the issue for Mongolia's developing archaeological condition: researchers derive nearly all evidence of prehistoric Mongolia from burial monuments and their traditions (Wright 2006: 55; Johannesson 2011). This perceived variability in burial form, Houle writes (2016: 19), "need not result in claims for countless new cultures, as is unfortunately often the case." Thus, the grave form and associated burial goods are posited as a developmental link through the entire region—the presence of impressive artifacts and horse tack leads to a blanket interpretation of increased hierarchy, a monolithic subsistence strategy, and a peripatetic lifestyle via the horse. Ultimately these macro-scale observations obfuscate local gradations and more intimate mechanisms of change.

The Xiongnu were the first large-scale polity to emerge from the steppes of Inner Asia. Early scholarship attributed their political and economic expansion to compulsory regional trade with the sedentary Chinese state (e.g., Kradin 2011b, 2002; Barfield 1981; Lattimore 1940). Khazanov (1994) and Barfield (1993, 1981), for example, maintain that pastoral economies—due to their mobility and supposed reliance on kinship (and by extension chiefs)—were unable to sustain themselves or create lasting political structures that could provide a foundation for the rise of empire. This "dependency hypothesis" epitomizes the condescending and biased views of the steppe versus the sown, or the privileging of sedentary agriculture over mobile pastoralism,

suggesting that the appearance of pastoralist polities ebb and flow with the power and reach of neighboring sedentary groups. Dependency is a vestige of evolutionary thought. It is here that Clastres' statement about "less complex" (or, in other words, non-agricultural or mobile) societies inherently "lacking" critical characteristics of social formation and progress come to the fore. How could herders possibly have the social, political, and economic infrastructure to catalyze such wide-spread empire without the assistance of sedentary communities and their agricultural products?

Recently, scholars have focused on this question finding that Xiongnu intensification was not contingent upon sedentary assistance. Thus, historians and archaeologists alike (Eisma 2012; Miller 2009; Di Cosmo 2002) now generally refute the dependency hypothesis and argue that raid-tribute relationships were overstated in previous academic and ethnographic literature. Instead, a more intricate view highlights diplomatic relations rather than violent plunder, isotopic signatures pointing to a very low reliance on external agricultural products (Joseph 2016; Beach 2013; Machicek 2012; Machicek and Zubova 2012), or even evidence of local millet farming at certain Xiongnu sites (Wilkin 2020b). What is more, Park et al. (2018, 2010) finds that much of the metallurgical production during the Xiongnu era had little similarity to Han manufacture, further supporting internal developments in the polity, and admonishing any assumed 'lack' or dependency. Of course, some exchange was occurring. Excavations at the famous cemetery of Noyon Uul by Chiksheva and colleagues (2009) recovered skeletal material identified as a young 25-30-year-old female from Parthia who assimilated into the Xiongnu milieu; moreover, Psarras (1995) states that China sent princesses to the Xiongnu on six historically-documented occasions.

Like the previous eras, the archaeology of the Xiongnu has chiefly revolved around burial excavation. However, unlike previous periods, the distribution of the some 350 Xiongnu cemeteries (Aminaa 2018) are spatially discrete unlike khirigsuurs and slab burials which dot the landscape in various combinations and arrangements (personal observation; Honeychurch et al. 2009; Johannesson 2011; Tsybiktarov 2003). Archaeologists separate Xiongnu burials into two main categories: commoner "ring" burials and terrace tombs. Typical ring burials are roughly 2m-diameter stone circles approximately 1.5m deep, while square terraced tombs can be 22m on a side, with burial chambers as deep as 24m below the ground surface (Miller 2009; Minyaev 2009; Polosmak et al. 2008). Scholars have now excavated many simple Xiongnu ring burials, with some cemeteries like those at Egiin Gol (Honeychurch et al. 2004) and Tamir Gol (Purcell and Spur 2006; excavations still ongoing as of 2019) being fully excavated or close to, but terrace tombs require massive amounts of energy to both build and exhume—which is why only about 20 of them have been fully excavated to date (Johannesson 2011: 48). Funerary objects vary through a range of items like jade, bronze mirrors, chariots, lacquerware, ceramics, woven felts, silks, horse accouterments, and faunal deposits, with some artifacts being tied to China, Central Asia, and the Middle East (Miller 2009; Johanesson 2011: 51).

Chinese written sources proclaim that the Xiongnu had "no towns or settlements" (Minyaev 2001). Yet, continuous scholarship has demonstrated this not to be true (Figure 2.2), which works against an image of the essentialized nomad who is constantly peripatetic and warlike. Of the handful of towns linked to the Xiongnu era, [2] the most researched settlement and associated cemetery (Davydova 1996) is the Ivolga complex located in close proximity to the

[2] Other Xiongnu settlement sites include Gua Dob, Khüreen Dob, Terelziin Dörböljin, Burkhin Dorboljin, Öndör Dob, Boroo Gol, and Tamiryn Ulaan Khoshuu in Central Mongolia. In the eastern portion of the country are the sites of Baruun Döröögiin Kherem, Bars Khot, and Tsenkher Gol. In the south is Bayan Bulag (Sneath and Kaplonski 2010; Waugh 2010).

Russian town of Ulan-Ude in Buryatia. First investigated in the 1920s and subsequently in the 1940s-60s by A.V. Davydova (1968), Ivolga was a fortress with ramparts encompassing 7 ha and over 50 subterranean pit-houses arranged in organized rows, which included clay pits, storage spaces, and fireplaces (Wright et al. 2008: 375; Erdelyi 1994; Minyaev 2001). The architecture of the residences also incorporated stone-lined heating systems and smoke-exhaust outlets reminiscent of building techniques found in China and the Bohai culture of northern Korea and Manchuria (Waugh 2010: 100). Excavations of the pit houses at Ivolga and at other smaller settlement sites of the Xiongnu uncovered artifacts that suggest an admixture of agro-pastoral practices and metallurgy: the presence of milling stones, plowshares, shovels, hoes, sickles, grinders, and grains of *Triticum aestivum* (wheat) supports an interpretation of an internal opportunistic economy and a further rebuking of the dependency hypothesis (Wright 2011; Sneath and Kaplonski 2010, Vol. 3: 20).

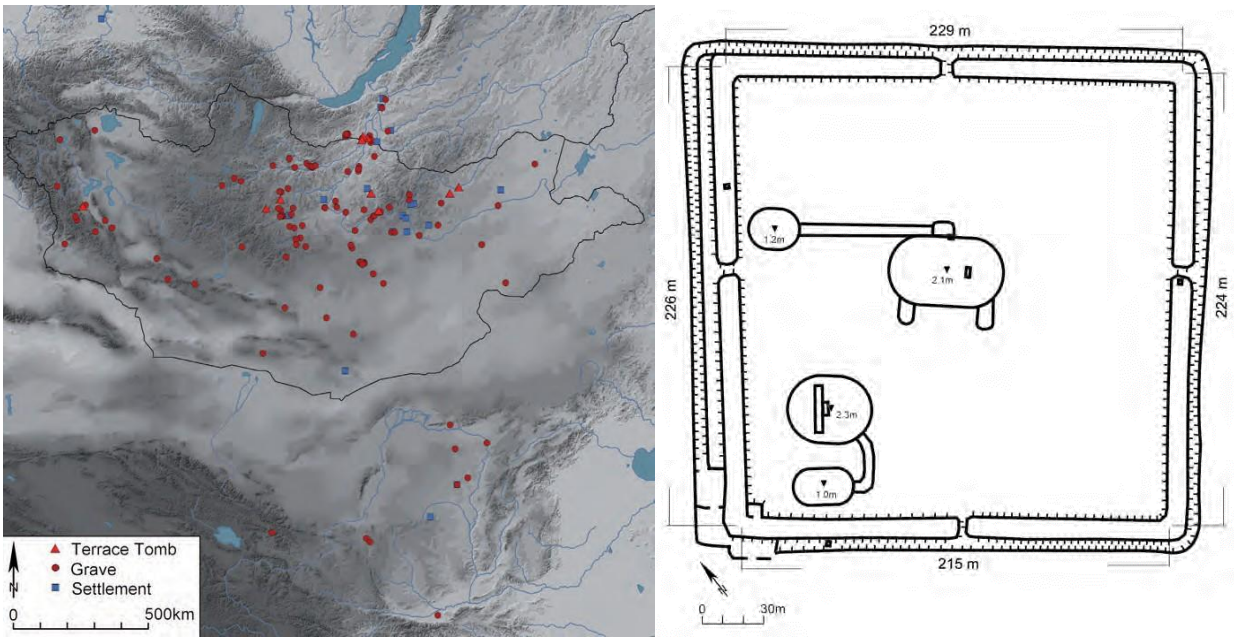


Figure 2.2. Distribution of Xiongnu settlements, ring tombs, and terrace tombs, left (after Tsevendorzh and Torbat 2011, compiled by Ts. Torbat and B. Miller). On the right is an example of a Xiongnu fortification site, in this instance, the settlement of Terelziin Dörböljin (from Danilov 2011).

As such, it is argued that the Xiongnu construction of settlement sites was an attempt to expand and overcome their singular economic reliance on animal husbandry by introducing agriculture and handicrafts into production-exchange-consumption networks, ultimately creating an intricate mix of labor divisions and a potential to revise individual subject positions (Ramseyer et al. 2009: 239). Yet, because the presence of cities is inherently part of our diachronic portmanteaus containing vestiges of evolution, the Xiongnu era is often juxtaposed with preceding eras, making earlier epochs stand out as less complex and lacking in certain qualities like towns or definitive agricultural pursuits. Therefore, Late Bronze and Iron Age populations are interpreted as being composed of simple political structures, and lacking productive economic strategies, agentive individuals, and group-networks that instill the capacities for progress and catalyze cultural transformations.

Despite the majority of knowledge about the Xiongnu deriving from burial excavation, investigations into settlements throughout Mongolia have diversified our view of their political economic situation. However, I caution that the Xiongnu should not be seen as a monolithic entity characterized by exceptional settlement sites like Ivolga or burials at Noyon Uul or Gol Mod. Instead, combinations of agro-pastoralist pursuits or degrees of mobility and sedentarization likely differed for Xiongnu groups; lifeways were likely gradated depending on particular ecological conditions, resource potential (i.e., the Gobi vs. forested steppe), or one's location within networks, a claim challenging macro-scale essentialized images of nomadic pastoralists and instead focusing on more local and autochthonous dynamics and rhythms.

To be sure, the study of funerary customs and burial sites is an extremely fruitful avenue for archaeological research. Monumental construction is an activity that supports the creation of communal identity, solidarity, and memory—a way to organize and demonstrate worldviews and

ideologies (Bradley 1998: 72, 1993; Pauketat 2007; Vavouranakis 2006; Johannesson 2011; Barrett 1994; Cannon et al. 1989). In addition to consolidating effects, monuments and funerary performance also act as differentiating political arenas that mark or compromise social roles and hierarchical structures (Houle and Erdenebaatar 2009; Chapman 2008; Carr 1995; Parker Pearson 1999). These effects are some of the social and political "processes," that comprise the theoretical foundations of this research. However, a preoccupation with sites of interment leaves much to be desired when attempting to define transitions of everyday political economy and refined chronologies of cultural change. Consequently, this study pursues an engagement with multiple archaeological materials and features that includes funerary monuments and their assemblages, yet seeks to bypass coarse horizons of development to construct a finer-grained archaeological resolution for Late Bronze and Iron Age Mongolia.

There have been recent exceptions within Bronze-Iron age research agendas which attempt to give greater clarity to the subtleties and diversity experienced by Mongolian and steppe populations of antiquity. Jacobson-Tepfer (2009, 2002, 1993) has approached symbols and rock art of Mongolia from a semiotic and cosmological viewpoint, arguing that depictions on stone panels, tattoos, and stelae can inform archaeologists about habitation structures (like the early use of felt-tents, called *gers*), and the regional importance of deer imagery as an important metaphor for the "Animal Mother" who dictates relations between life and death—leading to her claim that there was a repositioning of power on the steppe during the Iron Age. Kubarev (1999), as well as Batbold and Boloorbat (2009), have followed in kind documenting and classifying rock art into various quotidian and religious categories both geographically and diachronically within Central Asia, which they argue are useful representations of social structure and specific ritual actions of individuals and groups. Further, Fitzhugh (2009a, 2009b) has done extensive

research on deer stone stelae iconography in Northern Mongolia, linking the monument to similar styles found throughout the Eurasian steppe, a marker of social capital (Bourdieu 1977) for individual warriors, as well as helping to detail human-animal relationships where stelae often "coincide with the most productive grazing land" (Fitzhugh 2009b: 185). Although Bruno Frohlich's (2005, 2008) work in Khovsgol province centered upon khirigsuurs, his interpretations moved well beyond osteological and burial materials. His surveys and statistical analyses of the monuments themselves have been investigated to analyze social, political, and demographic situations of the Late Bronze Age. Frohlich's analyses were further extrapolated to put forth an initial relational hypothesis between topography, monument size, conspicuity, and the deceased's social status.

Further, extensive and long-standing projects completed by and Honeychurch (2004) et al. (2010, 2006) and Wright (2011, 2007, 2006), Houle (2016, 2010), Clark (2014), Gardener (2016), and Burentogtokh (2017) have accounted for all aspects of material culture found during systematic pedestrian survey and excavation for a holistic and unbiased accounting of an entire cultural milieu, as well as employing models that attempt to circumvent problematic vestiges of evolutionary thought.

In a series of joint Mongolian-American projects, Honeychurch and colleagues surveyed, recorded, and collected materials from the areas of Egiin Gol and Baga Gazaryn Chuluu, using burial evidence to buttress wider claims derived from the comprehensive methodology. To this end, they find that diversity in subsistence practices played a large role in the establishment of pastoral nomadic communities, and employ models based on "information networks" and agentive action to help explain shifting political economic practices. Houle's 40 km² survey of central Mongolia's Khanuy Valley included over 7000 shovel tests and targeted the investigation

of campsites. This spatially-oriented method led him to argue for the emergence of craft specialization as well as ancient migration patterns. Unequal distributions of artifacts throughout the valley, where at one locale there was a predominance of lithics and another where many faunal elements were found, led him to suggest that one group focused on tool production while the other cared for extra-familial flocks. Houle also found that herders would move from summer pastures on or near an alluvial plain to higher elevations in the mountains where one could find shelter from the winter winds, a pattern that approximates modern migration patterns of 7-8 km (Houle 2016: 8, 2010), thus, by extension challenging romantic ideas of the ever-roaming nomad. Clark (2014) also employed a combination of pedestrian survey with a complete recording of all features and archaeological materials while also promoting specific excavation goals. She finds that her exploration in northern Mongolia validates the importance of local variability, contrasting with coarse chronologies and assumptions of cultural continuity and change. Clark (185-7), surveying 57 km², argues that the populations inhabiting the area of Targan Nuur were engaged in mixed economies that would wax and wane with need and that local funerary traditions were incongruous to the region's wider customs, demonstrating the complications surrounding burial form and sweeping generalizations of geographic, temporal, and cultural similarities or differences. Gardner's dissertation project in northern Mongolia's Tarvagtai Valley (2016) surveyed 76 km² of the landscape, allowing him to investigate the strength and composition of local groups and individual households in the development of political and economic networks (15). In the same valley, Burentogtokh (2017) details the construction of khirigsuurs through a meticulous radiocarbon program to conclude that many of the monuments were built over time, constituting a community-strengthening model of social process. Finally, a closer look at human-animal relationships through stable isotope analyses

(Makarewicz 2017a, 2017b, 2014) has shown that prehistoric Mongolian herders used various types of grasses and plants to fodder their animals during harsh winters.

Outside of Mongolia similar trends are emerging. In the Semirech'ye region of southeastern Kazakhstan, Frachetti (2012, 2008) and colleagues (Chang 2012, 2003; Frachetti et al. 2010; Spengler et al. 2017, 2013; Hermes et al. 2019) have relied on a variety of methods and models that illuminate the diversity of steppe populations. For example, the recent introduction of consistent flotation as a standard archaeological method in the steppe zone (Anthony et al. 2005) revealed that pastoral societies were integral in the spread of domesticated crops to and from China. Carbonized seeds of broomcorn millet (*Panicum miliaceum*) and wheat (*Triticum aestivum*) found in ritualized contexts and burned dung demonstrate the range of subsistence practices available to steppe communities. This recovery of seeds pushed the direct evidence of domesticated grains on the steppe back nearly two-thousand years into the late third millennium BCE. Further, archaeological projects in the Ural Mountains of Russia (Anthony and Brown 2007; Anthony et al. 2005) revealed Bronze Age structures, occupation surfaces, storage pits, and seasonal activity areas. Paleobotanical and faunal dental evidence suggest these occupations were used year-round and that pastoralists were combining and even tacking between herding, gathering, and foraging (Popova 2009; Ibid). Excavations by Zhou et al. (2020) at Tongtian Cave in the Chinese portion of the Altai Mountains also confirm the flexibility of subsistence strategies, suggesting that "low investment prehistoric agro-pastoralists" may have encouraged the dispersal of domesticated cereals into Mongolia and other areas of Asia through mountain corridors. Packaged together, this new evidence is "calling into question the very idea of 'nomadism'" (Spengler et al. 2017: 305) by focusing on varying gradations of mobility, conflict,

and reliance on animals that will differ throughout the mosaic of peoples and environments that comprise the Eurasian steppe.

The diversity of pastoral communities is mentioned in earlier steppe academic literature (Lattimore 1962: 38; Dyson-Hudson and Dyson Hudson 1980), but the Romantic stereotype of pastoral nomads that carries the vestiges of neoevolutionary thought is maintained as a nimble nuisance. No longer are emphases on tribute from sedentary groups, military prowess, or constant peripatetic lifestyles. Instead a range of characteristics, specific to local particularities within regional homogeneities—termed "non-uniform complexity" by Frachetti (2009)— are helping move beyond images of the essentialized nomad. Subsistence strategies can be multi-faceted and opportunistic, and mobility should be viewed as multi-dimensional ecologically and politically (Honeychurch and Makarewicz 2016: 347; Kelly 1992) as adjustments to shifting cultural milieus. Yet, despite the improved chronological resolution and documentation of the variability in pastoral nomadic communities throughout the steppe zone, detailed archaeological knowledge of Mongolia's role in the region as well as the populations' local idiosyncrasies are still being determined (Honeychurch 2015), evident by a recent regional map of cereal transmission (Figure 2.3).

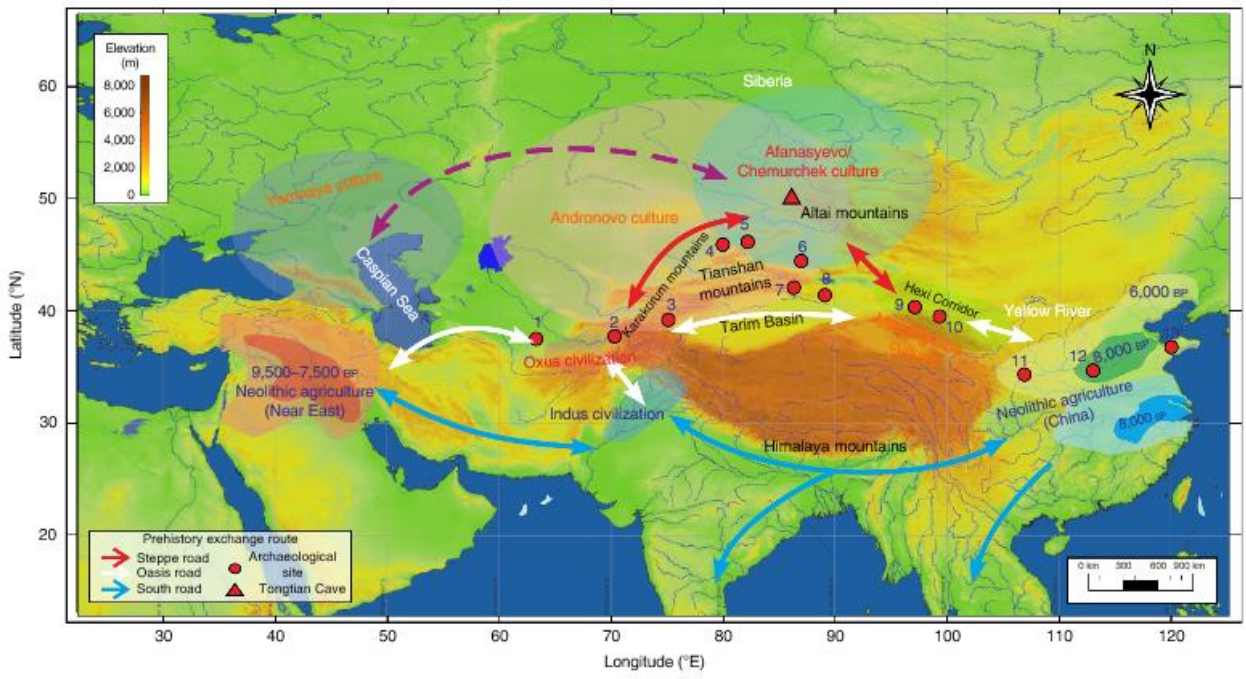


Figure 2.3. Map showing the transmission of grains through mountain corridors, but with Mongolia conspicuously under-represented. From Zhou et al. (2020).

I situate my dissertation within this contemporary vein of archaeological research in Mongolia and the steppe, one that is acknowledging of the diversity within communities that populate the steppe through time. Likewise, I intend to continue to refine and produce a finer and more local chronological resolution for Mongolian archaeology, hopefully to counter the "homogenizing effects of a progressive developmental model" (Stahl 1999: 48) by stressing local variability and social processes in northern Bayankhongor.

In order to do so, the next section will outline occupational landscapes as the basis for my multi-faceted holistic inquiry into prehistoric Mongolia. Using occupational landscapes as a framework for archaeological inquiry, and scalar mutability as its key feature, I will resituate epistemological foundations outside of social categories and burial types. Following the introduction of occupational landscapes, I present a model of social organization on the steppe

put forth by Chang (2012, et al. 2003) and Sneath (2011, 2007) that accounts for local idiosyncrasies and encourages the assembly of an enhanced chronology with a socially active view of people in the past.

2.5. Occupational Landscapes and Social Processes

Today, Mongolia is often imagined as a fenceless land, untouched and unadulterated by ever-roaming nomads (Honeychurch and Makarewicz 2016: 341; Myadar 2007; Dyson-Hudson and Dyson-Hudson 1980). A quick look into the service and tourism industry in the country corroborates this perspective, as tour companies play into this romanticized, Western gaze. On their homepage, Lonely Planet writes, “Rugged Mongolia is an adventure destination where travelers can experience nomadic culture and vast, untouched landscapes” (https://www.lonelyplanet.com/mongolia). These images of Mongolia as an adventurous “last frontier” or untouched” backwater " do well to propel the tourism industry and economy, but they also serve to reify and essentialize a nomadic lifestyle and subsistence strategy. In effect, these contemporary views of Mongolia run parallel to those produced by early explorers and academics which described Mongolia, and the steppe generally, in categorical and static terms of social evolution unfolding on infinitely open and smooth space (Deleuze and Guatarri 1987). Mongolian author Mashbat Sarlagtay’s description of his nation highlights the imagined, and problematic identity of nomadic pastoralists: a culture that is simple economically and politically, inhabited by a population that is peripatetic without restriction.

> Mongolians as a nomadic nation do not like boundaries or limits. The mentality and lifestyle determined by animal husbandry cannot simply recognize any limits in any dimensions, including space and time [...] Land in a nomadic society is like the air or ocean, it is impossible to divide or

> possess […] Nomads want to travel everywhere and across everything, without any limit. (2004; quoted in Myadar 2007: 5)[3]

Descriptions such as these, which emphasizes a nomadic essence, bring to mind vast empty spaces reminiscent of the emptiness so characteristic of cosmological myths of origin, where a natural, primordial, or spatial void acts as a passive backdrop to proto-human activity. To be sure, however, Mongolia is dotted with fences, out-buildings, hitching posts, and other ephemeral and permanent constructions—not to mention ordinary and unique topographical features—that structure the landscape as indices of social, economic, political, and religious ontologies.

The steppe is *not* empty space. It is not a "neutral, pre-given medium, a tabula rasa onto which the particularities of culture and history come to be inscribed" (Casey 1996: 14) One is always emplaced despite an imagined void or emptiness. "To be at all—to exist in any way—," writes Casey (1998: ix), "is to be somewhere and to be somewhere is to be in some kind of place." Caroline Humphrey (1995) describes nomadic emplacement as ego-centric, continuously reestablishing place (and the process of being emplaced) through the "smoke that rises from the campfire" each night (Bender 2001: 7). As such, place is not a modification of space, which would give primacy to the "site" or hotspots of cultural activity (Casey 1998: x). The steppe (and landscape in general) should be regarded *not* as a patterned set of sites or places within a spatial void, but as a totality of place where interdependent and reciprocal relationships bind actor and landscape together in a process of *becoming*. Ingold (1993: 155) follows this logic, stating, "For a place in the landscape is not 'cut out' from the whole, either on the plane of ideas or on that of

[3] Let me be clear. While I do not believe Mongolians have a monolithic view of their nation, I also do not wish to contest a description of a Mongolian's image of their own country. Mr. Sarlagtay is correct: the Mongolian steppe does feel empty; it can provoke feeling of unease if one only perceives vacant space (Casey 1998:6)—a feeling I myself have experienced. But this is only a matter of perspective, of the habituated ego, of the coded mind and body together engaged with the landscape.

material substance […] Each place embodies the whole at a particular nexus within it." Specific place informs the generality of landscape:

> To live is to live locally […] Construed in this light, indeed, the local is the general. Particular places tell us how a region is—how it disposes itself […] Precisely in their comparative sameness, places prove to be universal: they are necessary basis for regional specification. (Casey 1996: 18, 32)

Thus neither place and landscape, nor nature-culture, are mutually exclusive, as "human interventions are done not so much *to* the landscape as *with* the landscape" (Bender 2002: S104; italics in original). This process of becoming with the landscape moves beyond a singular Heideggerian *dasein* (being), or even one of "dwelling" (Ingold 1993), to a concept more aligned with *mitsein* (becoming together). Dependent on subject position (age, gender, status, ethnicity, etc.), the "plurality of place is always in the making," (2002: S107) always being refracted through the phenomenological: the corporeal body's experience and existence, and its associated *habitus* (Bourdieu 1977; Casey 1996: 21-24). Within a framework acknowledging the totality of place, the collapse of a false nature-culture dyad, and a phenomenological orientation, I offer a tripartite theoretical approach termed *occupational landscapes*. Occupational landscapes, it is hoped, will serve as a foundation for holistic and multi-faceted archaeological investigation and interpretations untethered by monikers of social evolution or romanticized images of a simple, uncomplicated, essentialized nomad.

The term "landscape" first appeared in the 16th century when Dutch artists began to paint rural scenes highlighting the changing conditions of everyday life (Bruno and Thomas 2008: 27). However, art in these instances was spatially static, creating distance between the observed and observer, making the observer active, and the observed landscape passive (Bender 2002: S105; Bender 2001: 3). This perspective continued as landscape entered archaeological discourse following a strict ecological approach in which adaptive economic and settlement patterns and

strategies were the central focus—stances similar to ones critiqued above (Bruno Thomas 2008: 27-8; Layton and Ucko 1999: 2; Ashmore and Knapp 1999: 1). Since then, scholars have appropriated the landscape analytic to include a variety of phenomenological and sensory applications, sometimes aided by the technology of Geographic Information Systems (GIS): a focus on the bilateral body and decoding or "reading" the landscape (Tilley 2010, 1994; Tilley and Bennet 2004; Mitchell 2002, 1988; Lefebvre 2004, 1991; Bourdieu 1977; Tuan 1977), visual perspectives and viewsheds (Llobera 2001, 1996; Wheatley 1995; Tschan et al. 2000; Jones 2006), as well as smell-, touch-, and sound-scapes (Hawthorne and Loisel 2019; Primeau and Witt 2018; Neumann 2018; Pellini et al. 2015; Hamilakis 2011; Fahlander and Kjellström 2010; Hurcombe 2007) are just some examples of the topics landscape studies have addressed. With this expansion of landscape's expressions and compositions, the landscape becomes a fluid continuum of interrelationships between people and places, from ecological to cosmological, positing a landscape that encompasses more than just physical or topographical contexts (Ashmore and Knapp 1999: 2; Bruno and Thomas 2008: 36).

> This then is the crux of landscape archaeology: it concerns not only the physical environment onto which people live out their lives but also the meaningful location in which lives are lived. This includes the tress and the rocks and the stars, not as abstract objects but as meaningful things that are located ontologically and experientially in peoples' lives and social practices. (Bruno and Thomas 2008: 38)

The theoretical foundation of occupational landscapes strives to follow this paradigm shift in archaeology where landscape is now central to the "archaeological programme as a whole" (Barrett 1999: 30). Thus, occupational landscapes are defined by their multi-faceted framework that includes ecological, vocational, and semiotic angles that are taken together to better uncover the political and economic conditions of Bronze and Iron Age Mongolia.

Like Ingold's (1993) taskscapes, the moniker of occupational landscapes orients analyses towards *labor* or *work*, a unique distillation of a general landscape approach. The tripartite

formation of occupational landscapes attempts to include, but move beyond "skilled agents" (Ibid.: 155) carrying out tasks and activities at significant locations. Thus, work and labor are operationalized as conceptual themes, where the environment, actors, and objects are all actively engaged in cultural production. What is more, I would not suggest that work and labor are the only aspects of life, but instead here act as powerful refracting concepts that bring forth agentive potential and cultural ontologies in recreational, ritual, or perfunctory interactions as well. Therefore, the configuration of occupational landscapes will highlight the activities, decisions, and stratagems of actors and objects operating within a landscape that *was* previously and *is* perpetually imbued with history and temporality—co-constituting a cultural and natural production of the landscape between person and environment.

- *Ecological*: The ecological facet of occupational landscapes first involves the consideration of the natural environmental setting. While I do not advocate for an environmental determinist position, the natural landscape does direct particular avenues for subsistence practice, placing constraints on certain endeavors. For example, while many places may be nearly non-arable for many grains or other domesticates, barley is an extremely hardy grain that can thrive in the most elevated and inhospitable conditions like the Tibetan Plateau (Dai et al. 2012). Likewise, steppe nomads may be predisposed to animal husbandry as the grasslands provide immediate sustenance for their herds—however, current research has demonstrated the potential breadth of pastoralist strategies for food collection and processing (Spengler III et al. 2013; Ryabogina and Ivanov 2011; Eisma 2012; Popova 2009, 2006; Barfield 1993). Acknowledging the possibilities and constraints of the environment sets forth, together with agentive decision-making, that the steppe is posited as both encompassing and particular—a mixture of regional similarities with local variations (Frachetti 2012). It is this potential variation, rather than universal laws of culture, that are sought within a framework of occupational landscapes.

  The addition of agentive decision making amidst a receptive environmental backdrop, in fact, posits the landscape as an active factor as well. Wilkinson's (2003) work in Mesopotamia is an excellent example of this. In describing the early stages of farming along the Euphrates and Tigris Rivers, he focuses on the construction and maintenance of irrigation ditches and canals. While these canals were necessary for food production in an arid environment, their maintenance provoked an intricate set of communal relations and political reformations that could be parlayed into land tenures or hereditary claims (Algaze 2005; Liverani 1996; Renger 1995; Maekawa 1984; Adams 1982).

I argue a similar process is unfolding in Bronze and Iron Age Mongolia, where pastures would be exceptionally political (see Popova 2006), but where the political situation may (or may not) encourage a more diverse set of economic practices on the landscape. Therefore, the landscape in an ecological modality is mainly shaped by human intervention, but also catalyzes a reciprocal relationship with "skilled agents" of the taskscape in constant negotiation with natural and cultural availability and restraints.

- *Vocational*: I define this element as people themselves and their labor assignments, refracted through individual (or group) subject positions (gender, age, status, title-association) and associated moral economies that guide proper action (e.g. Bourdieu 1977 Goffman 1983, 1967; Weber 1958). It would include daily or perfunctory work activities (cooking, herding, migrating, milking, shearing, culling), specialized professions and associated production of craft or food goods (pottery or lithic production, secondary products processing), or leaders with various title-associations (such as religious leaders and their adherence to cosmological structures). The activities of these "skilled agents" take place at significant locations, populating what Ingold calls "dwelling" within a wider taskscape. As agentive actors operating on the taskscape, Ingold holds, as I do here, that the taskscape (or occupational landscape) "exists" and is always becoming, "as interactivity" (1993: 163).

  Further, the vocational component of occupational landscapes is an integral crux for the framework proposed in this study. It holds the potentialities for local or communal variation, both spatial and temporal, among regional similarities. Therefore cultural particularities and structures find their expressions here: divisions of labor, the oscillation (to or from) or continuity of subsistence practices, monumental construction and architecture, and the production-maintenance-subversive actions that can be involved with symbolic readings of the landscape and its content. In short, choice and decision making are the operative characteristics for the vocational facet of occupational landscapes.

- *Semiotic*: Although I have in mind ritual performance, cosmological or artistic symbols, and their legibility as the defining characteristic of this aspect, semiotics play a prominent role in guiding everyday activities as well (and link together with moral economies of vocation). In either case, memory serves to propagate and perpetuate meaning throughout a landscape, or stratagems are used to alter the trajectory of meaning to restructure cultural ontologies. As a powerful mechanism for change and continuity, "memory," is often altered through "re-use, reinterpretation, restoration and reconstruction" (Ashmore and Knapp 1999: 14) or even desecration (Johannesson 2011)—constituting a social life of the object or feature (Appadurai 1986).

  In this study, the most prominent feature of symbolic occupational landscapes would likely be the numerous and conspicuous burial features that dot the Mongolian steppe. Although I do not wish to solely rely on burials and their coarse typologies for archaeological interpretation, it would be unwise to strike them from the analyses altogether. Instead of positioning these monuments as cross-sections of sequential architectural styles, which "directs our attention in certain ways" (Barrett 1999: 25), this

> limited yet important part of the cultural milieu is necessary for a comprehensive understanding of the occupational landscape (Derks 1997).
>
> Semiotic efficacy and the ability to cogently transmit meaning to viewers through material culture has been an important part of anthropological and archaeological conversations about landscape, on the steppe (see for example MacFarland 2017; Wright 2017, 2015; Jacobson 2010, 2002, 1993; Bunker 2009; Flad 2002), and beyond (Velasco 2013; Kuijt 2008; Preucell 2006; Geller 2006; Stasch 2003; Parker-Pearson 1999; Gell 1998; Little et al. 1992; Conkey and Hastorf 1990; Peirce 1932). In his recent works, *The Political Landscape* (2003) and *The Political Machine* (2015), Adam Smith emphasizes the role of physical objects and symbols in the creation of sovereign authority in Bronze Age Caucasia. Smith argues that a concentration on materiality, "allows us to conceptualize the objects] *at work* within a social field […], where objects do not simply mean, but operate to enable and constrain social possibilities and historical trajectories" (2015: 7, italics mine). Loosely following Henri Lefebvre's (1991) three-fold analysis of place-making and understanding, Smith refers to "sense" as the "domain of semiosis" where objects are not only functional, "but [act as] evocative potencies [working] across generations" (Smith 2015: 14, 177).

Ecological, Vocational, and Semiotic partitions of the occupational landscape are fragments of an epistemological whole. It should be clear that each component of the occupational landscape triad permeates the other two—together creating a material (and mental) assemblage that is actively co-constitutive of an intimate and complex link between environment, agent, and object.

An occupational landscape approach should help in bypassing the vestiges of neoevolutionary thought and interpretation which persists in the analysis of ancient societies. Landscape approaches in general, as well as the specific occupational landscape perspective, offer an opportunity for the use of diverse scales and articulations of evidence to produce lively narratives. For example, these scalar articulations can encompass and span households, valleys, and regions, to individuals, groups, and networks in myriads of viable combinations that social life has to offer. These constellations of landscape open windows for the analyst to assemble greater chronological clarity and the ability to pluck local processes from macro-scale linear conceptualizations of history.

While it is common to assume that ancient pastoral nomads are difficult to view through an incomplete archaeological record, Cribb (1991) is clear that nomads produce archaeological deposits like any other group and are recoverable through systematic methods. Archaeological correlates for occupational landscapes can include many features such as nodes and paths of pasturage, habitation locales, discard areas, important cosmological places or symbols, sites for raw material procurement and subsequent production, as well as faunal and human osteological material. Together elements like these can be extrapolated to better define herd management strategies and foci beyond husbandry, degrees of mobility and sedentarization, as well as insights into political arrangements through time.

On the ecological plane, spatial distributions of ceramic and lithics that can be associated with households, sites of recurring occupation, or production areas will provide insight into economic and political organization. Likewise, the internal patterning of burial features and their association with habitation areas may also yield important results of political economic configuration. Although difficult to study archaeologically (Honeychurch and Makarawicz 2016: 347), temporal patterns of ceramic, lithics, and monuments will assist in better understanding mobility patterns and their extent over time, as well as providing evidence of ecological experimentation. Consequently, when certain components of the occupational landscape seem to be rearranged or shifting in the *longue durée*, the distribution of residences, activity centers, and monuments may suggest that divisions of landscape use may not have rested entirely on the necessities of fodder for herds, but were instead formed within the socio-political arena, possibly indicating a "tense" (Lowry 2013) shift to pastoralism and that new political regimes were being implemented contemporaneously with economic transitions (Holmberg 2006; Foster 1989). Finally, specific reduction techniques and lithic toolkits may represent fluctuating subsistence

pursuits (Andrefsky 2005: 222; Sullivan III 1995; Binford and Binford 1966), and seasonal migrations (Derevianko 2011) variations of sophistication in divisions of labor, specialized or skilled craft production (Pollock et al. 1996), or designated workshop and other activity areas (Brantingham 2006) that are entangled with oscillating political formations and their corollary influence.

Political economic organization will be further analyzed through the vocational and semiotic elements of the occupational landscape. Potters—and their associated production sequences—can be excellent representations of social structure and divisions of labor (Doumani Dupuy 2019; Gosselain 2018, 2000; Rice 1999; Sinopoli 1988; Rice et al. 1981). Locations of raw material sources to one another or their distributions in proximity to household and discard areas can be utilized to determine degrees of specialization and networks of production, adherence (or not) to chains of knowledge about ceramic production (Roddick and Stahl 2016), and access to resources (whether through mobility or political claims). Therefore, potters and their products are excellent representations of ecological parameters that are combined with agentive decisiveness as they work within or outside of established norms (Gosselain 2018).

Finally, the role of semiotics in social life can alter ecological and vocational parameters. As such semiotic presentation and efficacy can be represented through the examination of foodstuffs (Logan et al. 2012; Helwing 2003; Dietler 1996), utilitarian and prestige items (DeMarrais et al. 1996; D'Altroy and Earle 1985), as well as cosmological symbols and their use within various social and ritual contexts (Kujit 2008; Flad 2002; Bell 1992; McIntosh 1999: 23; Turner 1967). For example, as presented in this study, the role of intrusive deer stones into subsequent monument types can reveal dislocations or attempts to reformulate arrangements of authority and vocational divisions. Additionally, compositions of faunal materials elucidate

ecological issues like culling strategies, or the utility of feasting as indices of socio-political structures emerging or breaking down.

Here, it is hypothesized that the Late Bronze-Iron Age Mongolian political economy in Bayakhongor province took on both sedentary and mobile aspects of pastoralism, mirrored by similar oscillations between centralized and decentralized concentrations in political structure. This hypothesis is supported by material analyses from each facet of the occupational landscape: habitation, procurement, and discard areas of ceramic and lithics will clarify ecological patterns; an analysis of ceramic and their chemical composition gives new light to potters and their activities in both ecological and vocational components; finally, the examination of symbols and associated osteological materials from a funerary context is used to comment on ecological and semiotic aspects of the milieu.

In conjunction with the occupational landscape approach, which will assist in chronological refinement and the deesentializing of the nomad *qua* nomad, the archaeological methods employed during fieldwork for this study follow in parallel. The diverse use of scale allowed within the epistemological triad situates the artifact, feature, or individual— and if necessary or desired, wider assemblages and group-networks, as the unit of analysis. In this "off-site" approach to archaeological contexts, the archaeological record is taken to be a "more or less continuous distribution of artifacts on or near the surface" (Dunnell 1992: 30; Cherry 2003; Cherry 1983: 395) such that a rebuilding of the social, political, and economic fields can be approached through various lenses and magnifications that can help bypass the vestiges of neoevolution. "Sites," then, are "only part of a continuum of artifact distribution," (Gallant 1986: 403), where even isolated objects or ephemeral assemblages are still valid. As Cherry (1983: 396) notes, it is more helpful to exclude the site concept and instead focus on explaining the

"variance in surface densities of cultural material of different types—a continuous variable which can be related quantitatively" and qualitatively to potential epistemological concerns such as those of the occupational landscape. A focus on only higher-order sites like burials, towns, or extremely dense artifact scatters, will ultimately exclude relevant cultural materials "and neglect the rich and more comprehensive understanding of place that intensive survey" and an off-site approach allows (Harrower 2013: 216); but this methodological orientation, I have argued, is a relic of evolutionary frameworks, and implicitly dismisses or ignores subtle variations in the archaeological record that are commonly produced by hunter-gatherer or pastoral groups (Gallant 1986: 409).

Associated with the epistemological framing of occupational landscapes as well as the method of off-site archaeological survey and analysis, I also apply a model of social organization that can encompass issues of local variation within regional similarities. The model, put forth by Claudia Chang (2012, et al. 2003) and David Sneath (2011, 2007), emphasizes fluid vacillations of economic practices and political configurations. Chang's work in the Talgar valley of Kazakhstan led her to argue that the Iron Age groups under investigation were often structured in a two-tier system of commoners and aristocrats, where commoners lived in non-ranked groups and routinely completed daily tasks of subsistence while aristocrats operated within larger pan-regional confederacies (135, 141). Combined with evidence demonstrating the transmission of grains through the region and its mountain corridors, this model accounts for economic breadth and political variety on the steppe. Similarly, David Sneath cogently argues that the socio-political history of Inner Asia and Mongolia did not rely on principles of chiefship or kinship. He contends that kinship and descent were "deployed as technologies of power" but were not used by governors as identification or methods of control on the ground in local settings (Sneath 2007:

4). He states that segmentary and conical clans are fictions (e.g., tribes and chiefdoms), modern-governmental ways to order pastoralist communities. Instead, he claims Mongolian pastoralists were governed by an acephalous aristocratic-commoner relationship that was extremely subject to modification and heterarchical shifts (Ibid). At certain historical junctures, the aristocratic-commoner structure would be in place; at others, powerful leaders (shamans, Buddhist monks, other title-associations, etc.) could usurp their role, promoting a prolonged, chronic, and oscillating set of arrangements for authority and leadership. However, Sneath is quick to mediate the expectations of an aristocratic-commoner structure, writing:

> The lack of centralization has tended to be mistaken for tribalism—it seemed as if in the absence of the state the nomads must organize themselves through kinship structures and preserve their tribal identity. But rooted as it is in evolutionist colonial-era thought, the discourse of tribe has generated highly misleading readings of the history of Inner Asia […]. (2011: 44)

I argue that research by Chang and Sneath encourages historians and archaeologists alike to rethink political economic processes on the steppe. In place of *de jure* power or static neoevolutionary political forms, the possibilities of *de facto* power allow for new interpretations. De facto power is only partially guided by law, thus it grants all groups and individuals a legitimate (if uneven) claim to affect dominant discourse and action through channels of both ascription and achievement.

Structures, then, may take on hierarchical, heterarchical (Crumley 1995), and network-like arrangements depending on certain spatio-temporal conditions, ecological practices and preferences, and the extent of political (de)centralization. This means that, although aristocratic-commoner structures appear to be common for steppe polities, the parsed quality of the tiered organization makes numerous topological permutations conceivable, with hierarchical processes unfolding within horizontal alterations. Moreover, their views on the contingencies of power echo a wider trend in archaeological dialogues, ‘alternatives’ to constant types and correlates

attributed to stages of complexity. Likewise, as I do in this study, archaeological researchers are advocating for study of the "practical regimes of authorization in interaction from the spectacular to the everyday" (Smith 2011: 419) that would be unbridled by the vestiges of evolution and associated diachronic portmanteaus.

2.6. Conclusion

In this chapter, I attempted to assess to how vestiges of evolutionary thought continue to permeate our analyses of societies in the deep past. Although not altogether new, it is hoped my critique opened-up a point of intervention for the introduction of occupational landscapes and a move from static typologies to social dynamism and agency. With a triadic composition of including ecological, vocational, and semiotic elements, the occupational landscape is an all-inclusive theoretical framework that lends itself well to the investigation of prehistory on the steppe. In conjunction with an occupational landscape approach, I also presented an accompanying model of social organization based on fluid arrangements of aristocratic-commoner structures, and an off-site methodology that resituates the primacy of site to a concentration on the minutiae of the archaeological record. Together, these models and methods have the potential to capture an array of mosaic diversity within steppe populations—mosaics of environment and ecological relationships, subsistence strategies, and flexible formations of power and authority that are now being revealed throughout Eurasia.

The following chapter will outline the environmental context and specific archaeological methodologies pertinent to this study. Subsequent chapters will exploit the occupational landscape framework using each component at various scales, which together, play integral roles

in interpretation of Late Bronze and Iron Age Mongolia that may highlight cultural continuities, or in this case, the untidy (Bender 2001) nature of (pre)historic change.

CHAPTER 3: ENVIRONMENTAL CONTEXT AND METHODOLOGY

Mongolia is located in Inner Asia (Atwood 2011)[1] at the eastern extent of the Eurasian steppe corridor which extends from the Black Sea to Eastern Mongolia, and from Southern Siberia to the grasslands and deserts of Kazakhstan, Uzbekistan, and Turkmenistan. The corridor covers 8,500 km east-west, and 400-600 km from north to south (Spengler et al. 2013b:128). Mongolia shares borders with Russia, China, and Kazakhstan. The country itself is expansive, covering 604,103 square miles, with continental weather typified by long and extremely cold winters, and short humid summers (Frisina and Valdez 1994: 157-8). There are three large mountain ranges in the country: the Altai to the west on the border with Kazakhstan, the Khangai Mountains located in the central portion of the country, and the Khenti Mountains to the east. Mongolia can be further divided into four distinct environmental zones as one moves from the north to the southern portions of the nation: forested taiga, grassland steppe, desert steppe, and the (Gobi) desert. Each of these zones are unique environments closely associated with geological processes, such as the "development of a waste (soil) mantle, washing, erosion, and the redistribution of silts" (Gunin et al. 1999: 97) that prevent plant root systems from taking hold, thus generating specific compositions of steppe vegetation.

While these environmental designations are quite general, the stark contrasts in topography and vegetation and their impacts on herd composition and mobility patterns of modern-day herders were quite clear during preliminary fieldwork[2] and were strongly taken into consideration when choosing relevant sites for investigation. This dissertation concentrates on

[1] The term Inner Asia is preferred here, as other monikers like "Central Asia" often exclude Mongolia due to certain political and historical traditions of parsing this region. See Atwood (2011) for a full discussion.
[2] For example, camels are most often found in the desert and desert-steppe portions of Mongolia, while yaks, complete with thick hides and hair, are common in the northern and more mountainous regions.

two regions identified in northern Bayankhongor *aimag* (province), south-central Mongolia (Figure 3.1).

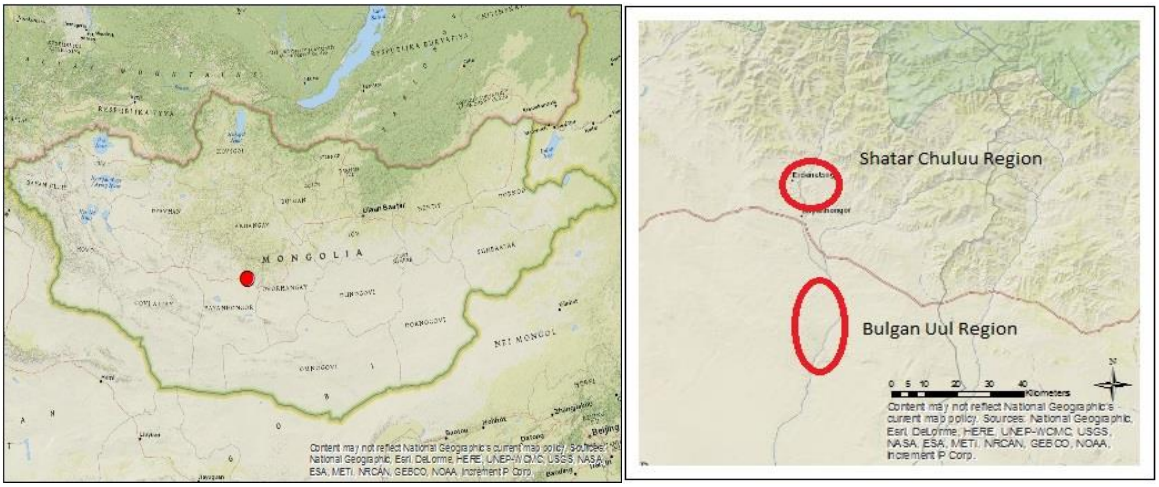


Figure 3.1. Location of archaeological investigation within Mongolia (left) and a detail of the study areas (right).

The study regions are close in proximity geographically, approximately 60 kilometers apart. Both locales are situated along the same major watercourse, the Tuin Gol, but lie in different ecological zones. Different environments are held to strongly influence the extent of mobility and economic patterns (Binford 1980; Binford 1966), risk management (Kelly 1992), seasonal transhumance patterns and herd compositions (Barfield 1993; Krader 1955), as well as social boundaries and communal relationships (Fernández-Giménez 2002).

As the topographical link between the two regions, the Tuin Gol runs north-south, originating in the peaks of the Khangai Mountains, flowing approximately 200 km and emptying into Orog Nuur Lake in the middle of the province. Closest to the headwaters of the Tuin Gol is the northern region under investigation, located in Erdenetsogt *soum* (a county subdivision of the province) at the foothills of the rugged Khangai Mountains. The well-known site of Shatar Chuluu (Figure 3.2) highlights this region's archaeological landscape. This locale is a large

funerary context, with monuments spanning the Bronze Age to the Turk Empire (ca. 2000 BCE-700 CE).

The topography of this region is characterized by steep intersecting valley corridors and subsidiary tributaries, all of which quickly recede and give way to the rolling hills of the typical steppe to the south. However, the Khangai region is subject to numerous subzones of various humidity levels, causing a great deal of vegetation and climate diversity even within a seemingly coherent ecological zone (Karamysheva 1988; Gunin et al. 1999: 12). Common taxa in Mongolia are *Pinus*, *Betula*, *Artemisia*, and Chenopodiaceae, with arboreal densities dwindling towards the desertified-steppe and the Gobi (Ibid.: 48). The main vegetal species in this region are *Kobresia spp*., *Potentilla fruticose*, *Rhytidium*, *Stipa capllata*, forbs, yernik- and fescue-mosses, and various shrubs (Ibid.: 20-1). At the southern edges of the Khangai range, *Larix sibirica* are relegated to northern slopes. Soils are brown to dark-brown clay loams. At this segment of the river, the Tuin Gol and its tributaries show evidence of frequent drifts in its watercourse, generating unstable alluvial planes with high densities of exposed river cobbles and detrital remains on the valley floors.



Figure 3.2. Shatar Chuluu. The left photo shows typical slab graves to the left, with a slab grave constructed of robbed deer stones to the right. Looking, west-northwest. At right, a detail of one of the deer stones.

The southern region, around Bulgan Uul, is positioned in the desert-steppe zone, situated mostly on the west bank of the Tuin Gol. I selected this region due to lithics and a low density of ceramic recovered in 2012, as well as a large monument center spanning the Bronze Age to the Khitan period (10th and 11th centuries CE). Low-lying hills and peaks on the eastern river bank and a large mountainous outcrop on the western bank that quickly fades into rolling steppe typify the area. Soils are classified here as silty sands of a light to medium brown.

In contrast to the northern region, there is an increase in vegetation diversity consisting of grasses and shrubs. Vegetation that is common to the Mongolian desert steppe include: *Stipa gobica, Lagochilus ilicifolius, Limonium tenellum, Krascheninnikovia ceratoides; Ajania fruticulosa, Anabasis brevifolia, Stipa glareosa, Oxytropis aciphylla, Allium mongolicum, Zygophyllum ptercarpum, Salsola laricifolia, Caryopteris mongholica, Lagochilus ilicifolius,, Allium polyrrhizum, Reamuria songaria, Salsola passerine, Potaninia mongolia,* and *Zygogphyllum xanthoxylon* (Ibid.: 98-100).

Alluvial processes are more subdued here, as evidenced by a 100 mm decline of annual precipitation when compared to Shatar Chuluu (World Wildlife Foundation). Yet, the soft silty soils still allow the Tuin Gol to run wild (Figure 3.3). In both the mountainous Khangai and the desertified southern region, wind and water erosion is palpable, with a potential for heavy desiccation of the upper soil horizons. These geological processes encourage deflation of the topsoil, carrying loose earth for many kilometers and exposing long histories of material culture upon the same ground surface (Seitsonen et al. 2018; Grunin et al. 1999: 32).



Figure 3.3. Bulgan Uul Region. From the western bank looking north-northeast over the Tuin Gol and its unwieldy courses.

3.1. Contemporary Uses and Observations

The Shatar Chuluu region is home to a relatively large population of pastoralists, herding and culling combinations of sheep, goat, horses, and yaks. Population estimates from field notes

suggest that approximately 100 individuals are living in the immediate area.[3] While these population estimates would surely not hold in prehistory, the number of families the pasture land can sustain is quite remarkable. In addition to these herders, a mostly abandoned Socialist-era town named Erdenetsogt is also present. We also noted a few (albeit small) farming endeavors, both along the Tuin Gol and in subsidiary valleys. Agricultural pursuits here are likely a holdover from the Socialist-era push, led largely by government premier Yumjaagiin Tsedenbal to nationalize the land, resources, and professions, as only 1% of the Mongolian landscape is considered truly arable (Eisma 2012; The World Factbook 2008; Atwood 2004b: 549).

To the south, the Bulgan Uul region appeared slightly less populated, with a general increase in the number of goat and camel within herds. On the eastern bank of the river are multiple concrete structures, a Socialist-era "brigade" made for centralization and collectivization of farming and herding enterprises that ended in 1991. Also present is a large Qing-era (1691-1911 CE) fortress or trading post named Bor Khot. Further, the area is rich in various minerals and ores, evident by raw materials and ingots recorded during pedestrian survey, as well as illegal mining activities taking place in the surrounding hills.

Approximately one-third of Mongolia's current population are nomadic herders, as the economic draw of capitalism has caused a high degree of "urban flight" and a renouncing of the traditional lifestyle (Bittner 2016; Bruun 2006a, b). While most of the urban flight is towards the capital Ulaanbaatar, we noted a similar trend around the city of Bayankhongor. Adaptation to migratory patterns are likely due to herders' engagement with the wool, cashmere, and meat trade, ultimately compressing the contemporary landscape around the urban center and altering the typical configurations of movement when compared with earlier periods (Gunin et al. 1999:

[3] With a single valley approximately eight kilometers long, nearly 30 *gers* were observed.

5). In many cases, this can cause overgrazing and instability on the landscape. However, the population densities of each region do suggest that these pasturelands can sustain a considerable number of residents despite the clustering around modern infrastructure like schools, markets, and roads.

3.2. Climate in Antiquity and Today

The Mongolian steppe is a volatile place in regards to seasonal weather, aeolian, and alluvial processes. Recent paleoenvironmental studies on Ugii Nuur lake sediments of the Khangai Mountains (Schwanghart 2008) suggest an ecological continuity between Bronze-Iron age environmental conditions and the modern period. Palynological studies suggest that states that ecological conditions fluctuated in the Early and Mid-Holocene period (ca. 8,600- 2,200 BCE), with wetter and milder conditions predominantly evidenced by 10-280mm more rainfall per year than today (Ibid.; Grunin et al. 1999: 75). This extra moisture caused forested areas to reach their maximum extent by 4000 BP, possibly even lasting until 2500 BP according to some scholars (Grunin et al. 1999; also see Vipper et al. 1976). More arid conditions followed this period from 2,200-800 BCE, causing a retreat of the boreal conifers and the general reduction of forested zones. Since then, a more stable humid phase has persisted into the present day. Without claiming deterministic correlations between ecology and subsistence, paleoecological studies suggest that Bronze and Iron Age peoples, as well as contemporary pastoralists, faced similar environmental circumstances and challenges. Thus, the distributions of material culture throughout the occupational landscape that are the focus of subsequent chapters can be confidently used for the interpretation of past human-environment dynamics.

3.3. Methods of Investigation

Building on preliminary studies in the province consisting of vehicular reconnaissance in 2011 and a more in-depth pedestrian survey in 2012, the Northern Bayankhongor Project team returned in the summer of 2015 to direct a comprehensive survey of the study regions.[4] Fieldwork took place over six weeks from the beginning of August to the middle of September, totaling approximately 60 days. The team and I employed a suite of archaeological methodologies to recover relevant evidence that would detail political and economic shifts from the Late Bronze into the Iron Age.

The methods used to address these research questions included pedestrian survey and collection, shovel tests, geophysical prospection using electromagnetometry (EM-38), and a minimal amount of funerary excavation. In regards to the stated research goals, immediate results of these approaches were as follows:

1) Combining the investigations of 2012 and 2015, the team intensively surveyed a total of 76 km²; 53 km² were covered in the north region, while we walked transects for 23 km² in the south[5]

2) Recording of 1620 archaeological monuments and ceramic/lithic scatter locations, allowing for an overview of diachronic landscape use

3) Subsurface investigations and testing for houses or "definitive habitation features" were not altogether fruitful

Survey

While the 2015 survey was ultimately successful, I was forced to rearrange my survey strategy and methodology. I originally planned to conduct a systematic survey, with 4 km² blocks chosen randomly from a 100 km² grid to cover spaces typical of both contemporary

[4] Features and scatters located in 2011 and 2012 (n= 134) were added to the 2015 database.
[5] This discrepancy in total survey area is due to extended stay in the northern region in 2012. The 2015 expedition evenly split fieldwork between the regions, approximating 16km² in each region. No ceramic, only lithics and monuments were recorded in 2012, so there is little concern of ceramic data biases.

summer and winter camps. However, it quickly became clear that the labor, fuel, and time necessary to shuttle survey teams to and from our base camp along the river into areas far from the waterway (i.e., winter camps) would not be cost or time effective and needed to be reevaluated (Cherry 1983; Read 1986). As such, the shape of the survey areas took on their unique character due to a variety of factors, mainly time and man-power: survey teams continued transects on the valley floors, bounded by natural topographical features like rivers and unpassable mountain ridges, until complementary excavation was complete and the entire project could move to the next study area.

Therefore, the survey results presented here are biased towards *contemporary* spring and summer zones of residences, which decreases the ability to discuss year-round mobility or seasonality, but still comprises a strong cross-section of nomadic lifeways in the Bronze and Iron Age. However, a concentrated effort was made to sample a small portion of modern winter vicinities in each region to pontentially alleviate this problematic bias. I should also state that ethnographic analogies of migratory patterns are extremely problematic. For example, Atwood (2015) demonstrates that a multitude of patterns can be operationalized in the same environment at the same time—as he states that during the Mongol period in the Khangai Mountains, herders were practicing a type of movement typical of the Altai Mountains—reverse of the pattern we see today. Thus, specific labels for locations like "Spring" or "Winter" are designated by contemporary ethnographic analogy and information gleaned from local herders.

To be clear, the alteration in survey design from non-contiguous 4km² blocks to a strategy aimed at canvassing a variety of contexts and site types, likely benefited our recovery and the ability to reconstruct human interactions with the environment. Bintliff (2000) writes,

> Large continuous blocks of landscape are the minimal units for surface survey. Ideally these should be sufficiently large to include several contiguous districts large enough to support a

> village settlement, where the vicissitudes of settlement relocation and variations in land use within natural settlement districts are likely to be picked up. (203)

Although fieldwalking and surface surveys have been a part of the formalized archaeological toolkit since the 1920s (Banning 2002), intensive pedestrian survey on the Mongolian steppe has a relatively short history, yet was extensively referred to for this project design and its research goals. Honeychurch et al. (2007) conducted the first full-coverage survey in the Egiin Gol valley, northern Mongolia, from 1996-2000. Although the researchers were unsure of their success during the initial planning stages, hundreds of monuments and artifact scatters were located using transects of 20 m intervals (Ibid.: 9), with the majority of sites located within the main Egiin Gol valley and its immediate tributaries. The success of this project encouraged subsequent researchers to include fieldwalking for investigations in Mongolia, with transects intervals spanning 20-30 m (Gardner 2016; Clark 2014; Houle 2010; Honeychurch 2010;). This strategy is typical of surface walking practices, as most researchers space transects between 3 m and 50 m depending on the particular terrain, surface visibility, and recovery goals (Banning 2002: 198; Schiffer 1978). However, there is often an "overemphasizing of the 'ideal' of close-interval" (5 m or even 1m intervals) fieldwalking (Bintliff 2000: 204), which is why I adopted an average of 30 m spacing for the project. Although scholars have debated the reliability or validity of artifacts recovered from surface scatters (Hole and Heizer 1963: 174), Laming-Emepraire (1963: 80) argued that a systematic survey discovers more than 70% of archaeological features. What is more, regional surveys and are extremely useful to investigate the remains of non-sedentary populations that leave scant archaeological records (Cherry 1983: 396), and can counter "homogenizing effects" of developmental models of social life (Stahl 1999: 48).

These milestone projects, as well as ethnographic observations, also revealed a general pattern for the location of ritual and habitation sites which informed my survey agenda. Summer

habitations are often found in flat, well-drained areas close to water, while herders choose to place their winter camps at higher elevations in the mountains, which help protect from severe weather and the chilling northerly and westerly winds. Space between summer and winter camps are often interspersed with interim residences for the Fall and Spring. Settlements are not found on hillsides or hilltops (Clark 2014; Houle 2010).

This structure of movement was termed the "Khangai pattern" of migration in the 1930s by anthropologist Andrei Simukov (1934; see also Humphrey and Sneath 1999) and is still applicable today. Migrations of this type typically consist of moving about 8km per year; however, depending on topographic and environmental particularities, as well as fodder availability each year or season, may necessitate movements up to 100km a year (Clark 2014: 110).

Considering previous field-walking methods and their findings of migration and settlement patterns, we undertook a pedestrian survey with a team of 5-8 people walking strict parallel transects north and south across the landscape, totaling 76 km^2. The Northern Bayankhongor Project team delineated survey areas mainly using natural topographic features such as the Tuin Gol, or steep and impassable mountains and hilly outcrops which helped focus research on potential domestic and activity spaces on or near the valley floors. When the survey crew spotted a site, the team stopped and recorded a variety of information about the archaeological feature: coordinates, the type of feature and characteristics, the size of the feature, elevation, environmental location, a photograph, and any additional comments that the team believed important. At the end of the workday, I entered the information into a master digital database in FileMaker Pro, which I subsequently used to answer more detailed questions about

the area through analysis in statistical computer programs like JMP 13 or spatial software such as ArcGIS. An example of a single record is below (Figure 3.4):

Region: Shatar Chuluu Site: NBP-020; Feature Number: 7;
GPS Location (UTM): 0636547E, 5128968N; Site Type: Khirigsuur; Fence Shape: square
North Side Dimension: 15.4m; East Side Dimension: 18.85m; Central Mound Dimension: 7m Khirigsuur Style (Tsybiktarov 1995): 4; Time Period: Bronze; Elevation: 2025m;
Photo Number and Direction: 1437, North; Comments: Robbed, and south side of fence missing



Figure 3.4. Example of survey database and attributes.

In addition to surface scatters and other archaeological materials, all ritual and funerary monuments were recorded by the team to corroborate and buttress the reconstruction of a prehistoric occupational landscape. Cataloging of stone monuments was straightforward (see above) in contrast to the recovery and collection of lithic and ceramic scatters.

Upon discovery of a lithic or ceramic surface scatter, the team was provided with flags to mark each artifact. Using a technique I learned as a young scholar working in Cultural Resource Management (CRM), as each team member placed a flag into the ground, they would call out "sherd!" or "lithic!" Because our goal was complete collection, the vocal cadence was indicative of continued or waning artifact density and extent. Flagging continued until minutes after the

shouts ceased, which indicated the team had sufficiently marked the scatter. Like the recording process with monuments, the spatial and environmental locations and additional comments were logged in the database, with final pictures demonstrating the density of flagged artifacts. Although the survey design did not include a formal grid technique during collection, the team divided and gathered extensive scatters in groups for finer analytical resolution and to better delineate between frequented habitation, activity centers, or ephemeral gathering places.

Sub-Surface Testing

In an attempt to locate habitation features like hearths, corrals, trash pits, or floors, shovel testing and electromagnetometry followed the identification of lithic or ceramic scatters believed to be indicative of domestic life. We performed two types of subsurface tests: exploratory 1 x 1 m units, and shovel tests. Exploratory units were excavated using standard archaeological procedures, with ten-centimeter arbitrary levels screened thoroughly for increased recovery percentages. In contrast, shovel tests were 40 x 40 cm, excavated non-stratigraphically, with the soil sifted through a 1/8" screen, and recorded as positive/negative based on presence or absence of archaeological material. A total of 70 shovel tests and exploratory units were completed, with 52 in the northern region and 18 in the south. Only 21 (30%) were positive for artifacts. Most contained only a single element: a sherd, an animal bone, a fragment of charcoal, or a knapped flake. We also attempted minimal auger coring, but this was not successful due to the often rocky and firm soil matrices.

Unfortunately, the context of *most* of these subsurface discoveries were not stratigraphically secure. Moreover, the incommensurability of dense surface scatters with the dearth of subsurface artifacts strongly suggest that due to the often hard and rocky matrices in northern Bayankhongor, local prehistoric pastoralists did not often augment the surface in their

daily lives—for example, digging a foundation for pit-house-like structures or latrines.[6] To be clear, the combination of minimal returns and extremely compact soils led to the eventual abandonment of shovel testing unless geophysical anomalies were present.

As such, this dissertation relies primarily on surface scatters and monumental construction as the main proxies to discuss Bronze and Iron Age political economy. There has been considerable concern regarding the reliability of surface scatters (Hole and Heizer 1963), but these concerns have proven to be unwarranted and can be ameliorated with sub-surface testing. Archaeologists should be astutely aware of Schiffer's (1972) cultural transforms that comprise an object's life-cycle (procurement, manufacture, use, maintenance, and discard), as well as natural transforms that can include alluvial, colluvial, aeolian, and frost-heaving processes. Together, these processes can displace artifacts vertically and horizontally over time; however, surface data are not without merit as they can be obtained efficiently and cost-effectively on a regional scale as other survey projects demonstrate that they will compose a representative sample (Cherry 2003; Dunnel and Dancey 1983). While light vehicular traffic, trampling from herd animals, and natural depositional and deflation processes are common to this region of Mongolia, I safely suggest that the location of artifacts outside of the immediate river course likely represent approximately *in situ* discard areas similar to their original densities.

The Northern Bayankhongor Project also utilized geophysical prospection with an EM-38 electromagnetic conductivity meter (Figure 3.5). The small EM-38 is two machines in one. The instrument produces subsurface imaging by releasing dual eddy-currents which measure both the conductivity of the soil (for detecting pits, walls, etc.) and magnetic anomalies (burning, metal, etc.). Each facet of these data recovered produces a composite 3-d view of the subsurface. At

[6] In a formal interview, a friendly herder pointed out that they never dig into the surface except for latrines. They burn and scatter their trash around the ger.

areas where extensive sherd or lithic scatters were recovered, I laid out 50 x 50 m contiguous grids that I walked with 1m transect lines for the best resolution of the subsurface model. Overall, the EM-38 was a moderate success. We found subsurface cultural anomalies in both the northern and southern regions, but with varying results. The most prominent discovery was a 11th century CE hearth in the Bulgan Uul region (Appendix A).



Figure 3.5. The EM-38 and a 50 x 50 m grid.

Finally, as a complement to the survey and the investigation into daily economic life, the NBP team excavated six burials and three khirigsuur satellite features. I will analyze the results of some of these excavations in Chapter 6, while I report the remaining records in full in Appendix B.

3.4. General Results

Although the Mongolian landscape often feels desolate, lonely, or overwhelming in its expanse, there were clear patterns of placemaking discovered during fieldwork. This section will

outline the recorded material culture and initially begin comparing and contrasting the north and south regions.

Project surveyors encountered a variety of locations during the investigation and recorded them in a manner commensurate with off-site archaeological methods, ultimately aiming for the distinguishing of large distributions across the landscape and not single "sites." Below are descriptions of the various activity areas and what constituted a "site" during the survey (Table 3.1), as well as their total counts (Table 3.2). A full reporting of features can be found in Appendix C.

Table 3.1. Definitions for recording and "site types."

Monuments	This category includes khirigsuurs, slab burials, circle burials, square burials, ring burials, Turk burials/ Balbal lines, deer stones, and uncarved stelae and standing stones.
Rock Art	This category designates panels, NOT the number of actual images. Multiple images often appear on the same rock face. Much of the rock art from Bulgan Uul was located and recorded during informal reconnaissance.
Ceramic Scatters	This category designates sites where *three or more* pieces of ceramic were found.
Ceramic Isolates	This category is for sites where *less* than three pieces of ceramic were found.
Lithic Scatters	This category is for sites where *three or more* pieces of lithic materials/tools were found.
Lithic Isolates	This category is for sites where *less* than three pieces of lithic materials/tools were found.
Lithic AND Ceramic	This category is designated for sites where both lithic and ceramic were found, and the combination yielded more than three artifacts.
Slag/Metal	This category designates sites where evidence of metallurgical production or raw ore was found.

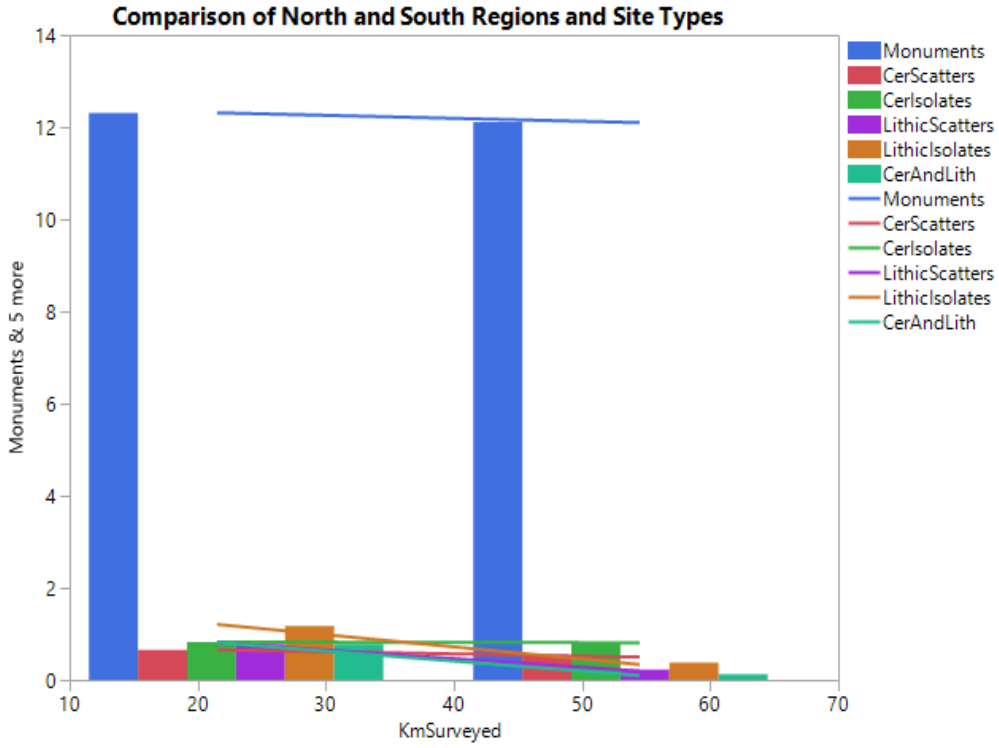
Table 3.2. Total counts of sites recorded during fieldwork.

	Shatar Chuluu	Bulgan Uul	Other Regions 2011/2012	TOTAL
Monuments	642	283	134	1059 (65%)
Rock Art	66	268[7]	N/A	334 (20%)
Ceramic Scatters Ceramic Isolates	27 43	15 19	N/A	42 (2.5%) 62 (3.8%)
Lithic Scatters Lithic Isolates	12 20	18 27	N/A	30 (1.8%) 47 (2.8%)
Lithic AND Ceramic	7	18	N/A	25 (1.5%)
Slag/Metal	3	18	N/A	21 (1.2%)
TOTAL	820	666	134	1,620

This cursory look demonstrates the ubiquity of monumental construction on the Mongolian landscape, yet also points to flattened and unproblematic generalizations of interpretation if one was to solely rely on them within a coarse chronology and neoevolutionary framework. Therefore, a coordinated use of materials and spatial relationships will be analyzed with a variety of methods; Chapter 4 will investigate densities and distributions of artifacts and monuments through space and time; Chapter 5 will focus on potters and their commodities; and Chapter 6 will employ the analysis of ritual customs and funerary goods.

Although there was a discrepancy between North (53 km²) and South (23 km²) regions regarding the total km² surveyed, these regions are still statistically and spatially comparable. To better determine the accuracy of these totals and their proportions despite this discrepancy, I processed Chi-square statistical tests and line-of-fit graphical representations for each region.

[7] Approximately 200 of the rock art panels in the Bulgan Uul region were located during unsystematic reconnaissance survey.



N	DF	-LogLike	RSquare (U)
6	20	9.3642625	0.8710

Figure 3.6. Statistical and graphic output demonstrating comparability between regions.

To make the two data sets proportional, for each region, the site type was re-calculated in terms of the area surveyed: *# of sites per type/Km²* (an example being 642 monuments/53 kilometers squared=12.1 monuments per km² in the North). The statistical output verified a nearly perfect correlation between the two regions with the R^2 value at 0.871. The graphical representation above (Figure 3.6) further demonstrates the linearity of fit. Thus the statistical representations of "site types" and their occurrence between regions are nearly equivalent and can be compared without hesitation.

I can provide a few general observations about the dataset immediately. It is clear that a higher density of ceramic locales were found in the northern region, while lithics, debitage, and the remnants of metal production dominated the southern region's assemblage. Further, the number of individual knapped artifacts and sherds also demonstrates this division. A total of 883 ceramic sherds and 1,729 pieces of chipped stone were recovered from surface scatters.[8] Of these, our records assign 454 sherds to the region of Shatar Chuluu, with the remaining 429 allocated to Bulgan Uul. In turn, there were only 548 lithics retrieved in Shatar Chuluu, with 1180 found around Bulgan Uul. The disparity suggests that both regions were consistently populated over time, the southern region appears to be a preferred residence of Paleo-, (E)Neolithic and Early Bronze Age peoples, but the northern region seems to have more Late Bronze and Iron Age activity. Previous research may corroborate this preliminary observation of these data. Janz (2012) and Séfériadès (2006) both argue that the (E)Neolithic to Bronze Age transition (ca. 3000-1000 BCE) was typified by a higher mobility rate, an increase in pottery production, a potential upsurge in population growth, and the continued use of microblade technology, all while expanding and relocating to exploit areas north of the Gobi Desert. Janz writes of Southern Mongolia:

> After about 5.0k cal yr BP, widespread deterioration of steppe environments and the contraction of lakes and wetlands outside of dune-fields encouraged hunter-gatherers to intensify seasonal use of dune-field/wetland environments, which were oases of productivity. Diminished returns encouraged hunter-gatherers to make more frequent moves, resulting in the geographic expansion of smaller field camps and task sites. […] The adoption of domesticates is proposed to have culminated under conditions of relatively extreme desiccation after 3.0k cal yr BP. The increased exploitation of upland and plains environments is consistent with pasturage needs and typical of later nomadic pastoralist land-use (Fernandez-Gimenez 1999) but is not definitive. (2012: 218, 291)

[8] 90 other pieces of ceramic were recovered in burial and testing excavations.

Thus, these general data support an economic expansion from desert oases into the south, into steppe and taiga environments of central and northern Mongolia throughout the Bronze Age, which could explain the higher density of Bronze Age materials around Shatar Chuluu.

In addition to the regional scale of analysis, succeeding chapters will also rely on reduced scales, namely the Locus, valley, and "household." Thus, for ease of reference and discussion in subsequent chapters, I have further divided the regions into smaller loci—two within each region (Figure 3.7). Locus A and Locus B are located in the Shatar Chuluu region, while Locus C and Locus D are situated around Bulgan Uul. These segregations are mainly for analytical clarity, but do serve as a demarcation between environmental and ecological particularities of the larger regions. The following descriptions are meant to contextualize the study area for the reader and provide a nomenclature for use in argumentation.

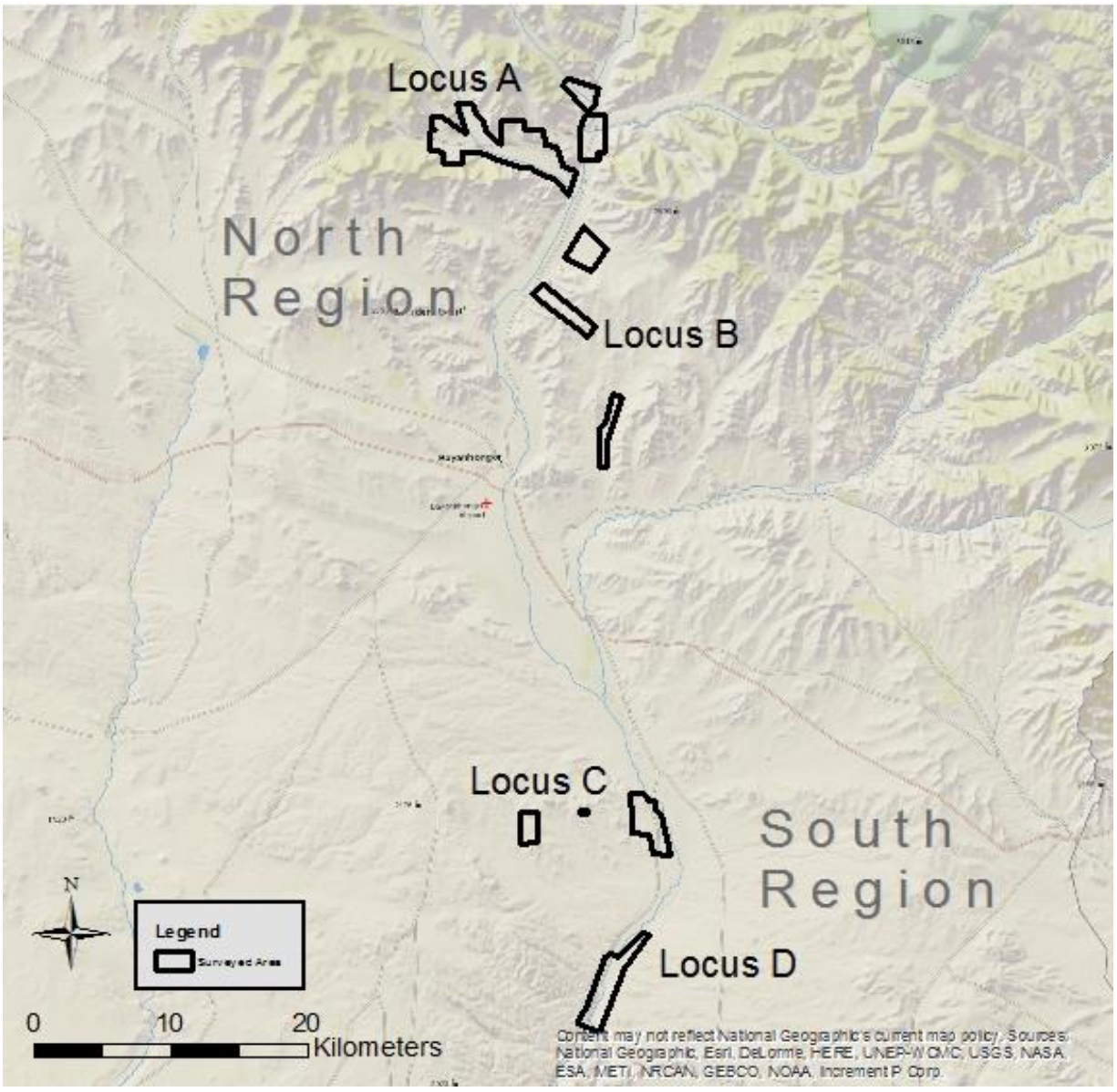


Figure 3.7. Map of areas investigated by the pedestrian survey, and the regional designation of North (Shatar Chuluu region) and South (Bulgan Uul region). Also shown are Locus A-D, discussed in the following section.

3.5. Detailed Contexts

Locus A

Locus A consists of three large intersecting valleys. The Khujirtiin River (Хужиртийн Гол) and the seasonal drainage, Urt Nariin River (Урт Нарийн Гол), are east-west oriented tributaries emptying into the main Tuin Gol valley. This locus represents nearly half of the total 76 km² surveyed during the expedition.

Overall, this Locus was extremely rich with dense ceramic scatters, numerous monuments, and contemporary spring and summer campsites with evidence of ancient habitation and activity. Within this Locus, four areas are pertinent to the discussions in following chapters: 1) Tsogt Khairkhan Uul (Цогт Хайрхан Уул), labeled site NBP-001; Bor Shoroonii Am (Бор Шорооны Ам), labeled site NBP-015; 3) a contemporary spring campsite with the designation NBP-017, 4) Khujirtiin Valley (Хужиртийн Хөндйи), labeled site NBP-018, and 5) and a clustered khirigsuur complex in the Tuin Gol valley south of Erdenstogt city, identified as NBP-022 (Figure 3.8).

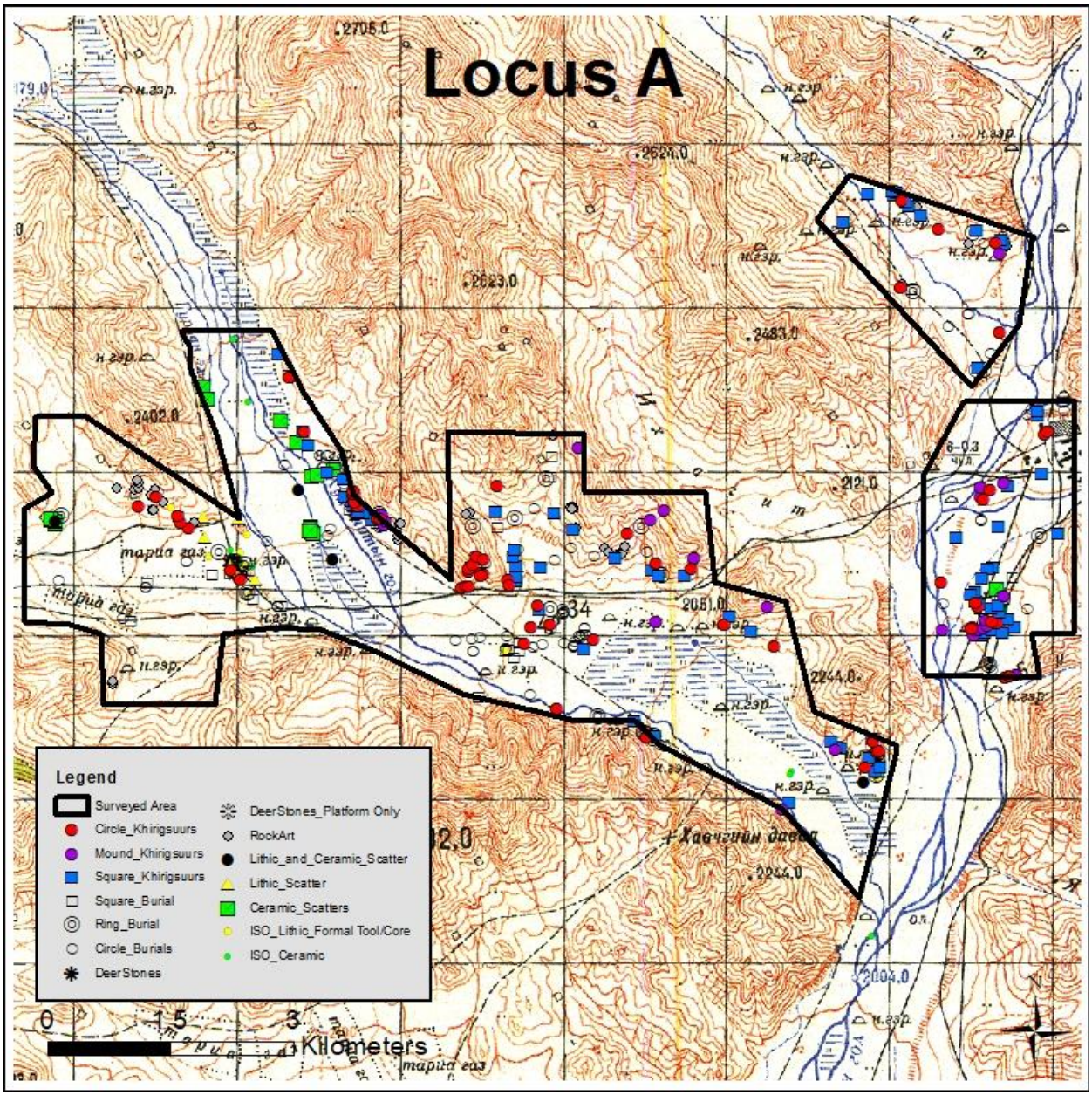


Figure 3.8. Spatial distribution of scatters, rock art, and monuments in Locus A.

NBP-001, Цогт Хайрхан Уул



Figure 3.9. Overlooking NBP-001 and the Tuin Gol to the south (right). Note the large khirigsuur in the mid-ground. At left, a contextual view of NBP-001.

Tsogt Khairkhan Uul, or NBP-001, is located at the eastern edge of the Khujirtiin Valley, overlooking the confluence of the two rivers (Figures 3.8 and 3.9). Survey members collected material culture concentrated on a sloped and southern-facing terrace. The monuments and artifacts present on the terrace suggest it was an important location for ritual activities; surrounding a large square-fenced khirigsuur were circle and ring burials, feasting pits, and horsehead mounds. The crew collected high densities of flakes, cores, and stone tools on the surface (n=430), as well as Late Bronze and Iron Age ceramic (n=45). The survey team found ceramic to be relegated to a single position on the terrace—just to the west of the large khirigsuur. The location of the pottery is unsurprising as archaeological evidence suggests that people's ritual activities (feasting, drinking, praying, etc.) mainly took place on the west sides of khirigsuurs, while circular satellite features on the south and east sides of the khirigsuur often contain ritual horsehead offerings (J. Bayarsaikhan, personal communication). The team also found a distal end of a bronze knife among the pottery sherds to the west of the main khirigsuur.

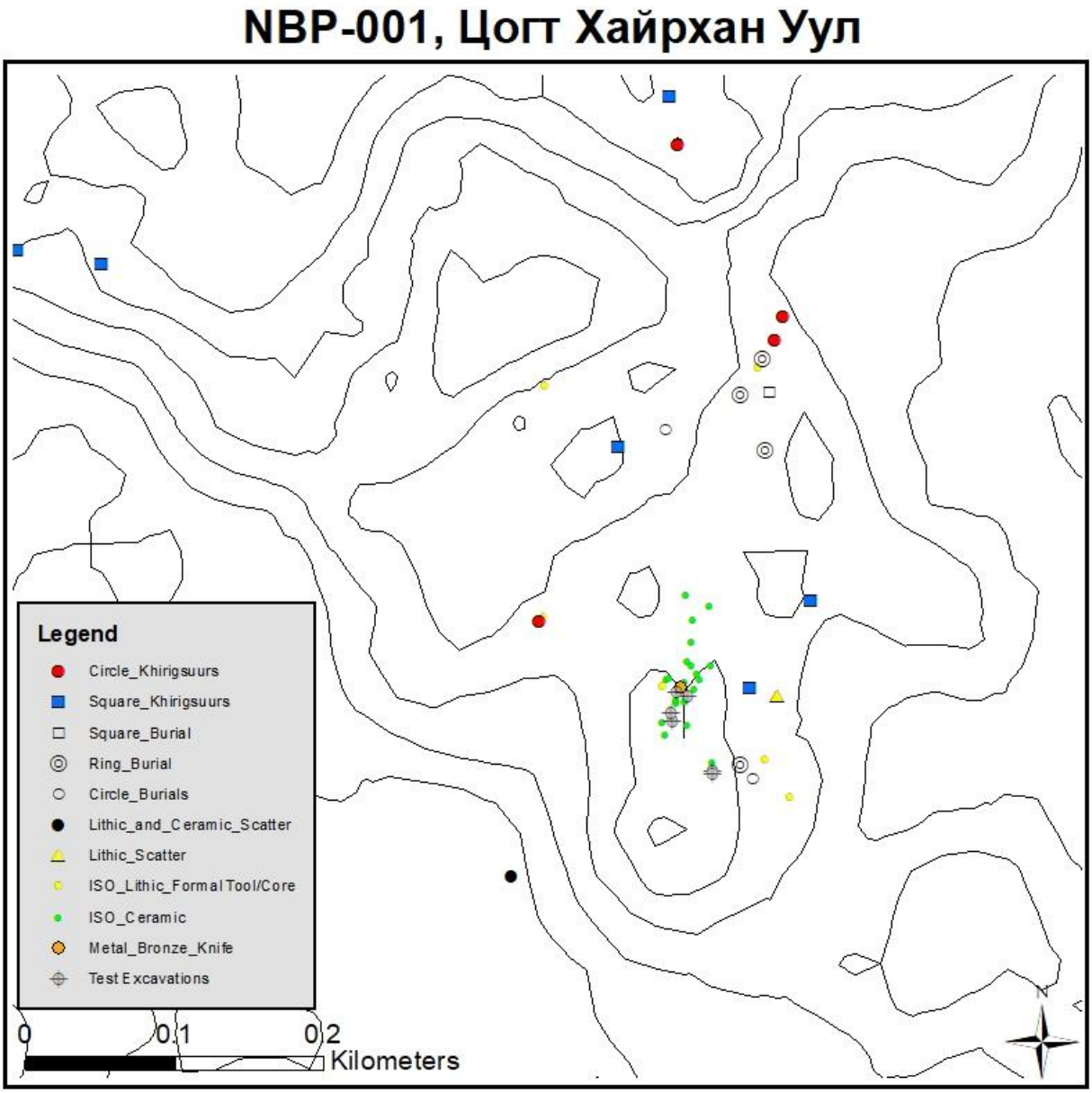


Figure 3.10. Planview of NBP-001.

Due to the extensive surface scatter and monument construction at NBP-001, team members excavated six 1 x 1-meter test units, including a formal excavation of one of the khirigsuur's satellite features (Figure 3.11). Five of the six test units were positive for material culture, which included various combinations of one or a few sherds, single flakes, and pieces of animal bone.



Figure 3.11. Formal excavation of the khirigsuur satellite feature (left), and an example of a test unit (right).

Unfortunately, however, the contexts within the arbitrary 10 cm levels were not clear enough to better determine chronological deposition.

NBP-012, Урт Нарийн Гол

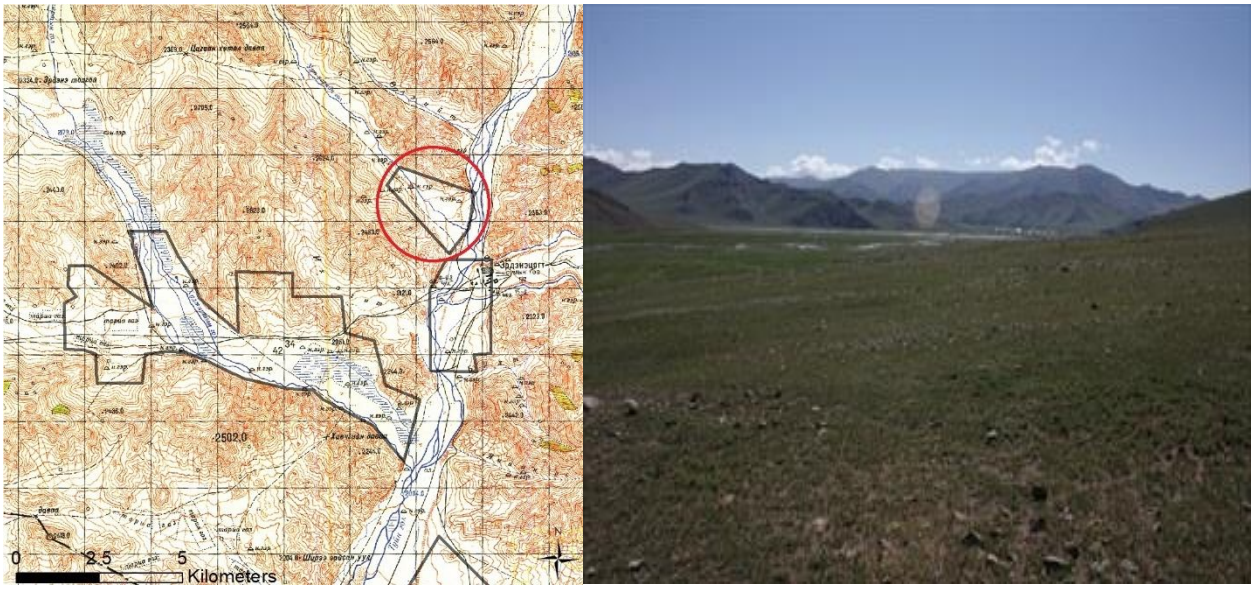


Figure 3.12. Location of NBP-012 in the wider context of Locus A (left) and a photo of the valley looking east (right).

NBP-012 (Figure 3.12 and 3.13) is the northernmost quadrat of the project, Urt Nariin Gol. Like the valley inlet where NBP-001 is located, this area is flanked by steep hills and has a slight declination to the east slanting downwards toward the Tuin Gol. The river here is not substantial and is more than likely a seasonal drainage following excessive rainfall. Material culture was not abundant here, but there was a moderately sized lithic scatter on the northwestern mountain overlooking the main valley, positioned similarly in terms of topography to the lithics and ceramic found at NBP-001. In addition to knapped stone, the survey team also recorded numerous khirigsuurs, mostly dominated by the square-fenced type, as well as a number of ambiguous ring and circle burials.

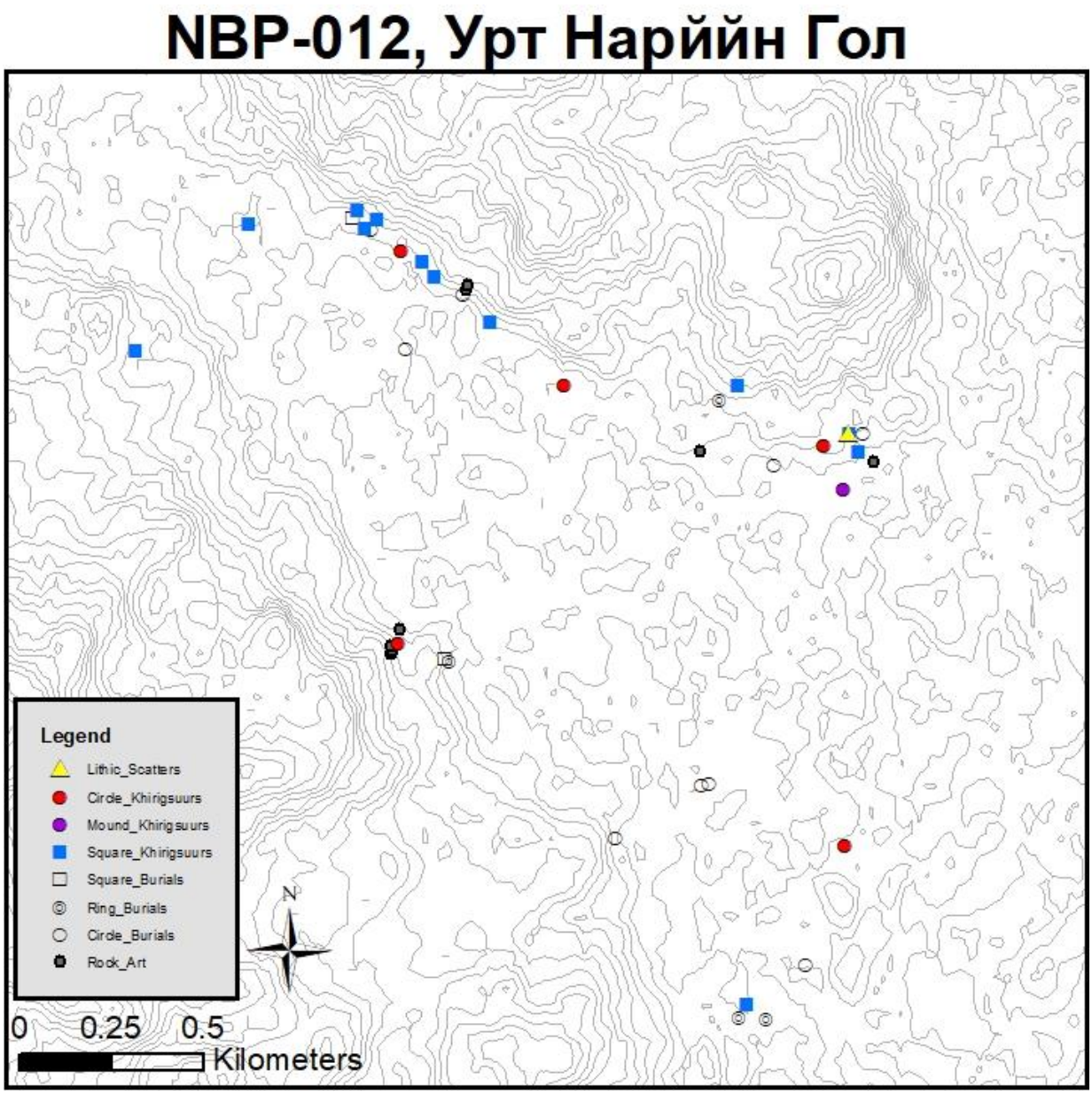


Figure 3.13. Planview of NBP-012.

NBP-015, Бор Шорооны Ам

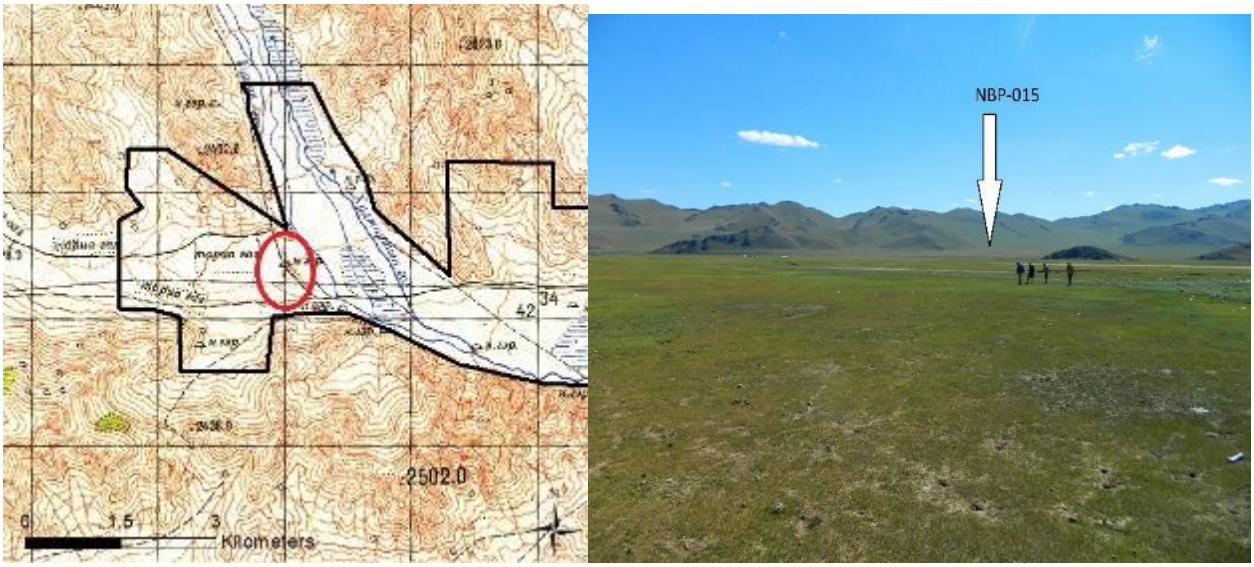


Figure 3.14. A contextual view of NBP-015 (left) and a photo looking west-southwest over the Khujirtiin Valley towards the uplift of NBP-015 (right).

NBP-015 (Figure 3.13 and 3.14) sits on a flat terrace, named Bor Shoroonii Am, raised 3-4 meters above the Khujirtiin Valley floor. This area was also comprised mainly of monumental construction, including large circular-fenced khirigsuurs with numerous satellite features, smaller square, circle, and ring graves, as well as and two Iron Age slab burials that the team fully excavated. Two fallen deer stones were also on the uplift, along with four empty deer stone "platforms"[9] consolidated around the largest khirigsuur that was nearly 60 meters in diameter. In addition to the monumental complex, three small lithic scatters (n=45) were also present and included a formal blade, a hafted point, and thumbnail scraper. We recovered only two pieces of isolated ceramic at this location.

[9] Deerstone platforms are often small stone boxes approximately 1 x 1m, or a crescent-shaped stone feature which open to the east. The empty platforms at NBP-015 were all crescent shaped.

To determine the potential of subsurface deposits and the probability of uncovering habitation features during formal excavation, we conducted twenty-four shovel tests along the edge of the terrace positioned according to the density of lithic scatters. Unfortunately, only three of the probes were positive for material culture, with no immediate evidence of prolonged or recurring residence. Although this terrace appeared to be an excellent location for habitation based on the presence of multiple contemporary *gers* (felt tents, also known as a *yurt*), here, ethnographic analogy was not congruent with artifact recovery. Instead, NBP-015 is likely a location dedicated to ritual and temporary gatherings.

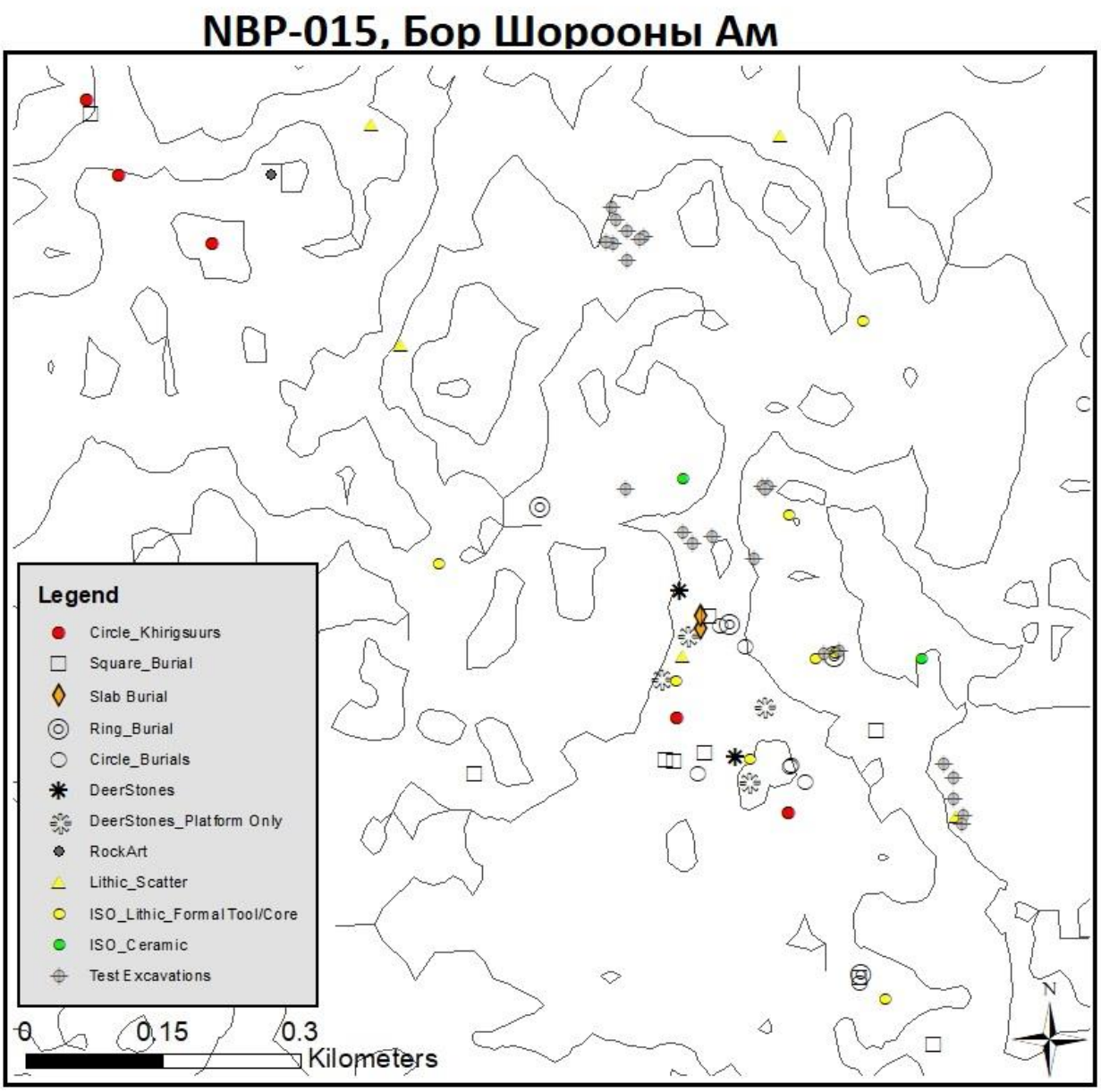


Figure 3.15. Planview of NBP-015.

NBP-017, Spring Camp

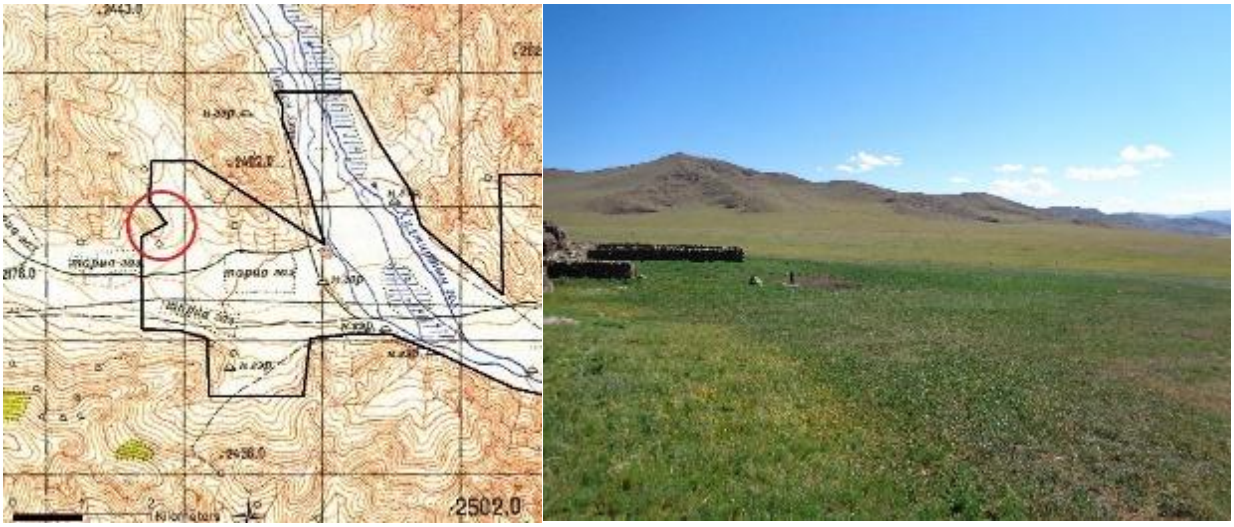


Figure 3.16. The location and overview of site NBP-017. At right, the photo is looking north-northeast.

This location (Figure 3.16 and 3.17) is a contemporary Spring campsite and corral, with evidence of ancient habitation. Tucked against a rocky outcrop protecting the area from seasonal northerly and westerly winds, the campsite yielded a moderate density of both ceramic and lithic materials on the surface. Twenty pieces of pottery assigned to the Late Bronze to Late Iron Age were present, indicating NBP-017 was a residential space repeatedly used over time. In addition to the pottery, clay bricks from later historical periods were also noted and cataloged by the team.[10] The small lithic (n=16) assemblage consisted of debitage and expedient flake tools, but formal tools like scrapers and retouched blades were also part of the toolkit, which provides an excellent dataset to determine and compare with assemblages from other types of occupational spaces to garner insight on landscape use and political economic strategies over time.

[10] Local informants as well as the administrators in the provincial government suggested these architectural remains were from a Buddhist temple and monastery that once stood in the area.

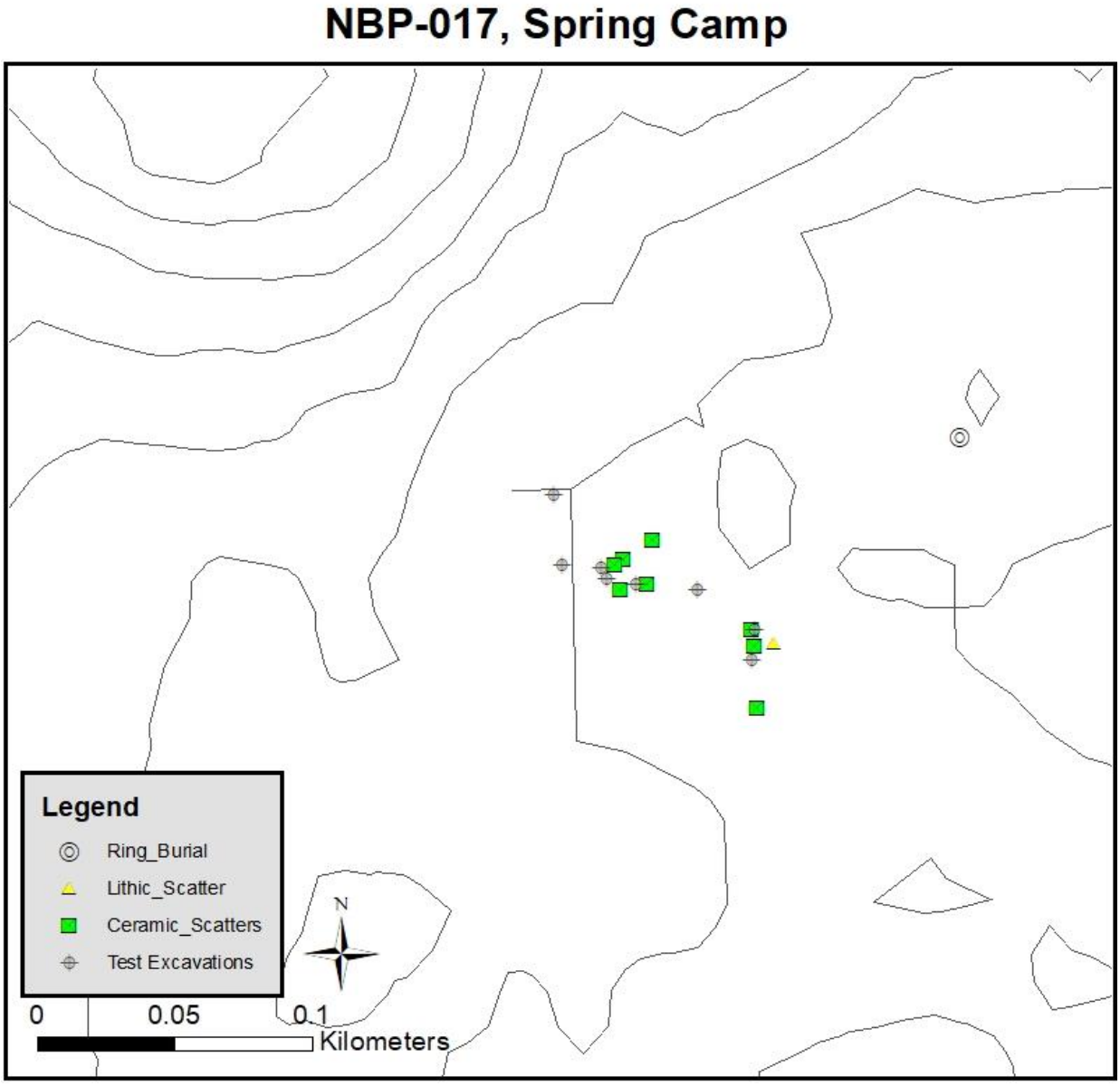


Figure 3.17. Planview of NBP-017.

Alluvial and other taphonomic processes dispersed the artifacts at NBP-017 approximately 30 meters from the center of the modern corral. While it was clear that the artifacts likely originated from an area closely tucked against the sheltered outcrop, surveyors conducted shovel test units (n=8) to evaluate the potential of subsurface features and to determine the extent and depositional

potential of the scatter. Unfortunately, the continual use of the area for herding (including cleaning and disturbances from faunal traffic and churning) caused the stratification to be mixed and mottled. Only three of the shovel tests were positive: two tests revealed single Late Bronze Age sherds, while another unearthed a single *Ovis/Capra* astragalus and very small quantities of charcoal from the disturbed contexts.

NBP-018, Хужиртын Хөндий

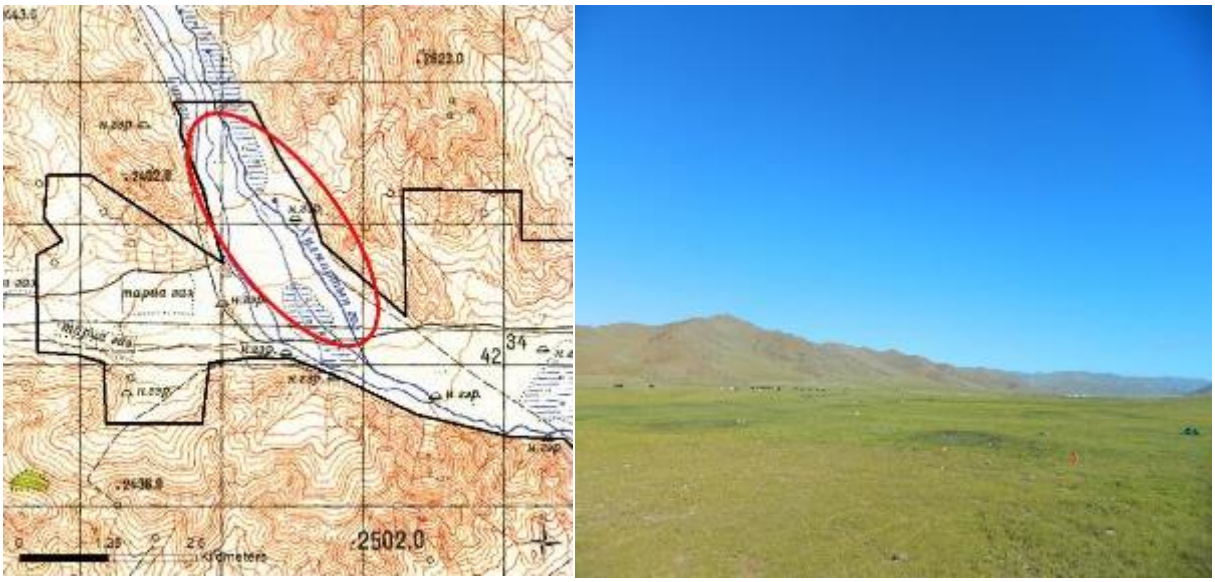


Figure 3.18. The location of NBP-018 (left) and the Khujirtiin Valley and ceramic scatter looking north-northwest (right).

As the team traversed the Khujirtiin Valley (Figure 3.18 and 3.19), they detected high densities of ceramic surface scatters, as well as extensive monumental construction. Fifteen distinct ceramic distributions were recorded and collected throughout the valley floor, many of which appeared to be *in situ* on a slight uplift that rose approximately a meter above the alluvial plain. Two of those ceramic distributions also included lithic materials (n=6) with two expedient flake tools. Ceramic assignments for the 273 pieces spanned the Late Bronze Age to the Late Historic periods of the Khitan (ca. 10th century CE) and the Qing dynasty (17th-20th century CE).

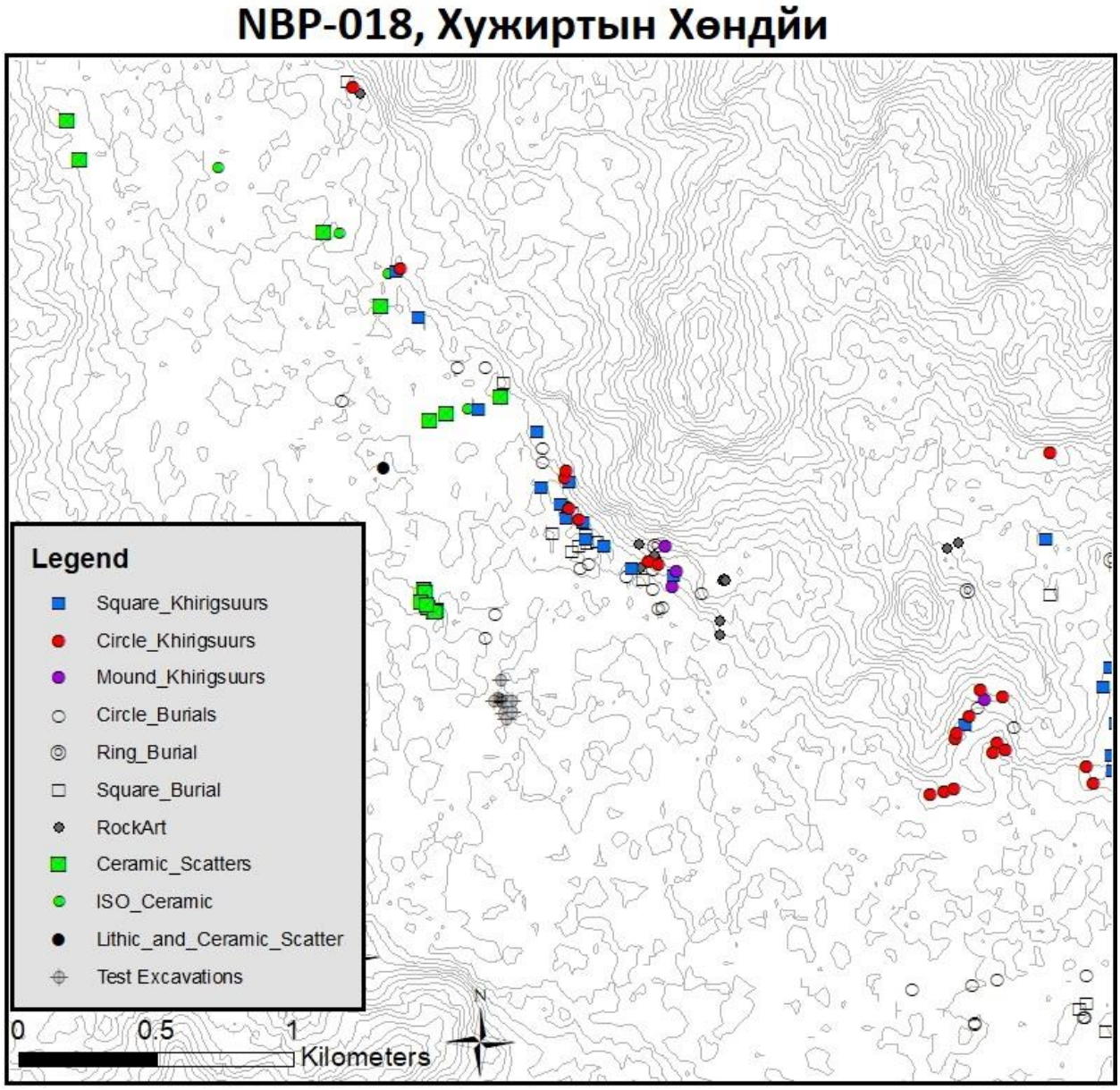


Figure 3.19. Planview of NBP-018.

Over 70 monuments run alongside the eastern edge of the valley. Common monument types were all present: khirigsuurs, circle burials, ring burials, square graves, and rock art.

The organization of NBP-018 demonstrates that the spatial relationships between ceramic scatters and monument complexes is generally congruent with Houle's (2010) findings, where he argued that summer valleys are structured by four discernable ribbons moving away from a river

towards the edges of a valley: 1) an area of habitation adjacent to the river, 2) an empty tract devoid of residential or monumental evidence, 3) a ribbon dedicated to monuments usually located at foothills, and 4) an area in the hills/mountain passes typical of winter and spring camps (Ibid: 43). Direct historical analogy suggests that this four-part spatial form has continued in modern times, but extreme caution should be taken when addressing seasonality in the past. At NBP-018, many contemporary gers were noted alongside the river in similar positions to the ceramic scatters. Combining analogical reasoning and Houle's conclusions from the Khanuy Valley, NBP-018 is assuredly a residential area on the valley floor with a monumental counterpart (and potential ritual activities evidenced by the surface assemblage) at the valley edges.

Locus B

Across from Locus A on the eastern bank of the Tuin Gol, sits Locus B (Figure 20), also in Erdenetsogt *soum*. The Locus consists of three surveyed areas, amounting to a total of 18 km². Overall, these three areas represent substantial ritual locations with low concentrations of lithic and ceramic scatter as proxies for residential spaces. However, the analysis of the spatial correlation between the presence and prominence of ritual monuments and artifacts associated with habitation illuminate interesting details about the political economy, power, and landscape in the Late Bronze and Iron Ages of Mongolia. Specific settings from Locus B to be discussed are 1) the well-known site of Shatar Chuluu (Шатар Чулуу), designated NBP-010, 2) a thin valley adjacent to Shatar Chuluu labeled called Doromot Khairkhan (Доромт Хайрхан) labeled NBP-020, and 3) a north-south oriented valley called Bumbatiin Valley (Бумбатын Хөндий), assigned the catalog number, NBP-021.

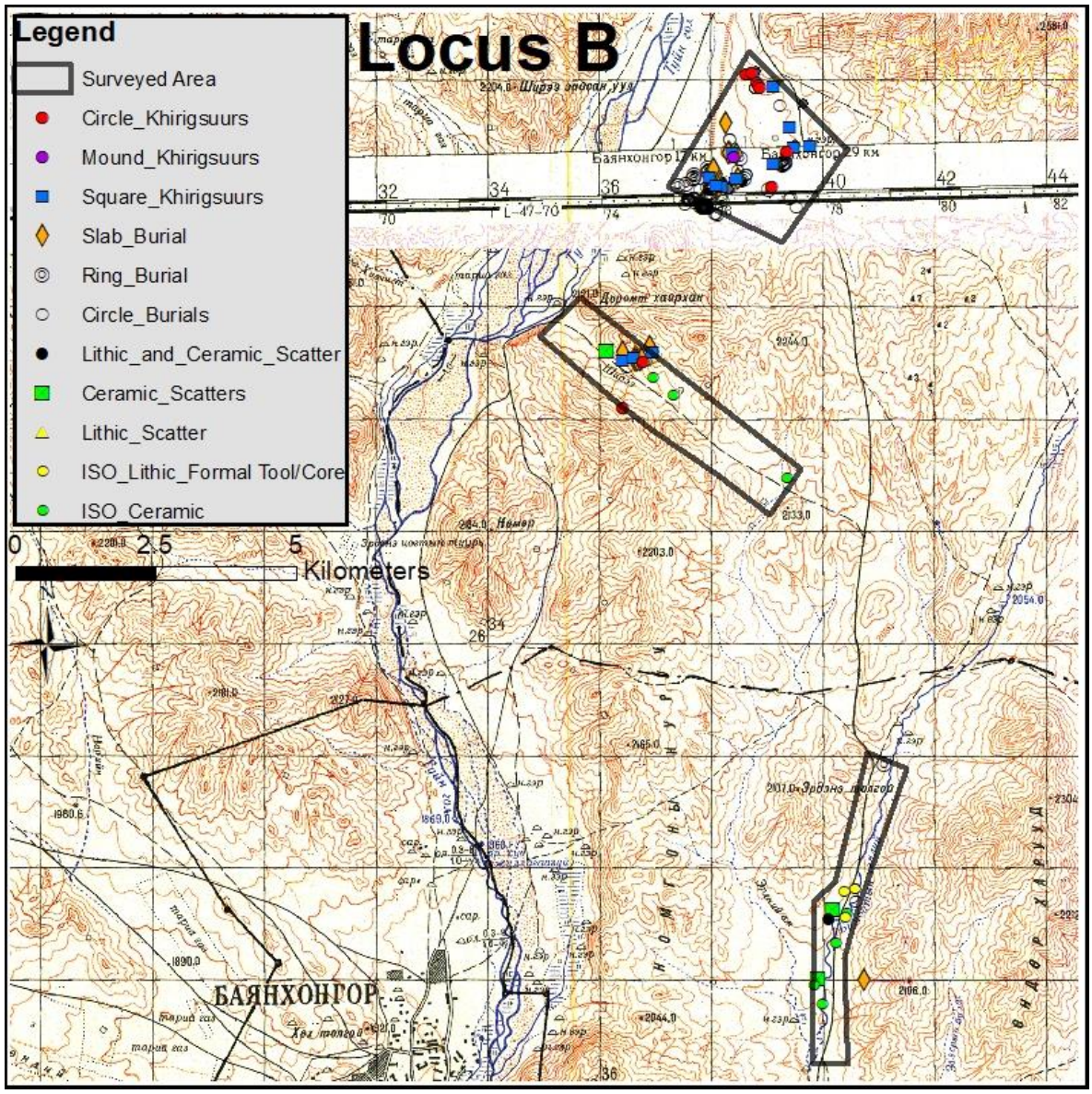


Figure 3.20. The location and distribution of scatters, monuments, and rock art in Locus B.

NBP-010, Шатар Чулуу

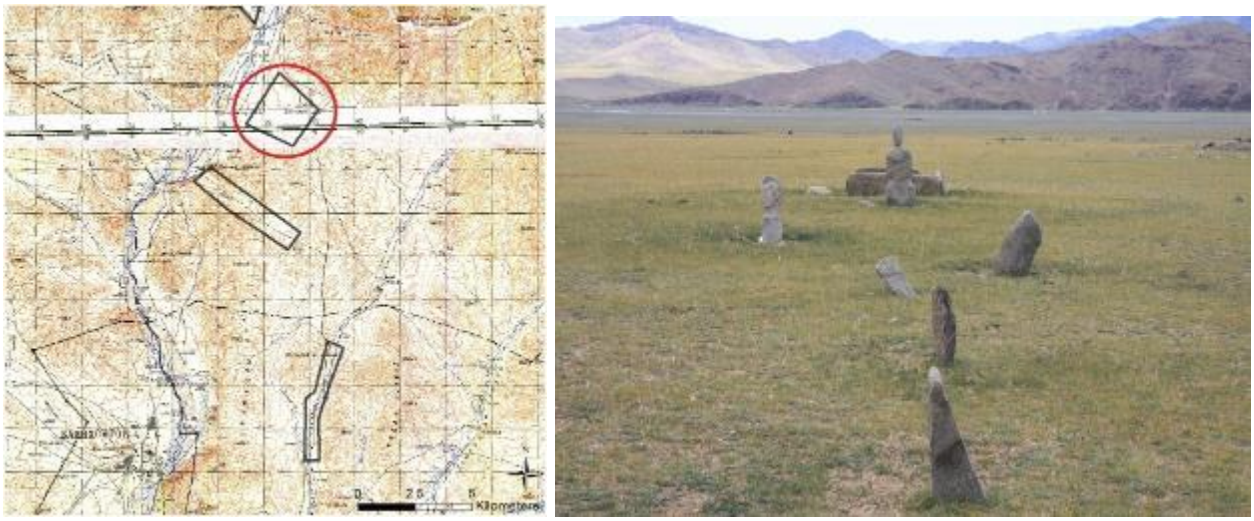


Figure 3.21. The location of Shatar Chuluu within Locus B (left) and a view of a Turk burial and accompanying man-stone and the beginning of the bal bal line that runs eastward (right). The photo is looking west.

Shatar Chuluu (Figure 3.21 and 3.22) is a well-known ritual site situated on a flat terrace on the eastern bank of the Tuin Gol, approximately 15 kilometers north of Bayankhongor city. The prominent archaeological features are conspicuous to the naked eye from a great distance, such that the locale is often visited by tourists on their way to a popular hot-springs destination. The inset terrace is quite large, totaling nearly 10 km² of intensive pedestrian transects. Monumental construction here spans nearly three-thousand years.

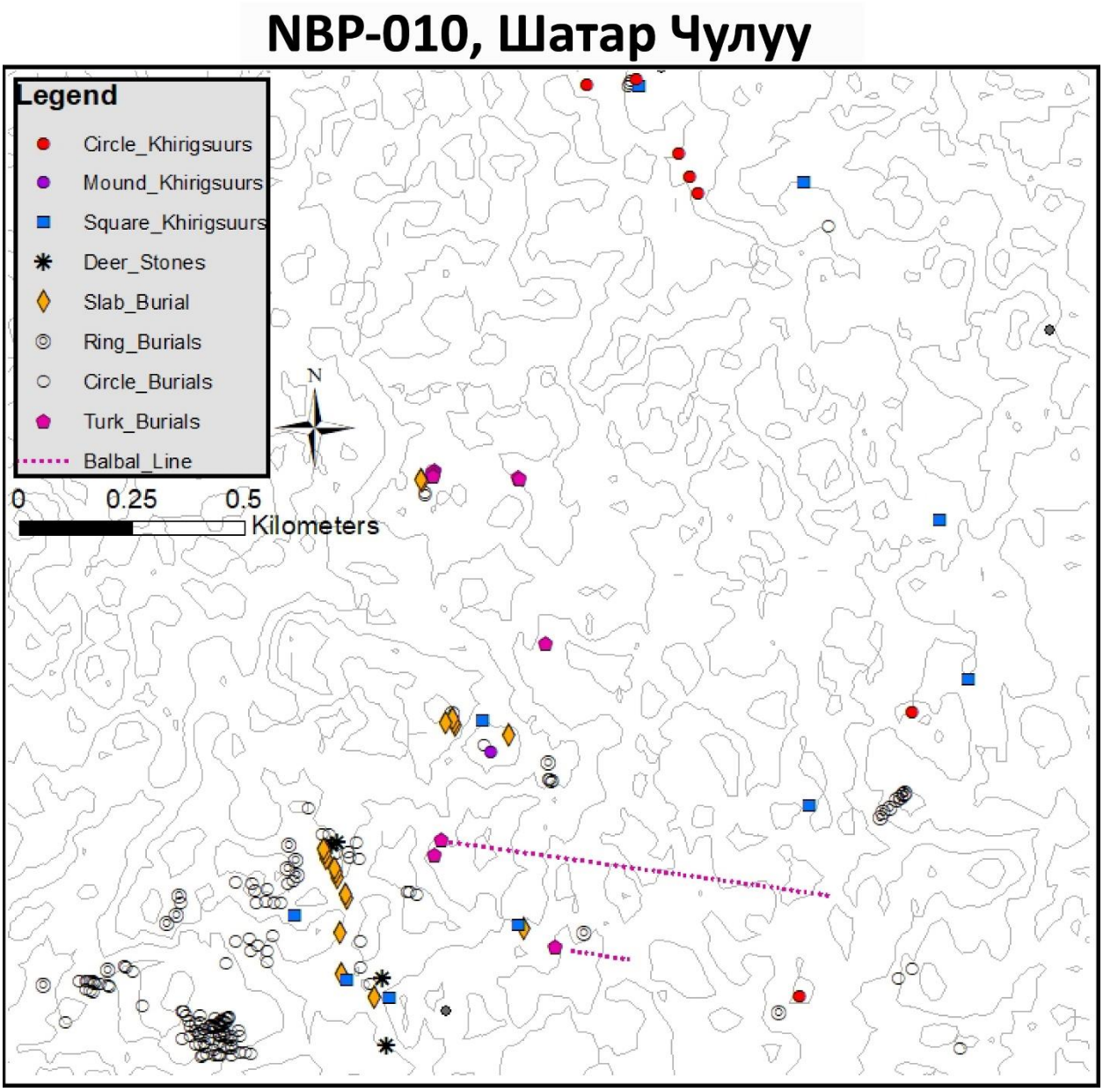


Figure 3.22. Planview of NBP-010.

Post-field research confirmed that three large Middle Bronze Afanasievo mounds (ca. 3300-2500 BCE) at Shaatar Chuluu were excavated by V.V. Volkov in the early 1970s (Novgoroda 1989: 81-84). Grave shafts yielded thick egg-shaped ceramic vessels with chevron and herring-bone patterns, lithic scrapers, stone pestles and copper rings (Volkov 1995: 320). Bodies were covered in red ochre and found in eastern-facing flexed positions (Volkov 1975) typical of the western steppe Yamnaya and Afanasievo traditions (Frachetti 2012: 11), evidence of long-distance migrations between Mongolia and the western steppe. The funerary goods he recovered were paltry but included incised ceramic and well-made scrapers (Novgorodova 1989: 82).

To the east, deeper into the terrace of Shatar Chuluu are large square-fenced khirigsuurs with hundreds of satellite features surrounding them. In addition to these monuments, twenty slab burials are spread throughout the uplift. However, the majority of slab burials (n=12) were consolidated together neighboring the main khirigsuur. One of the Iron Age slab burials was constructed with purloined Bronze Age deer stones. This complex also consisted of eight Turk burials, one of which included lion statues flanking the grave and two bal bal lines emanating eastwards from the burial chamber. One of the bal bal lines incorporated 47 squat standing stones and measured over 850 meters.

The survey team at NBP-010 did not find evidence of habitation, ephemeral, or otherwise. We recorded only a few pieces of Turk period ceramic in the vicinity of a robbed Turk burial. This is likely due to previous archaeological fieldwork completed on the terrace, however, the abscence of everyday material culture may suggest that this locale served a ritual or religious center, or was not considered suitable for a living space.

NBP-020, Доромт Хайрхан

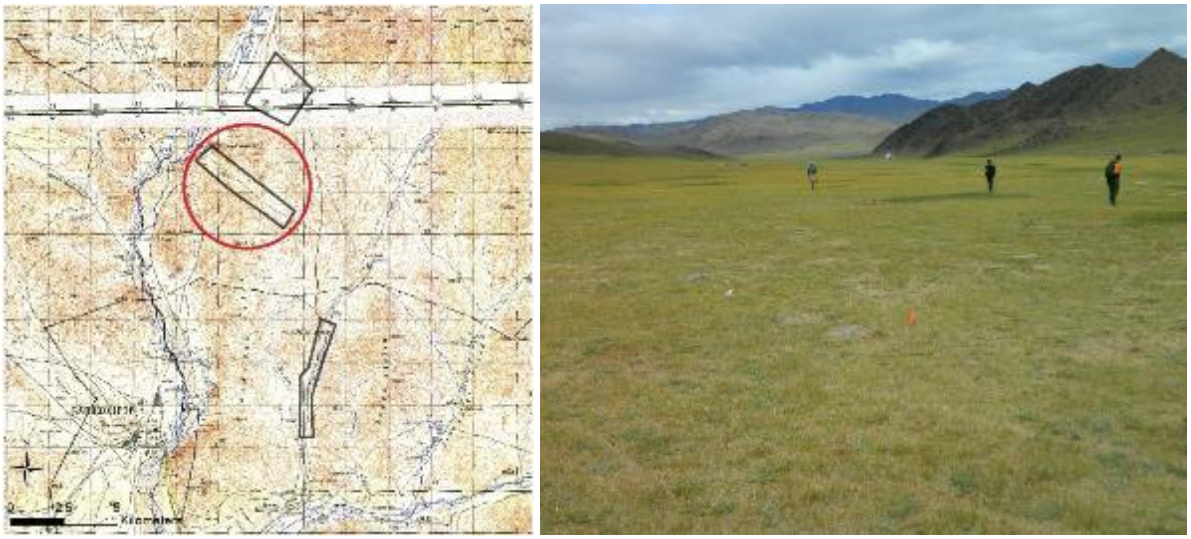


Figure 3.23. The location of NBP-020 within Locus B (left), and NBP-020 looking west-northwest towards to the Tuin Gol valley.

Because NBP-010 lacked evidence of habitation, the survey team investigated immediately adjacent valleys for comparison in attempt to (re)assemble a holistic occupational landscape, namely Doromt Khairkhan. NBP-020 (Figure 3.23 and 3.24) totaled 5 km² of the pedestrian survey, wherein we recorded both monuments, as well as paltry evidence of ephemeral residences. In regards to monumentality, there were a few moderately sized square-fenced khirigsuurs underpinning the valley's activity; in addition to the khirigsuurs, there was a consolidated collection of thirteen mid-sized slab burials. Further, one of these slab burials was recently robbed by looters who discarded the human remains on the surface. The osteological material was collected and analyzed, the reporting of which is in Appendix B. Complementing the monumental construction at NBP-020 were eleven pieces of pottery, four of which were single isolated finds. While the presence of ceramic does suggest a degree of residence for the area, most of the ceramic was not in situ, found along slopes victim to alluvial wash or near

rodent burrows. Although the exact placement of prehistoric campsites or habitation areas may be unclear due to taphonomic processes, the volume, occurrence, and dating of the ceramic will be of utmost importance in the following chapter.

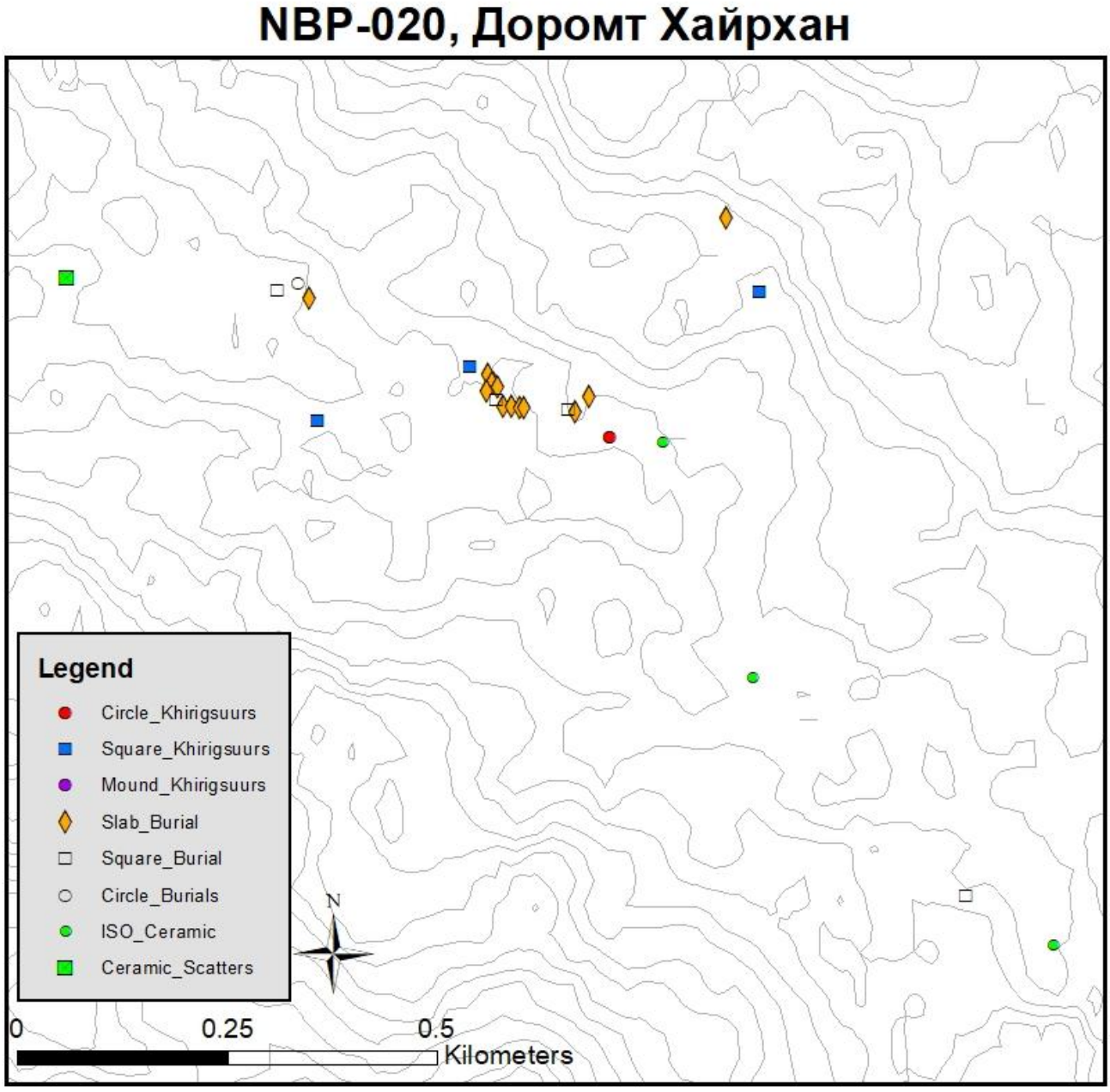


Figure 3.24. Planview of NBP-020.

NBP-021, Бумбатын Хөндий



Figure 3.25. Location of NBP-021 within Locus B. At right, team members flag a ceramic scatter. Photo is looking south-southeast.

NBP-021 is a 4 km² survey unit on the Bumbatiin Valley floor (Figure 3.24 and 3.25). Bumbatiin Valley was chosen as a location of interest because it had excellent potential for analogical winter habitation areas. This wide valley was tucked away 6.5 kilometers to the west of the Tuin Gol, where mountain peaks could block the frigid winter winds. Running through the open vale was a seasonal drainage not flowing during the 2015 summer expedition. A single family was living in the valley.

Although the survey team did not observe any contemporary winter camps, NBP-021 did reveal some indication the valley was a residential space. Forty-seven pieces of ceramic and four lithic flakes were flagged and collected. In addition to these scatters, the crew also noted a collection of five Iron Age slab burials at the valley's eastern foothills.

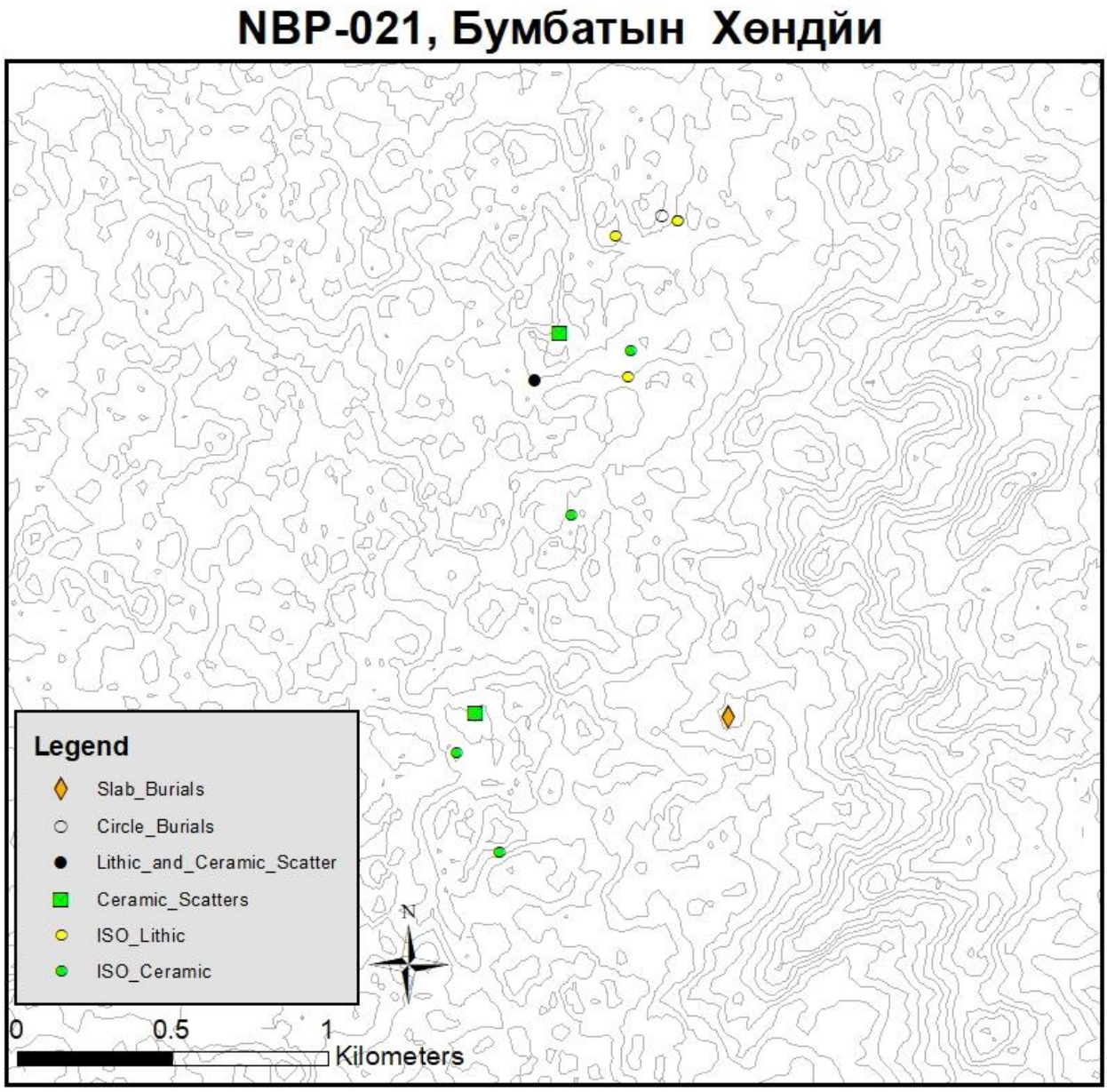


Figure 3.26. Planview of NBP-021.

Locus C

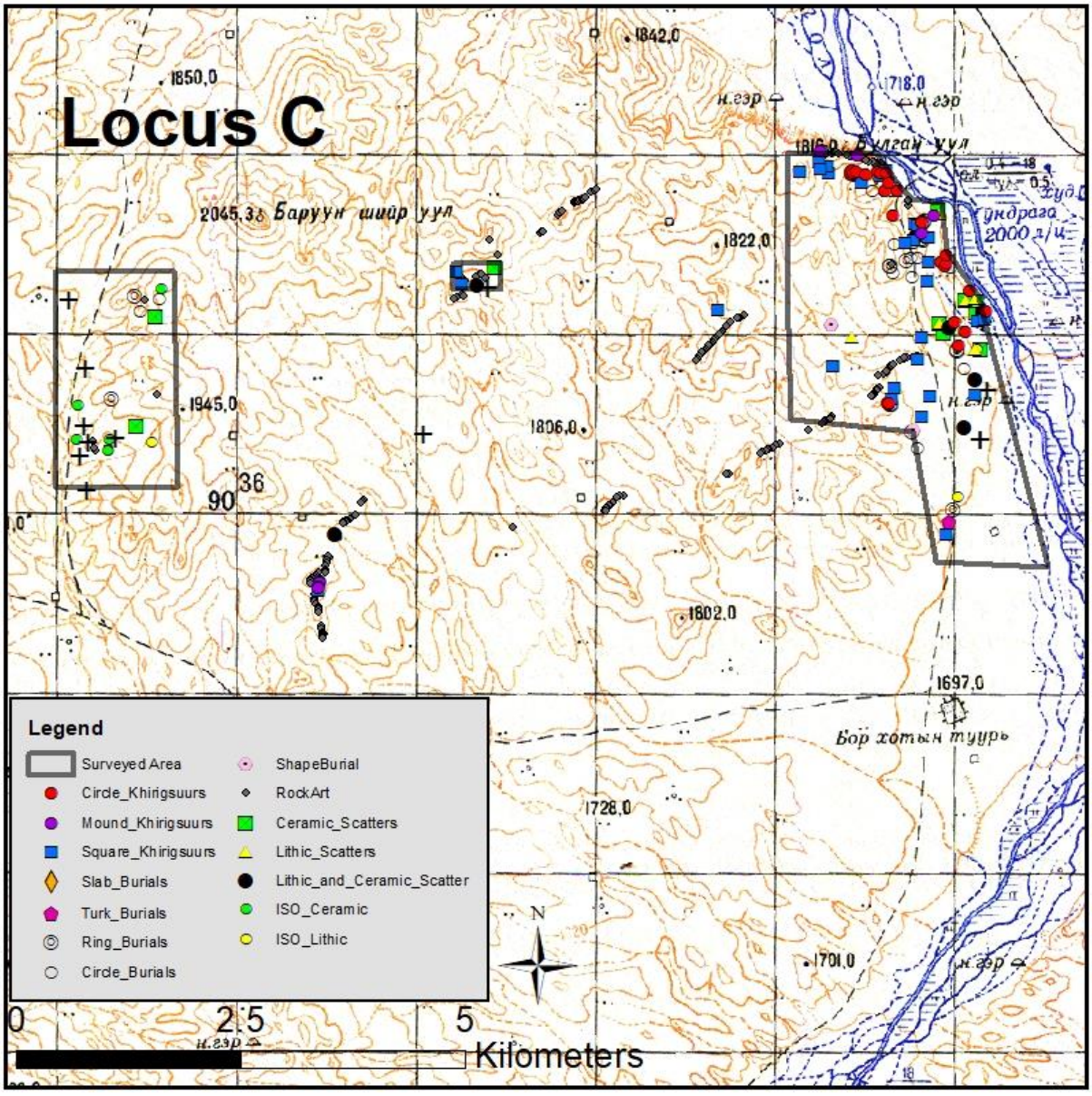


Figure 3.27. The general layout of Locus C.

Sixty kilometers south of the previous two loci sits Locus C (Figure 3.27), situated alongside a bend in the Tuin Gol in Olziit *soum.* The locus is just south of Bulgan Uul, from which I named the southern region of this project. The Locus accounts for 10 km² of the total pedestrian survey, parsed out into three formally walked units, including a single winter camp

that we informally investigated during a reconnaissance trip. Transect walking within the three designated survey areas revealed an extremely dense setting, complete with monuments, residential spaces, and activity centers. Archaeological materials ranged from the Paleolithic to the Qing Dynasty era, with the presence of a large walled "city" or fortification and an irrigation canal suggests that the Manchus extensively used the zone during their occupation (ca. 17th-20th centuries). Much of the prehistoric activity was unsurprisingly clustered along the Tuin Gol; however, in places of modern winter residence (quadrats to the west of the river), both contemporary and prehistoric artifacts were recovered by surveyors, creating palimpsests of material chronologies to be assessed. The area was also rich with surface slag and raw iron ores and consisted of several extensive rock art "spines" along low-lying ridges recorded during unsystematic reconnaissance.

It is necessary to outline four places in detail before the analytical chapters that follow this section: 1) the main survey area south of Bulgan Uul, labeled NBP-013, 2) a modern winter camp with a contemporary corral, designated NBP-023/NBP-024, 3) a second winter camp given the record number NBP-025, and 4) a moderately sized survey unit southwest of the conspicuous Baruun Shiir Uul (Баруун шийр уул), assigned NBP-026.

NBP-013, Булган Уул

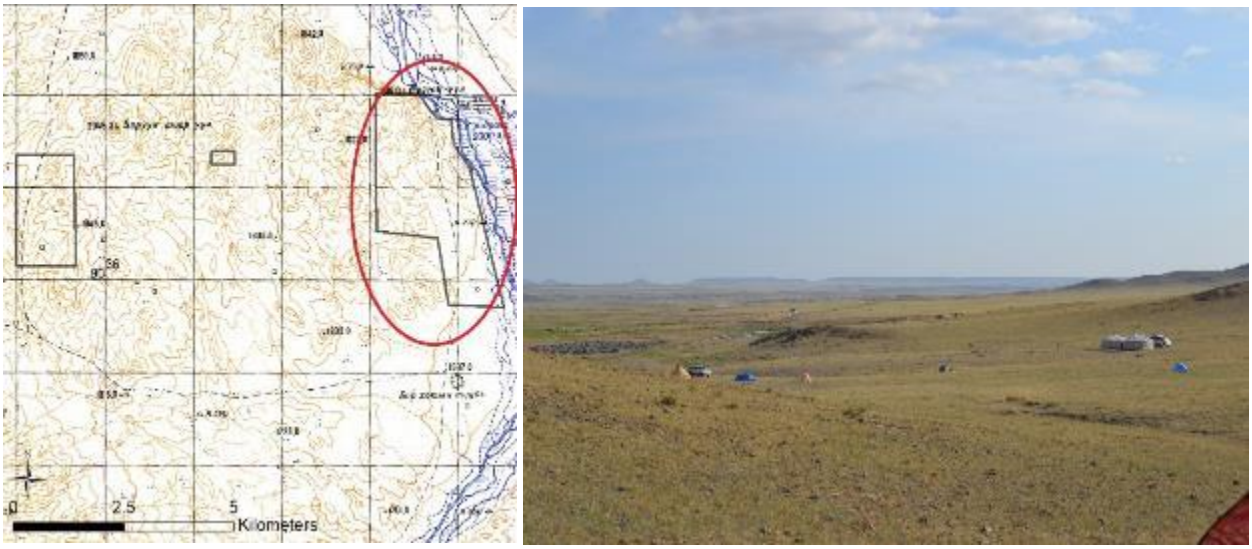


Figure 3.28. The contextual location of NBP-013 in Locus C (left), and an overview of the area facing south (right). The Tuin Gol can be seen far in the background behind our camp.

NBP-013 is a large inlet south of the imposing Bulgan Uul ridge and represents approximately 6 km² of the total 76 km² that we surveyed during the project (Figure 3.28 and 3.29). At the northern extent of the survey area, the landscape is quite rugged but recedes into a flat valley as one moves south. Material culture was in high densities both in the rocky sectors, as well as in the open swale. Monuments included Bronze Age khirigsuurs of all three types, numerous circle and ring burials, as well as a single "shape" burial that we excavated and carbon-dated to the 8th-6th centuries BCE (Appendix B).

The survey revealed a great deal of evidence for habitation in addition to monuments and graves. The team collected seven lithic scatters, a few of which extended over hundreds of meters. In cases where surface scatters were sprawling, we collected artifacts in multiple groups for better analytical resolution. The lithic assemblage from NBP-013 consisted of 643 pieces of knapped material, with flakes, cores, expedient, and formal tools all present. Ceramic sherds

were also highly concentrated at NBP-013 (n=156), representing periods from the Bronze Age to the current day. Lithic and ceramic materials were clustered at the edge of the swale inlet, closest to the river. The team also completed eighteen shovel tests. Only six were positive, but the materials were situated within similarly disturbed or unclear contexts like those in the Shatar Chuluu region.

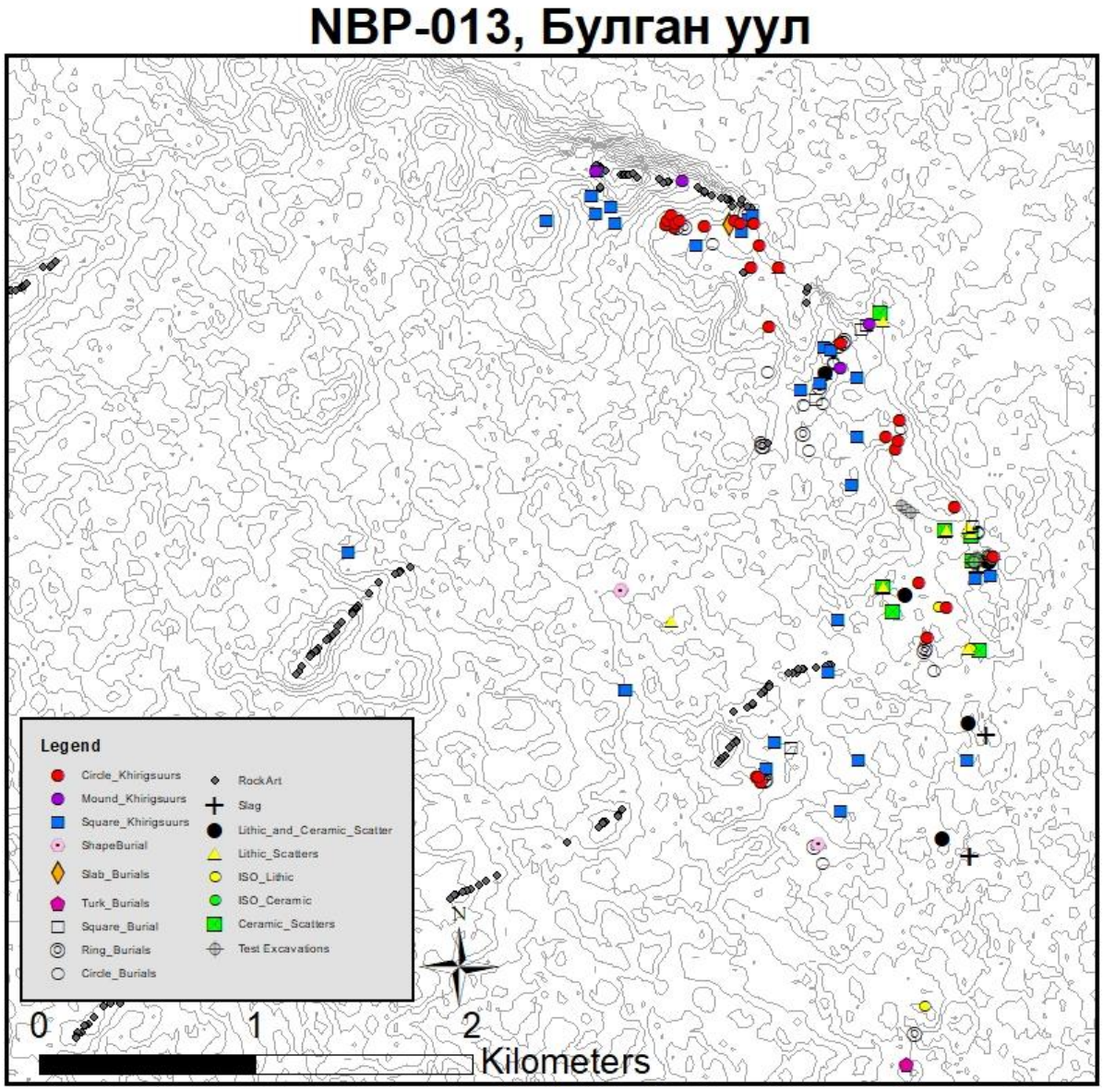


Figure 3.29. Planview of NBP-013.

NBP-023/NBP-024, Winter Camp

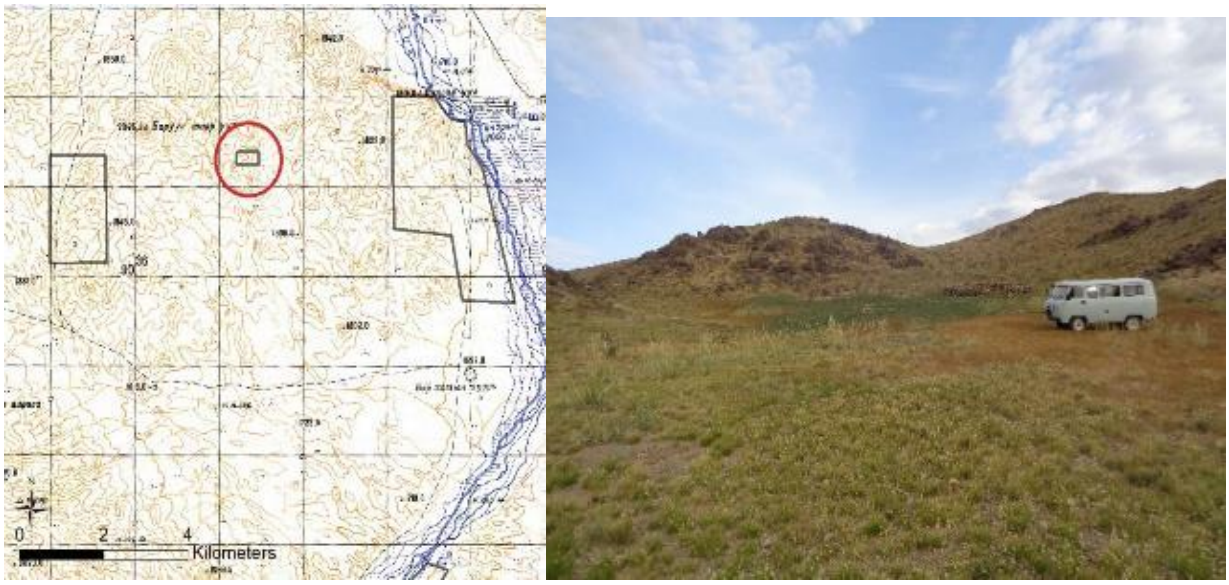


Figure 3.30. The location of NBP-023 and -024 within Locus C (left). The image on the right shows one of the winter camp corrals.

During vehicular reconnaissance to the west of the main survey area NBP-013, the survey team encountered a modern corral nestled within a series of undulating hills (Figure 3.30 and 3.31). We transected a .15 km² block around the corral and immediate vicinity. We collected twenty-nine pieces of ceramic near the corral at NBP-023/NBP-024, much of which was glazed brown-wares or fine grey wares attributed to late historical eras like the Khitan/Uyghur or Qing periods. However, we did identify some prehistoric ceramic and lithic materials. Scrapers, blades, and flake debitage, some produced out of high-quality chert, comprised the small lithic assemblage (n=10).

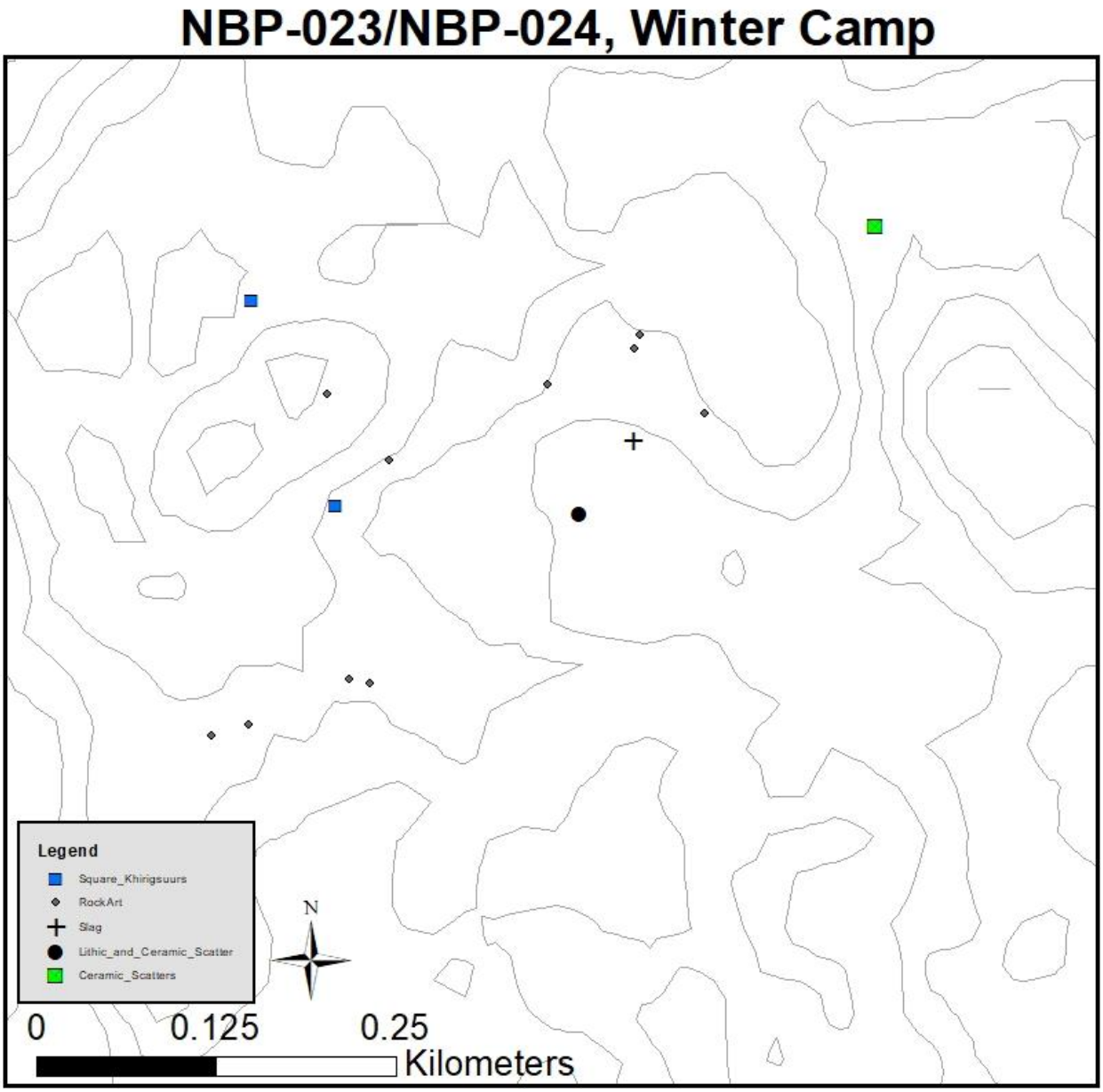


Figure 3.31. Planview of NBP-023 and NBP-024.

NBP-025, Winter Camp



Figure 3.32. The location of the winter camp (left) and a detail of the outbuildings (right).

The survey team did not encounter the winter camp NBP-025 during the formal survey (Figure 3.32 and 3.33). Instead, we found this location during vehicular reconnaissance aimed at complementing the larger survey areas typical of summer and spring habitations. Still, however, the area was walked using strict transects and flagging methods discussed above.

NBP-025 is a conspicuous site comprised of two outbuildings for storage and animal shelter, as well as two stone corrals in the immediate vicinity. The camp is located in a shallow swale, in a generally flat topographical zone. Very few mountains or hills were present to protect residents from winter winds. The survey team collected twenty-two pieces of pottery and a few flakes, in addition to informally recording over two-hundred rock art panels on low-lying "spines" to the south and north of the campsite. While the concentration of the surface material was not as dense as in other Loci, the temporal and spatial distribution of the ceramic will be important to the analyses in the following chapters.

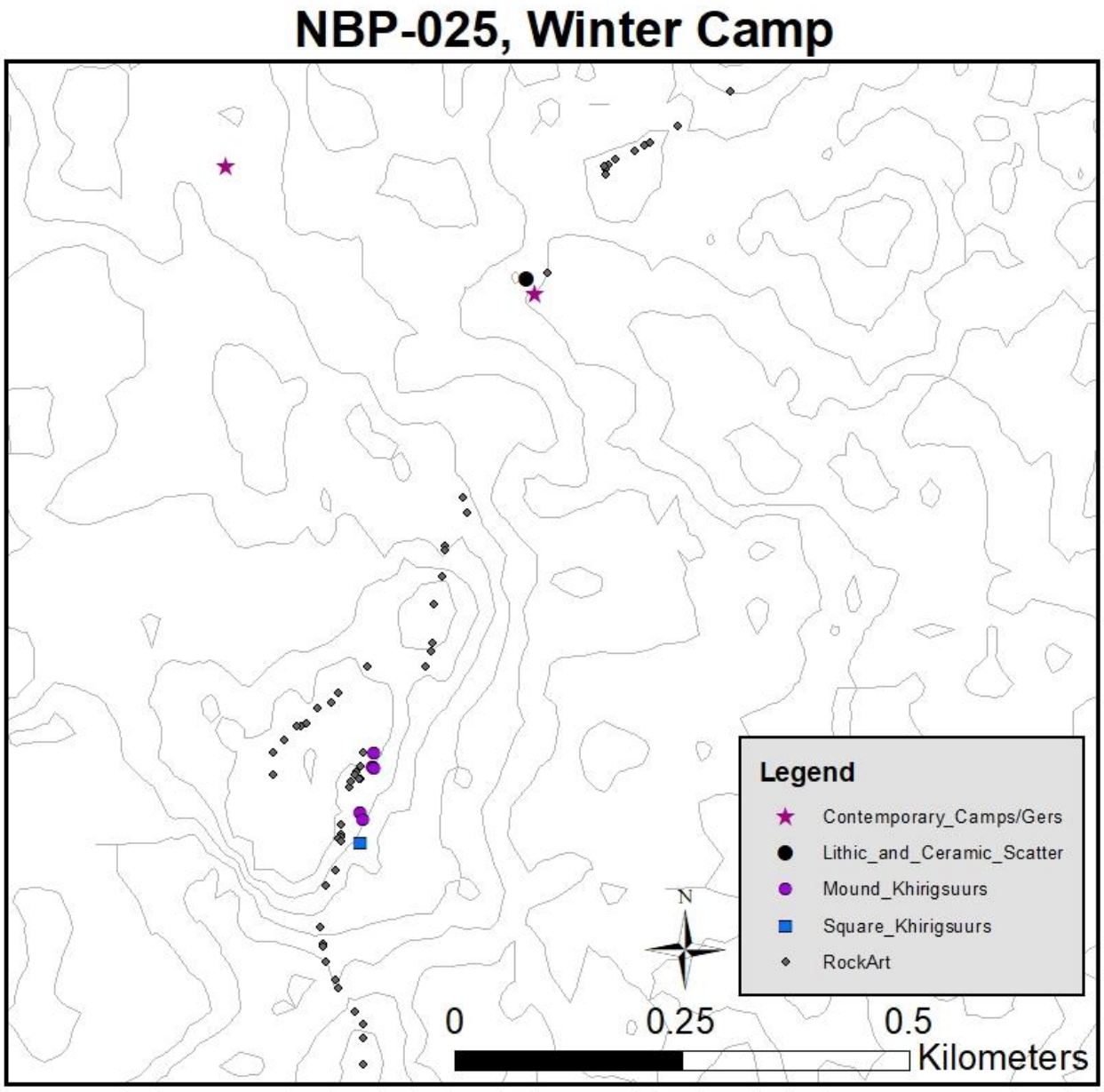


Figure 3.33. Planview of NBP-025.

NBP-026, Unnamed Steppe



Figure 3.34. The topographic location of NBP-026 is on the left. The right image shows the survey team collecting and recording one of the ceramic scatters.

The final component of Locus C is an unnamed swath of open steppe, labeled NBP-026 (Figure 3.34 and 3.35). This 3 km² zone, along with NBP-024, -025, and -026 was part of the concerted effort to sample ecological and topographic zones away from the main river course, often used for winter habitation within a typical Khangai migratory pattern.

When compared to other Loci, there was a dearth of artifacts and monuments at NBP-026. Slag and iron ore were well represented, as were two moderately sized ceramic scatters and a few isolates (n= 43). Further, the team only recorded four burial features. This unique sector will provide an excellent opportunity to compare economic strategies, mobility, and land use with survey sections closer to the Tuin Gol.

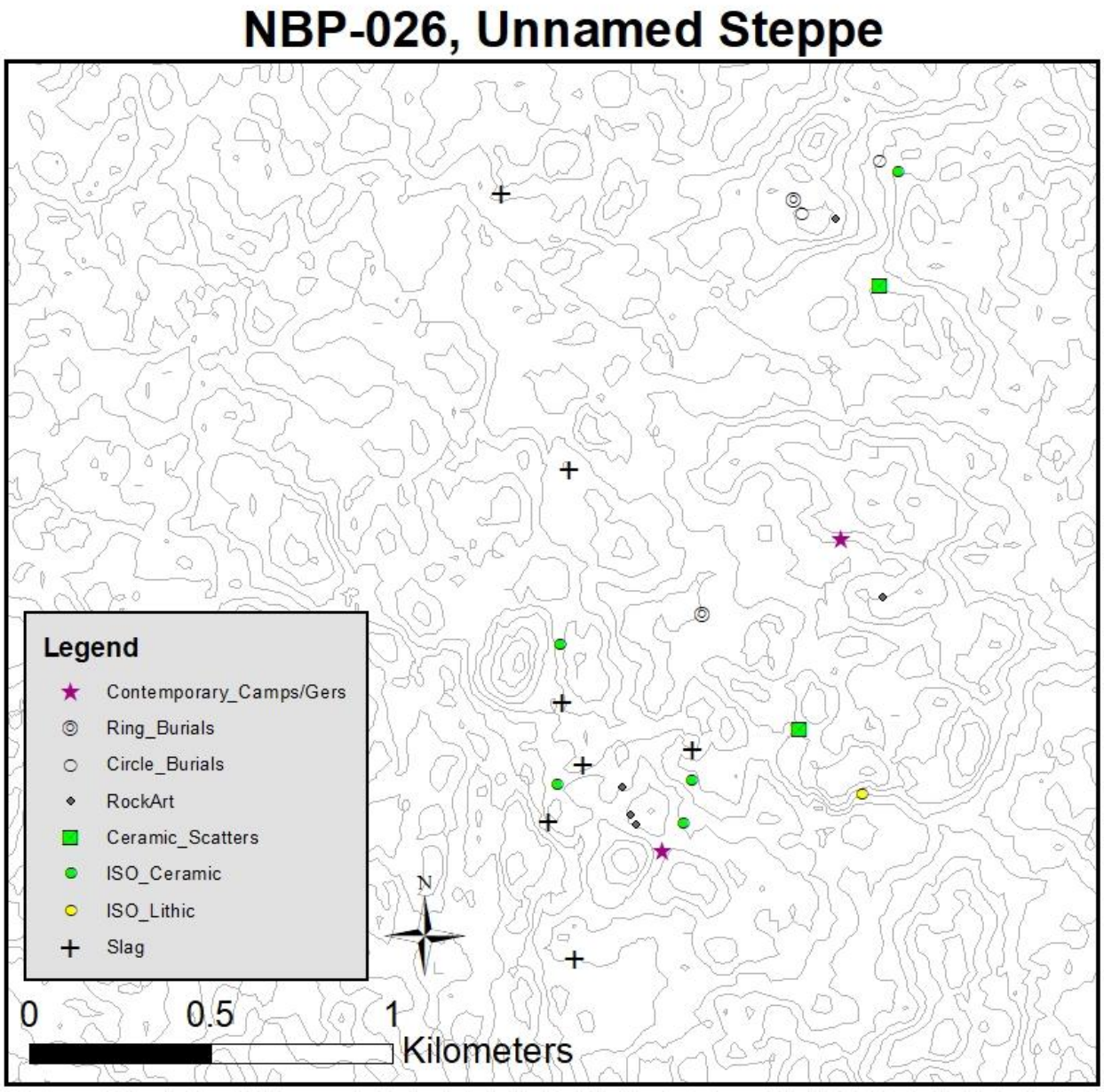


Figure 3.35. Planview of NBP-026.

Locus D

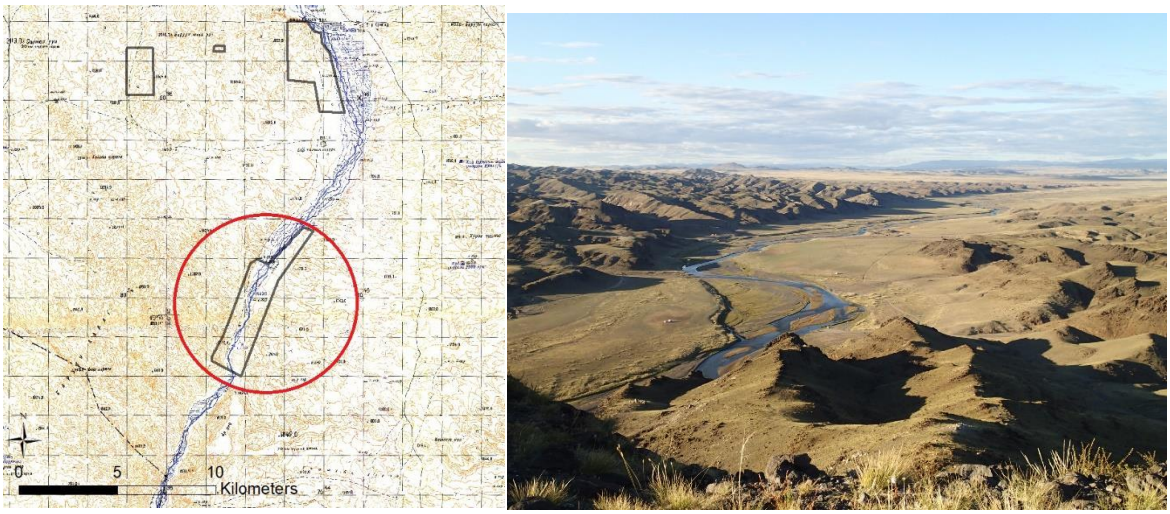


Figure 3.36. The location of Locus D (left) and an overview of the area looking south (right). Photo courtesy of Isaac Warshauer.

NBP-027, NBP-028, Хар Сайр

Unlike the other loci described above, Locus D is only a single zone flanking the Tuin Gol, with locals calling it Khar Sair. Archaeological catalog numbers NBP-027 and NBP-028 refer to the western and eastern banks of the river, respectively (Figure 3.36 and 3.37). I initially chose this locale for intensive investigation because of the conspicuous and dense monumental constructions on both sides of the river, which included a large collection of khirigsuurs and well-made Turkic man-stones. The survey team was able to cover 10 km² of the valley floor, using the mountains as a natural corridor and fieldwalking limit.

In addition to the numerous stone monuments (n=214), the investigation of NBP-027 and NBP-028 also revealed that prehistoric inhabitants heavily used the Locus as residential and workspaces. Interestingly, the artifact discrepancy between the western and eastern banks of the river is quite severe. Surveyors collected 506 lithics and 67 pieces of pottery on the western bank of Locus D, yet only recovered 26 lithics and 97 sherds on the eastern side, which suggests a

temporal preference for the western bank. Electromagnetic prospection was quite successful at Locus D, where linear anomalies led to the discovery of an early Medieval hearth (carbon-dated to the 11th century CE) approximately 15cm below the ground surface (Appendix A). Associated with the subsurface hearth, was a surface assemblage that constituted at least five-thousand years of activity at the household level.

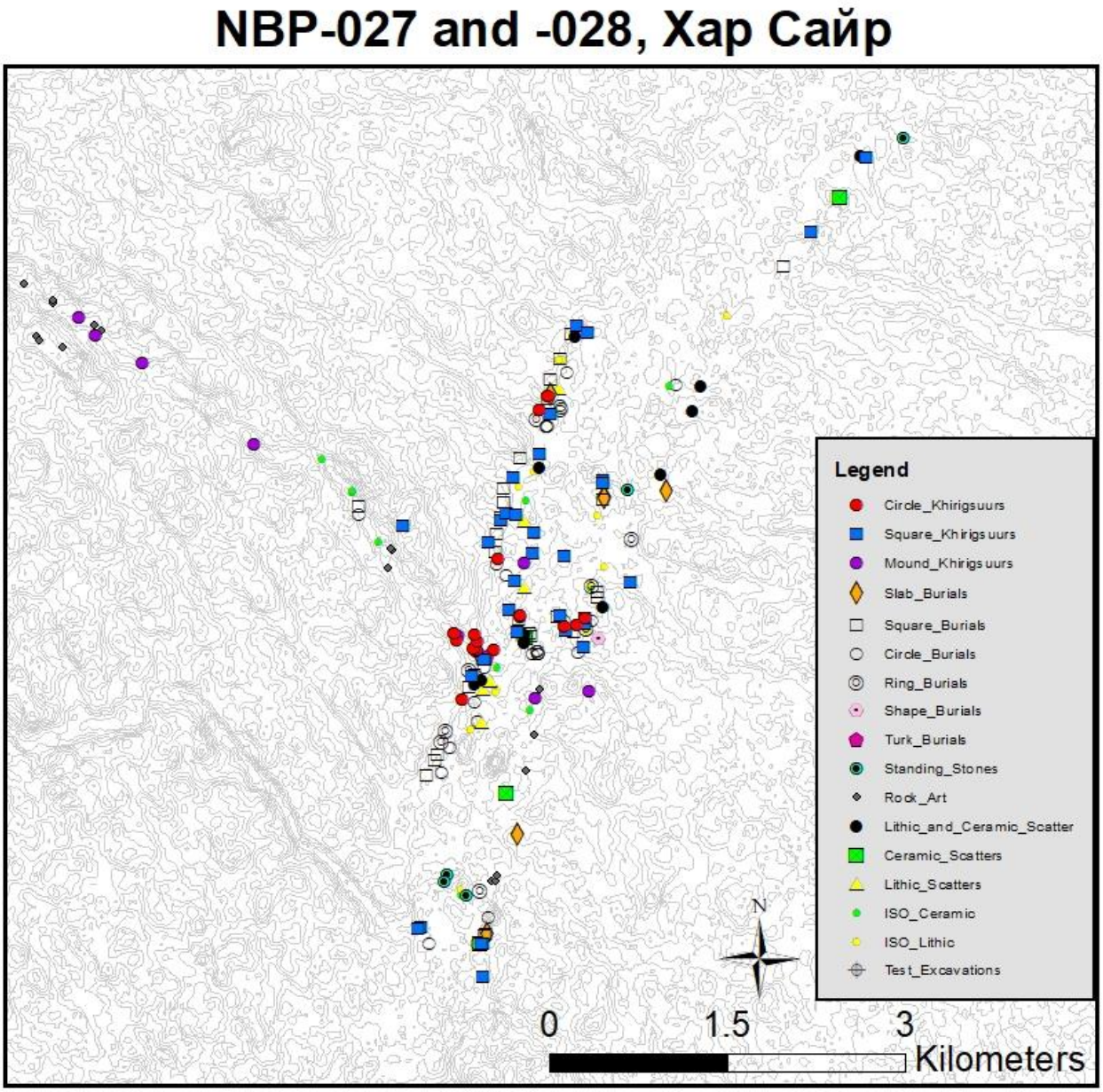


Figure 3.37. Planview of NBP-027 and NBP-028.

CHAPTER 4: CARTESIAN STEPPES: PLACES AND IN-BETWEEN ON THE PREHISTORIC LANDSCAPE

This project is framed using the concept of occupational landscapes. Occupational landscapes comprise a myriad of natural resources, places of domesticity and production/exchange/consumption, as well as spaces and symbols of cosmological importance. However, more than just tasks and activities at particular locations, the occupational landscape is an epistemological approach that is set-up to bring the tactics and stratagems of actors, their decision-making and subsequent actions, to the fore. While these locations may appear (and were recorded in the field) as vector-points on a map (i.e., the 'site'), I do not frame the occupational landscape so discreetly. Instead, I approach these locations as nodes within a network of options and constraints for the prehistoric pastoralist—places of activity linked together through intersecting paths of people, objects, and ideas (Tuan 1977). In kind, Foley (1981) argues that much of human activity is not confined to the settlement; therefore, archaeological evidence of political and economic dynamism will be dispersed and revealed at varying spatial extents and densities beyond what researchers often classically define as "the site." Bintliff (2000: 200) writes that the

> […] 'site' is inseparable from the recognition of how the entire artefactual land surface has been put into existence in all its variety and complexity. Only a holistic analysis of the subtle variation in surface artefact density across the landscape can lead, at a secondary stage to the delineation and potential structure in the data, which at a third stage allows inferences concerning a range of past activity […].

Thus, the archaeological materials we recorded in northern Bayankhongor province will not only be analyzed as a set of isolated vectors but also as patterned distributions and densities throughout the study area (Foley 1981: 163; Dunnel and Dancy 1983: 271; Bintliff 2000), constituting an "off-site" approach. Conceptualizing a contiguous environment lends itself well

to landscape investigation, as it allows for scale and context to become a powerful factor in analysis. Managing the occupational landscape at various scales also gives primacy to the artifact as the singular unit of analysis (Clarke 1968). With the artifact, not the site, as the hinge of investigation, it further safeguards that 1) observed patterning is not a reflection of the archaeologist's predilection for the site concept, or 2) that taphonomic or depositional processes after artifact discard are not a significantly misleading factor in 'site' formation and interpretation.

The analytical methods used in this chapter rely predominantly on Geographic Information Systems (GIS) and built-in spatial statistical queries. The chapter will investigate surface distributions of lithic and ceramic material found throughout each Locus recovered during pedestrian survey. These spatial analyses determine a clear patterning of ecological practices that highlight the political and economic dynamism of the Late Bronze and Iron Ages of Mongolia. The following questions and tentative conclusions will organize the remainder of the chapter:

1) How are the lithic and ceramic materials distributed on the landscape, and what can these scatters reveal about large-scale economic practices? Do the scatters overlay each other, creating palimpsests, or, do the scatters have idiosyncratic patterning over time?

2) Is it possible to parse the occupational landscape into smaller-scale degrees of presence like ephemeral or continued residential areas, ritual spaces, workshops, or gathering places based on the comparison of lithic tool kits and densities of ceramic scatters?

3) Are lithic scatters or ceramic distributions of a certain period more spatially related than others?

4) How can the patterning of lithics and ceramic provide detail of political economic circumstances and/or chronological clarity?

Turning away from the popular site concept, this chapter focuses on the ecological facet of the occupational landscape at various scales for maximum geographic and temporal resolution: the region (North and South), the locus or valley (ABCD), and the household (NBP-). Synchronic lithic and diachronic ceramic distributions and their assemblage patterns outlined in this chapter lead me to argue that during the first-half of the first millennium BCE (Early and Mid-Iron Ages), habitation areas started to become more dispersed than in the Late Bronze Age. I suggest this is related to the adoption of pastoral nomadism and growing use of the horse. However, the slow fissioning and spread of habitation locales, I argue, is not only evidence of shifting ecological practices, but shows that this transition was not all together smooth. Instead, during the Early and Mid-Iron Ages, I contend that populations were engaged in ecological experimentation as they refined their engagement with animal husbandry and the landscape, ultimately paralleling the affiliations of individuals and groups—and the structures of authority— as they too were likely restructured and refashioned contemporaneously.

4.1. Geographic Information Systems and Archaeological Materials

Locations of and relational distances to and between assemblages are critical to archaeological interpretation. It is in this creation of place from undefined and nebulous spaces that form our initial connection with a landscape. In fact, "everything that happens, happens somewhere," and it is these happenings which emplace us within our world (Longley et al. 2005:24). This emplacement is both mental and physical, as the imagined world becomes mapped in mind and memory in combination with a variety of tangible and intangible environmental properties and contexts. Although the influence of the Enlightenment's scientific and secular enterprises sought to separate mind and body into a Cartesian and epistemological

dualism (Costall 2006: 16), the relationship between the landscape and its inhabitants are intimately connected and must be treated as such.

The introduction of Geographic Information Systems (GIS) into the suite of archaeological methods sparked extensive, yet quite possibly, overly enthusiastic confidence in our ability to reconstruct past societies. As a combination of complex software, data storage capabilities, and networks of satellites, GIS was heralded as a technological breakthrough engendering a Kuhnian paradigm shift. Its implementation was akin to

> the invention of the microscope and the telescope [are] to science, the computer to economics, and the printing press to information dissemination. It is the biggest step forward in the handling of geographic information since the invention of the map. (DoE 1987: 8)

After its initial conception in Canada in 1962, less than two decades later, the use of GIS was widespread in archaeology and continues to be a principal analytical tool for the social sciences (Chapman 2006: 17; Lock and Harris 1992). However, the introduction of GIS was not without its detractors, as the technology necessitates data manipulation in particular ways. For example, Zubrow (1990) suggests that the structure of spatial data within a GIS generates drawbacks and issues to be explicitly addressed. For example, raster data sets rely on a grid system, in which the attribute assigned to the cell may be larger or smaller than the area of the cell, eliminating minute variations that may be critical to that unit; in kind, vector-point and line-data imply a simplicity and precision to archaeological remains as static cartographic objects—a characteristic likely not mirrored on the surface (Ibid.: 67-9).

These drawbacks can hinder the analysis of important human-environment and human-human dynamics. As stated previously, for example, the paradigm of the New Archaeology further compounded this issue, which sought to calculate models of prediction and interpolation upon landscapes that were extra-somatic, a "fundamentally external backdrop to cultural activity" (Wheatley and Gillings 2002: 6). While scholars have addressed many of these

assumptions since the 1980s in various ways such as phenomenology (e.g., Tilley 1994), or claims of embedded meanings negotiated through the use and perception of space (e.g., Franklin 2014; Smith 2003; Llobera 2001, 1996; Harvey 1990), analysts must be cognizant of these drawbacks and ascertain the most effective approaches to ensure that cultural *and* individual systems-of-being-and-acting in the world are best represented in a landscape mired in reciprocal social-environmental production. Tactics used in this study to safeguard from detail potentially lost in static GIS analyses is the use of scale, distribution, and interpolation of artifacts and topographic features deriving from regional survey (Stahl 1999: 48).

4.2. Lithic Analysis: Introduction

While blades dominate lithic technologies of the Upper Paleolithic (ca. 45,000-10,000 ya) and Neolithic (ca. 8.0-3.0k cal yr) and Bronze Ages (ca. 3,000-1200 BCE) of Mongolia, micro-blades, scrapers, burins, denticulates, and retouched expedient tools are also part of the toolkit (Janz 2012: 138) and are represented in the assemblage from Bayankhongor (Appendix D). Although metallurgical production on the steppe arises between the fourth and third millennium BCE, stone tools likely remained an important part of the hunter-gatherer-pastoralist toolkit well into the first millennium, as evidenced by studies in other areas of Asia (Rosen 1996). Therefore, the geographic dispersal of lithic materials indicative of potential habitation and activity locales can yield important insights into land use over time, even granting the ability to comment on the specific periods under investigation in this dissertation.

Throughout the 76 km² surveyed, lithic materials were found at 102 locations, while surveyors collected ceramic at 129. This section will employ spatial statistics to display the dispersal of these artifacts—first lithic materials, and subsequently, ceramic. I will first evaluate

the proportions of lithic materials through sums and their reduction sequences—namely, primary, secondary, and tertiary stages. This "triple cortex typology" (Andrefsky 2005: 117) became more popular in recent years as research has shifted from finished tools to the *process* of lithic production (Dibble et al. 2005). Remaining or absent cortex can illuminate the relationship between labor and energy expended during transport or retrieval, locations of raw material sources, initial areas of reduction, as well as base-camps where tool production and finishing/maintenance occur most (Johnson 1989). For example, Binford's (1979) ethnoarchaeological analysis of the Nanamiut demonstrates a "distinction between residential locations and other special-purpose locations," such as procurement or hunting loci. Residential areas were typified as the "terminal focus of maintenance activities" like final tool production and food consumption (Ibid: 483). In other words, this method organizes the materials into stages of "procurement, production, use, maintenance, and discard" (Sellet 1993: 108), with the primary-secondary-tertiary sequence likely representing a continued decrease in the distance approaching a residential area.

The lithic assemblage collected by the survey team was comprised of 1,728 flakes, shatter, and tools made of various raw materials and stages of reduction. I completed the analysis of lithic materials with the aid of a definitional flow-chart. This chart (Figure 4.1), was engineered for empirical replicability and simplicity, but also to have better flexibility in analysis for representing the process of lithic reduction and other factors indicative of the technology, effort expended in production, and/or the learned skillset the knapper may or may not have. For instance, conchoidal flakes are often produced with a hard hammer as opposed to bending flakes that are often linked to softer hammers (i.e. bone), while more advanced bipolar technologies leave a palpable "twist" in the flake (Andrefsky 2005: 26-28). These distinctions, among others,

can aid in the determination regarding the extent of energy and focus to create a "tool," landscape use, as well as demonstrate the degree of specialized knowledge.

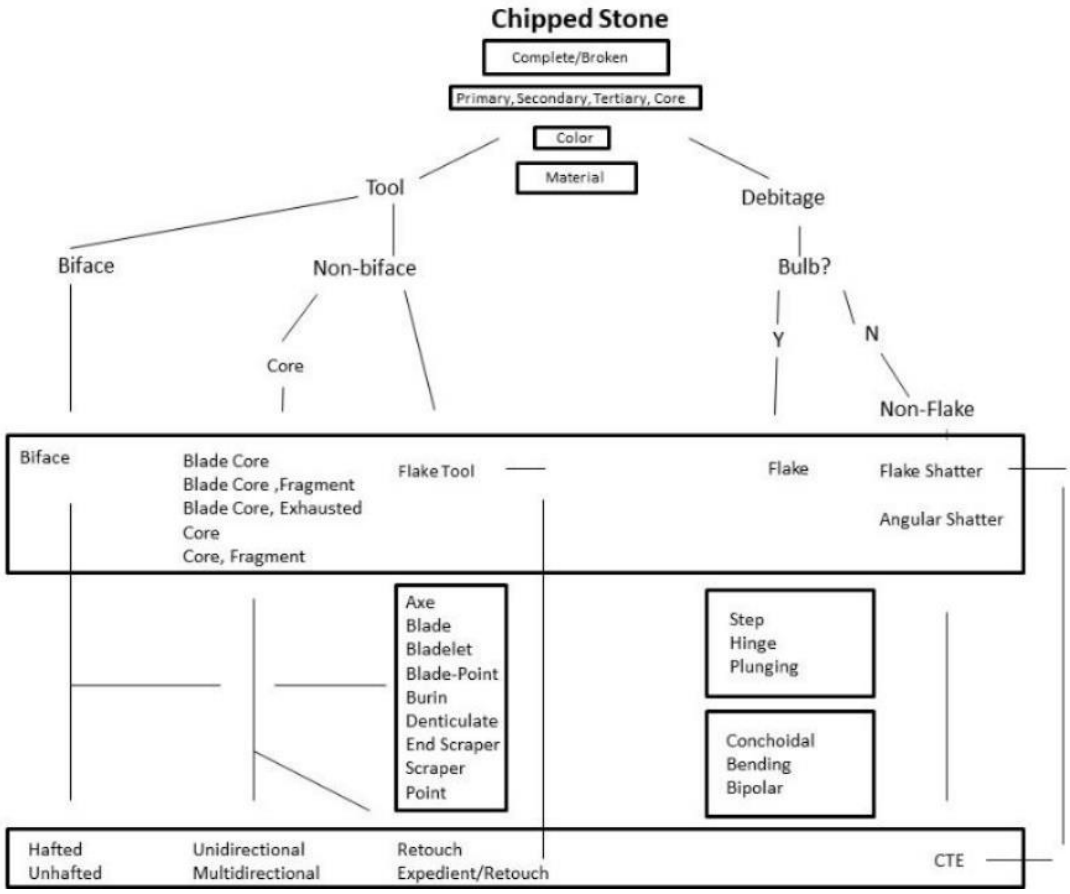


Figure 4.1. Flow-chart for the recording of lithic materials.

Andrefsky writes,

> Flake shatter includes all flake debitage with no recognizable striking platform […] researchers who rely upon flake counts in analysis can adjust for breakage by segregating proximal [whole] flakes and flake shatter. For example, skilled flintknappers can remove the size and shape of the detached piece they want from an objective piece by using a single impact […] Less skilled flintknappers may remove a flake that breaks into two or more fragments upon impact. (83)

Many of these attributes and their interpretations are outside the scope of this dissertation. However, statistical and spatial correlations of 1) the triple-cortex typology, the 2) number of

broken flakes and the ratio of expedient tools to formal tool production, and 3) the location of high-density discard areas will be central to this chapter.[1]

4.3. Lithic Analysis: Reduction Stages and Flake Production

Although reduction stages and the triple-cortex typology have received some scrutiny due to a lack of continuity between researchers, reduction stages can be important for the assessment of mobility, technology, raw material availability, and site function (see Dibble et al. 2005 and Andrefsky 2005 for further discussion). Dibble and colleagues offer the example of a quarry site or raw material outcrop where "the effect is that the lithics left at [or near the source of raw material] itself will express a relatively high degree of cortex, while the lithics discarded at the site where subsequent reduction took place will be relatively non-cortical" (547). Yet, to be clear, reduction stages and their proportions are complexly affected by both behavioral and non-behavioral choices and restrictions, like degrees of mobility, raw material accessibility, or fracture mechanics.

For this project, I adhere to a rigid, yet common, definition of cortical presence: a primary reduction refers to material with 50% or more cortex remaining; secondary stages are typified by fragments that show less than 50% of the cortex; finally, tertiary pieces do not have any cortex remaining and represent the finalizing stages of tool production and the knapping process. The lithics collected by the surveyors clearly show an overwhelming cluster around secondary and tertiary pieces (90%). Raw materials consisted mostly of grey, blue, and black, moderately fine-grained volcanic rock (FGVR) that are categorized as "local" or "common"

[1] A full explanation of definitions, the cataloging process, and the database for lithic analyses can be found in Appendix D.

variants of basalts, dacites, andesites, and rhyolites (n=1,488; 86.1%;). Much smaller densities of high-quality flints, chert, chalcedony, and quartz were also recovered (n=240; 13.8%).

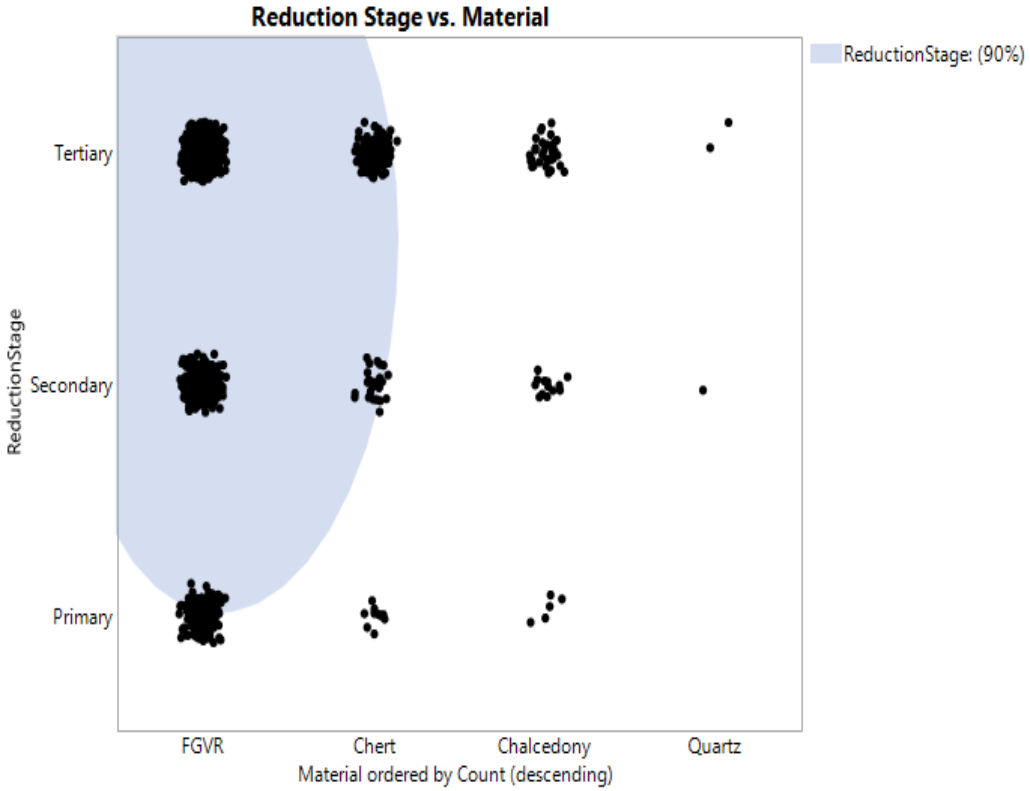


Figure 4.2. Graph showing the distribution of raw material types and reduction sequences.

Table 4.1. Flake Types and Reduction Stages at a cursory glance.

Reduction Stage, Flake Type	Count		Count, % of Total
	North Region	South Region	
Primary	43	80	123, 7.1%
Secondary	79	160	239, 13.8%
Tertiary	178	429	607, 35.1%
Flake Shatter	58	115	173, 10.0%
Non-Flake Debitage	22	57	79, 4.5%
Angular Shatter	45	77	125, 7.2%
Flake Tool, Formal	64	159	223, 12.9%
Flake Tool, Expedient	30	63	93, 5.7%
Core and Core Tools	21	46	67, 3.8%
TOTAL	662	1,186	1,728, 100%

Accordingly, Table 4.1 and Figure 4.2 point towards a lithic economy that was not focused on fine or high-quality materials. Instead, Table 4.1 shows prehistoric populations favoring the exploitation of common raw materials, likely close in proximity to habitation areas or migratory patterns. The moderate presence of Cores and Primary flakes when compared to the high counts of Secondary and Tertiary flakes, imply that much of the knapping and retouch was

completed at central activity centers or domestic locales. Well-trimmed spalls, not large pieces of raw material, were transported and prepared at various locations.

Table 4.1 also suggests that lithic manufacturing was generally skilled and revolved around crafting more formal tools rather than expedient substitutes. Approximately 12.9% (n= 223) percent of the lithic material the crew collected were formal tool types, which is over twice the sum of their informal counterparts (n= 93). Moreover, the ratio of flake and angular shatter (n= 298) when compared to complete flakes (n= 969) is nearly 1:3, making approximately 30% of the total flake count the effect of failed percussion or pressure flaking. Although a 30% ratio appears to be statistically significant, this calculation could also be inflated by non-cultural taphonomic processes like trampling (see Schiffer 1972). Shea and Klenck (1992) suggest that even light trampling can alter microwear patterns and can be confused as retouch; thus, it is plausible that a high proportion of the broken flakes or shatter could be the product of herds grazing or human foot traffic.

According to Andrefsky (2005: 83), "less skilled flintknappers" break their flakes during the detaching process more often, which suggests that the 3:1 ratio of complete flakes to broken flakes is an indicator of knapping skill in the region, signaling a knowledge of raw materials and fracture mechanics as well as forethought into the production of tools and their intention. If skill was conspicuously absent, the number and ratio of broken flakes would be much greater. Additionally, in acknowledging that the total amount of broken flakes could be amplified due to trampling or other taphonomic processes, the ratio is even more suggestive of proficiency. Continuing with this logic, it would seem that the overwhelming majority of knapping centered around the production of formal tools instead of expedient tools (like simple flakes with retouch), which I argue also implies that knappers in Bayankhongor likely manufactured lithics

with at least a moderate degree of aptitude and knowledge. This claim has precedent from work in the Khanuy Valley, Mongolia where Jean-Luc Houle (2010) asserted that differing densities within the valley, where one area was comprised mostly of faunal remains and another that was mostly consisted of lithic materials, was evidence of emerging craft and herder specialization during the Late Bronze Age. One group was producing lithics, while another focused on herding according to Houle.

The collection of lithics from northern Bayankhongor was separated into their respective tripartite reduction stages, as well as Formal and Expedient Tool categories, and then imported into ESRI's ArcMap software. To better visualize the occupational landscape, datasets were initially manufactured to give primacy to the singular artifact as the unit of analysis. Thus, each piece of knapped stone, even Isolated Surface Objects (ISOs), are accounted for and represented. The boundary of the analytical "neighborhood" during statistical queries was confined only to the surveyed areas.

I should also note that only formal flake tools were assigned time periods, when possible. Yet, even applying rough chronological associations from reduction techniques characteristic of the wider region is difficult. Sietsonen et al. (2018) divide tools from surface lithic scatters in Mongolia into three main periods (P1= 40,0000-33,000, P2= 33,000-23,000, and P3=20,000-2,500 BP), but the analytical resolution is still coarse, with Period 3 composed of all targeted time periods under investigation in this study. Likewise, Primary, Secondary, and Tertiary flakes, as well as expedient flake tools are extremely hard to date and therefore were not assigned eras or were placed into an "Unknown" category. Therefore the reduction stages of this section and the subsequent discussion of toolkits in the next are a synchronic grouping that may flatten the potential of the lithic dataset. However, although understanding and fully acknowledging the

drawbacks of this approach, I needed to prepare the data in that way to ensure the statistical population was robust and comparative enough to discern general patterns about the ecological facet of the occupational landscape and political economic strategies. Firmer chronological control will complement and ameliorate these drawbacks when I spatially analyze diagnostic ceramic.

To begin mapping the distributional densities of stone artifacts across the landscape, the Point Density feature in ArcMap was used. In order to magnify the densities so that thin scatters or even isloates (ISOs) are displayed on the heat map, I ensured the Point Density settings were arranged to display the data with ¼-step standard deviations, generating fourteen discrete degrees-of-presence measured by the count of lithics per square kilometer. The breadth of representation spanned from Null/Low (Blue) to High values in Red.

Figure 4.3 shows the distribution of primary debitage (n= 123) per kilometer in each Loci. Densities fluctuate from 0/Null as Blue, with the maximum value represented in Red at 29.9 Primary flakes per square kilometer. When considering the maximum density value of 29.9, the mean count of primary debitage was 1.19 flakes per kilometer, which again implies that the majority of initial reduction was completed at or near the source of the raw material.

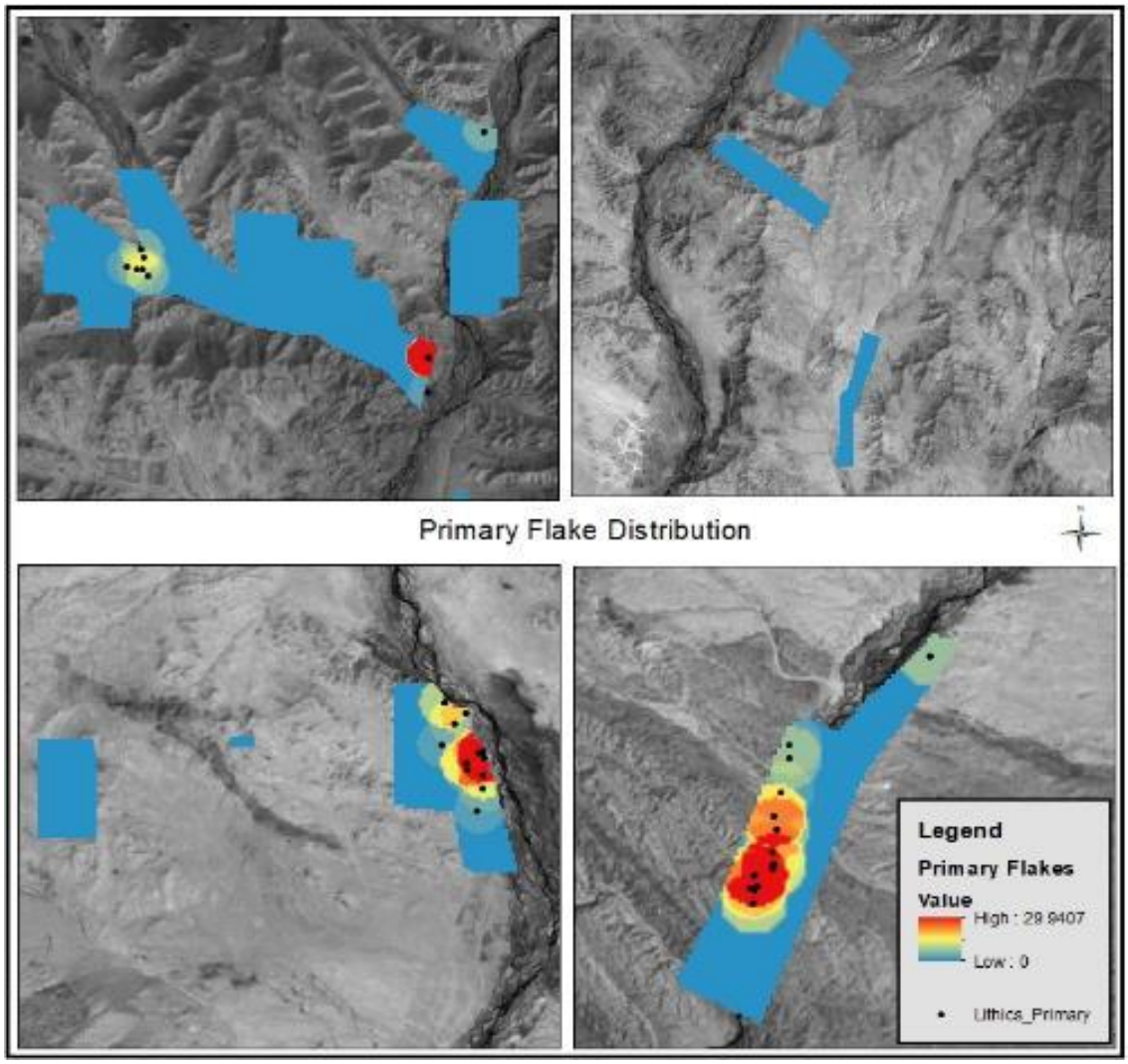


Figure 4.3. Primary Flake Distribution at Locus A (top left), B (top right), C (bottom left), and D (bottom right).

In the northern region, only the contemporary spring camp NBP-017, the terrace NBP-015, and Bronze Age monument site of NBP-010 in Locus A show any discernable measure of preliminary reduction activity. Surveyors did not recover Primary lithics at Locus B. In contrast, the southern region shows numerous dispersed areas of lithic reduction, all concentrated on the west bank of the Tuin Gol. Locus C appears to have three general concentrations of Primary debitage at NBP-013, while Locus D may have four to five locations of elevated counts.

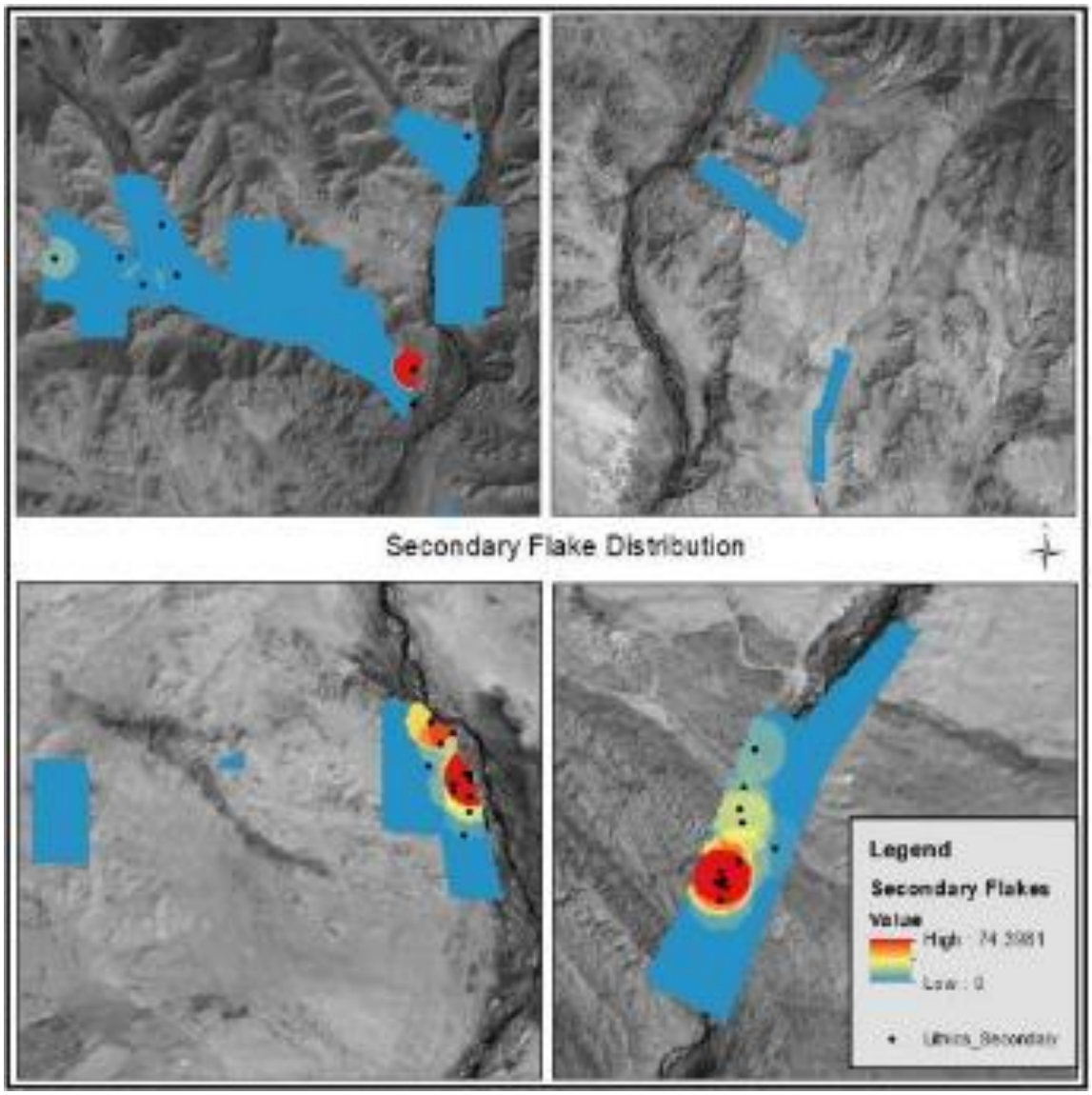


Figure 4.4. The distribution of secondary debitage at each Locus.

Secondary and Tertiary reduction stages (Figure 4.4 and 4.5) show a similar pattern of dissemination, with higher-level concentrations generally overlapping the Primary dispersal. However, Secondary and Tertiary phases are visually[2] more spread out, with a larger number of moderate concentrations or ISOs dispersed throughout the landscape.

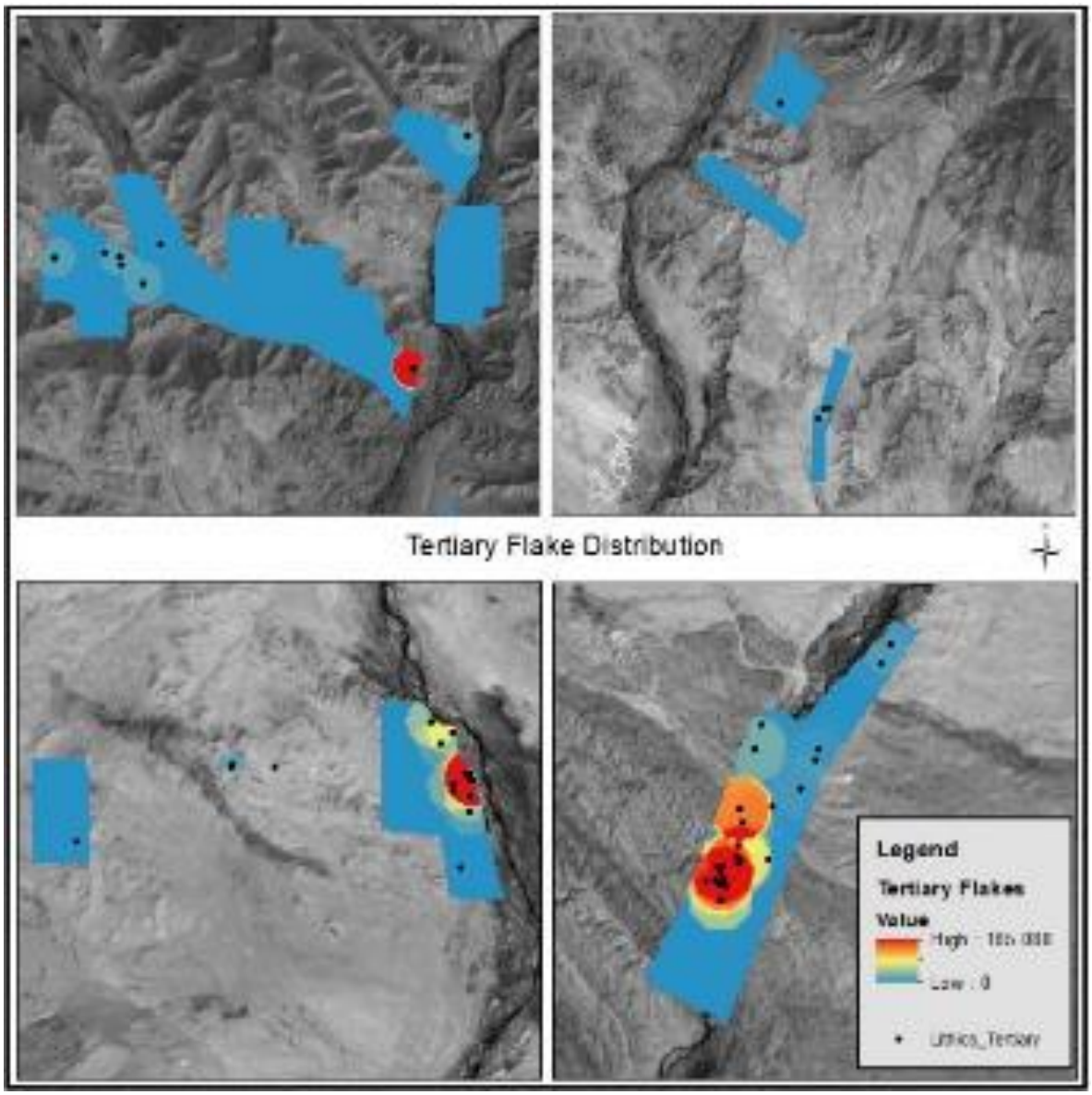


Figure 4.5. The distribution of tertiary debitage at each Locus.

[2] Formal dispersal calculations will be completed in the next section.

This is evidenced by the widened range of Secondary and Tertiary flakes when compared to the Primary category: Secondary flakes ranged from Null to 74 flakes per kilometer, with an average of 2.2 instances in each square kilometer; conversely, Tertiary reductions have values spanning Null to 185 cases at the most elevated areas of concentration, with a mean average of 5.5 flakes per square kilometer. In short, the mapping of latter reduction stages highlights additional locales of activity.

Yet, how can these reduction stages and their spatial provenance be correlated with social, political, or economic milieus? Following Binford (1979, 1984) and others (Kintigh 1994;Wilkinson 1989), I argue that elevated densities associated with late-stage reduction and tool discard can be correlated as proxy locations to determine the occupational intensity of residential campsites, or even "workshops" used for small-scale pursuits in concentrated lithic production.

Therefore, to continue framing and conceptualizing the occupational landscape, it is necessary to examine consolidated assemblages as diagnostic markers for ecological relationships and landscape use. These assemblages and their particular spatial groupings, as well as their unique artifact composition, can help discern between broad divisions of activity locales which will further inform how inhabitants constituted and engaged with the landscape over time. In the next section I seek to build upon the distributions of Primary, Secondary, and Tertiary flakes by increasing the spatial resolution of the lithic dataset, emphasizing grouped collections of both formal and expedient tools.

4.4. Lithics and Spatial Patterning: Assemblages

Although this dissertation employs an "off-site" approach to artifacts and landscape such as the calculation of flake distributions above, it is often necessary to construct discrete artifact assemblages representative of both the cultural (choice, skill, technology, function) and non-cultural influences (raw material availability, fracture mechanics) driving lithic manufacture and discard. Lithic toolkits have been an integral facet of archaeological inquiry for many decades. For example, the well-known debate between Louis Binford and François Bordes focused on the issue of tool types and names, their functions, and their assemblages either correlating with distinct cultural groups or, instead, being expressive of seasonality and specific types of activities conducted at particular locations (see Bisson 2000; Binford 1984, 1966; Bordes and Sonneville-Bordes 1970). Other scholars (Janz 2012; Wright 2006; Roth 1998; Andrefsky 1994; Bettinger et al. 1994; Bamforth 1991, 1986; Lurie 1989) have focused on the relationship lithic assemblages and their provenance have with patterns of mobility and generalized subsistence regimes, sometimes specifically concerning formal and expedient tool production and discard.

These debates and trends in lithic research have largely engendered "ever-more sophisticated methods for studying stone tools (e.g., use-wear and residue analysis, fracture mechanics, spatial patterning), but the results of analyses using this battery of techniques" and nomenclatures often complicates interpretation rather than enlightening it (Torrence 1989: 2). Considering the potential pitfalls of studying stone artifacts, I attempt to present the lithic assemblages here as a straightforward spatial interrogation of formal and expedient tools. I have consolidated individual scatters into assemblages based on proximity of discard, used simplified tool names, and collapsed time periods. In sum, for this section of the dissertation, tool-kit assemblages are less about assigning a strictly categorized function or time period to certain

locations, than the material evidence describing degrees of occupation over time, land use, and general socio-economic parameters that can provide a firm foundation to discuss the Late Bronze and Iron Ages more precisely. Thus, assemblages and toolkits can further characterize the kinds of activities, and the intensity of those activities, into heuristic categories that can articulate ecological facets and scales of the occupational landscape. What is more, field-recording methods buttress the off-site methodological framework put forth in this dissertation: all formal and expedient tools, as well as cores, were individually recorded by the team during collection to ensure malleability of scalar association and grouping while maintaining a minimum scale where the artifact is the key unit of analysis.

Toolkits were united manually in ArcMap based on proximity. Scatters and isolates that were combined into groups needed to be less than 200 m from each other and ultimately have three tools or more to be determined an assemblage. The map below (Figure 4.6) shows formal and expedient tools overlaying Tertiary flake distributions. Above, I suggested that the unaccompanied Tertiary distribution indicated approximately ten total clusters of lithic reduction activity. Yet, adding the formal and expedient tools as refined elements of the reduction sequence greatly amplifies this initial number.

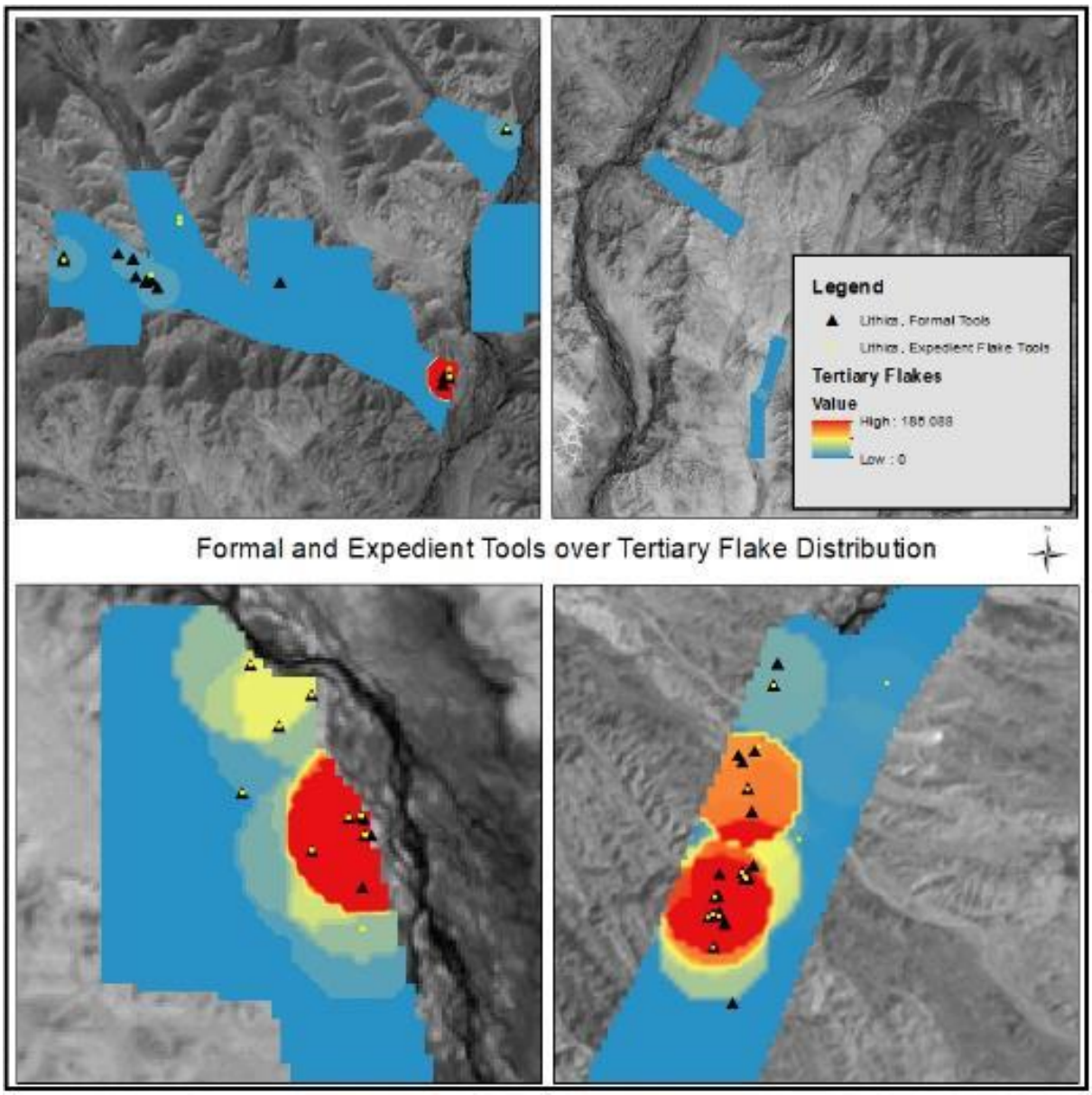


Figure 4.6. Formal and expedient lithic tools over Tertiary flakes. Formal tools are represented by a black triangle, while expedient tools are shown as yellow dots.

In fact, this procedure fashioned nineteen discrete assemblages found throughout Locus A, C, and D (Figure 4.7). In total, forty-one recorded lithic scatters comprise the nineteen assemblages, with each assemblage having an average of 2.15 combined scatters and 15.15 tools (n=290). These assemblages were then parsed into basic tool classes in a spreadsheet for analysis: the proportion of formal vs. expedient tools, axes, blades, bladelets, blade-points, burins, tool blanks, choppers, scrapers, end and thumbnail-scrapers, and points.

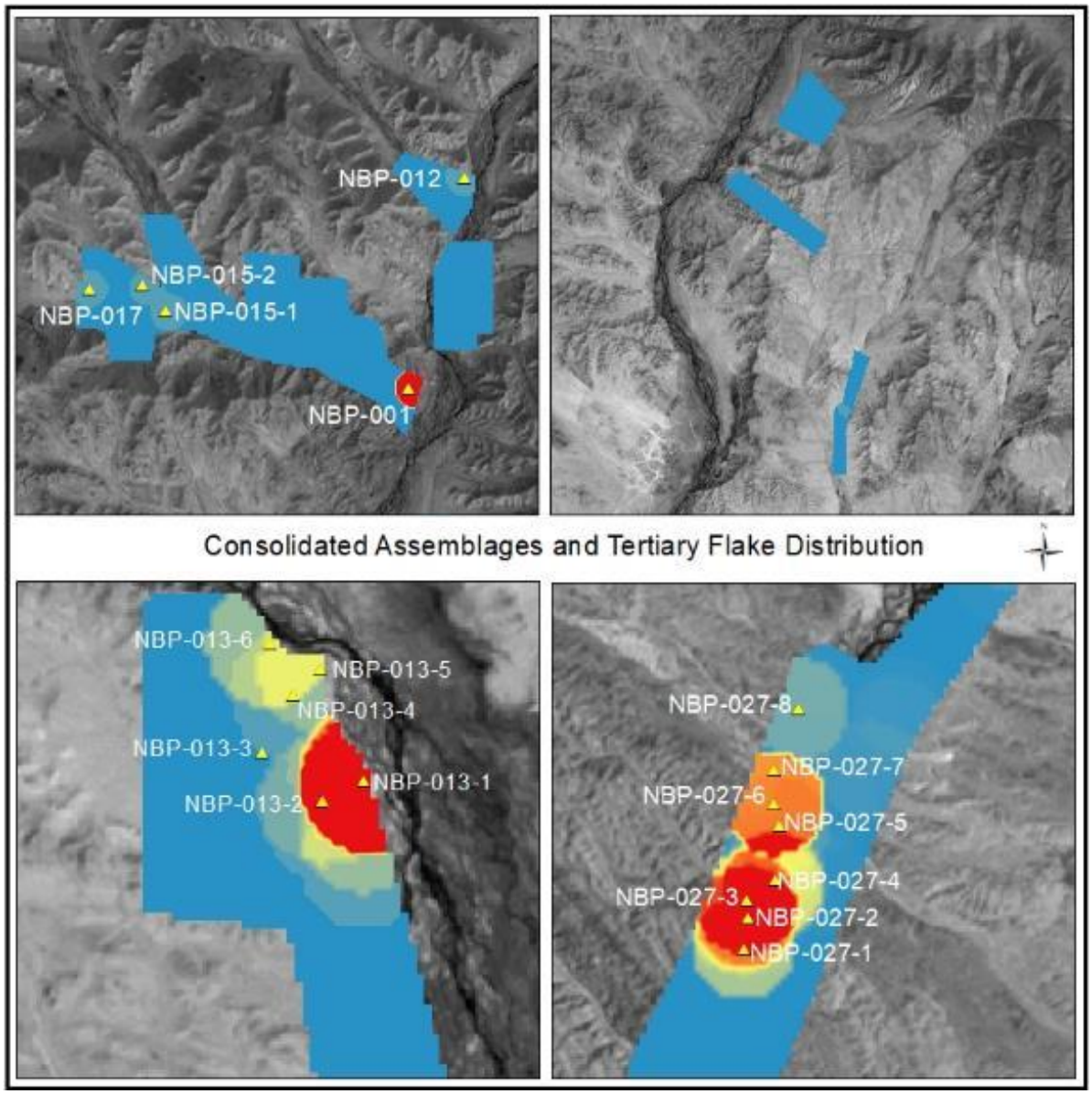


Figure 4.7. The nineteen lithic assemblages and their locations throughout Locus A, C, and D represented by yellow triangles.

I then imported the spreadsheet of tool assemblages into the JMP 13 Statistical Package to determine if the nineteen groupings possessed any inter-assemblage similarity, or if location (i.e., North or South Regions, proximity to other assemblages, etc.) characteristics were an influencing factor in assemblage composition.

Because the spatial locations of the assemblages are already fixed, I applied the K-Means Iterative Cluster Comparison algorithm to the dataset. Although investigators have used various cluster calculations in archaeology for decades, since the introduction of K-Means by Kintigh and Ammerman in 1982, the computation has become one of the most common approaches to correlative data in archaeological contexts (Caspari and Jendryke 2017; Baxter 2015). Its popularity is likely because "cluster analysis mimics one of the human mind's fundamental ways of dealing with complicated variability" across the landscape (Drennan 2004: 309). Specifically, the K-Means algorithm groups cases based on the mean calculations of attributes, creating a prototypical cluster which can be compared to all other observed cases and their variables; these observations are averaged and used to determine cluster membership. Drennan (2004) notes that one of the major drawbacks of K-Means clustering is that the number of clusters must be set before the test can be run; yet, mathematical rules do not bind these choices, but instead depend on "prior knowledge, intuition, and [the] inventiveness of the analyst" to decide (310).

For the purposes of roughly grouping the occupational landscape and the associated lithic assemblage, I set the K-Means criterion in JMP 13 to produce five clusters based on the mean counts of specific tools and their Formal and Expedient designations.

Table 4.2. Lithic assemblages and component tools, color-coded according to the output of K-Means Cluster Comparison. Note, these colors do not match the map and are only associated with the 2-d and 3-d biplots in Figure 4.8.

Assemblage No.	Formal	Expedient	F/E Ratio	Axe	Blades	Bladelets	Blade Points	Burins	Tool Blanks	Chopper	Denticulates	Scraper	E-T_Scrapers	Points	Cluster
NBP001	42	23	0.547619	0	20	4	2	3	0	0	4	4	3	2	4
NBP012	3	2	0.666667	0	3	0	0	0	0	0	0	0	0	0	3
NBP015_1	5	1	0.2	0	1	0	0	0	0	2	0	0	1	1	2
NBP015_2	3	0	0	1	1	0	0	0	0	0	0	0	0	1	3
NBP017	5	1	0.2	0	2	0	0	0	0	0	0	0	2	1	0	2
NBP013_1	42	18	0.428571	0	23	1	3	2	4	2	0	4	0	1	4
NBP013_2	1	2	2	0	0	0	0	0	0	0	0	1	0	0	3
NBP013_3	3	2	0.666667	0	1	0	0	1	0	1	0	0	0	0	1
NBP013_4	5	2	0.4	0	1	0	1	1	0	2	0	0	0	0	2
NBP013_5	4	1	0.25	0	4	0	0	0	0	0	0	0	0	0	3
NBP013_6	4	3	0.75	0	2	0	0	0	2	0	0	0	0	0	5
NBP027_1	9	1	0.111111	0	5	1	0	0	0	0	0	2	1	0	2
NBP027_2	15	2	0.133333	1	2	6	0	0	0	2	1	2	1	0	1
NBP027_3	8	4	0.5	1	3	2	0	0	0	1	0	1	0	0	1
NBP027_4	15	5	0.333333	0	4	6	0	0	0	1	0	2	1	1	2
NBP027_5	6	0	0	0	2	0	0	0	0	0	1	1	2	0	5
NBP027_6	27	9	0.333333	1	15	0	1	0	0	2	3	3	2	0	1
NBP027_7	3	2	0.666667	1	2	0	0	0	0	0	0	0	0	0	3
NBP027_8	9	3	0.333333	0	4	1	0	0	0	0	1	1	2	0	5

Cluster	Count	Proportion
1	4	0.21053
2	5	0.26316
3	5	0.26316
4	2	0.10526
5	3	0.15789

Cluster	Axe	Blades	Bladelets	Blade Points	Burins	Tool_Blanks	Chopper	Denticulates	Scraper	E-T_Scrapers	Points
1	0.74878593	5.24937656	1.99776874	0.25029531	0.25029531	0.0007875	1.49796561	0.99881874	1.49927812	0.74996719	0.0007875
2	0.00052527	2.60479042	1.3994117	0.20033617	0.20033617	0.00063032	0.99936968	0.00105053	1.20002101	0.79987394	0.39983192
3	0.39972686	2.00598802	0.00220611	0.00073537	0.00073537	0.00063032	0.00136569	0.00105053	0.20201702	0.00147074	0.20023112
4	0.00130924	21.4179104	2.49306101	2.48939513	2.48939513	1.99162084	0.99842891	1.99266824	3.98612202	1.49620319	1.49410841
5	0.00087428	2.6744186	0.33589788	0.00122399	0.00122399	0.66550096	0.00227312	0.66620038	0.66847351	1.33135163	0.00104913

Based on the outputs of the K-Means computation in Table 4.2, each cluster contains a similar number of consolidated assemblages, ranging from two to five (10.5% to 26.3% of the 19 assemblages). Further, it appears that Blades, Bladelets, and Scrapers are the principal components directing how the statistical procedure determined inter-assemblage similarity and group membership—an unsurprising conclusion based on their ubiquity in the Northern Bayankhongor dataset, and their role as typical tool types throughout the Paleo-, Neolithic, and Bronze Ages.

Yet again, how do these clusters correlate with social life, land use, or economic strategies? Reviewing the clusters more carefully, I argue that the grouping represents a tiered organization of activity or "degrees of presence." A 2-d and 3-d biplot graphically illustrates group separation (Figure 4.8). While the 2-d plot clearly shows Group 4 as a potential outlier

with the other three groups overlapping, only when we view the 3-d image is it possible to detect variability between the other clusters.

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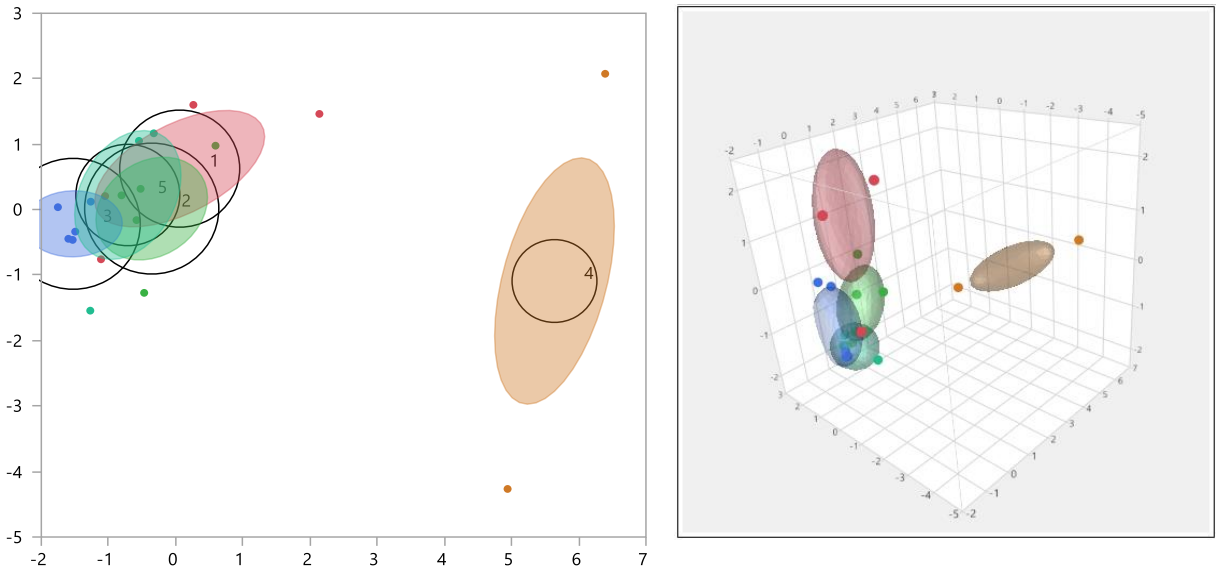


Figure 4.8. A 2-d biplot of assemblage clusters (left) and, the same data represented in 3-d (right).

Keeping in mind the unique environmental context in Northern Bayankhongor, I tentatively follow Binford (1990, 1982, 1979), Ingold (1993), and others (Camilli 1989) in proposing an ordinal categorization for the description of cultural activities where lithics are detected: 1) Workshops, or Consistently inhabited residential spaces; these areas are defined as "the uninterrupted [or consistently seasonal] use of a place by participants" (Binford 1982: 5) and evidenced by exceedingly high densities of artifacts over time (Group 4, Orange); 2) Frequented residential areas, where occupational correlates are strong, but may not exhibit clear chronological continuity (Group 1, Red); 3) Ephemeral camps, classified as having a moderate density of artifact remains; assemblages may be distinct in terms of tool-type variability (Group 3, Green); 4) Short-term gathering places or habitations where few tools or debitage are found; these areas may also exhibit distinctive atypical assemblages due to the performance of specific

activities (Group 4, Blue); and, 5) Other; this final type includes locations where the density of artifact discard can range from thin scatters and ISOs to heavier concentrations (Group 5, Aqua); for example, areas of ritual focus, sources of raw material, or temporary-transitory camps that may or may not have extensive or continuous artifact representation, but should be noted in a holistic configuration of the landscape.

To be clear, I do not intend for these schemata of settlement organizations to be rigid categories—essentially falling into the trap of descriptive "types" that I argue against in this dissertation. Instead, these places and their suggested "function" certainly overlap or shift through time and thus should only be treated as general guidelines for the arguments put forth here and for future research. Moreover, some classifications, like Ephemeral Camps and Short-Term Gathering Places could certainly be consolidated but are split here for analytical purposes.

Referring back to the color-coded Table 4.2 and biplots found in Figure 4.8, the distributional classes of lithics aggregate the assemblages in a hierarchical structure based on two attributes critical to the general assessment of political economy and landscape use: the quantity or degree of artifact/tool presence, and the precise composition of the assemblage in regards to the types and counts of morphologically formal tools. In short, while acknowledging the pitfalls of synchronic lithic investigation, the confluence of etic statistical categorizations may strongly correlate with emic configurations of prehistoric land use.

Precise spatial configurations suggest a residential-activity pattern that delineates in-depth knowledge of immediate needs, but with a limited breadth of habitational extent. For example, a single Workshop/Consistent Habitation is found in both the North and South regions and there are relatively even proportions of Frequented Habitation and Ephemeral Camps in the North and South regions—indicative of groups usually returning to the same place, but on rare

occasions using other areas that are associated with shorter-term use or occupation. Finally, tool types appear to be directly interrelated with degrees of occupation, such that assemblages that include infrequent tools like axes, choppers, denticulates, or burins are particular to longer-term residences or specialized production centers, while short-term transitory places often have limited toolkit inter-variability (Table 4.3).

Table 4.3. Further itemization and classification of K-Means Cluster and categories of land use in the occupational landscape.

Type	Specific Locations	Lithic Assemblage Details	Environmental and Cultural Context, Notes
(ORANGE) Workshops/Consistent Habitation	NBP-001; NBP-013-1	60+ tools (formal or expedient); rarer tools like burins or denticulates are found in moderate quantities	On slopes nestled in hills, overlooking Tuin Gol. Not always excellent areas for habitation. However, adjacent spaces may have been used for actual residence. Sometimes accompanying ancient monuments like khirigsuurs.
(RED) Frequented Habitation	NBP-013-3; NBP-027-2; NBP-027-3; NBP-027-6	Generally high tool count with an average of 17.5 tools per location; Axes appear to be the principal component of this category.	Flat river banks, with easy access to water and raw materials in hills. Often spatially associated with pervasive monument construction.
(GREEN) Ephemeral Camps	NBP-013-4; NBP-015-1; NBP-017; NBP-027-1; NBP-027-4;	Average of 12.2 tools per locale. Rarer tool types like Choppers are more thoroughly represented.	Situated on flat areas at various distances to the main watercourse, often linked with modern-day corrals, *ger* platforms, and ancient monuments. Transitory, or adjusted seasonal camps may be included here.
(BLUE) Short-Term Gathering Places	NBP-012; NBP-013-2; NBP-013-5; NBP-015-2; NBP-027-7	Low density scatters with an average of 3.2 tools per location. Toolkit often biased toward one morphological type: Scrapers, Blades, and/or Axes.	Often found in contexts of higher elevations and extensive viewsheds. May or may not be associated with monuments
(AQUA) Other/Transitory Camps/ Gathering Places	NBP-013-6; NBP-027-5; NBP-027-8	These locales have an average of 8.3 tools each. However, unlike the category of Short-Term Gathering Places, the toolkits are more well-rounded in regards to the breadth of type.	These places are located at furthermost distances from the Workshop/Consistent Habitation and Frequented Habitation sites. This category could be grouped with Ephemeral or Short-Term residences when considering their similar environmental context and assemblage composition.

4.5. Formal and Informal Stone Tools

After analyzing specific toolkits and their combinations that further elucidated land-use patterns to suggest a refined yet constricted distribution of residential-activity locations, I calculated the ratio of Formal vs. Expedient tools for each assemblage to determine if there was a relationship between assemblage provenance and the amount of time producing tools—deliberate and well-designed, versus hurried and efficient. Parry and Kelly's (1987) case studies from the New World describe key advantages and disadvantages of each tool-making process. They write of their data set from the Americas,

> Every assemblage included both formal and informal tools […] [However,] the choice of expedient over formal core technology involves a tradeoff between the costs of transporting tools and raw material (which are high for expedient core technology and low for formal or standardized core technology) and the costs of manufacturing and using the tools (relatively high for formal, lower for expedient). It would appear that the benefits of portability outweighed the added costs of standardized core technology in a context of high mobility. Once mobility was reduced, however, there was less incentive to expend the effort to produce and maintain formal tools. (Parry and Kelly 1987: 296, 299)

Although the description by Parry and Kelly is reminiscent of the vestiges of evolution still haunting our discourse about pastoral nomads or other mobile groups, the general comment is insightful. Although the authors further state that the techniques are not associated with evolutionary schemas of technological and cultural complexity, where one practice supplants the other, case studies do suggest a general association of sedentary populations with expedient technologies and mobile populations with a more formalized method of tool manufacture (Andrefsky1994: 21; Bamforth 1991, 1986; Shott 1986). Thus the lithic data from Bayankhongor seem ambiguous at a cursory glance.

As a complement to the K-Means Cluster, I produced a linear regression model (Figure 4.9) to better assess degrees of mobility and the precision and effort expended in tool production. The model and line of fit imply that aggregated Northern Bayankhongor assemblages were not

biased toward expediency or formality at any locale—the R^2 value (.892) indicates a nearly perfect inverse relationship: more formal tools at a location necessitate a corresponding proportion in expedient tools and vice versa.

Model	AICc	BIC	SSE	MSE	RMSE	R-Square
Linear	114.02773	115.26105	301.27442	17.722025	4.2097535	0.8929373

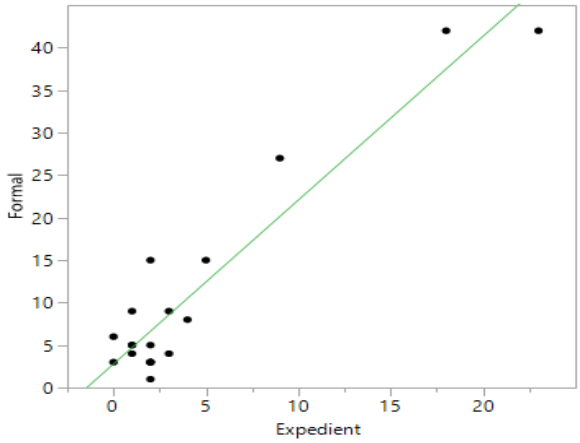


Figure 4.9. Regression showing the strong correlation between formal and expedient techniques.

If we take the observation of Parry and Kelly above seriously, who like Shotts (1986) suggest that mobile populations are more associated with formal tools and sedentary populations use more informal and expedient instruments, the regression model and line-of-fit is significant. With an equal presence of informal and formal tool production at each locale, I suggest that prehistoric Mongolian populations of the Paleolithic, Neolithic, Bronze Age, or the latter and more-focused agro-pastoral nomads of the Terminal Late Bronze Age onwards, likely participated in economies with admixtures of itinerancy. When mobility was a key function of ecology, formal tools were preferred, but as groups oscillated through more sedentary phases, the intent in knapping production may have shifted to less formal toolkits. I argue that this malleable

synthesis of mobility and sedentism may have served as tactics of adjustment when facing adverse climate conditions, alterations to communal ties or structures of authority, responses to increases in skilled (object) production or herding, or the renegotiation of land and pasture tenures.

Without continued research it is difficult to say precisely which of these forces played the most prominent roles during the pre-Bronze, Late Bronze, and Iron Ages. However, the seemingly equivocal quotient of Formal to Expedient tools, which suggests that combinations of mobility strategies were central to these populations, begin to break down our diachronic portmanteaus and assumptions about pastoral nomads and their lifeways.

First, it should be noted that the lithic investigation suggests a counter-narrative to the popular imaginings of pastoralists as populations constantly traversing unregulated and unfenced spaces (see Myadar 2007 for further discussion). This continued trope has positioned the "steppe-and-the-sown" dyad as inflexible extremes with very real theoretical and material consequences, such as instinctively linking sedentism with more "complex" societies, specialization, and centralized authority—relegating even moderately peripatetic cultures to simple social forms and certain subsistence approaches. Thus, it is clear how and why pastoralists came to continuously occupy the "savage slot" (i.e., Cobb 2005; Trouillot 2003) unattached to "civilized" statuses when discussing social, economic, and partitioned political forms. As such, as archaeologists we must be sensitive to local gradations of mobility rather than viewing it as a given. Robert Kelly (1992) argues for a much broader conceptual spectrum of mobility caught within the steppe-sown dyad. Kelly states that mobility has many facets: mobility as individuals, groups, men or women, old and young, and of course, seasonality: "early concepts of mobility blinded us to the fact that mobility is universal, variable, and multi-

dimensional" (43, 44). Mobility is not a drawback. Instead, mobility creates conditions of possibility that can be exercised depending on circumstances.

Second, the ambivalence in mobility indicated by the stone tool investigation above implies that hunter-gatherer and proto-pastoralist strategies are not monolithic subsistence types. Popova (2009, 2006) references her work on the Bronze Ages of the Middle Volga, Russia to demonstrate the malleability of pastoralism and its itinerant and ecological characteristics. She argues that through the Early Bronze to Late Bronze Ages (ca. 3300-1300 B.C.E), migratory patterns and pasturelands often shifted and then were routinized—and then shifted again. Moreover, during certain eras, avenues of subsistence other than animal husbandry like farming and foraging were of prime importance in that region. She finds that Bronze Age populations actively collected wild grains, exploited distant forests, and experimented with horticulture. Recent research suggests a similar malleability of subsistence schemes on the Mongolian steppe too. Machicek (2012ab, 2011) and Wilkin (2020b) use strontium, carbon, and oxygen isotopes from human osteological remains to prove that prehistoric Mongolian populations were engaging in multiple forms of subsistence simultaneously. Machicek argues that wild grains of the Chenopodiaceae/Amaranthaceae family may have long-been a modest part of their diet alongside the typical meats and dairies of herding life, well into the Late Iron Age and Xiongnu epochs, while Wilkin finds that local millet production may have played a slight role in ecological strategies beginning around 800 BCE.

Although linking lithic morphology and type with tool or site function is questionable, the diversity in "function" of formal tool types and the minimal presence of informal and broken examples in the Bayankhongor dataset may reflect a similar economic flexibility. First, it should be restated that the ratio of complete to shattered flakes is likely indicative of skilled knapping.

One would expect more failed detached flakes, broken or missing the striking platforms, if less-skilled knappers were the majority of producers. Second, the variety of tools at certain assemblage locations and not at others could imply multiple ecological strategies oscillating or operating simultaneously (refer to Table 4.3; see Andrefsky 2005: 201-222; Shott 1986). Finally, the ratio of formal to expedient tools is evidence that arrangements of both mobility and sedentarism were likely in place (Parry and Kelly 1987). In short, complicating the presumption that pastoralism was adopted as a singular trajectory *en masse* around the first millennium BCE, these studies, and the spatial patterning and mathematical queries provided here, may demonstrate a latent fluidity and diversity of steppe populations—especially in Bayankhongor—characteristics we should recognize when analyzing the connections between mobility, economic resourcefulness, and political tact.

4.6. Ceramic Spatial Distributions

Although it was necessary to amalgamate the lithic analysis above into a synchronic view, a spatial examination of diagnostic ceramic will add a diachronic arrangement that can further elucidate issues of landscape use and economy, as well as providing data to further theories about economic practices and the production of authority in the Bronze and Iron Ages of Mongolia.

Following the same protocol as the lithic analysis above, I used the Point Density feature in ArcMap to plot the distributions of Late Bronze (LBA), Late-Bronze-Early Iron Age (LBA-EIA), Iron Age (IA), and Late Iron Age (LIA) pottery. The distributional and aesthetic parameters of the GIS spatial inquiry were also retained from the lithic investigation: distributions were plotted with ¼-step Standard Deviations, allowing for ISOs and heavy

concentrations to both be indicated; color schemes were altered slightly, but still remain on a sliding scale of Null Values (Green), to areas of high ceramic density (Red) (Figure 4.10 – 4.13).

Figures 4.10 through 4.13 display fluctuations in ceramic dispersal over time. Locus A is dominated by continuous ceramic distributions at NBP-018 from the Bronze to Late Iron Ages. In contrast, the corral site of NBP-017, and the ritual/workshop area of NBP-001 appear to lose their favor in the Iron and Late Iron Age periods, respectively. When compared to the lithic distributions, ceramic concentrations in Locus B are much better represented by the Point Density output. It would seem that residents in the Late Bronze Age utilized this Locus, but the survey area NBP-021 emerged as a more permanent residential fixture on the landscape in later eras. The relocation of pottery over time in Locus C is arguably the most conspicuous: distributions in survey area NBP-013 appear tightly concentrated in the Late Bronze Age, but disperse in proximity as time progresses toward the Late Iron Age; further the winter campsites of NBP-022 and NBP-025 were likely only used in the Late Bronze and Early Iron Age, while NBP-026 appears to be a residential space only of Late Iron Age populations. Similar to Locus C, the ceramic densities of Locus D expand from tightly organized habitation areas of the Late Bronze Age to habitations that are spread out in the Late Iron Age.

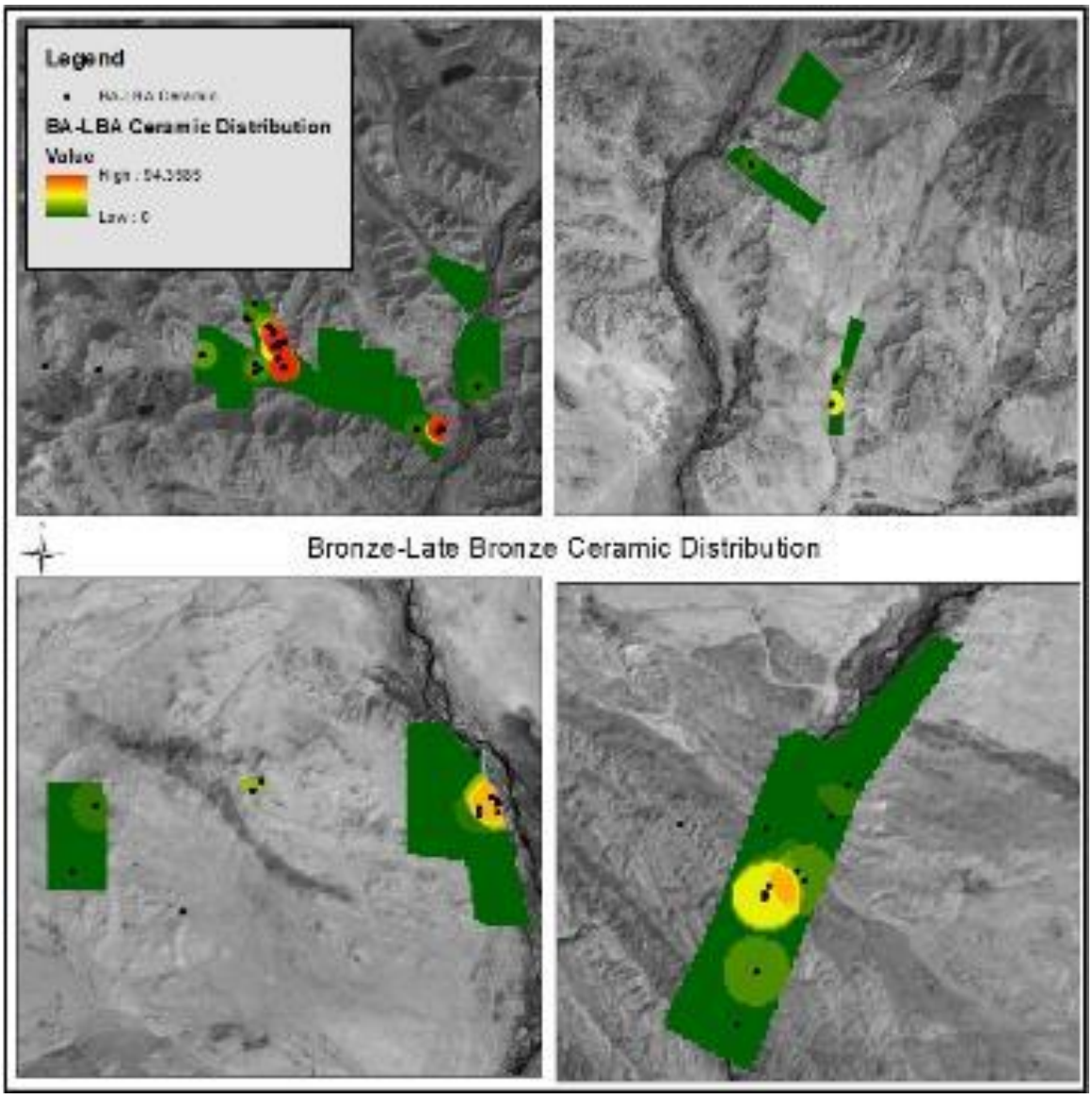


Figure 4.10. Distribution of Late Bronze Age Ceramic throughout each Locus.

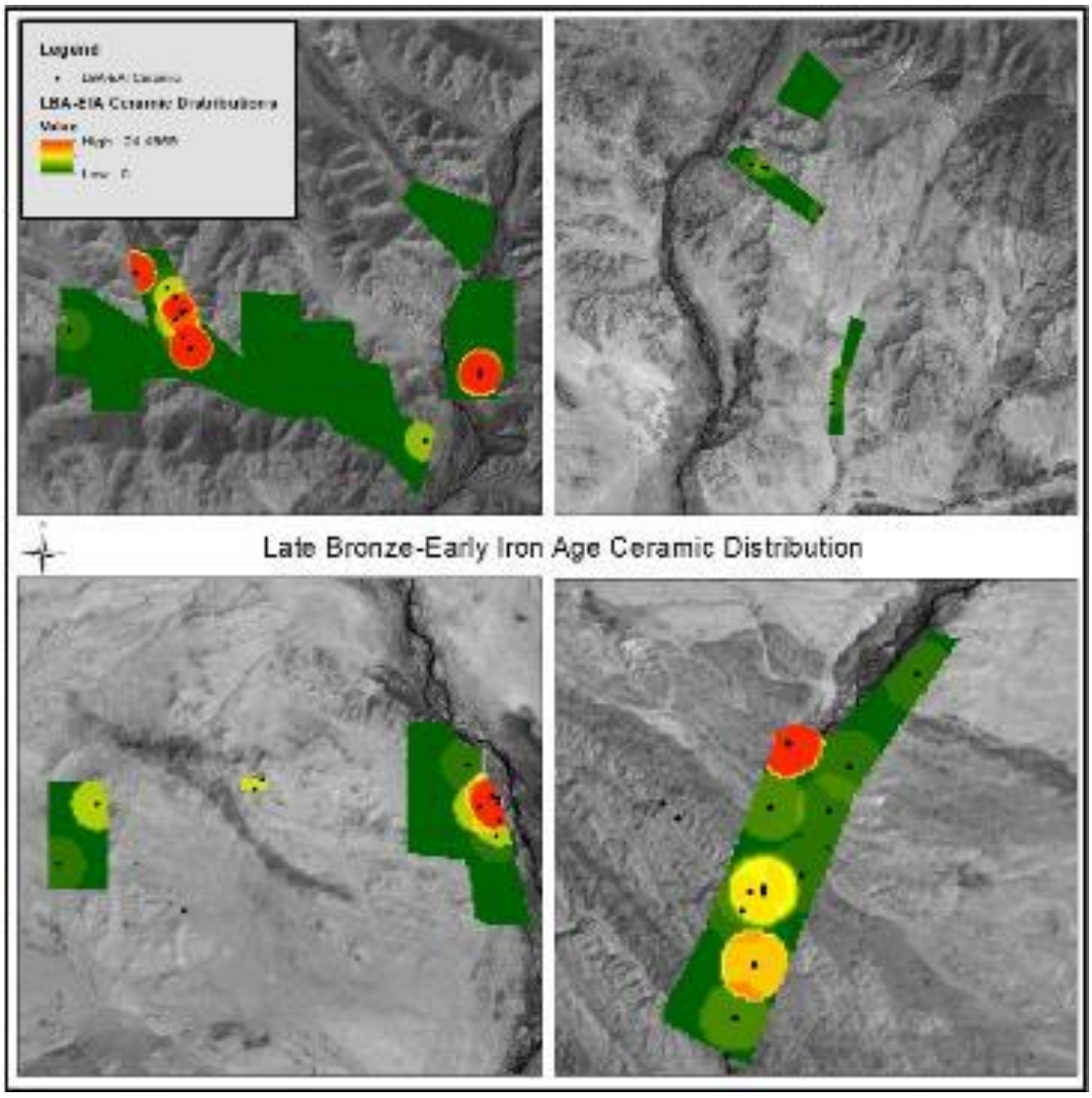


Figure 4.11. Distribution of Late Bronze Age-Early Iron Age Ceramic throughout each Locus.

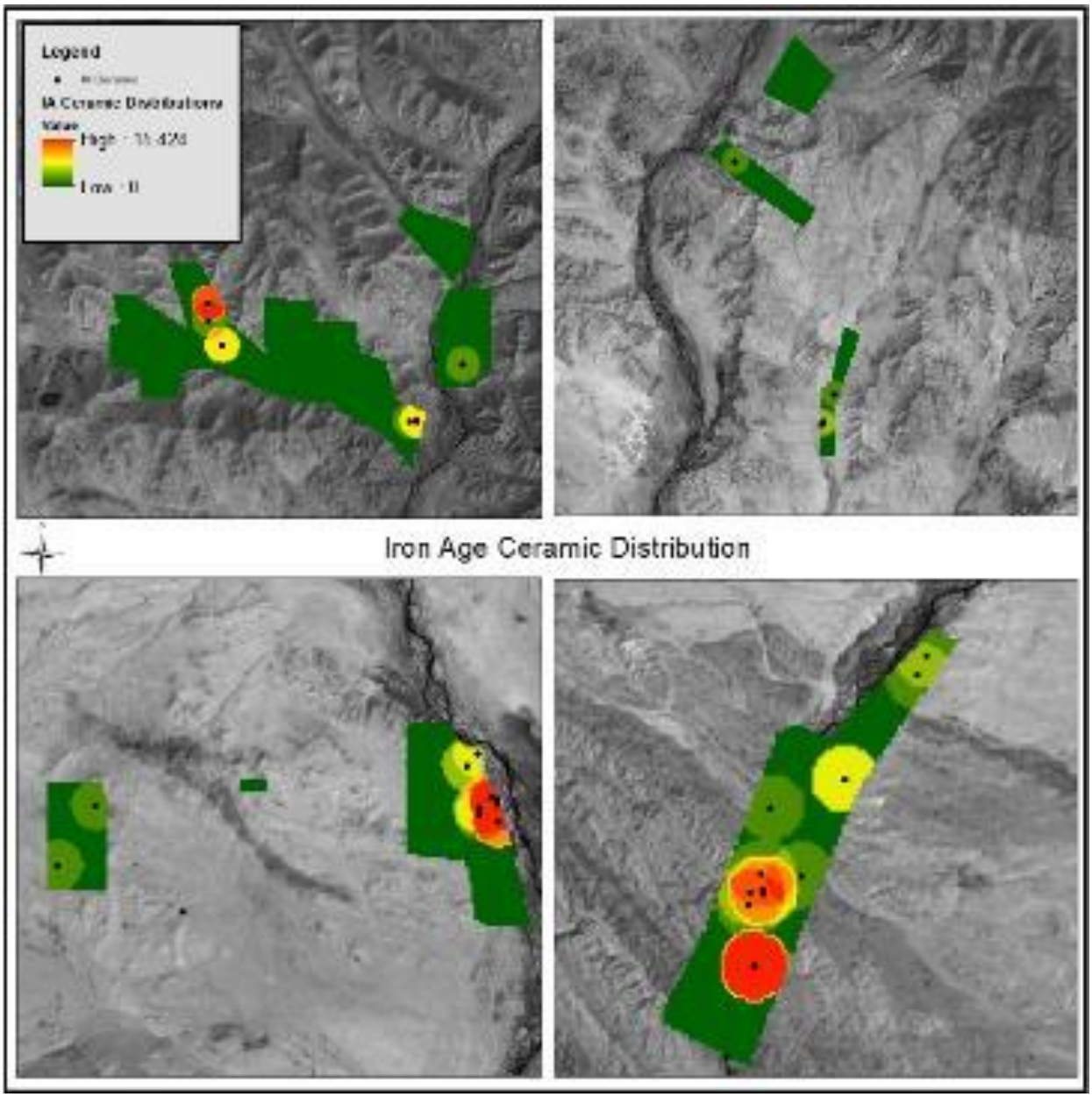


Figure 4.12. Distribution of Late Bronze Age Ceramic throughout each Locus.

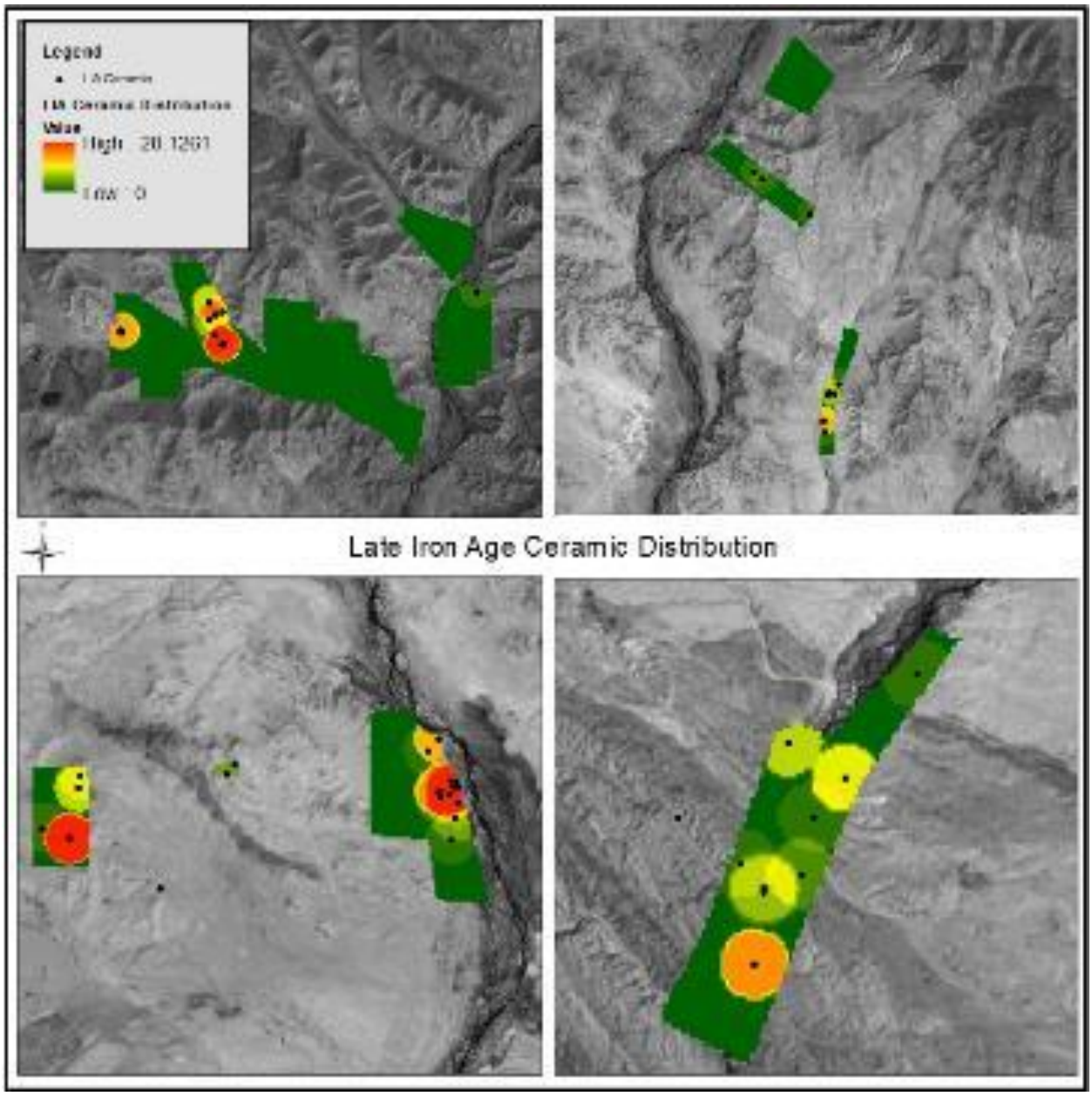


Figure 4.13. Distribution of Late Iron Age Ceramic through each Locus.

To statistically investigate the spatial distributions of ceramic from different eras, I created pottery assemblages following the same rules I applied to the formation of lithic assemblages: aggregate scatters if they are less than 200 m away from each other, and three

sherds are the minimum limit to be designated a viable member of the consolidated collection. Table 4.4 below illustrates the general findings.

Table 4.4. Assemblage counts of ceramic through the Late Bronze-Late Iron Ages.

Time Period	Total Number of Sherds in All Assemblages	Number of Assemblages	Average Number of Sherds per Assemblage
LBA Ceramic	270 (Highest = 57, Lowest = 3)	21	12.8
LBA-EIA Ceramic	139 (Highest = 23, Lowest= 3)	17	8.17
IA Ceramic	41 (Highest = 9, Lowest = 3)	9	4.55
LIA Ceramic	125 (Highest = 19, Lowest = 3)	15	8.20

In an attempt to articulate the lithic assemblages' "tiers of activity" and nominal designations with ceramic data, I took each era's ceramic assemblage and ordered them in ascending order based on the number of sherds assigned to each. This allowed me to assign ordinal categories to particular assemblages and compare them against the lithic aggregations: 3-5 pieces of ceramic were considered Short-Term Gathering Places; 6-10 were labeled Ephemeral Camps; 11-20

sherds within an assemblage was labeled a Frequented Habitation; and, I designated locations of 21+ pieces of pottery as places of Consistent Habitation (for an example, see Table 4.5).

Table 4.5. An example of Late Bronze Age pottery assemblages compared to lithic assemblages and their nominal designations for landscape and residential use.

Region N/S	Locus	Ceramic Designation	Associated Lithic Assemblage (<200m distance) and Designation	LBA Count	Lithic Tool Count	Designation Based on Ceramic Presence
N	A	NBP-018-8		57		Consistent Habitation
N	A	NBP-001	NBP-001, Workshop, Consistent Habitation	34	65	Consistent Habitation
N	A	NBP-018-5		25		Consistent Habitation
S	C	NBP-013-1	NBP-013-2, Short Term-Gathering Places	22	3	Consistent Habitation
N	A	NBP-018-3		22		Consistent Habitation
N	B	NBP-021-2		16		Frequented Habitation
S	D	NBP-027-1	NBP-027-4, Ephemeral Camps	16	20	Frequented Habitation
N	A	NBP-018-6		12		Frequented Habitation
S	C	NBP-024-1		9		Ephemeral Camps
S	D	NBP-028-2		7		Ephemeral Camps
N	A	NBP-017	NBP-017, Ephemeral Camps	6	6	Ephemeral Camps
N	A	NBP-018-4		6		Ephemeral Camps
S	C	NBP-025		6		Ephemeral Camps
S	D	NBP-028-1		6		Ephemeral Camps
N	A	NBP-018-2		5		Ephemeral Camps
N	B	NBP-021-1		5		Short Term Gathering Places
S	C	NBP-026-1		4		Short Term Gathering Places
S	C	NBP-013-2	NBP-013-1, Workshop, Consistent Habitation	3	60	Short Term Gathering Places
N	A	NBP-018-1		3		Short Term Gathering Places
N	A	NBP-018-7		3		Short Term Gathering Places
S	C	NBP-024-2		3		Short Term Gathering Places

Interestingly, the nominal designations for lithic assemblages often did not match those for ceramic. In some cases, however, especially with moderate-to-low densities of artifact concentrations labeled Ephemeral Habitations and Short-Term Gathering Places, designations do overlap in each of the periods under investigation. For example, in Table 4.5, the lithic and Late Bronze Age ceramic assemblages of NBP-017, and the Late Bronze Age ceramic assemblage NBP-027-1 and its spatially associated lithic collection of NBP-027-4, appear to generally coincide in regards to "degrees of presence." The later eras of the Early Iron Age, the Iron Age, and the Late Iron Age also posit a similar pattern with only a few ceramic aggregations aligning with lithic assemblge designations.

This initial lack of association suggests a few cursory conclusions: 1) While some lithic scatters are associated with ceramic counterparts, the two materials are most often not spatially associated with one another. I would continue to argue, however, that many of the lithic

assemblages still indeed represent habitation or activity areas with differing degrees of occupational intensity. Yet, when compared with the ceramic distributions (and their assemblages) over time, it is likely that a large portion of these lithic scatters were secondary activity centers adjacent to actual residence locations. Further research will be needed to better elucidate these potential connections. 2) Beginning in the Early Iron Age, the ceramic scatters and their compiled assemblages start to become more dispersed, present at areas within Loci in which Late Bronze Age pottery and lithic tools were not. I argue this is possibly due to a subsistence shift that would ultimately come to focus on pastoralism, but also is a manifestation of a changing political climate. As Early Iron groups started to utilize the landscape in different ways and to different ends—likely mixing herding with other subsistence strategies and using mobility as an option, not an absolute —I suggest that ecological relationships would often be strained as populations were probably involved in ecological trials as they managed and experimented with strategies previously unfamiliar to them. These ecologial trials, I argue, map onto a political situation in which shifting ecological practices mirrored processes aimed at the reconfiguration of power and authority.

In the next section, measures of dispersion will be used in ArcMap to statistically test the second cursory conclusion and elaborate on what these procedures suggest about the development and reformation of political economic structures in Mongolian antiqutiy.

4.7. Measures of Spatial Dispersion

With the data frame properties in ArcMap still set to calculate spatial statistics only within the surveyed areas, I applied the Average Nearest Neighbor computation to each of the materials and sequences discussed in this chapter (Figure 4.14): Primary, Secondary, and

Tertiary Flake Scatters; Lithic Assemblages; Late Bronze, Early Iron, Iron, and Late Iron Age Ceramic Scatters; and the Ceramic Assemblages from all periods. The Average Nearest Neighbor tool "calculates an index" that measures the "distance between each feature centroid and its nearest neighbor's centroid location. It then averages all these nearest neighbor distances based on the average distance from each [scatter or assemblage] to its nearest neighboring feature of the same [scatter or assemblage group]" (ArcMap, Online Tool Reference).

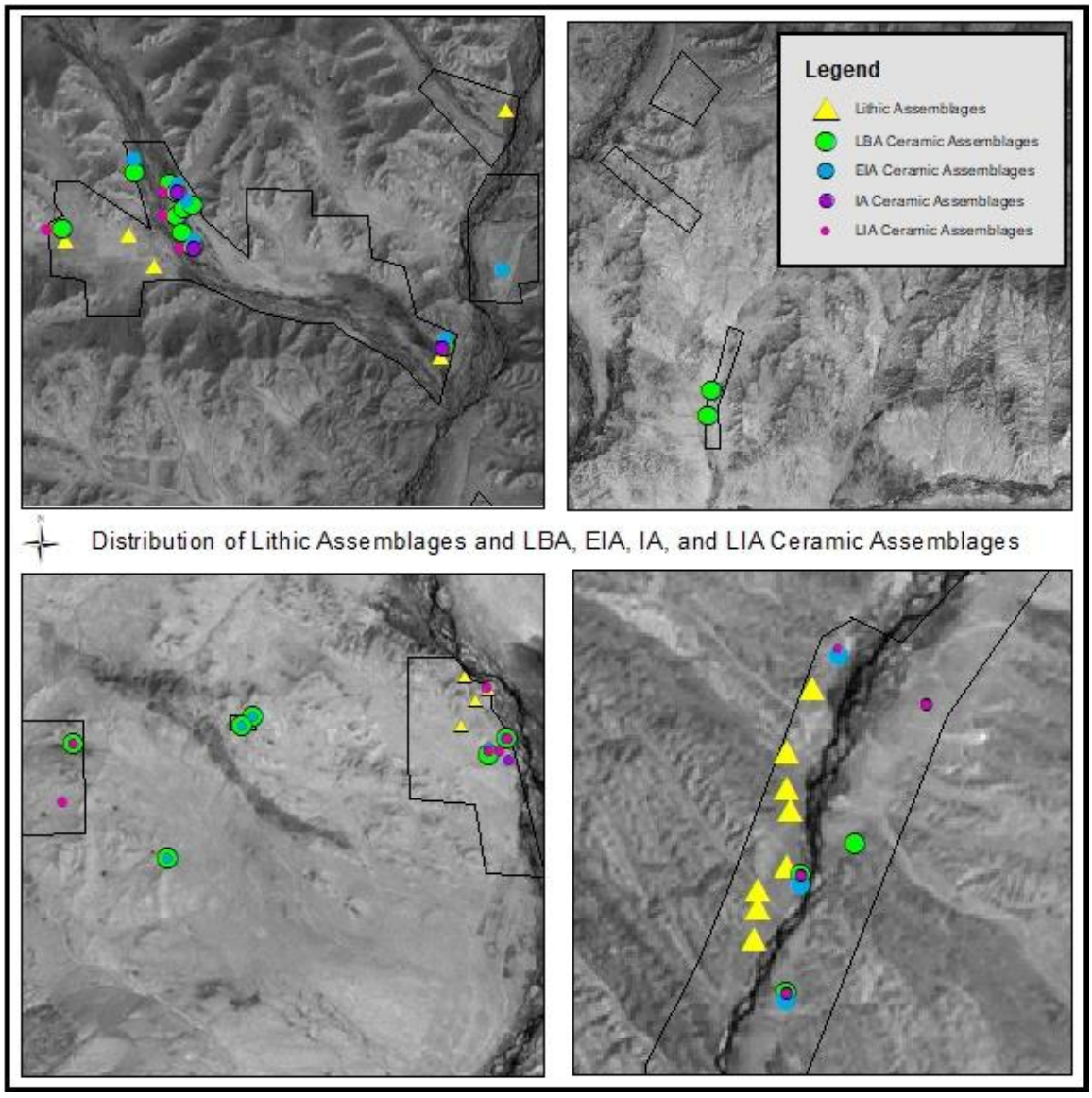


Figure 4.14. Distribution of lithic and ceramic assemblages throughout the four Loci.

The output from the Average Nearest Neighbor inquiries corroborated the second conclusion above, stating that beginning in the Early Iron Age, prehistoric Mongolian populations in Bayankhongor likely started to use the landscape more expansively, with a peak during the Iron Age. A few simple comparisons found in Table 4.6 demonstrate the increasing breadth of residential, migratory, and activity patterns moving forward through time.

Table 4.6. Nearest Neighbors for scatters and assemblages.

	Nearest Neighbor Ratio	Z-Score	Expected Mean Distance	Observed Mean Distance	Count
Primary Flake Scatters	0.030049	-20.579428	1176.6511 m	35.3570 m	
Secondary Flake Scatters	0.055973	-27.919939	1068.8580 m	59.8267 m	
Tertiary Flake Scatters	0.045616	-44.983004	672.6112 m	30.6817 m	
Lithic Assemblages	0.368130	-5.269087	1198.8955 m	1198.8955 m	
LBA Ceramic Scatters	0.049196	-31.662361	993.4450 m	48.8733 m	303
LBA Ceramic Assemblages	.440812	-4.902282	2770.2920	1221.1782	21
EIA Ceramic Scatters	0.085768	-22.534151	1265.7302 m	108.5595 m	165
EIA Ceramic Assemblages	.423171	-4.414060	3148.4890	1332.3481	16
IA Ceramic Scatters	0.194902	-12.127617	2045.1309 m	398.6001 m	62
IA Ceramic Assemblages	.531364	-2.689601	3433.4548	1824.4141	10
LIA Ceramic Scatters	0.113321	-21.523369	1516.6586 m	171.8692 m	161
LIA Ceramic Assemblages	.311959	-4.925035	3341.9464	1042.5496m	16

The Nearest Neighbor Ratios and the corresponding Observed Mean Distances for Primary, Secondary, and Tertiary Scatters fall within a constricted range from 0.030 - 0.055 and 30.68 m - 59.82 m, respectively. Late Bronze Age Ceramic Scatters fall within this limit at 0.049 and 48.87 m. Yet, when Early Iron Age, Iron Age, and Late Iron Age Ceramic Scatters are compared, both the Nearest Neighbor Ratio and the Observed Mean Distances are unmistakably greater. Early Iron Age ceramic scatters almost double in both aspects (0.085, 108.5 m) when compared with Late Bronze Age pottery Scatters (0.049, 48.87). Moreover, Iron Age Scatters (0.19, 398.60) show a ratio of dispersal that is nearly four times those of the Late Bronze Age (0.049, 48.87), while the Observed Mean Distances is over eight times more diffuse. This indicates a slow expansion of habitation and land-usage patterns with a sharp up-turn and clear peak in extent during the Iron Age. Nearest Neighbor values for Late Iron Age Scatters (0.11, 171.86) show a quickened constriction and clustering when compared to the Iron Age. Analysis of the Assemblage variable paints a similar picture (Figure 4.15).

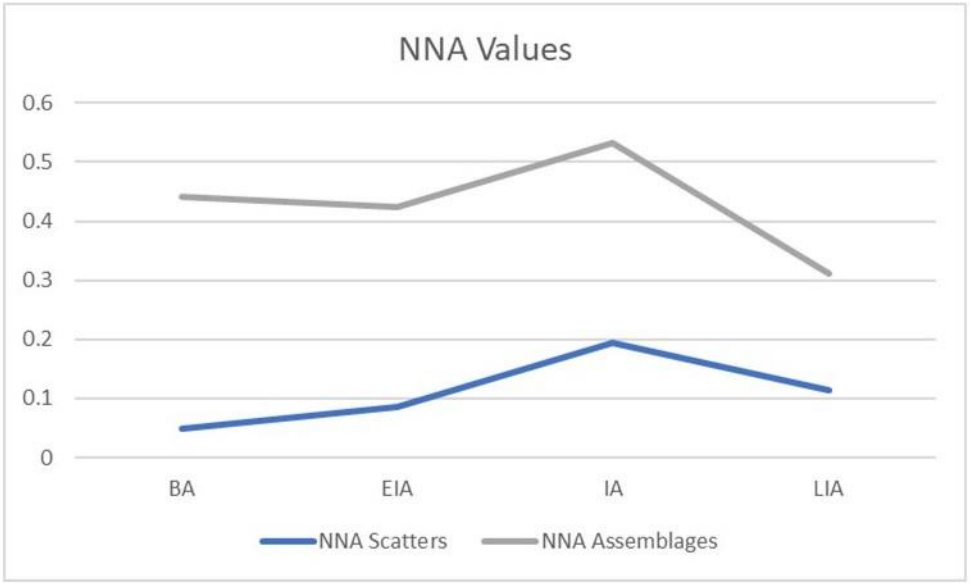


Figure 4.15. Nearest Neighbor values for ceramic scatters and assemblages.

I would argue that this, unsurprisingly, suggests that during the Late Iron Age/Xiongnu period the ecological rhythms and relationships became more focused and intensive, with more systematic coordinations of movement and pasture usage. Perhaps even more telling for this study, however, is comparing Nearest Neighbor values and patterning with simple counts of Scatters and Assemblages—especially during the Early and Mid-Iron Ages. Although both periods have a similar number of Assemblage totals (EIA=16, IA=10), the total number of Scatters drastically drops (EIA=165, IA=62). This, I contend could be due to the rapid expansion of landscape use during the Iron Age, which may have come to an unstable tipping point as wider thresholds were explored. The weakened visibility of the Iron Age material within the project's survey area may also imply that Iron Age populations intermittently left the Tuin Gol region or started to use differing habitation or migratory patterns. In either case, I hypothesize that political ties likely waxed and waned with local and regional variations as activity and habitation locations quickly expanded approaching the Mid-Iron Age, likely paralleling ecological trials and experimentation in new environments with novel combinations of herds and subsistence strategies.

In sum, I argue that the expansion of habitation and activity locations hints at nuanced ecological shifts during the first-half of the first millennium BCE, while accompanying political ties are disintegrated and reformed as social groups are pushed, pulled, or incentivized away from established occupational patterns. This is in contrast to the second half of the first millennium BCE (and especially the Late Iron Age) where patterning would suggest that residential locations and migratory patterns were becoming more stable.

This reticent expansion of landscape use (and by proxy, habitation and grazing areas) beginning in the Early Iron Age—and subsequent spike in the Iron Age—articulates with oscillating structures of power and community argued for in this dissertation. Popova (2006) writes, "Pastoralists do manage the land […] Pastures are political." I agree, and I argue that the use of GIS at different scales of resolution speak to an articulation of economic shifts and trials with uncertainties in political life and its organization. Degrees of mobility, or subtle modifications in residential locations—like those seen in the Iron Ages here—can be activated or subdued depending on combinations of environmental or political conditions and objectives.

4.8. Conclusion

To contextualize the spatial data and arguments presented above, it is necessary to consider the main instrument of mobility for prehistoric Mongolian populations—specifically the horse and its role in a budding pastoralist economy and the implications the animal may have had in influencing structures of political organization and ecological tactics. Archaeologists have yet to uncover evidence of horse domesticates in Mongolia prior to the mid-second millennium BC (Honeychurch et al. 2009: 346), and conclusive dates for mounted riding are still undetermined. Yet, extensive recent research in Mongolia (Wilkin 2020b; Taylor et al. 2017), as well as research on the wider steppe (Hanks 2010; Anthony 2007), demonstrate the significance of the horse and its capacities that would have palpable effects on political economy beginning in the Late Bronze Age.

Christopher Atwood (2015: 294) states that mobility can project power. To this, I would add that a newfound mobility from equid domestication not only manifested as a projection of power and status but also operated as a mechanism for the reformation of power and its

organizational structures that are intimately associated with malleable land-use patterns. As such, "information networks" and topological variations of aristocratic-commoner organizations could expand and contract with "unforeseen consequences for both extra-regional and local interactions" (Honeychurch et al. 2009: 333).

I propose that these "networking" processes of political structuring were fraught with heterarchical compromise and repeated substitutions or oscillations of local and regional variations in authority. This, I argue, can clearly be seen in the spatial analysis of the residential locations discussed above. Specifically, I infer that the lithic analysis and the increased spatial dispersal of Iron Age ceramic scatters compared to Late Bronze Age ceramic distributions, suggest that: 1) Ecological trajectories in the Early and Mid-Iron Ages were multi-faceted and likely relatively unstable; this is evident by a first slow, then quickened and palpable expansion of habitation areas; 2) Social networks were likely increasing in scope due to the horse; 3) During the Mid-Iron and Late Iron Ages, landscape use and knowledge of pastoral migrations started to become congealed. Herders now understood the best places to camp for access to water, pasture, and other necessities; and 4) Lithic investigations insinuated that both mobility and sedentism were part of the prehistoric repertoire of peripatetics.

Mobility and its potential as a social process—both ecologically and politically catalyzed—is central to this chapter. As a product of ecological constraints and opportunity, political upheaval or consolidation, pastoral nomads in the Late Bronze and Iron Ages used itineracy as needed. Yet how can ambivalent mobility and the patterns of surface material discussed in this chapter articulate with trends in political economy?

As stated earlier, the use of ethnographic analogy to describe migratory patterns or political organization in this study must be cautious. Historical studies show that multiple

patterns of transhumance and political rubrics can (and do) operate simultaneously in the same environment (Atwood 2015). It is an effect of strategy and decision-making, not an environmentally determined limitation or an outcome of an assumed structure of leadership. With this in mind, however, the synthesis of lithic and ceramic data presented here paints a complicated diachronic picture of political economy in northern Bayankhongor.

Although I argue against the over-determined use of terms like "chiefdoms" or "tribes" in this dissertation, it would be negligent to ignore the importance of familial and proximal relations altogether. I hypothesize that the clustered Nearest Neighbor values in the Late Bronze and Late Iron Age are compatible with the idea that communities and groups were working together relatively harmoniously, with pasture politics being largely guided by an aristocratic-commoner organization that was under-written by appanage policies. Discussing the Mongol empire, Christopher Atwood (2012: 3) describes appanage communities as a

> […] group corporate identity [which] is firmly attached to resources and to [the] common sharing of them with one's fellow members, but is only weakly, if at all, linked to notions based on common descent. Moreover, the difference in status between the appanage rulers […] and the community members under their rule was based on a sharp genealogical descent between noble and common ancestry.

Appanage land-tenure politics are a regulatory mechanism, a social process that reinforces an aristocratic-commoner relationship. Thus, I would suggest that Late Bronze Age populations and their forays into pastoral nomadism were largely directed by and experimented with at local scales, with extra-regional networks being thin and tenuous. Other scholars (e.g. Burentogtokh 2017; Gardner 2016; Houle 2010) too have suggested that the Late Bronze Age political sphere was likely characteristic of local order and governance. Yet, as mobility increased with the introduction of the horse, and subsistence strategies widened to include specialized herding and other supplemental strategies, I argue that these localized rules started to break down, being reassembled (still loosely) at greater extents on the landscapes creating regional informational

networks that would start to challenge and rearrange those appanage and aristocratic conventions. Heterarchical negotiation at work.

The apex of this breakdown, I would contend, occurred during the Middle Iron Age (ca. 500 BCE) when Nearest Neighbor values showed that the distribution of habitation locations were at its greatest extent, either because during this period populations were altering patterns of landscape use or moving out of the Tuin Gol region completely, ultimately straining the conventional social ties of the Late Bronze Age. Local relationships likely degraded, but inter-regional networks likely strengthened. This process may have oscillated, reverting between local and regional ties of authority if and when the thresholds of ecological limitations and experimentation were encountered. Subsequently, in the Late Iron Age, a clearer hierarchical political organization was likely reconsolidated on similar appanage and territorial lines, but now with both a strong sense of local and regional identity, and with ecological possibilities and migration patterns now clearly understood and structured within a burgeoning empire.

Atwood (2012: 39) continues, stating "Archaeologically," the appanage community model would correlate with material culture arrangements that indicate "strong territorial organizations" that are "also reflected in concentrated and stable patterns" of land-use—patterns such as those seen in the Late Bronze and Late Iron Age—and precisely the opposite of what these spatial data indicate during the first-half of the first millennium BCE. In sum, the investigation into the ecological facet of northern Bayankhongor's occupational landscape captured a complex temporo-spatial mosaic where agentive individuals and groups operationalized gradations of mobility and migration depending on circumstance and need. This, unsurprisingly, likely had reverberating and lasting effects on land-tenure rights, the general

stability of the aristocratic-commoner organization, and the way hierarchical relations could emerge within a compatible, yet malleable, heterarchy.

CHAPTER 5: POTS AND PEOPLE: CERAMIC IN ELEMENTAL AND DIACHRONIC PERSPECTIVES

The major aim of this dissertation project is to better understand the diachronic changes to political mechanisms and economic strategies from the Late Bronze and into the Late Iron Age in northern Bayankhongor province, Mongolia. Pottery, as both utilitarian objects and materials that may carry a deeper meaning, are central to understanding these milieus. Research has shown the connection between pottery and the composition of authority structures (DeMarrais et al. 1996; Sinopoli 1988; Deetz 1965), food consumption and access (Dietler 1996), networks of procurement and exchange (Arnold 2006; Tite 1999) and their scales (Druc 2001; Arnold 1988; Van der Leeuw 1977), as well as craft specialization and technology (Doumani Dupuy et al. 2019; Costin 2001; Gibson and Woods 1990; Rice et al. 1981).

With ceramic production as the focus of this chapter, I emphasize a particular segment of the vocational facet of occupational landscapes— potters and their wares. Through statistical and chemical analyses of pottery collected in northern Bayankhongor, I attempt to discern the degrees of standardization in production over time, diachronic aesthetic or technological preferences, and macro-scale landscape use. Guiding research questions to be addressed in this chapter include: 1) Which attributes of ceramic appear to be preferred or standardized diachronically, and how can they be linked to social processes? 2) In what ways does technological knowledge (or lack thereof) of ceramic production manifest itself through the Bronze and Iron Ages? 3) How can elemental studies of ceramic composition provide detail into the spatial parameters of potters and the procurement of raw materials?

While clay is simply the weathering of igneous rock that forms a general matrix of "silicates, aluminum and water joined in a crystalline structure" (Sinopoli 1991: 9-10), pottery

production is a complex interplay of environmental restrictions and agentive choice. As an exemplification, pottery with calcite, feldspars, or crushed pottery inclusions into the vessel's "paste" offer increased resistance to thermal shocks, yet the addition of quartz decreases the quality and endurance of vessels because the mineral expands at 573 degrees Celsius, ultimately causing fractures during the firing or cooking process (Ibid: 125; Eygun 2001). Consequently, hard-and-fast mineralogical rules apply, but cultural particularities or preferences, chains of knowledge, and skill contribute additional dimensions to manufacture which go beyond vessel functionality or use (Roddick and Stahl 2016; Bleed 2008).

Gosselain (2000: 189) writes that "the complex set of feelings and relationships upon which identity is constructed," personhood or group membership, emerge in the *processes* of manufacture and use of a vessel. Gosselain argues that this amounts to a "technical identity" corresponding to social networks, chains of knowledge and learning, as well as social and ecological boundaries (Ibid.). Although Gosselain has since shown that these processes of identity construction can be problematized by numerous "palettes of alternatives" (Gosselain 2018: 12), the framework he uses to conceptualize ceramic production in African contexts ultimately accounts for both constraints and potentials at each stage of production: clay procurement, clay processing, shaping, decoration, drying, pre-firing, firing, and post-firing. By accepting the combination of environmental restrictions and malleability of choice when producing clay vessels, ceramic analysis can be approached in multiple ways and at varying scales of resolution. Decoration, use, function, wear, chemical compositions, physical attributes, and skills of the potter "are all part of the arsenal of tools" (Sinopoli 1991) in relating the material to social life.

This study will focus on the production stages of clay procurement, shaping, and firing—therefore combining physical attributes, technological prowess, and chemical composition to provide an additional facet of material evidence to discuss the Bronze and Iron Ages of Mongolia in greater chronological detail. Paralleling arguments from the previous chapter, I argue that the ceramic assemblage from Bayankhongor generally indicate a decrease in routine production practices in the Early Iron Age, but are reformed and routinized into the Mid- to Late Iron Age. As such, I contend ecological trials and experimentation combined with political uncertainty at the beginnings of the first millennium BCE impacted ceramic production in tangible ways by interfering with chains of knowledge transmission and the preservation of technical identities. Yet, as these practices start to be refashioned entering the Mid-to-Late Iron Age (ca. 500 BCE), it is clear that potters began to exploit raw materials on the landscape at greater or differing extents, as well as increasing the range of exchange networks their wares travel within as they exercise some of the alternatives available in their production palettes.

5.1. Previous Research on Mongolian Ceramic

Ceramic studies in Mongolia have, until recently, solely relied upon vessels uncovered in burial excavations. Unfortunately, the reliance on funerary pottery only compounds the typological and chronological issues perpetuating the vestiges of evolutionary thought because these broad types do not provide intra-period detail (Clark 2014: 119) for more practical everyday wares. Thus, the lack of clarity between funerary and domestic pottery highlights the need for analyses of ceramic attributed to everyday life—utilitarian vessels not found in mortuary contexts.

In-depth ceramic studies in Mongolia that focus on pottery recovered outside of burials have only rarely moved beyond general descriptions. Bronze Age ceramics are often low-fired, coarse, friable, and range in color from browns to reds. Late Iron Age materials have finer gray pastes and are usually fired in a fully reduced atmosphere (Houle 2010: 39). Wright (2011, 2008) argues that the predominant forms display stylistic continuities from the Bronze to the Iron Age, with wide-mouthed beakers and large bowls being the predominant forms. Decorations are somewhat rare on prehistoric Mongolian ceramics, mainly consisting of low counts of appliqués, paddled/incised geometric decorations, punctates, or burnishing (Houle 2010: 39; Wright 2008; personal observation).

Yet, in contrast to general descriptions, the work of Hall and colleagues (2002, 1999), Gardener (2016), as well as Kelsoe (2013) and Clark (2014) have started to realign a singular concentration on funerary pottery. Hall and colleagues conducted chemical studies of prehistoric ceramic recovered from settlements and survey in northern Mongolia. Chemical compositions of the pottery led them to argue that clay "recipes" for ceramic production remained relatively consistent for millennia, from the Bronze Age to the Qing dynastic period, and that some Xiongnu groups likely manufactured pottery locally at settlements like Ivolga. Gardener too compared the chemical composition of prehistoric ceramic from two adjacent valleys (Tarvagatai and Egiin Gol), finding that the signatures from Neutron Activation Analysis (NAA) were nearly indistinguishable. Clark, with the assistance of Mongolian colleagues and their extensive institutional knowledge, created an intuitive typology (Sinopoli 1991: 50) based on the assessment of visible characteristics of over 500 sherds from Targan Nuur, also in northern Mongolia. From this procedure, she produced ten distinct classes of ceramic consisting of Bronze, Iron, and Turkic wares. These classes aided her spatial inquiries about residential

patterning from which she argued that Early and Middle Bronze habitations were constricted, unlike all other subsequent periods. Using raw materials from the same project area, Kelsoe (2013) and Clark (2013) performed experimental research regarding the workability and physical attributes of clays sourced within the region. Testing characteristics of absorbency, shrinkage, and thermal conductivity, they argue that local clay sources needed little alteration to produce functional vessels, and that post-firing attributes seemed to mirror those of ceramic made in antiquity.

As methodological reorientations toward data recovered outside of burial contexts, these studies provide a firm foundation for future research and interpretation of the social, economic, and political roles that ceramic may have played in Mongolian prehistory. Likewise, the remainder of the chapter will focus on pottery collected in northern Bayankhongor, bringing together various characteristics of the sample in order to comment on the ways vocational practices articulate with shifting ecological pursuits and the oscillating structures of political organization in the Bronze and Iron Ages.

5.2. The Northern Bayankhongor Ceramic Sample

The Northern Bayankhongor team collected a total of 954 pottery sherds during fieldwork in 2015. The main sample under investigation here consists of sherds originating on the surface or test pits, producing a statistical population of 884 pieces; the survey team collected this sample at 129 locations within the study area, totaling nearly 8% (n=1,620) of all recorded archaeological features.[1] The ceramic represents a variety of periods: Neolithic (NEO), Early/ Middle Bronze (EBA/MBA), Late Bronze Age (LBA), Early Iron Age (LBA/EIA), Iron Age

[1] Ceramic recovered from burials will be discussed in a later chapter.

(IA), Late Iron Age/Xiongnu Empire (LIA), Turk Empire (Turk), and Late Historic (LH) which spans Uighur and Kitan periods (ca. 10th century CE) through the Qing Dynasty of the 17th-20th centuries (Figure 5.1). This sample was further limited to eras of interest, specifically the Late Bronze to the Late Iron Age (n= 692).

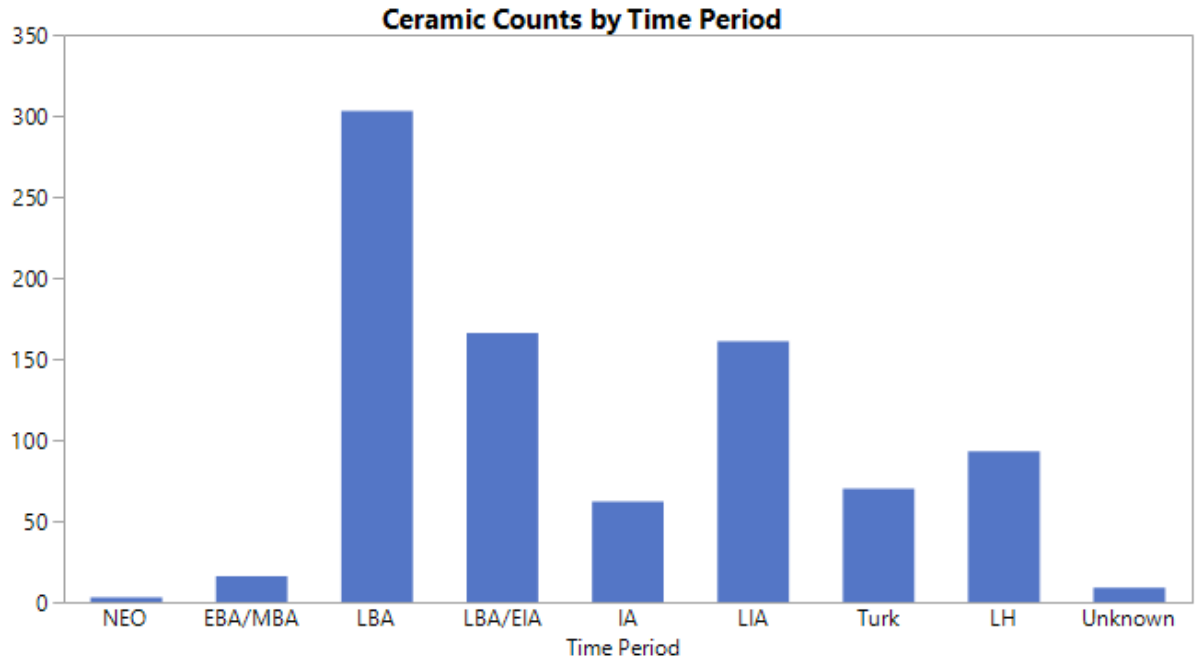


Figure 5.1. Distribution of ceramic yields by period.

Following Clark's example of the intuitive typology, I also sought assistance from my Mongolian co-director and colleagues to develop seriated sets of ceramic. The intuitive typology was created by grouping sherds by certain criteria or visible attributes, inherently biased to the individual researcher and institutional knowledge (Sinopoli 1991: 50). Yet, these categories are built upon the foundation that "every type necessarily has a diagnostic attribute […] or attribute cluster […] which makes it possible for us to think of them in a collective way and under and collective label" (Adams and Adams 1991: 30). As such, I defined 11 groups (Appendix E), 8 of which were assigned to eras of the Late Bronze Age through the Late Iron Age. Further, five of

the eight groups belong to the Late Bronze Age, which suggests a high degree of variability during that epoch and will be considered during further analysis.

5.3. Methodology for Ceramic Analysis, Attribute Analysis

After creating the diachronic typology, I cataloged each piece of ceramic in detail, with numerous attributes combined into a single database. I composed the database with a set of "pre-established system of variables," yet, the composition of the database itself allowed for flexibility and "ways of arranging attributes to create new categories […] or revise old ones" (Richard 2006: 516). This flexibility is crucial to the adjustment and refinement of categories at various spatial scales, ultimately allowing for topological adaptations to the typology.

The database included characteristics from each stage of ceramic production while paying close attention to a potter's potential choice and palettes of alternatives throughout the processes (Appendix E): GPS location, sherd type, weight, size, thickness, color and firing environment, type and percent of inclusions in temper, charring, decorations, and time period. Cumulatively, these attributes form a relatively standard suite of characteristics for the analysis of archaeological ceramic (Rice 1987; Shepard 1956). To ensure the replicability of the database, attributes were regulated as much as possible. For example, I used Munsell Color Codes to specify the colors of the interior, exterior, and paste of the sherds, digital calipers for all measurements, and I defined temper texture based on the observable and measurable size of inclusions ranging from grains <.5mm (Fine Texture) to large granules exceeding 2mm (Coarse Texture) suggested by Shepard (1956: 118).

Vessel Thickness

Vessel thickness is an excellent metric for gauging standardized or specialized production techniques, and the degree of craft centralization. In her seminal work on the Vijayanagara period in South India, Sinopoli (1988) defines the difference between centralized and non-centralized production regarding a "spatially" and socially "segregated production by specialists" often in the form of workshops or defined areas of assembly (581). Therefore, degrees of standardization and specialization may increase with centralization, evident by clustered distributions of a given attribute. In contrast, an attribute's high degree of variability will likely be indicative of non-centralized local production.

To investigate the vocational scale and organization of potters in prehistoric Mongolia, I calculated the standard deviations and means for vessel thickness within each period (Appendix E). As seen in Table 5.1, there is a steady decrease in the standard deviation over time, moving from 2.582 in the Late Bronze Age to a standard deviation that is more clustered around the mean in the Late Iron Age (1.908).

Table 5.1. Diachronic distributions of vessel thickness by territory and region

.

Maximum Thickness	Territory Population			Regional Population			
Designation	Mean	Std. Deviation (*Without Outlier*)		North/ South Regional Variation	Mean (*With Outlier*)	Standard Deviation (*With Outlier*)	Sample Size
All Ceramic	9.6027	2.9995					883
LATE BRONZE AGE	10.5	2.582		North	10.36	2.495	218
				South	10.85	2.781	84
LATE BRONZE/EARLY IRON AGE	9.09	2.607		North	8.26	1.913	78
				South	9.81	2.925	87
IRON AGE	9.27	2.084		North	9.64	2.169	18
				South	9.11	2.054	43
LATE IRON AGE	9.4	1.908		North	9.52	2.022	58
				South	9.33	1.847	102
UNKNOWN/ LATE HISTORIC/EBA/MBA							195

But what do these distributions indicate about the political economic organization of prehistoric pastoral nomads and ceramic producers in the Mongolian Bronze and Iron Ages? Diachronically, the decrease in standard deviations beginning in the Iron Age suggest a steady escalation in the standardization of ceramic production. Where standard deviations are high—as with the Late Bronze and Early Iron Age—there is likely a higher variability in potting skills and practices, possibly deriving from more informal transmissions of crafting knowledge. In contrast,

where the standard deviation is lower, like with the Late Iron Age, I propose that the organization of production likely revolves around more specialized and/or fewer trained potters.

Although the fluctuations in vessel thickness presented here depend on minute deviations from the mean, the small discrepancies corroborate the overarching argument of the dissertation. During the Late Bronze and Early Iron Age, these data allude to more local pottery production with limited avenues for the vocational transmission of techniques that would lead to more consistent numerical outputs. What is more, a small uptick in the standard deviation in the Early Iron Age may suggest that potters and their corpus of knowledge of ceramic production began to briefly decompose before being reassembled around the middle of the first millennium BCE. Although the investigation of this attribute relies on minutiae, literally millimeters of difference in vessel thickness, when the calculated standard deviations are combined with other ceramic attributes a clearer and more chronologically refined picture of the Late Bronze-Iron Age transition does emerge.

Ceramic Firing Conditions, Color, And Paste

The major causes of color variation in ceramic are due to the elemental composition of clay and its impurities (like iron oxides), as well as the temperature, duration, and atmosphere of the firing process (Tite 1999). Thus again, ceramic production and its analyses rely on tacking between natural constraints and aesthetic preference as both aspects can be altered (Shepard 1956: 103). During the firing process color is greatly affected by the amount of oxygen allowed into the atmosphere: high amounts of oxygen encourages the oxidation process and produces brighter colors, while an oxygen-reduced atmosphere does not allow for oxidation to take place and thus results in a variation of grey and black ceramic (Ibid.). To date, archaeologists have not unearthed any prehistoric kilns or firing areas in Mongolia, thus we can assume that during the

Late Bronze-Late Iron Age, ceramic was fired either in a pit covered with various fuels like dung and wood, or the ceramic was fired on the ground surface and simply covered by accelerants (Wright 2008, Figure 5.2). Obviously, using a prepared pit would greatly reduce the amount of oxygen allowed into the prepared atmosphere, causing greyer-blacker results, while surface firings would likely vary in color between reds, oranges, and browns depending on the porosity of the fuel superstructure. Temperature can also be a factor, such that low temperatures often result in brighter colors (Shepard: 1956: 103; Rice 1999, 1987). Therefore, as a characteristic that encompasses both the natural composition of clays and vocational expertise of the potter and learned firing techniques, ceramic color can provide additional insight into political economic situations as it relays information about chains of knowledge transmission and the care taken to produce vessels.

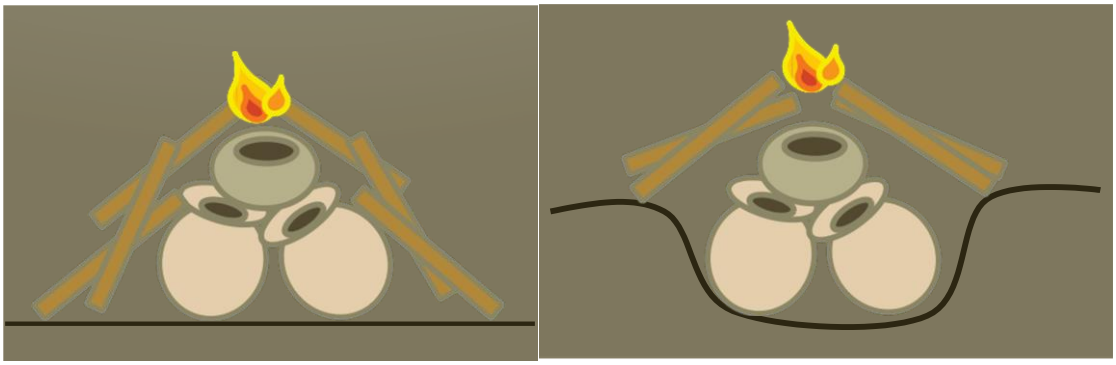


Figure 5.2. Example of surface- and pit-fired ceramics. (From Kelsoe and Clark 2013).

Both exterior and interior colors, as well as the paste color, were recorded using Munsell Color Codes. I entered over 100 distinct color codes during ceramic analysis. To better analyze patterns of color preference, as well as the technology chosen and attention given to firing conditions, I consolidated these codes into larger categories along the color spectrum. Ultimately this produced a continuous scale of color and shade: Yellow, Yellowish Red, Light Red, Red,

Dark Red, Reddish Brown, Buff, Brown, Dark Brown, Light Grey, Grey, Dark Grey and Black (Table 5.3).

Table 5.3. Munsell codes and consolidated colors.

Consolidated Color	Nominal Munsell	Munsell Color Code
Yellow	Yellow, Reddish Yellow	5yr 6/6, 5yr 6/8, 5yr 7/6, 7.5yr 6/6, 7.5yr 6/8, 7.5yr 7/6, 10yr 7/6
Yellowish Red	Yellowish Red	5yr 4/6, 5yr 5/6, 5yr 5/8, 5yr 4/8
Light Red	Light Red, Weak Red, Pink, Pale Red	10r 6/6, 10r 6/8, 2.5yr 6/6, 2.5yr 6/8, 7.5yr 6/4, 2.5yr 6/2. 2.5yr 4/2 7.5yr 7/4, 10r 5/4
Red	Red	10r 4/6, 10r 4/8, 10r 5/6, 10r 5/8, 2.5yr 4/6, 2.5yr 4/8, 2.5yr 4/8, 2.5yr 5/6, 2.5yr 5/8,
Dark Red	Dark Red, Dusky Red	2.5yr 3/2, 2.5yr 3/6
Reddish Brown	Light Reddish Brown, Reddish Brown, Dark Reddish Brown	5yr 6/4, 2.57r 5/4, 2.5yr 4/4, 2.5yr 5/4, 5yr 4/3, 5yr 4/4, 5yr 5/3, 2.5yr 3/3, 5yr 3/3, 2.5yr 3/4, 5yr 6/3 2.5yr 6/4, 2.5yr 6/3, 5yr 3/2
Light/Pale Brown, Buff	Light Brown, Brownish Yellow, Very Pale Brown, Light Yellowish Brown, Yellowish Brown	10yr 6/6, 10yr 7/4, 10yr 6/3, 2.5y 8/2, 10yr 6/4, 10yr 5/4, 10yr 5/6, 10yr 5/8, 10yr 8/2, 7.5yr 6/3, 7.5yr 6/4,
Brown	Brown	10yr 4/3, 10yr 5/3, 7.5yr 5/3, 7.5yr 5/4, 7.5yr 4/2, 7.5yr 4/3, 7.5yr 4/4, 7.5yr 5/2,
Dark Brown	Dark Brown, Strong Brown, Very Dark Brown, Dark Greyish Brown, Very Dark Greyish Brown, Greyish Brown, Dark Yellowish Brown	10yr 3/4, 7.5yr 5/6, 7.5yr 3/3, 10yr 2/2, 10yr 4/2, 2.5yr 3/2, 10yr 5/2, 10yr 4/6, 10yr 3/2, 10yr 3/3, 7.5yr 3/2 10yr 4/4, 10yr 3/6, 7.5yr 3/4
Light Grey	Light Grey, Light Brownish Grey, Pinkish Grey, Reddish Grey	10yr 6/2, 7.5yr 6/2, 10yr 7/1, 10yr 7/2, 2.5yr 5/1, 5yr 5/2 10r 5/1
Grey	Grey	10yr 5/1, 10yr 6/1, 2.5y 5/1, 5yr 6/1, 7.5yr 5/1, 7.5yr 6/1, GLEY1 5/N, GLEY1 6/N, 5yr 5/1
Dark Grey	Dark Grey, Dark Reddish Grey, Very Dark Grey, Very Dark Bluish Grey,	10r 3/1, 10r 4/1, 10yr 4/1, 2.5y 4/1, 5yr 4/1, 7.5yr 4/1, GLEY1 4/N, 10yr 3/1, 2.5y 3/1, 7.5yr 3/1, GLEY 1 3/N, 5yr 4/2, 2.5yr 4/1, 2.5yr 3/1
Black	Black, Reddish Black, Bluish Black	10yr 2/1, GLEY1 2.5/N, 2.5yr 2.5/1, 5yr 2.5/1, GLEY2 2.5/PB, GLEY2 3/10B

The results of the ceramic color analyses were quite clear. First, it must be noted that the colors dominating each time period are congruent with previous research (see Houle 2010; Wright 2008; Clark 2014). Yet, the most revealing aspect of color distributions were the

diachronic shifts. The well-defined battleship curves below (Figure 5.3) exhibit a clear trend towards a reduced firing atmosphere through time. Late Bronze Age pottery has a wide range of Reds, Browns, and Yellows possibly symptomatic of oxidizing atmospheres and lower temperatures, while Late Iron Age ceramic cluster around greys and black likely resulting from a lack of oxygen during the firing process.

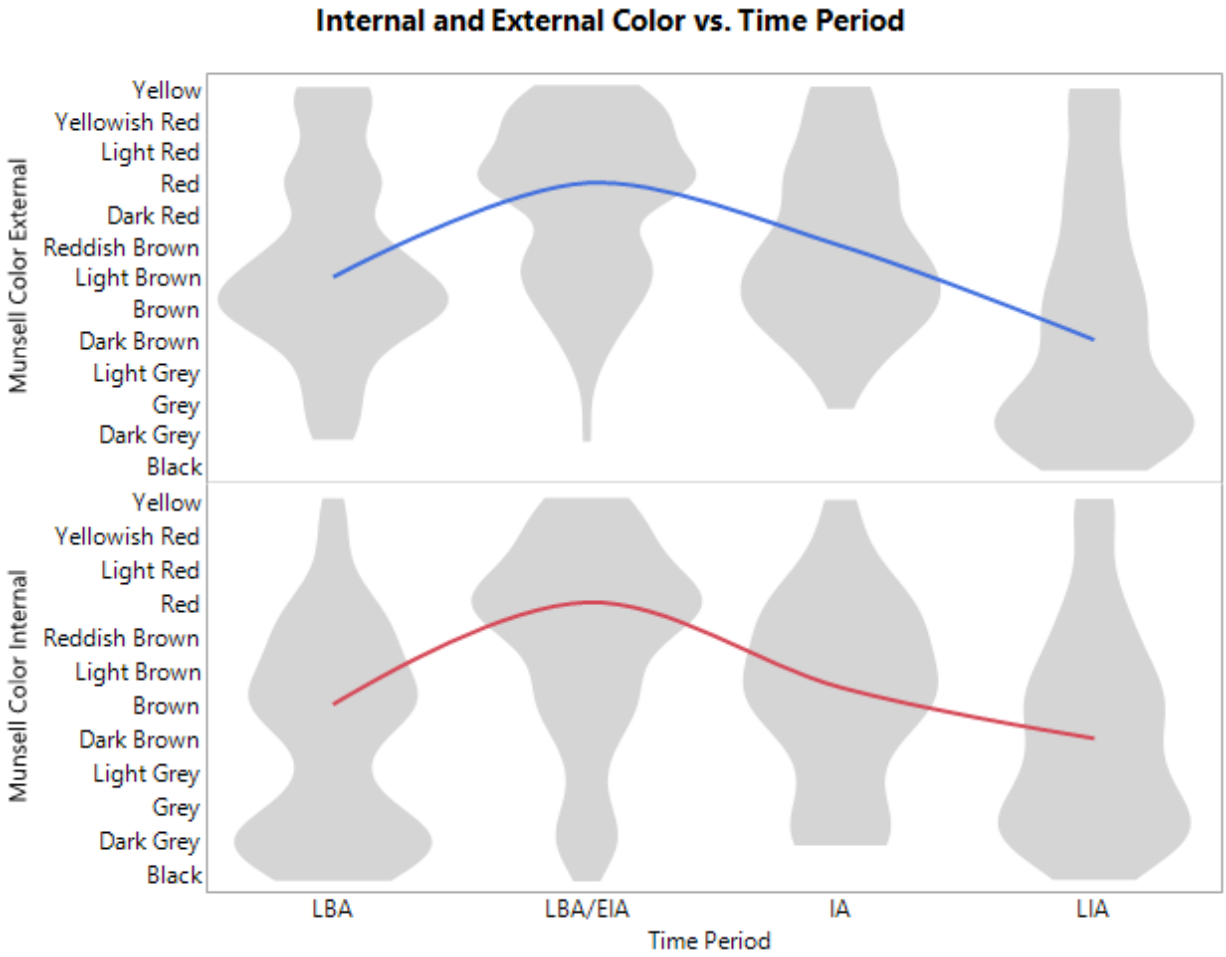


Figure 5.3. Diachronic changes in Internal and External Color.

This diachronic pattern is likely the result of either 1) a changing preference for vessel color during the Late Bronze Age/Early Iron Age and the Iron Age proper, 2) a shift in firing

conditions where oxidizing conditions and a lower firing temperature were more common during the Early and Mid-Iron Age transition, or 3) a combination of shifts in both cultural preference and technological processes and attentiveness.

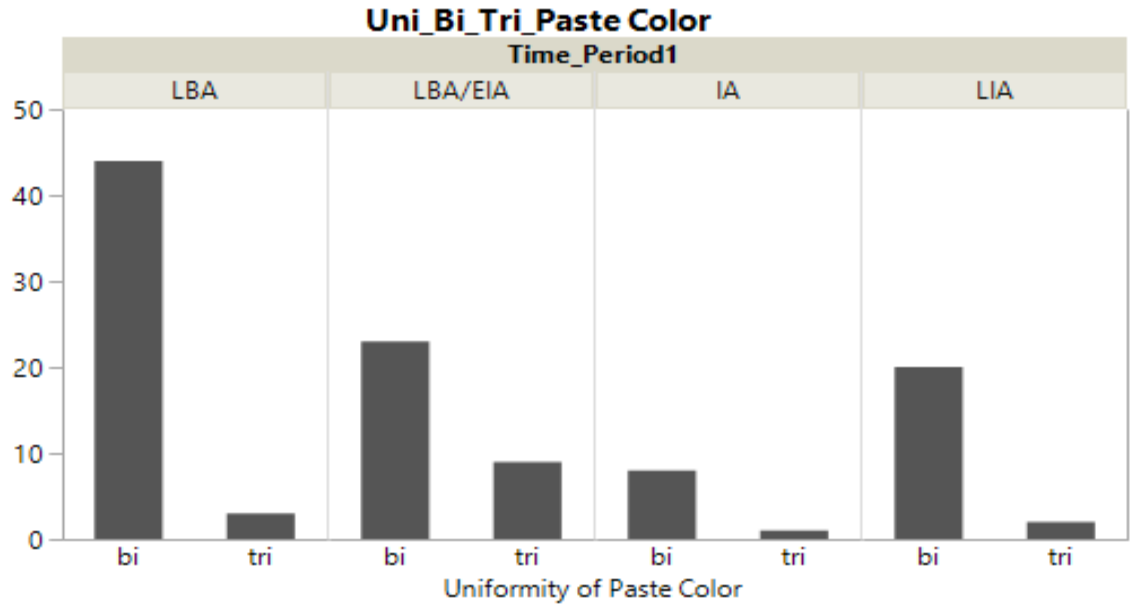


Figure 5.4. Variations in paste color indicative of firing conditions

However, if we turn our attention to paste color as a complement to internal and external color, more insight is gleaned into determining the catalyst as either technological or cultural. Looking again to the Internal Color of the Late Bronze Age vessels (Figure 5.3), we see two well-developed curves: one near Dark Grey/Black, and the other clustered around Brown. By themselves, these patterns in the battleship curves imply two distinct firing strategies and allotments of oxygen in the firing process. What is more, these color-patterns of Late Bronze Age ceramic are congruent with variations in paste color (Figure 5.4) where Late Bronze Age ceramic has a high degree of bi- and tri-colored pastes (15%). This metric further deteriorates in the Early Iron Age (21%) and continues into the middle of the first millennium BCE (21%).

Because slow heating kilns or well-made firing pits are essential for uniform surface and paste color as they determine the amount of oxidizing processes allowed (Tite 1999: 218), I suggest that variations in paste color indicate a level of uncertainty about firing conditions, temperature, and/or a lack of specialized knowledge. Thus, it does not seem as though the bright reds and oranges of the Early and Mid-Iron Age are representative of cultural preference. Instead, it alludes to a shift in socio-economic organization, broken chains of "technical identities." Changes to technical identities, I argue, map onto the expanding, yet experimental, ecological strategies of the Early and Mid-Iron Ages put forth in the previous chapter. Accordingly, as groups started to exploit the landscape at greater extents and emphases, the knowledge of (or, at the very least, attentiveness to) local ceramic production practices were further disjointed, ultimately causing the disparities seen in color and firing conditions during these periods. Moreover, the broken chains of technical identities may also imply that political organization, structures that inform and influence ways-of-doing-and-learning, were interrupted as influxes of heterarchical negotiations for authority likely became more commonplace moving into the first millennium BCE.

5.4. Introduction to Portable X-Ray Fluorescence (pXRF)

X-rays are not new to the scientific world. Wilhelm Röngtgen discovered them in the early 20th century, and six decades later, the technology was adopted into archaeological practice (Shackley 2011: 7). From the 1960s on, X-ray fluorescence (XRF) has been an exciting addition to the archaeological sciences, but despite the fervor, many voices are concerned about the instrument's output and drawbacks as the minimum archaeological unit shifts from artifact to element. However, elemental studies of ceramic do fit well within the concept of occupational

landscapes and distributional "non-site" archaeology as it allows a view of diachronic land use without biasing the sample spatially. As such, chemical analyses of ceramic rarely lead to the discovery of raw material sources (Emmitt et al. 2018; McCormick and Wells 2014) as a singular "site" of action, but instead speaks to schematics of commodity production as interrelated practices and available alternatives. In short, elemental investigation of ceramic does little to answer the question of "where," but is quite informative about "how" potters exercised their options regarding clay procurement and vessel manufacturing.

Portable X-ray fluorescence (pXRF) is a technique whereby x-rays excite and displace electrons from the inner orbit of atoms, which are "subsequently filled with electrons" from the outer orbits as they return to a grounded state (McCormick and Wells 2014: 23). The differences between the electron shells differ, but their measures are known and can be quantified (Hunt and Speakman 2015: 635). It is this highly technical procedure, along with robust statistical output that creates an outside perception that users lack analytical rigor or understanding (Frahm and Doonan 2013: 1430). However, a review of the archaeological literature on pXRF does not corroborate this worry (Tykot et al .2013; Ibid.).

The popularity of pXRF has revolved mostly around sourcing obsidian tools (Frahm 2013), but with ceramic materials, researchers since the 1970s have often championed Neutron Activation Analysis (NAA) because of its accuracy. However, accuracy comes with exorbitant costs and the need for specialized and stationary equipment as well as lab spaces. (Fernandez-Ruiz and Tornero 1997). Since then, however, technical strides have assured that pXRF spectrometers have "lower detection limits and better resolution than those of decades past" (Hunt and Speakman 2015: 626;) and are comparable to NAA while also being non-destructive technique (Newlander, et al. 2015; Tykot et al. 2013; Fernandez-Ruiz and Tornero 1997). But,

when creating and executing a research design with novel technology, drawbacks must be accounted for and clearly understood.

Drawbacks and considerations of pXRF use include 1) calibration, 2) detection of elemental ranges, 3) mineralogical effects and sample size, and 4) statistical overlap effects. However, to initially counteract these potential pitfalls, it is important first to attempt to characterize the geology, geomorphology, and cultural history of the region where your materials originate (McCormick and Wells 2014: 24). Contextualization is critical, especially when the elemental composition of one's materials is unclear or widely varied. The analyst must know which elements will likely be most important to the research questions.

pXRF instruments come with many "factory" calibrations for a variety of material types. In fact, the Bruker-Tracer IIISD comes with hundreds of presets (Laura D'Alessandro, personal communication). However, Hunt and Speakman (2015) found that when these factory calibrations are tested on archaeological materials, they rarely contained the elements of interest. They write that calibration must,

> 1)include all elements of interest in the sample, 2) that it has a dynamic range appropriate for the elemental concentrations typical or expected in the sample materials, and 3) that the certified reference materials (CRMs) or standards used to build the calibration have a similar matrix to the samples. (634)

Therefore, one ideally calibrates with standardized "pellets." If the sample is not well characterized, the analyst can perform a qualitative examination of the material "using three or more acquisition conditions, designed to cover high, medium and low energy ranges" which can be used to produce an empirical calibration—a line of fit determined by the calculated versus actual concentrations (Shackley 2011: 24, 34).

Elemental ranges must also be accounted for when using pXRF. Although XRF technology can record a larger range of elements than spark-source optical emission

spectrometry, gamma spectrometry, or chemical test kits (Potts 2008: 3), the instrument has difficulties detecting certain elements. In regards to archaeological ceramics and soils, "detectable elements of interest include Mg-Si, K-Ca, Ti-Zn, Rb-Nb and Th" (Hunt and Speakman 2015: 634) as well as trace elements of Arsenic (As), Neodymium (Nd), Hafnium (Hf), Nickel (Ni), Barium (Ba), Vanadium (V), Copper (Cu), Gallium (Ga), and Yttrium (Y) (Fernandez-Ruiz and Tornero 1997). But, in general, pXRF has difficulty with elements which have a low atomic number, such as those below Si (Potts 2008) or with elements that are not represented in moderate concentrations (McCormick and Wells 2014: 23).

Mineralogical effects can also have a detrimental effect on the accuracy of readings. Markowicz (2008: 23) notes that with increased grain size and smaller excitation volume discrepancies can emerge. Large inclusions, disparities in the crystal structure or densities can result in differential penetration of rays into the actual sample, and as a result, leads to misreading of "electron excitation and emissions" (Hunt and Speakman 2015: 636). Therefore, it can be deduced that the analyst should carefully note where on the ceramic the pXRF beam is reading elemental composition (on the clays as opposed to large granular inclusions). Moreover, individuals samples must be .10 mm in its smallest dimension and 2 mm thick for optimal readings (Shackley 2011: 8) and the amelioration of mineralogical effects.

Lastly, spectral inferences can be problematic. These are defined as overlaps in peaks during outputs that either incorrectly show a range or are conflated with a neighboring element, hiding that statistical reading. For example, sometimes, elements of interest like P, S, Cl, and Ca, are not visible due to low concentrations or because the peaks overlap (Ibid.). Conversely, the Rayleigh Scatter effect, when x-rays bounce off atoms without producing fluorescence but still appears as a peak, can also be difficult to untangle during the analysis of outputs (Shackley 2011:

22). However, these drawbacks are usually due to the software being unable to handle, record, and graph excitation with precision.

Despite the drawbacks outlined above, pXRF analysis has many advantages. It is non-destructive and portable, which is often critical to meet international protocols of collection and exportation. Moreover, it is cheap and fast—at the longest, only taking 5-6 minutes per sample (Ibid.: 6). Therefore, in terms of its articulation with archaeological research questions, pXRF is important to studies of provenance, economic organizations, trade networks, and the assignment of activity areas (Hunt and Speakman 2015: 626). While McCormick and Wells (2014) argue that few pXRF studies explore ceramic provenance due to the compositional complexity of raw materials—not to mention cultural factors—the technique articulates well with questions specific to the Bronze and Iron Age Mongolia. Although there is no baseline for the elemental compositions of clays throughout Mongolia, or even in Bayankhongor province specifically, the distribution of major, minor, and trace elements in pottery found across the territory will illuminate political economic organization as well as begin to frame ceramic lifecycles and provenance.

In this study, pXRF analysis will not be able to definitively locate the raw clay source(s), which researchers rarely find anyway (Druc 2001: 104). There are no baselines for source clays, and often the analyzed ceramic bears little "resemblance to its source sediment" (Hunt 2012: 90). Even so, "'provenance' is a reasoned probability and imperfect reality in archaeology, geology, and the archaeological sciences" (Ibid.: 92) such that rough groupings can still help distinguish different production or procurement zones, as well as trade networks and the mobility of ceramic. It is here that the anomaly becomes more interesting than the pattern. For example, Frankel and Webb (2012) analyzed 400 samples from Bronze Age Cyprus, recording a total of

36 elements for grouping. They found that most vessels were produced on a certain portion of the island, with only a few traveling to other areas. McCormick and Wells (2014: 12) also suggest that pXRF is useful for characterizing local and non-local wares; they found potters had local variations of foreign imports based on Strontium (Sr), Niobium (Nb), and Yttrium (Y) groupings. Further, Druc (2001) adds that pXRF can delineate large resource areas which can be used as a proxy for the division of labor and economic strategies in terms of raw material procurement.

5.5. pXRF Analysis of Northern Bayankhongor Sample

The Mongolian sample selected for pXRF analysis consisted of 45 pieces of ceramic.[2] The sample was not randomly selected but was instead gathered to represent a cross-section of northern Bayankhongor and the North and South regions of analyses, as well as the periods of interest. As such, the sample consisted of 16 sherds from the northern region, and 29 from the south; 18 of the pieces represent the Late Bronze Age, 14 for the Early Iron Age, 5 from the Iron Age, and 8 from the Late Iron Age.

The specific instrument used for analysis was the Niton XL3t. The Niton XL3t was set to general settings used for sediments, set to read compositions in parts-per million (ppm). Before and after each set of irradiations, a standard clay pellet of known elemental composition (called "Ohio Red" at the Field Museum) is scanned by the machine to ensure the instrument's proper calibration. Subsequently, each piece of Mongolia ceramic was assayed five times, twice on the interior and exterior, and once on the paste. Each assay spanned 90 seconds. I performed multiple assays as a protective measure against spectral overlaps or other erroneous readings, and

[2] pXRF analysis was conducted at the Field Museum in Chicago, IL under the supervision of Laure Dussubieux.

because the readings could be averaged to construct a normalized statistical output throughout the sample.

Because pXRF has difficulty reading lighter elements, Magnesium (Mg) to Silicon (Si) were deleted from the dataset outright due to unreliability. Then, after averaging the readings for each sherd, it was necessary to remove the elements that fell below the level of detection (<LOD). After these preparations, I had eliminated a total of 15 elements from the record: Scandium (Sc), Cobalt, (Co), Selenium, (Se), Molybdenum (Mo), Palladium (Pd), Gold (Ag), Cadmium (Cd), Tin (Sn), Antimony (Sb), Hafnium (Hf), Tantalum, (Ta), Tungsten (W), Rhenium (Re), Mercury (Hg), and Uranium (U). Twenty-five elements remained in the dataset.

To determine which trace elements were statistically significant in displaying group membership or difference, I ran Analysis of Variance (ANOVA) and independent t-testing in the JMP 13 statistical package. In a combinatory manner, each time period was tested against the other eras (i.e., LBA vs. EIA, LBA vs. IA, LBA vs. LIA, IA, vs. LIA, EIA vs. IA, etc., Appendix E).

ANOVA testing showed that clear differences between period, in particular, defining Sulfur (S), Strontium (Sr), and Barium (Ba) as elements of importance that fall beneath the 95% confidence interval (CI). Subsequent t-tests segregated Sulfur (S), Calcium (Ca), Potassium (K), Iron (Fe), Chlorine (Cl), Rubidium (Rb), Chromium (Cr), and Copper (Cu) .

I then plotted these remaining elements with a Ward-method dendrogram model. The dendrogram isolated three major elemental taxonomies within the sample (Figure 5.5). The main cluster component for Group A was Iron (Fe), with Chromium (Cr) and Copper (Cu) adding to the signature. Group B was largely defined by Sulfur (S), and followed by Calcium (Ca), Strontium (Sr), and Chlorine (Cl). The final group, C, was determined by statistically significant

compositions of Potassium (K) and Rubidium (Rb). A bivariate plot and numerical output of the significant elements also show these groupings (Appendix E).

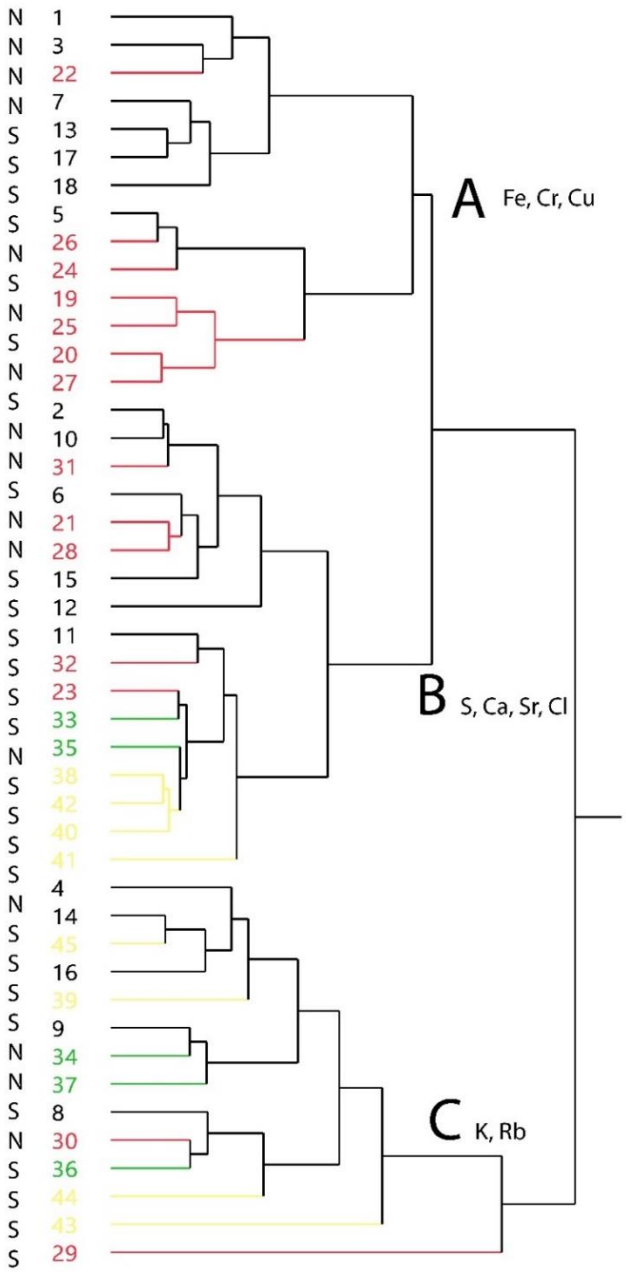


Figure 5.5. Dendrogram showing elemental groups by time period. Black is LBA, Red is EIA, Green is IA, and Yellow is LIA.

The dendrogram offers multiple scales of interpretive resolution. Regionally, the cross-section of selected ceramics from the North and South areas of the project were ambiguous. Each element group, it appears, carries a mixture of absolute geographic provenance with both regions represented. Group A, for example, contains fourteen samples—half collected in the Shatar Chuluu area and half from Bulgan Uul. Moreover, Group B is composed of seventeen sherds with twelve (70%) originating in the southern region of the study area. Finally, Group C contains fourteen samples with the majority (n=10; 71%) of them deriving from the South. Consequently, these data demonstrate somewhat antithetical computations if geological and environmental context are not considered. Clear element groupings clustered in significant and logical ways, juxtaposed to the amalgamation of sherds from the Northern and Southern regions of the project area within each cluster, is likely due to substantial presence of the Tuin Gol and its parent chemical properties. Along these lines, the indeterminate geographical apportioning within elemental clusters is not unexpected or extensively problematic; the unabridged chemical compositions of the clays are probably quite similar (ultimately causing the samples from the North and South to group indiscriminately) as the Tuin Gol serves as a natural feature that would accumulate diverse and broad elemental signatures eroding into the river at various points along its 200+ km course. Thus, the presence of samples from all relevant eras in each cluster, as well as the indiscriminate grouping of samples assigned to either the North and South throughout the dendrogram likely points to a relatively common and local "recipe" for ceramic manufacture from the Late Bronze through the Late Iron Age—at least. This conclusion follows previous chemical studies of pottery in Mongolia (Gardener 2016; Hall and Minyaev 2002; Hall et al. 1999).

However, the elemental groupings displayed in the dendrogram offer a more detailed resolution and scalar interplay. I argue that Groups A, B, and C, represent relatively distinct "sources" of clay procurement along or adjacent to the Tuin Gol and its tributaries. Most telling is how time periods separate into these sets of elemental compositions. The dendrogram model clearly shows that Late Bronze and Early Iron Age sources were similar in elemental composition (Group A; n=14, 100%), but in later periods, specifically the Iron and Late Iron Age, compositions indicate different clays or tempering additions assigned to Groups B and C. Group B displays a combination of Late Bronze Early Iron Age, Iron Age and Late Iron Age samples, but is predominantly characterized by Late Bronze and Early Iron Age sherds (n=11; 65%). Group C also spans the Late Bronze to Late Iron Age, but the Late Bronze and Early Iron Age examples (n=7; 50%) are further underrepresented, implying that potters started to alter their spatial schemas of clay sourcing and/or tempering practices around the middle of the first millennium BCE (Middle Iron Age).

5.6. Conclusion

By focusing on pottery production as the vocational facet of the occupational landscape, we can better assess vessel manufacture as a social process, a process that includes and acknowledges the plethora of choice for the potter at each stage in vessel production. Analyses of vessel thickness, firing conditions, color, and elemental composition indicate that potters, their schemas of production, and their technical identities were undergoing changes in the first millennium BCE. Specifically, variations in vessel thickness insinuates that Late Bronze and Early Iron Age potters were likely numerous and local, possibly at the households or valley scale; however, during the Iron Age proper, thickness as a metric for standardized practices of

manufacture begin to gravitate toward the mean, implying the presence of fewer or better trained potters. That trend continued into the Late Iron Age. Surface color and firing conditions corroborated conclusions drawn from vessel thickness by revealing that ceramic from the Late Bronze to the Mid-Iron Age were fired under less-than-ideal oxidizing conditions and temperatures. In contrast, the fully-reduced ceramic that is typical of the Late Iron Age and Xiongnu era needed improved skill and technological knowledge to achieve. Finally, the pXRF investigation showed a diachronic pattern in which Iron and Late Iron Age potters started to expand their spatial procurement schematics on the landscape, and/or started to temper clays differently. In short, I suggest that ceramic production was most interrupted in the opening centuries of the first millennium BCE; subsequently, clay provenience locations expanded and manufacturing techniques became more standardized in the Middle Iron Age onwards.

Pottery is a strong tradition, a conservative craft skill. But it can be adapted in many ways along the sequence of manufacture (Gosselain 2018: 27). Potters and their wares operate within larger, and sometimes nested (Munn 2003) networks that articulate socialized facets of the landscape in intimate or disparate ways. As such, vocational practices can "be quite heterogeneous, with some people having different knowledge and different goals […] Such dynamics are particularly visible during periods of social and political turbulence (Roddick and Stahl 2016: 5, 9)."

This, I argue, is what is occurring in Late Bronze and Iron Age Mongolia. The addition of potters into the occupational landscape milieu makes clear that agentive choice and palettes of alternatives operationalized in clay procurement and ceramic firing stages can be central to the discernment of political economic strategies and commodity production. It also demonstrates the intimate link between the ecological and vocational facets of the occupational landscape, as

alterations to mobility patterns are shown to be connected to the way potters' practices are executed. Therefore, I claim that technical identities, as a nested mental and material template within wider networks of practice (such as subsistence strategies and migration), were unstable during the initial centuries of the first millennium BCE. Transmission and gradations of knowledge, skill, and diligence of the potter were all adversely affected, ultimately catalyzing the exploration of alternatives or short-cuts within the manufacturing process (i.e. different clay sources, irregular thicknesses, shorter or lower-temperature firings, etc.). It follows that "discontinuities" in social life are "part and parcel of the situations that shape learning" or, in the case of Early Iron Age Mongolia in Bayankhongor, the disintegration of ways-of-doing (Roddick and Stahl 2016: 5).

Combined with the spatial and ecological data presented in the previous chapter, ceramic exploration at scales from the element to the attribute provide a detailed and dynamic view of social processes and their interconnectedness. Through the concept of occupational landscapes, we have started to develop a multi-scalar and multi-material analysis which layer in broader contexts of ecology and craft production. Extended habitation patterns, ecological tribulations, and equid mastery, map onto discontinuities and disruption to vocational practices like ceramic production—creating a web of social potentials and constraints. Frachetti (2002) writes that,

> changes in social lifeways, such as an increase in mobile pastoral production or relocation to, and exploitation of, new ecological niches can be seen as a form of political strategy whereby relations of power between groups may be renegotiated. (162)

While it is difficult to extensively comment on the political role of ceramics in the Bronze and Iron Age Mongolia at this moment, the production of clay vessels *is* indexical of general political economic conditions and the agents working within them. Ecological and vocational endeavors emerge and develop relationally on the landscape; and, as I have argued, these processes were not fixed or singular, but sometimes slow, staggered, or multiple. Mirroring the conclusions

drawn in Chapter 4, the shoddy and uncertain characteristics of ceramic in the opening centuries of the first millennium strengthens the hypothesized breakdown of local authority and loosely-defined appanage guidelines that were likely in place during the Late Bronze Age. Following this logic, I hypothesize that a disintegration of local appanage-like structures manifest in utilitarian ceramic as disruptions in technological identities and standardized attributes. Pasture politics, (im)mobility, and ecological experimentation in the Early and Mid-Iron Age, then, may have had a hand in dissolving the channels of education and learning that transmit a potters' skill over generations and across space. To conclude, the articulation of ecological configurations with these ceramic data strongly suggest that the first-half of the first millennium BCE was a period of uncertainty, and experimentation for populations in Bayankhongor, Mongolia. In the ensuing and final chapter, I will use funerary and monument data, refracted through performative rites of ceremony and ritual, as a capstone for the further buttressing of this argument.

CHAPTER 6: THE IMPERMANENCE OF STONE: OCCUPATIONAL LANDSCAPES AND MONUMENTALITY

"[…] For by building the earliest monuments people were indeed altering the earth, and in ways that meant the human experience would never be the same." (Bradley 1993: 1)



Figure 6.1. Fifteen team members and a Russian *furgon* (jeep) attempting to right a deer stone after excavation.

"*Нэг, хоёр, гурваа*! [One, two, three!]" Even with the best intentions, these collective and timed-counts were continuously followed by grunts of disappointment and frustration (Figure 6.1). It was Friday, August 14th, only two weeks into the Northern Bayankhongor Project, and the entire team was called to Bor Shoroonii Am (NBP-015) for a difficult task—

attempting to right a fallen deer stone after we excavated and analyzed it. The crew prepared a small pit for us to drag the base of the stela into with multiple tow-ropes, yet, our group of fifteen adults could not get the stone to budge. After about thirty minutes of heaving, we realized that we did not have enough power to right the stela with only our muscles and determination.

Our project vehicle, a Russian military jeep (UAZ-452) popular in the Mongolian countryside, seemed to be our only option as we desperately needed to increase the force placed on the deer stone. The UAZ-452, commonly known as a "*furgon*," was originally used as ambulances or artillery-pulling command vehicles during the Socialist period. Still being made for military and civilian operators, the UAZ-452 comes equipped with four-wheel drive and has the capability to assume a 1000 kg towing capacity with an exceedingly low-gear ratio. With one of the three tow-ropes now connected to the UAZ's hitch and the two others manned by the fifteen crew members, we again attempted to right the deer stone. Beginning with shouts to the UAZ driver in Mongolian to position the vehicle properly, then followed by another three-count, the entire force of our expedition was focused on the ~1.5 m stela.

Despite the addition of mechanical horsepower, the deer stone remained stubborn in its stasis. With each try, the furgon's transmission strained, the tow-ropes would slip, or the stela would only shift slightly making its angle of entry into the prepared pit unacceptable. On one occasion, the tow-rope connected to the UAZ snapped, highlighting the exertion and danger explicit in the endeavor. Notwithstanding the problems, after about an hour we finally had the deer stone upright.

Without archaeological context, this story is simply an epitome of the adventures that can occur while on scientific expeditions. However, upon further reflection, the prolonged attempt and success in righting the deer stone points toward a facet of the occupational landscape that

analysts should not entirely overlook—namely monuments and their importance as semiotic indicators of socio-cultural ontologies and transitions over time.

While the monuments that dot the Mongolian landscape appear to be permanent cultural fixtures, the strenuous process of righting the excavated deer stone unequivocally demonstrated the "impermanence" of stone. This impermanence of stone manifests in two modes. First, the monument itself is physically unstable—it can be added to, subtracted from, or moved. Second, the semiotic content behind the monument, as a reflection of social memory, is also malleable and sucseptible to manipulation and mutability. In this way, impermanence as a theme speaks to a monuments' physical position within the environment, its flexible forms, as well as the potential for symbolic appropriation of them by subsequent groups. It follows, then, that we as a collection of archaeologists altered the monumental landscape (and by extension, the way locals interact with and understand that landscape after our modifications) by re-erecting the fallen deer stone. The team modified the stone's physical position, but in doing so, we also influenced how the area would be comprehended, described, and traversed as a place with new meaning and activity now attached. The "past and present are inextricably intertwined on the contemporary landscape," writes Rubertone (2008:17), evident from our actions at the deer stone locale. Put succinctly, the material properties of stone imply stasis and permanence; however, the actual built environments and their semiotic properties are always under threat of appropriation and change.

Mongolian populations in the transitional Late Bronze-to-Iron Ages also participated in this type of impermanence to varying degrees by adding to, subtracting from, or desecrating monuments throughout the landscape. Although this dissertation attempts to give primacy to the analyses of domestic goods and locales, the addition of funerary contexts—as physical locations

and ideological indices—provide a welcomed line of corroboratory evidence, despite the overwhelmingly narrow research agenda of burial excavation that has been predominant in Mongolia for decades. The occupational landscape is not only a collection of places, tasks, and goods associated with households and everyday life, it is also an assortment of ritualized places and activities that stand apart as specialized aspects of a wider political economy. And if we are to "extract ourselves from the legacy of culture-historicism" and other linear conceptions of history in favor of an interpretive and optimistic epistemology (Van Dyke 2011: 241), "engaging with how past peoples constructed their pasts through engagements with mortality can provide a valuable starting point" (Williams 2003: 5).

As such, this chapter will focus on stone monuments typical of Late Bronze and Iron Age Mongolia at multiple scales of resolution. After a brief discussion of current landscape theory and the significance of monuments as representative of cosmological beliefs and social structures, I will begin by spatially investigating the physical locations and patterning of monumental construction across space and time; subsequently I will turn to more local scales of analysis by concentrating on two sites: NBP-015 of Locus A (Bor Shoroonii Am) and NBP-010 of Locus B (Shatar Chuluu). Following previous research and introducing results from Bayankhongor, I will establish that 1) the spatial arrangement and construction parameters of deer stone-khirigsuur monuments suggest a building process not focused on the creation or display of social inequality, but instead indicates a communal process meant to strengthen ties between groups; and, that 2) populations building slab burials with arrogated deer stones into their monuments appear to be signaling a purposeful attempt to associate with or to create distance from previous cosmological milieus. Although monumental construction on the Iron Age steppe and Mongolia specifically is often argued to signal burgeoning hierarchies and a

growing importance of the individual (see for example Shelach 2009; Tsybiktarov 2003, 1995; Davis-Kimball et al. 1995), excavation of two slab graves (SG-1 and SG-2) and examination of associated funerary objects struggle to conform to this simplistic evolutionary perspective. Instead, these data continue to demonstrate that the transition from the Late Bronze to the Iron Age in Mongolia was not simply a linear intensification of complexity and inequality. Instead, investigations into the semiotic facets of the occupational landscape again point to a dynamic and long-term process often accompanied by uncertainty and negotiations about the utilization of economic resources, vocational practices and their parameters, as well as the efficacy and consistency of ideological messaging through objects and monuments.

6.1 Landscape Perspectives and Monumentality

Here the monumental landscape will be contextualized using two broad approaches, which Wright (2014: 12) calls the "monumental" and "memorial," congruent with physical and commemorative qualities. These aspects of the built environment are not new in the anthropological or archaeological literature (e.g., Ingold 2007; Bender 2002; Barrett 1999; Bradley 1998, 1993; Godelier 1986), nor are they mutually exclusive, but they do capture the essence and importance of built structures as active participants (in both material and cognitive dimensions) in the configuration of social, political, and economic conditions. Monuments and memorialization together refract the practices, activities, movements, and identities of groups and individuals at both the moment of initial construction and in perpetuity through the remembrance, reconstruction, or appropriation of the monument and its meaning.

The monumental quality of a built environment directly engages with the mobile body (Jones 2007; Llobera 2001; Tilley 1994; Bourdieu 1977, Bradley 1998, 1993; Barrett 1994),

producing legible patterning of monuments for passers-by (Wright 2017, 2014; Lefebvre 1991; Bakhtin 1981; Wheatley 1970). All too often linked to this quality of monumentality are claims that the construction of these features demonstrates the ability to operationalize labor via hierarchical structures or emerging elites (Epimakhov 2009; Houle 2009; Chapman 2008; Carr 1995; Allard and Erdenebaatar 2005; Smith 2003; Williams 2003; DeMarrais et al. 1996; Renfew 1973). Yet, in contrast, some researchers have argued that the prime function for monument building is not social inequality, but instead solidarity and the reinforcement of communities and their networks, as well as delimiting territories, productive lands, or simply signaling group presence in the area (Wright 2017; Burentogtokh 2017; Honeychurch et al. 2009; Pauketat 2007).

An excellent example of how semiotics function within the occupational landscape is the way monuments can be used to order bodily action, as means to (re)configure and manifest social structures. In Barrett's (1994) discussion of henge monuments in England, he envisions a communal procession through the landscapes at Avebury and Durrington Walls. Barrett argues that the phases of building were meant to create subjects through the site's spatial order (24). Three features constitute one of the sites: two parallel rows of timbers creating a pathway; a perpendicular line of timbers crosscutting this pathway, and two circular wooden henges at the termination of the path, with the largest at the center. The manufacturing of subjects and authority, Barrett suggests, was directly dependent on the movement of participants through these features. The ritual guided particular peoples to certain areas of the henge dependent on their status. He writes,

> Firstly there were those who were excluded from the interior of the circles, but who may have observed or listened to some part of the proceedings from outside. Secondly there arose distinctions among those who were able to enter the Sanctuary, created by where they stood and

> how they moved […] The enclosure thus represented a series of stages upon which distinctions within a relatively isolated elect could have been repeatedly established […]. (Ibid: 15)

A procession at Avebury or Durrington Walls, therefore, relied on the movement of peoples and their relationships to reify a particular social order mirrored in space; individuals with a deeper connection to the activities occurring at the center of the henge were allowed into the center circle, with ever-decreasing social statuses occupying the spaces outside of it. Avebury and Durrington Walls, then, become not just religious centers or sites of interment, but a site for political discourse and community building. Nancy Munn (2003) further clarifies what is occurring at places like these. She argues that monumental spaces of this kind are specific, as a "space of deletions or of delimitations constraining one's presence at particular locales" (93). For Munn, it is a practice of "locatedness," in which the actor is identified through interaction with the event in space (Ibid.: 94).

Etymologically, the term "monument" derives from the Latin *monere*, meaning "to remind." As such, researchers associate monuments and other impressive structures with the production of memory and ideology, a "memorialization" of the practices, beliefs, individuals, or groups that were present or interred at the original time of assembly (Velasco 2014; Fitzhugh 2009a, b; Kuijt 2008 Vavouranakis 2006; Holmberg et al. 2006). Examples from Velasco (2014), as well as Deetz (1977) and Cannon et al. (1989), however, illustrate the powerful yet malleable nature of memory.

Velasco engages with current concepts of agency that allow all people and things, even deceased or inanimate (see Latour 2005, Mitchell 2002, Gell 1998, for further discussion and examples) to play an active role in the formation of social landscapes, their structural compositions, as well as the meaning ascribed to them. He argues that through "post-mortem"

agency, the memory of departed ancestors influenced the design of the Yuraq Qaqa cemetery in the Andes. Velasco expounds on this claim:

> Sequences of ancestry, even if contested acquired a durable existence to the 'mental structures' of the living through the act of building. At the moment of a new construction episode, the existing arrangement of funerary structures, a mnemonic of the socio-spatial-temporal relations of ancestral bodies, would have logically shaped where new structures could be placed and what social or political statements could be made by their placement. (460)

Velasco demonstrates the capacity of memory and its articulation with socio-cosmological understandings to link the present with the happenings of the past (461). However, this example from the Andes only demonstrates the potential of memory to perpetuate the continuity of social relations between the living and the dead. Memory, and its material correlates, to be sure, can also be appropriated in an attempt to redefine 'social or political statements' that may have existed for previous groups or builders. "Memory is unstable," writes Bradley, such that "rituals and beliefs can be manipulated more consciously to serve the changing needs of people in the present" (1993: 3).

The work of James Deetz (1977) and Cannon et al. (1989) also highlight the instability, or impermanence, of monuments, memory, and associated objects. Within his seminal work, *In Small Things Forgotten,* Deetz analyzes a collection of tombstones and their iconography from the 1700s- 1830s in New England. Using seriation, he chronologically maps out the diachronic changes in imagery found on headstones throughout the region. Deetz argues that the shift in headstone design was associated with two catalysts: ideological modifications and social posturing.

On the one hand, he describes the modifications as a reaction to developing religious beliefs; the death-head figure of the 1700s "was a more earthly and neutral symbol," while the later desired cherub design was seen as iconoclastic (71). However, as preachers altered the

connection between the parishioner and the supernatural in the late 18th century, the symbolic meaning of cherubs and their placement on headstones became acceptable. On the other hand, he also relates the seriated iconography to socio-economic status. Deetz writes that "in Cambridge, then, we might suggest two groups, one the more progressive elite, who preferred the cherub design, and the other the more traditional group of lower status, whose religious views were more consistent with the symbolism represented by the grim death-heads." (75) He then suggests that lower status people began to favor cherubs in an attempt to align themselves with higher classes.

Cannon et al. (1989) describe a similar process of association with case-studies from England, Greece, and the Northeast Iroquois. He states that "mortuary expressions," and thus the memory and meaning behind them, "are actively manipulated in the context of competitive display" (446). Variations or emulations of the higher class by the lower status through funerary treatments exhibit the flexible nature of memory through display. In effect, the memorialization of the interred is consciously controlled by the living to affect the way in which the deceased individual was to be remembered in the immediate present and distant future.

In sum, monumental landscapes act in both material and symbolic-cognitive dimensions that can be maneuvered and directed. Monuments can be added to, moved, or desecrated as tangible materials of socio-political processes. In the same way, the intangible memorialization and "reminded meaning" of built structures can deceptively be rearranged by a certain group to fit a variety of circumstances, needs, and aspirations. As archaeologists, we need to be aware of both aspects and their potential.

As I have argued, the vestiges of evolutionary thought persist on the steppe. Standard archaeological approaches" of the 19th and 20th century often traced the "successive replacement

of one archaeological culture by another," with large monuments as evidence of "ancient migrations […] 'races,' or 'cultures'" (Rubertone 2008: 17; Williams 2003: 4). Yet, "efficacy and [the] meaning of commemoration for that ancient community" often goes overlooked (Williams 2003: 3). This is unfortunate, as "commemorative practices" demonstrate how individual memory, collective remembrance, and material culture are powerfully interwoven (Jones 2007: 44)—each doing a form of "work" or "labor" in the social arena. Therefore, the physicality of monuments, the performance of ritual experience, and reverberations of social memory and semiotic messaging play integral and interrelated parts in the processes of placemaking and the structuring of social relations. Rubertone elegantly synthesizes the arguments and themes discussed so far in this chapter:

> What is remembered about a particular place is triggered, guided, and constrained, largely by visual "landmarks" but also by verbal accounts and other sensory stimuli […] These images of place of reshaped and reinterpreted sometimes by placemakers who selectively seek to cultivate certain responses and therefore, attempt to define for others what should be remembered and how it should be remembered. (2008: 13)

In the following section, I will examine the monumental landscape of Bronze and Iron Age Mongolia. I will first provide detailed descriptions of these era's relevant monuments that complement the archaeological context found in Chapter 2. I will then move to an analytical discussion of how the monumental and memorial aspects of these features in northern Bayankhongor illuminate transitions in political economy.

6.2. Late Bronze and Iron Age Monumentality in Mongolia

Three developments typify the Late Bronze Age in Mongolia: the adoption of pastoral nomadism and dairying, the importance of the horse, and an unprecedented explosion in the construction of monuments (Jeong et al. 2018; Taylor et al. 2017, 2016; Honeychurch 2006;

Hanks 2010). The khirigsuur (ca. 1300-700 BCE) is the most prominent and ubiquitous monument on the Mongolian steppe. Although their numbers and conspicuous presence would seem to attract much archaeological attention, these features were not initially considered of archaeological value due to their lack of grave goods. However, in recent decades, khirigsuurs have become a central focus of inquiry.

Khirigsuurs are a component monument with a central cairn being the fundamental characteristic. The cairns are often adorned with square or circular fences, built-up corners, standing stones at cardinal directions, pathways connecting the mound and fence, and external satellite features containing ritual horse-head offerings. Sizes range from 10s of meters to hundreds of meter-long fences such as the khirigsuur at Urt Bulagyn, which measures 390 x 390 meters and includes over 1700 small satellite features (Allard and Erdenebaatar 2005). In a survey of khirigsuur variability, Tsybiktarov (1995) identified nine general types, useful in quickly recording the subtleties in diversity. However, later research has shown that the nine types outlined by Tsybiktarov are only a modicum of the range of khirigsuur variability. Wright (2006) has noted arms, pavements, porches, and negative circles emanating from the central mound (Figure 6.2).

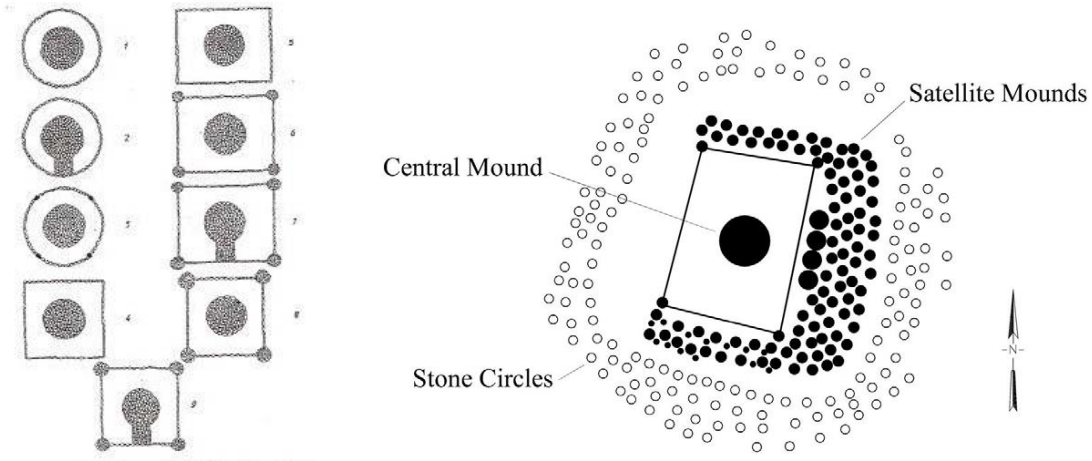


Figure 6.2. Tsybiktarov's typology of khirigsuurs (left, from Tsybiktarov 1995) and a typical plan view of khirigsuur complete with satellite features (right, after Houle 2009).

This intra-type variability, along with a surprising 60% of monuments lacking any skeletal material or grave goods (Honeychurch et al. 2009: 332), however, sparked widely differing opinions over the function of the monuments; the main hypotheses suggest that khirigsuurs are 1) ritual spaces with astronomical correlation (Dal Zovo 2015; Dal Zovo et al. 2014; Allard 2009), cenotaphs (Fitzhugh 2009a, b; Wright 2007), or 3) funerary monuments (Honeychurch et al. 2009; Frohlich 2008). The khirigsuur form has extensive correlations linking Mongolia with a pan-steppe tradition of the earlier western horizons of the Afanasievo (2500-1700 B.C.), Andronovo (1700-1200 B.C.), the Neolithic Hongshan culture of Northeast China (4700- 2900 BCE), and the Karasuk (1200-700 B.C.) culture of the Minsusinsk Basin (Wright 2014; Wright 2007: 351; Legrand 2006; Psarras 1995: 110).

Recent research in northern Mongolia provided much-needed clarity to the practical and social functions of the khirigsuur. In northern Mongolia, excavations by Bruno Frohlich (2009,

2008, 2005), confirmed that khirigsuurs are indeed primary interments with additional ritual characteristics. Bruno Frohlich's work in Khovsgol also used surveys and statistical analyses of the monuments themselves to investigate the social, political, and demographic circumstances of the Late Bronze Age. Loosely following a variation of the model put forth by Saxe (1970) and Binford (1971), Frohlich expanded his analyses to develop a relational hypothesis between topography, monument size, conspicuity, and the deceased's social status. Frohlich argues that khirigsuurs are grouped within three classes, with the largest of the classes (Class I) found on valley floors, and the smallest monuments (Class III) at the hilltops. Based on a statistical bias for the prehistoric desecration or looting of particular classes of burials, Frohlich suggests that Class II and III khirigsuurs likely contained individuals of higher social status. However, he cites that khirigsuurs of all classes appeared to contain individuals of both sexes and age-ranges from newborn to old-age, possibly comprising an entire living population. Jean-Luc Houle (2010) also contends that differences in size and structure of khirigsuurs may indicate patterns in social organization. He suggests that more complexly-fenced, decorated, or large khirigsuurs may represent a more elite population, while unfenced khirigsuurs and smaller fenced khirigsuurs, which he terms "slope burials," represent lower-status interments. Alternative postulations for khirigsuur function—particularly khirigsuurs being cenotaphic monuments (Jacobson 2010) or astrologically important (Dal Zovo et al. 2014)—have largely been disproven by a better understanding of taphonomic processes and the discovery of false burial chambers built to deter looters (Frohlich 2008: 99; Littleton et al. 2012). Positing the khirigsuur as a sign of elite presence derives mainly from their comparison with kurgan burials in the western steppe (Wright 2015: 284; Davis-Kimball et al. 1995), as well as general links of burial characteristics to

hierarchies promoted in the durable, yet problematic, Goldstein-Saxe hypothesis—a framework that obscures ideological motivations and political maneuvering (Hill and Hageman 2016: 45).

Alternatively, Wright (2015, 2014, 2007) and Burentogtokh (2017) maintain that the building of khirigsuur monuments was not to signal a burgeoning hierarchy or the power of elite individuals. Instead, they argue that the construction of these monuments was an opportunity for groups to reinforce communal ties. Utilizing what he terms a "communal-territorial" model, Burentogtokh writes that, "spatial analysis indicates that khirigsuurs were distributed across the landscape in a highly patterned arrangement that demonstrates attention to the organization of pastoral resources, rather than representing a hierarchical social order" (iv). He suggests that khirigsuurs were intentionally placed at the mouths of secondary valleys to showcase group presence, and possibly to delimit pastureland or mountain passes needed for fodder and seasonal migrations. What is more, he continues by citing the analyses of faunal materials—specifically horse-head offering in satellite features—which show that "the sacrificed horses […] were selected in accordance with herd management strategies that promoted maintenance of herd reproduction and stable composition instead of supporting elite display" (v; Wright 2015). Burentogtokh (170-180) also confirms the theory from Takahama et al. (2004), finding that khirigsuurs could be constructed either in a single event or over centuries where communities would continue to underpin their group identity through ritual and additional construction events.

Before the Late Bronze Age, there is little evidence of horses being a large part of nomadic lifeways in Mongolia (Ibid.: 218). However, the introduction of horse use and ritual was palpable throughout the steppe during the Bronze Age, indicating that equine mastery radically altered the steppe through a series of migrations and the ability to make marginal lands productive (Taylor 2017; Frachetti 2010: 17; Hanks 2010; Anthony 2007). While it is still

unclear if the horses interred in khirigsuur satellites were being ridden or were only domesticated and used for traction, numerous radiocarbon dates retrieved from them secure the chronology of the khirigsuur to a period between ca. 1300- 700 BCE (Fuka 2017; Taylor et al. 2018, 2017; Taylor 2016). Further, the aging and sexing of specimens from the satellites led Taylor (2016) to argue that many of the sacrificed horses were juveniles and females that fit with typical herd management strategies, ultimately corroborating Burentogtokh's claim. In sum, the adoption of the horse would have expanded trade networks, the ability to migrate with traction power, made herding easier, and increased the ability to participate in community events such as the construction of khirigsuurs. Yet, despite the marked changes the adoption of the horse could bring about, horses are a common aspect of mobility and pastoralism such that their use and ritual deposition may not index inequality (Wright 2015: 285).

Another Late Bronze Age monument critical to the Mongolian monumental landscape are deer stones. Deer stones, of which there are approximately 1,200 within Mongolia's contemporary borders (Turbat 2016), are stelae of various sizes (up to nearly 3 m in height) with zoomorphic and/or anthropomorphic imagery carved in high relief (Figure 6.3) and are often bounded with a small stone box or a large horseshoe-shaped rock enclosure. The deer stone feature lacks human interments, but scholars sometimes interpret the distinctive anthropomorphic imagery as a representation of or dedication to a particularly influential individual (Fitzhugh 2009c. 82). Other geometric elements like circular or linear chevron designs are reported to represent earrings, the sun, or belts. Knives hanging at the "hip" of the stela appear to resemble metallurgical traditions of the Minusinsk Basin's Karasuk culture, ca. 1400-700 BC (Fitzhugh 2009b: 380; Psarras 1995: 110). Stylized deer carved on the "torsos" of the monument are argued to represent a deity important to Siberian and Mongolian peoples, with

clear associations to shamanism (Jacobson 1993).[1] With heads tipped back and feet flexed in stride, the animals appear to be "in flight" uniting earthly and heavenly worlds and assisting spiritual movement between them (Fitzhugh 2009c: 85). Excavations of deer stones reveal ritual horsehead offerings, charcoal stains, and calcined bone fragments, but little else (Fitzhugh 2009b: 396).

Due to artistic similarities with animal-style art found throughout the steppe, scholars formerly associated the deer stone with the contemporaneous Early-Late Iron Age Scythian horizon (Fitzhugh 2009c: 72). However, recent investigations and radiocarbon dates have revealed the deer stone to be a Late Bronze Age monument— spatially, culturally, and temporally associated with the khirigsuur, which posits an iteration of animal style art flourishing 500 years prior to the Scythian horizon and the rich burials found at the Arzhan site in Tuva (Fitzhugh 2009a: 183; Zaitseva et al. 2004). Together, they are often referred to as the deer stone-khirigsuur complex (DSK).

Like the khirigsuur's structural correlation with stone or earthen mounds (kurgans) in other areas of the steppe, deer stones too have aspects that point to larger, wide-spread tradition. Careful classification begun by V.V. Volkov (1995) and continued by William Fitzhugh (2009c: 82), implies that the Sayan-Altai and Eurasian deer stone types of the central and western Eurasian steppe respectively are likely subsequent derivatives of stelae found in Mongolia and the Minusinsk Basin (see also Antonini 1994). More research is needed, however, to confirm these stylistic similarities, origins, and derivations.

[1] In addition to stylized deer, other animals like horses, wolves, and boars are sometimes represented.

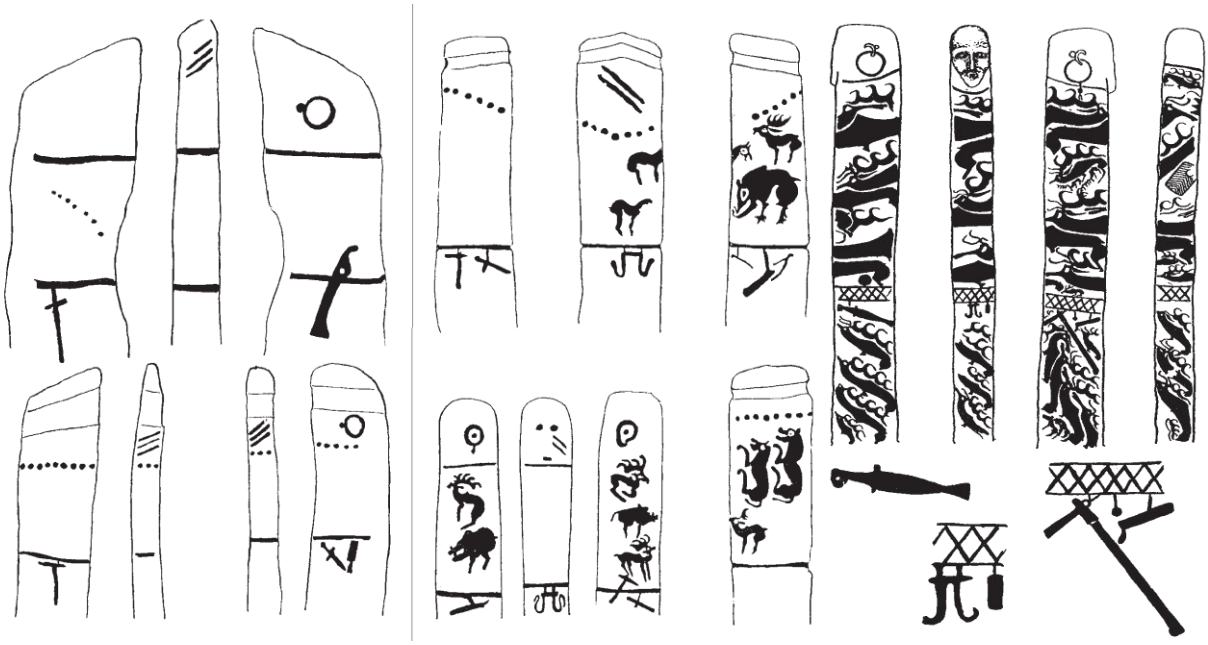


Figure 6.3. Types of deer stones. (after Volkov 1995, from Fitzhugh 2009a) At left is West Eurasian. Center is Sayan-Altai, and at right is the Mongolian type.

During the Early Iron Age, a third monument becomes significant and common on the Mongolian steppe. As the name implies, the slab burial is a rectangular structure often constructed with thin pieces of stone (Figure 6.4) that most often measure from 2-4 meters in length, but can reach up to 10 meters on a side (Wright 2006). Other forms and styles have also been noted, likely due to the lack of thin slabs in many environments (Johannesson 2011; Günchinsüren et al. 2006, see Appendix F). Radiocarbon dates of Mongolian slab burials demonstrate a brief chronological overlap with DSK, flourishing from ca. 800-500 BCE (Honeychurch 2004: 111-112). Unlike in the DSK monuments, excavators of slab burials recover faunal remains, horse accouterments, metal weapons and helmets, as well as beads and crafts made of carnelian, cowries, and turquoise (Johannesson 2011; Volkov 1995). Moreover, they are sometimes spatially associated with khirigsuurs or built with robbed deer stones (Honeychurch 2009; Fitzhugh 2009).



Figure 6.4. A typical slab burial in northern Bayankhongor.

Early Iron Age slab burials correspond with the final transition to nomadic pastoralism. With herders in Mongolia now mounted (Honeychurch 2004; Kohl 2007: 245), occurring around the turn of the first millennium pastoralists could acquire flocks in greater numbers, interact with distant communities through raiding, trade, alliances, and perform intra-communal displays of wealth, status, or collective solidarity in ways not previously available (Anthony 2009: 222; Frachetti 2002: 162). However, these theories of socio-political formation and interaction have not been adequately defined on the Mongolian steppe (Kovalev and Erdenebaatar 2009: 149), evident by the uncertainty regarding the origins of this burial style and its associations with other monumental features (like DSK) on the Mongolian steppe.

In a move mimicking Barrett's henge discussion, Honeychurch and colleagues (2009) too approach the slab burial from a performance aspect. They argue that slab burials redefine the funerary "theater," in which the stage of ritual activity is greatly reduced from that of the

khirigsuur allowing fewer participants intimate involvement, therefore spatially manifesting social status. What is more, researchers have noted a smaller number of slab burials compared to khirigsuurs in respective research areas (Honeychurch 2004; Wright 2006; from Johannesson 2011), which may indicate that, unlike khirigsuurs, the deceased may not represent an entire population but only a select group.

This reformulation of burial practice aligns with an interpretation by Shelach (2009: 252), who reasons that slab burials are found predominantly in eastern Mongolia due to an immigrating warrior class using a northwest-southeast route between Siberia and northern China.[2] As evidence, he points to instances of elevated conflict in Pazyryk tombs of the Altai (Jordana et al. 2009), and grave goods such as bronze knives, celts, arrowheads, horse trappings and helmets (Volkov 1995: 321). However, in a survey of osteological materials from slab burials Johannesson (2011) notes a lack of trauma; a finding that would suggest the weaponry were more symbolic than functional. But together, ideas like the shrinking theater of performance and an increase in grave goods have led scholars to unproblematically associate the slab burial horizon with unequivocal hierarchy and ostentatious display. The northern Bayankhongor data will ultimately argue against this evolutionary schema by employing the theme of impermanence, demonstrating again that the Early Iron Age was a period of instability, insecurity, and negotiation regarding the manufacture and display of power and use of pastoral resources.

[2] Novogorodova (1989) first argued that there was a geographic split in which slab burials were found in eastern Mongolia while khirigsuurs were a western phenomenon. However, archaeologists have now documented both types throughout the country and these divisions are not as clear as once believed (Burentogtokh 2017: 33).

6.3. Late Bronze Age Khirigsuurs in Statistical Space

Before turning to a diachronic discussion of burial patterns and practices, it is necessary to investigate what khirigsuur monuments can communicate about the socio-political situation in the Late Bronze Age. As noted above, the interpretation of khirigsuurs has moved from an association with elite display to one that champions the formation of solidarity and community, a pattern that I argue is evident in Northern Bayankhongor. Specifically at issue in this section will be 1) the design or "grammar" (Wright 2014) of khirigsuurs and their spatial patterning; 2) the sizes of khirigsuurs (i.e., Frohlich's Classes I, II, III; Wright 2015) and placement within a topography; and 3) the elaboration or "complexity" of khirigsuur types and their distribution (i.e., the number of ritual satellite features).

Stone fences surrounding the khirigsuur mound, whether it be square, circle, or completely absent have prompted a good deal of conjecture as to their correlation with socio-political status. Frohlich (2005) suggested that square and circle khirigsuurs could be representative of gender difference, but later excavations proved that this was not cut and dry (2008). Houle (2010) argues unfenced khirigsuurs, which he calls "slope burials," were the burial places of lower status peoples when compared to more elaborate khirigsuur monuments. While this section will not provide definitive answers to these issues, the analysis below will demonstrate that the location and grouping of khirigsuurs do suggest some sort of delimitation of the landscape, and therefore an intentional social process of spatial and semiotic legibility. Following Burentogtokh and Wright, and drawing from the totality of survey data collected in Northern Bayankhongor, I will argue that khirigsuur placement, dependent on fence type, could be an attempt to mark pastureland and routes of migration, as well as to signal particular group identities and communal relationships. These claims will be evident through the use of spatial

and statistical analysis, including the tools of Mean Center, Standard Distance, Nearest Neighbor, lines of fit, and 3-d modeling.

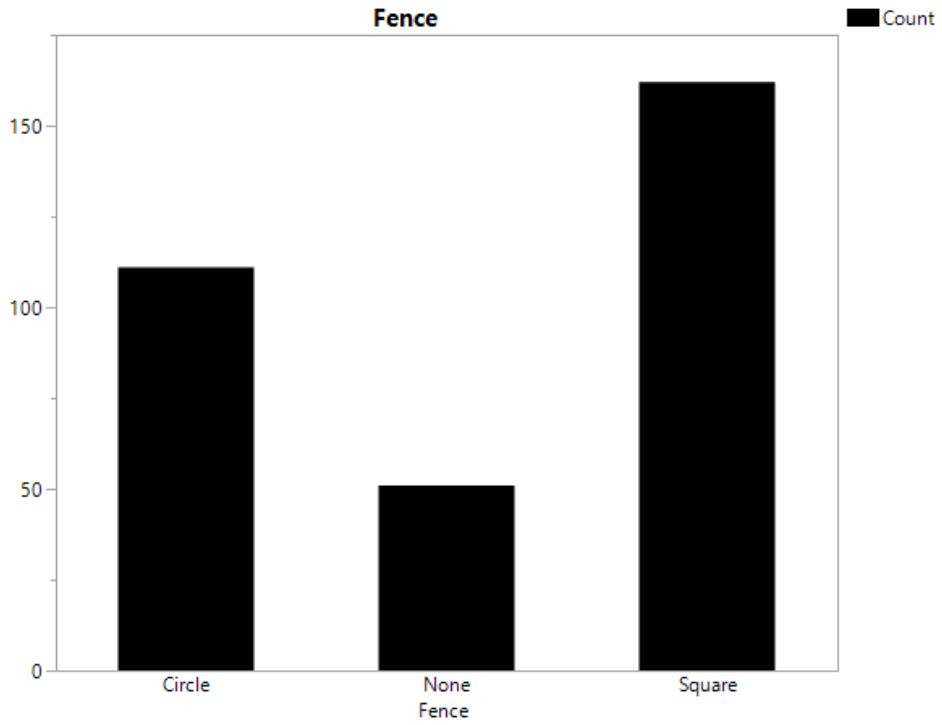


Figure 6.5. Counts of khirigsuurs in the survey areas in Northern Bayankhongor based on fence type.

The khirigsuur dataset derived from fieldwork in Northern Bayankhongor (n=325) show a slight bias in presence towards square-fenced khirigsuurs (Figure 6.5). Yet, how do these variations map out in space? To better visualize the inter-spatial relationships between the disparate khirigsuur fence types, the "Mean Center" tool in ArcMap can be employed. "Mean Center" averages all X and Y coordinates, outputting a mean coordinate for the set of features. Each of the three varieties of khirigsuurs were plotted against this "X-Y Mean" to check for any clustering correlation across the types.

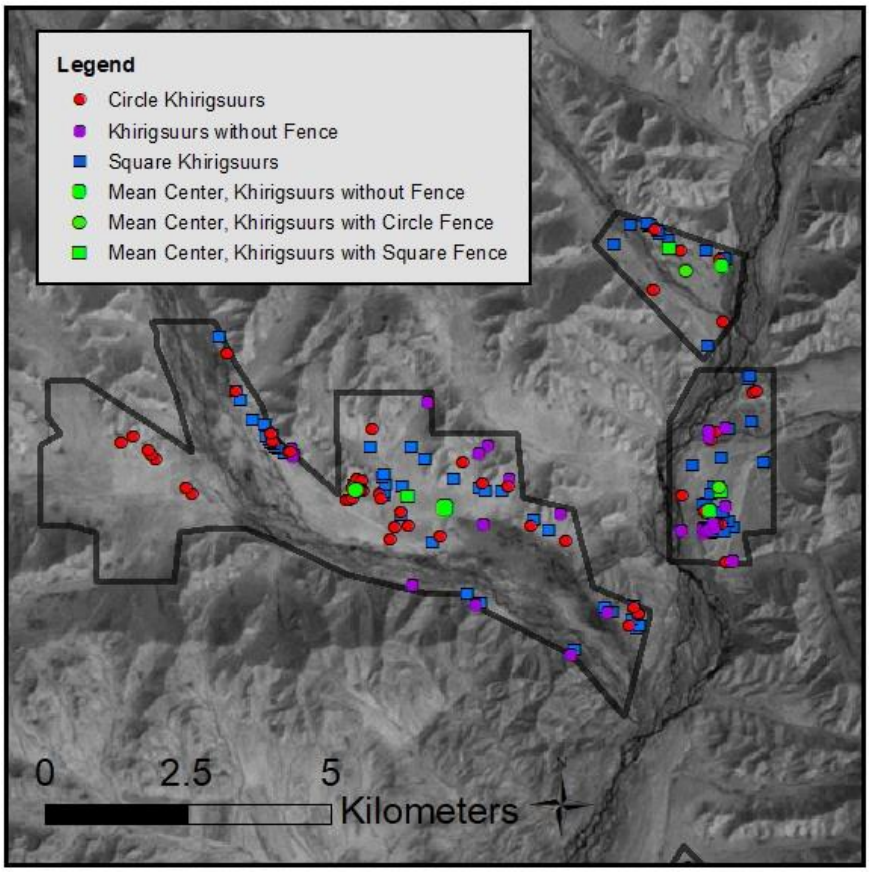


Figure 6.6. Distribution of khirigsuurs in Locus A by fence type and Mean Centers.

Although this is a simple calculation in ArcMap, the results are suggestive and relevant in nearly every Locus. For example, in the western survey portion of Locus A (Figure 6.6), the placement of khirigsuurs by fence type demonstrates a clear pattern—circle fenced khirigsuurs cluster toward the western and central reaches of the Khujirtiin valley, while square fenced khirigsuurs group centrally and at the confluence of the Khujirtiin and Tuin Gol valleys to the east. What is more, khirigsuurs lacking a fence appear to be more spatially associated with square-fenced khirigsuurs, with their Mean Center biased slightly to the north in the more prominent topographic areas.

The northern-most survey area in Locus A (NBP- 012) also exhibits a similar trend. Square khirigsuurs, which dominate here, are clustered along the southern-facing slopes, while the Mean Center of circular khirigsuurs is pulled southward due to a few cases where placement was more dispersed throughout the southern areas of the tributary valley. However, not all the survey blocks show discrete grouping based on fence type. The khirigsuur complex in the Tuin Gol alluvial plain (NBP-022) appears more random in their placement, with the three types and their means nearly overlapping.

Loci B, C, and D follow the pattern described above (see Appendix F for additional maps). In Locus B (Shatar Chuluu, NBP-010), the khirigsuur types clearly cluster at disparate ends of the inset terrace. Circular monuments are found together at the northern reaches of the valley, while generally square varieties have placements towards the south, but again, they also have a more scattered spatial arrangement. In the largest survey area of Locus C, the Mean Centers are found relatively close together, which is unsurprising since the majority of khirigsuur monuments are found along the foothills of the mountainous outcrop in the north and along the river terraces to the east.

The Standard Distance tool, which "measures the degree to which features are concentrated or dispersed around the geometric mean" (ArcMap), provides some additional clarity as to the order of the monuments using Loci C and D. The Stand Distance Tool calculates average distances between a class of features' mean point and displays a catchment area equal to one standard deviation from the average. Like we have observed in other survey blocks, the Standard Distance function shows that square khirigsuurs are generally more dispersed than their circular counterparts. But khirigsuur variations still appear to cluster together with like-types. In Locus D, once again, the 2-d spatial analysis of khirigsuur fence variations shows discrete

clustering, with the Mean Centers of each type separated by distance of over 500 m from one another. Moreover, the Standard Distance calculation again reveals that circular-fenced monuments are much more tightly bunched than square khirigsuurs.

Succinctly, the spatial analysis of khirigsuur monuments by fence type reveals that 1) similar monumental forms, square or circular, are often built together, suggesting builders had preferences guiding where to place each type, 2) these groupings were relatively distinct, demonstrating an ordered yet divided pattern of monument type throughout the landscape, and 3) unfenced khirigsuurs are likely spatially linked with square-fenced khirigsuurs. From these cursory conclusions then, I would argue, along with Wright (2017, 2012, 2007) and Burentogtokh (2017) that the Late Bronze Age landscape was built with an intentionality that articulates with monumental aspects of construction and social legibility to be read and remembered as demarcated places and pasture, deciphered by those passing through the valleys. Burentogtokh concludes his study on khirigsuur construction, stating that

> […] khirigsuur monuments were built as embodiments of pastoral communal decision making and reflect collective event-oriented activities on the part of sparsely located pastoral groups. These monuments had ceremonial and collective impetus but had the effect of organizing pastoral resources by marking the landscape at strategic locations and marking the local community's cohesiveness and organization to both community members and to outsiders. Instead of representing the status of an individual, these monuments were important to pastoral communities as material and communal ways to support a herding lifestyle […]. (230)

As such, I suggest that the patterning of khirigsuur monuments are indexical of social processes and understanding: the building of the monument itself can reinforce communal ties and relationships; after construction, the grammar and placement of khirigsuurs are actively engaged with memory as a reference to "their understanding of circumstances, events, and meaning that have come before"(Van Dyke 2011: 233).

In addition to fence type, the size of a khirigsuur and its association with the environment and surrounding topography is another important design element of the monument. As previously stated, in the archaeological literature scholars often correlate the sizes of monuments with hierarchical social and political status. The same is true in Mongolia, with Frohlich and Houle both suggesting that particular classes of monuments—based on size and topographic location— likely represent some degree of categorical inequality in social life. To better assess this situation in northern Bayankhongor, I graphed the east-side dimension of square khirigsuurs and the diameter of circular ones. I then followed Wright (2014) in calculating the extent of a monument's footprint rather than attempting to estimate the labor-hours needed for construction. Finally, I segregate the outliers—the largest khiriguurs and those with the most satellite features (which may be indicative of returning ritual performances)[3] regardless of fence type. I then input these data into a computer-generated 3-d model of the surveyed Loci for a unique visualization of khirigsuurs in the totality of their environment.

Histograms of the east-side dimension and diameter of khirigsuurs demonstrate a relatively normal distribution of sizes. While the standard deviations breach the critical 1.96 value for perfect normality, the deviancy outputs for square (SD=14.73, Mean= 19.56) and circle (SD=10.07, Mean=16.34) monuments suggest khirigsuurs are regularly of similar size within each type (Appendix F). However, generally, circle-fenced monuments are often smaller than square khirigsuurs, with an average footprint of 288 m² compared to 524 m². Further, the calculation and histogram distributions exhibiting the area of khirigsuurs' dependent on fence type show a relatively bunched distribution with few outliers in both cases (Figure 6.7). These

[3] Burgentogtokh (2017), Allard (2009), and Allard and Erdenebaatar (2005) have shown that more satellite features indicate a continued return to and use of the monument, even for hundreds of years.

distributions show a break between typical and extraordinary sizes. The consistency of sizes for both khirigsuur types suggests a significant and widespread awareness of khirigsuur grammars, "that hints at the presence of ritual specialists and the [successful] generational transmission of ritual knowledge over centuries" (Allard 2003: 558).

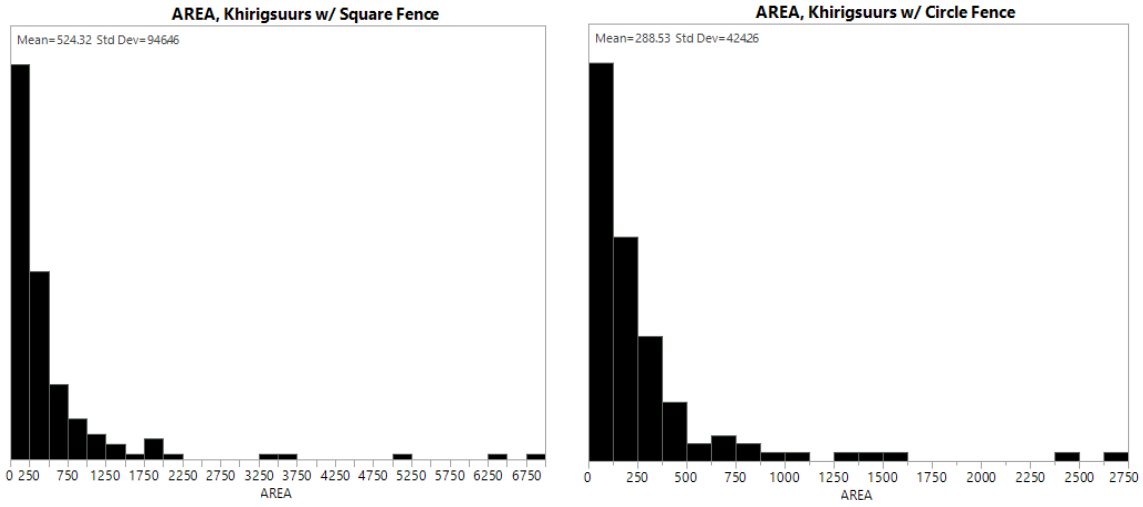


Figure 6.7. Histograms of Area for both circle and square-fenced khirigsuurs.

To further investigate the grammars and sizes of khirigsuurs as they relate to social life, I segregated extreme outliers using simple formulas:

Square Khirigsuurs >= 1250 m² and *Circle Khirigsuurs >= 700 m²*

For the square category, fourteen monuments were deemed outliers (8%, n=162), while only eleven (9%, n=112) of the circular khirigsuurs were isolated. Satellite feature counts for these exceptional monuments are unsurprisingly high when compared to the entire khirigsuur dataset. Khirigsuurs of any type average approximately 7 satellites, yet an average of 59.7 satellites are present with square-fenced outliers while a mean 17.45 satellites were recorded for the circular type. The presence of numerous satellite features suggests that continued ritual was likely taking place at these conspicuous locations over generations, as opposed to smaller monuments with

few satellites that prehistoric inhabitants likely built in a single event. But how were these extraordinary examples of khirigsuurs disseminated amongst the landscape and other monuments? The map below (Figure 6.8) corroborates the spatial analysis up to this point, showing delimitations of the landscape through the construction of conspicuous khirigsuur types. It is clear to see in Locus A that square khirigsuurs are flagged as one exits the main Tuin Gol valley and turns westward into the secondary dale. Where the valley turns northwest, a collection of massive circular khirigsuurs sits prominently atop a slight terrace (NBP-015). Still, in Locus A, the northern reaches of the Tuin Gol valley is dominated by massive circle-fenced monuments, yet, immediately to the south in Locus B, square-fenced khirigsuurs predominate, offset by a large circular monument at the northern end of that survey block. Locus D is comprised of four outlier monuments (three shown with overlap), but their respective groups are clearly separated by hundreds of meters—again indicating a legible space. What is more, however, these large khirigsuurs—which can be assumed to be central places of continued ceremonial practice—embody the memorialization aspect of a monumental landscape. Continued ceremonial practice at these locations would only serve to reinforce memory, ideology, regulate pasture politics at local scales, as well as perpetuate the building of new monuments in specific locations depending on certain characteristics and social conditions. The practice and processes of performative ritual, here in the Late Bronze Age, incites a homogenizing effect on community.

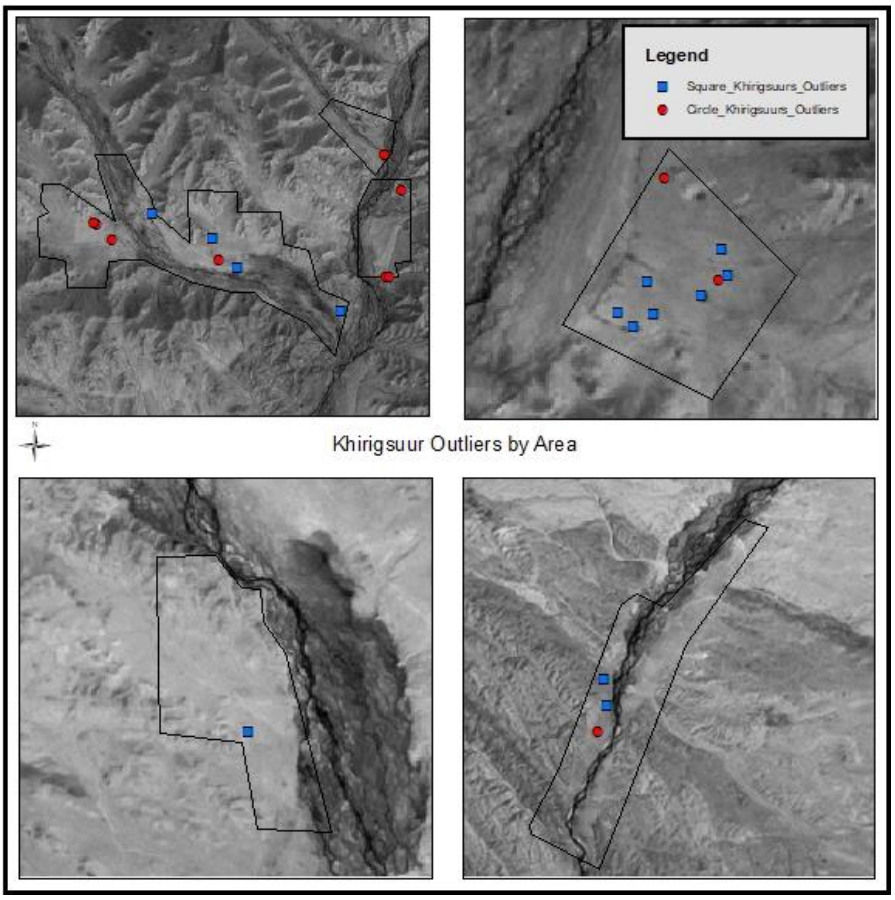


Figure 6.8. Khirigsuur outliers by area in Loci A, B, C, and D. Locus is located at top right, B at top left, C at the bottom left, and D is at the bottom right.

The relationship between elevation and khirigsuur placement is also telling. Figure 6.9 shows that the largest khirigsuurs are often located on the alluvial plain, corroborating Frohlich's initial claim. However, when khirigsuur footprint area is plotted against elevation data, the relationship is more ambiguous. Because Loci A and B are located at the foothills of the Khangai mountains, and Loci C and D are in the lower elevation desert-steppe ecological zones, each region's khirigsuurs were charted separately. The bivariate plots calculated for the north region of Shatar Chuluu and the southern region of Bulgan Uul demonstrate a weak correlation between

the size of khirigsuurs and the conspicuity derived from elevation and prominence. First, both graphs demonstrate that khirigsuurs—within square or circular types—are often of a similar size regardless of regional location. This corroborates analyses earlier in this chapter. Second, the line of fit for each region has an R^2 value that does not breach a statistically significant value to claim a parallel between monument size and elevation. The northern region's R^2 value is a paltry 0.051, while the southern region carries a value of 0.069. With each line of fit value approaching zero, I confidently argue that elevation—and thus by proxy—prominence or elite display, was not a prime motivating factor in the construction of these monuments. Again, I argue along with other researchers, that khirigsuurs were a communally-oriented monument.

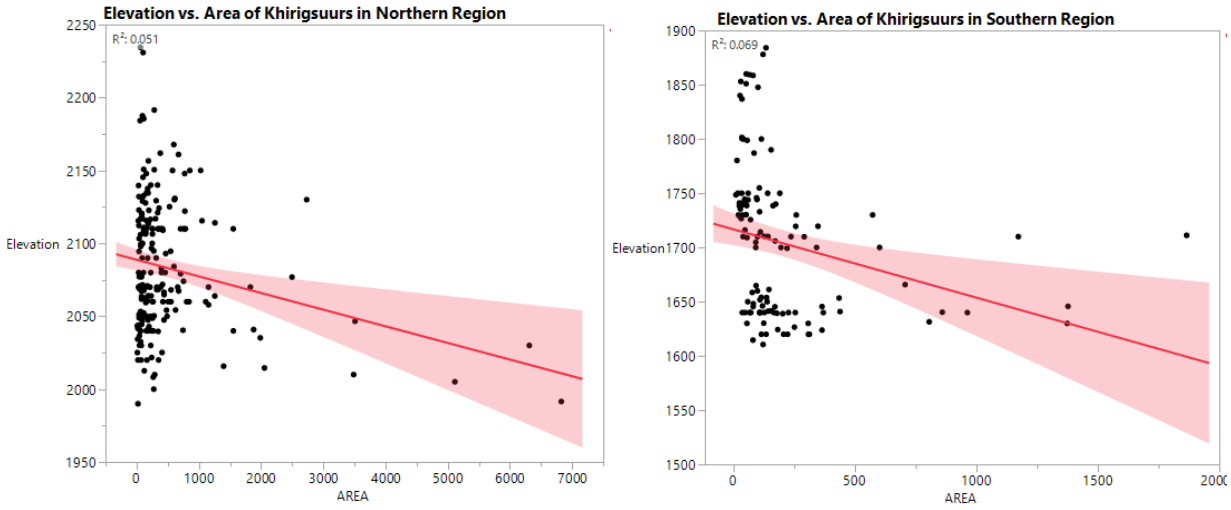


Figure 6.9. Bivariate plots for each region plotting the relationship between khirigsuur area and elevation.

As a final piece of analysis on the khirigsuur monument in regards to its design, size, and elevation, I made a 3-D rendering of the survey areas generated through various processes in ArcMap. First, a Digital Elevation Map (DEM) was downloaded and added to ArcMap. Subsequently, contour lines at 10 m were drawn based on the DEM's heights, creating a precise

rendering of 2-dimensional topography. The final step is the computation of a Triangular Irregulated Network (TIN) which produces a 3-d model based on the previous contours. I then imported the TIN into the 3-dimension module of ArcGIS, ArcScene, along with the khirigsuur datasets. Although a lengthy process of computation and steps within the ArcGIS suite, the reward is obvious. Onto the 3-d models of each Locus, I rendered circle- and square-fenced khirigsuurs with a symbology corrected to portray the unique design elements and relative sizes of the monuments within horizontal and vertical space. With this unique vista overlooking the monumental landscape of Bronze Age khirigsuurs, it is possible to visually confirm the arguments put forth so far in this chapter (Figure 6.10 – 6.12).

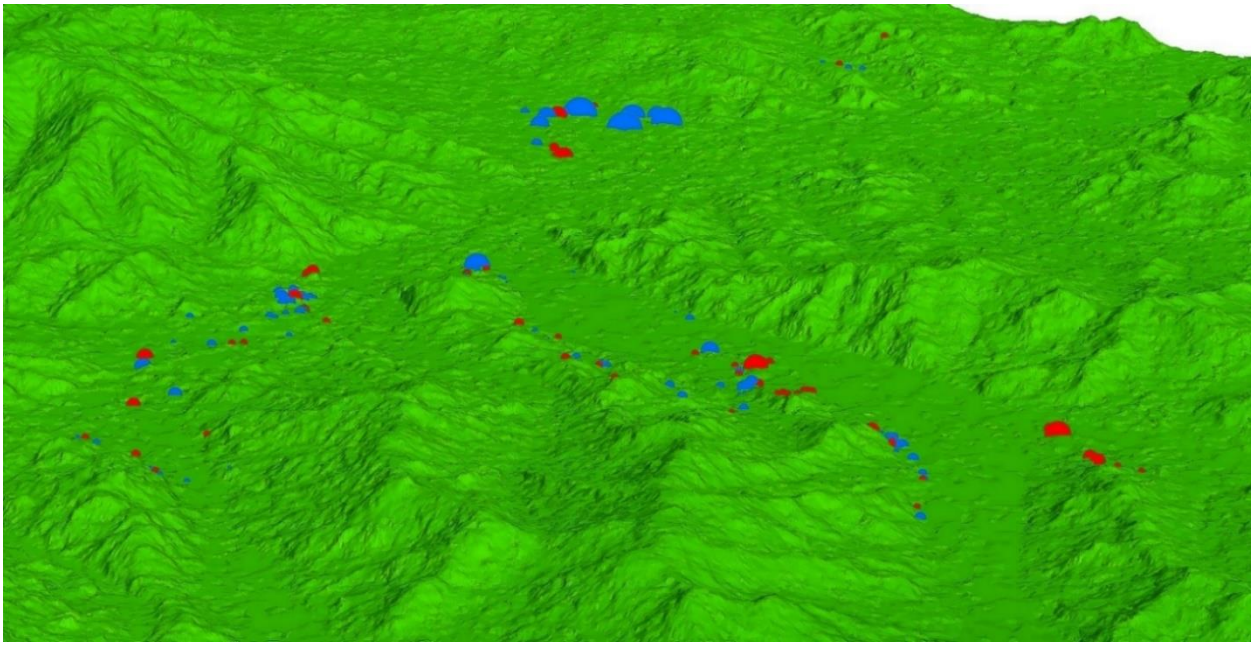


Figure 6.10. Loci A and B looking east-southeast. Blue features represent square khirigsuurs while red are circular. Symbols are sized according to relative area of the khirigsuur foot-print square meter calculation.

In each of the 3-d plots, blue represents square khirigsuurs, while red indicates circular monuments. What is more, the sizes of the features' footprints are absolute, meaning, the

symbols accurately represent their dimensions in space. Locus A and B depicted in Figure 6.10 clearly shows monumental grouping; square khirigsuurs cluster at the top of the image at Shatar Chuluu (NBP-010), while a collection of circle-fenced khirigsuurs dominate the image at right on the terrace of Bor Shoroonii Am (NBP-015). Figure 6.11 shows Locus C, in which square-fenced khirigsuurs are the predominant style. Complementary circular khirigsuurs are clustered near the mountaintop of Bulgan Uul, while square khirigsuurs are distributed with an extended spatial breadth. Finally, the 3-dimensional rendition of Locus D in Figure 6.13 demonstrates a preference for square khirigsuurs, as they envelop the few circular monuments present on the valley floor.

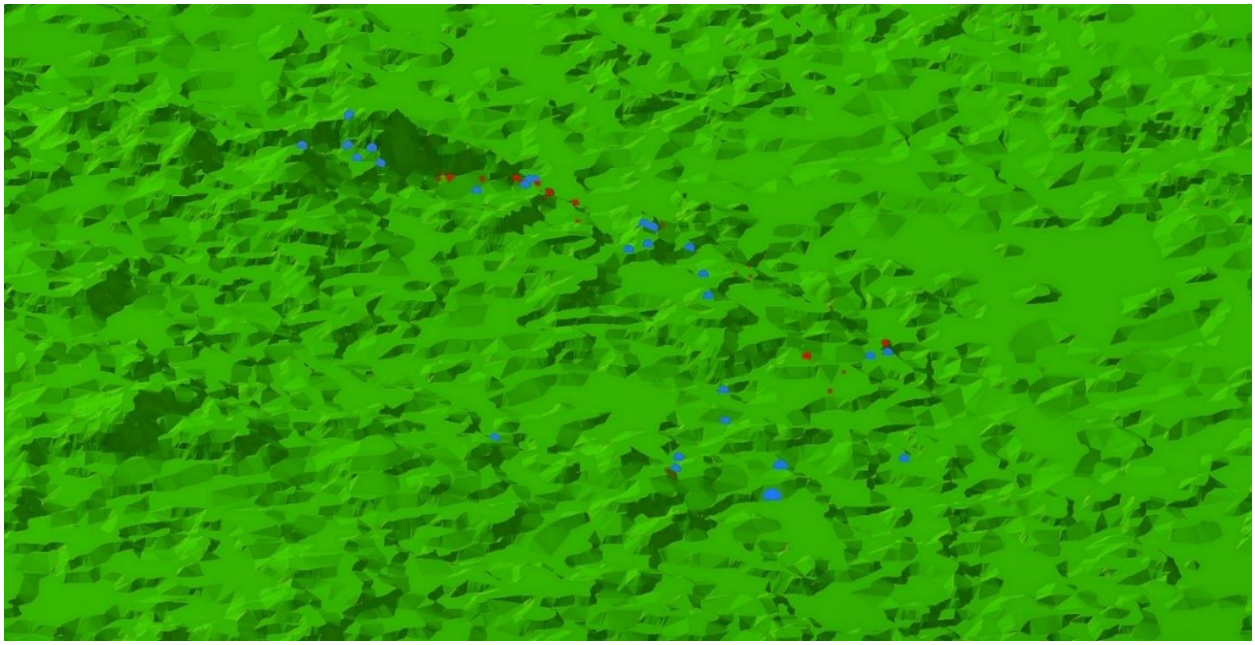


Figure 6.11. Locus C looking north north-east. Tuin Gol wraps around large mountain at the top of the image and exits at right. Blue features represent square khirigsuurs while red are circular. Symbols are sized according to relative area of the khirigsuur foot-print square meter calculation.

The inclusion of monumental activity into the framework of occupational landscapes does not deter from my overarching goal. Although I argue that burials, their goods, and their forms are

sometimes over-determined in their ability to speak directly about social life, they are an important part of the landscape, and should be treated as such. Stone monuments, and their latent impermanence then, reveal how "people and objects are engaged in the process of remembering" and co-constituting a landscape that situates the past and informs the future actions of inhabitants (Jones 2007: 22).

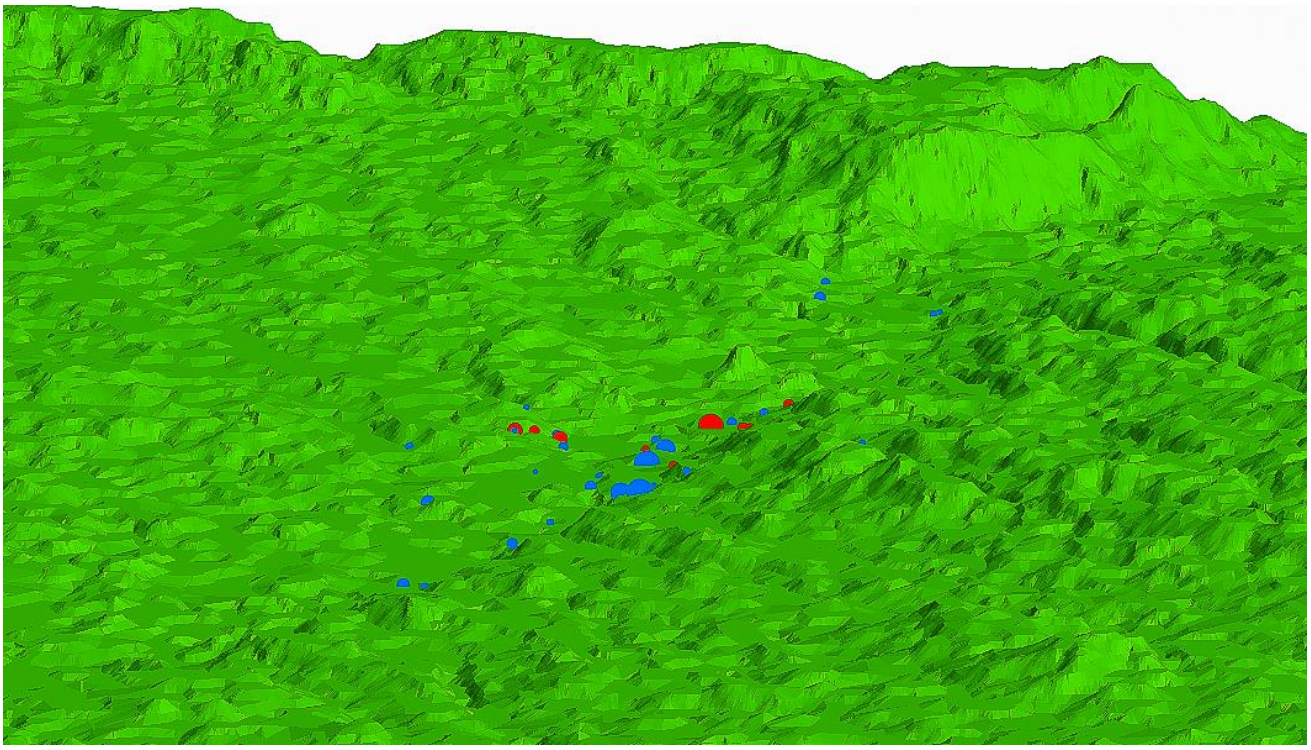


Figure 6.12. Locus D looking southeast across the Tuin Gol plain which runs through the cluster of monuments. Blue features represent square khirigsuurs while red are circular. Symbols are sized according to relative area of the khirigsuur foot-print square meter calculation.

Tentative conclusions regarding spatial and statistical analyses of Late Bronze Age khirigsuurs are as follows:

1.Khirigsuur fence-types are found in relatively equal numbers.

2. Circle and square-fenced khirigsuurs often clustered with their like-types. Moreover, the placements of khirigsuurs within a certain valley or Locus seem intentionally placed by intra-type, likely to flag territory and community presence. For example, in Loci A and B, circle-fenced monuments are placed at the west-northwestern portions of an inlet area. Square-fenced khirigsuurs, on the other hand, cluster to the east and southern reaches of the valley. Generally, however, circle-fenced khirigsuurs have a greater degree of clustering than the square monuments.

3. Khirigsuurs without a fence may be more closely associated with square-fenced monumentality.

4. Histograms demonstrate a pan-architectural tradition and an understanding of size thresholds. Most monument sizes are clustered normally, with a gap between the typical and extraordinary dimensions.

5. Few extreme size-outliers are present. However, those outliers comprise a higher-than-average- number of satellite features where feasting and sacrificial rites were taking place—likely over generations. What is more, the outliers are distributed evenly throughout the Loci, with each local area appearing to have at least one or more central gathering place for continued ritual and communal rites.

6. Khirigsuur size and topography do not have a strong correlation in northern Bayankhongor. Larger monuments are found at high elevations and on valley bottoms, with small khirigsuurs sometimes present on the alluvial plain.

A close examination of the Late Bronze Age Mongolian landscape reveals conclusions that corroborate *and* challenge previous research, while also permitting new inferences. The weak relationship between size and elevation contrasts with current research (Frohlich 2008, 2005). Yet, the grouping of khirigsuurs by type and size corroborate claims of monument building support the solidification of community solidarity and identity, as the "decision to build these monuments could be made at the household or small communal levels" (e.g., Wright 2014; Burentogtokh 2017: 86). Taken together, I argue these monuments need not be read as flattened claims to emerging hierarchies, but instead were operative as a mechanism for social fusion and spatial demarcation. What is more, the constricted distribution of fence-types together (especially circular khirigsuurs), as well as their locations at strategic points in the main and secondary valleys, does insinuate the monumental arrangement was meant to signal the builders' presence and territorial pasturage—not using singular large monuments—but as a collected and cohesive group of features. Wright (2017) also claims that the importance of khirigsuurs lies with their patterned ubiquity:

> Because single monuments are relatively inexpensive to build and maintain, I argue that the costly signal in the construction of these monuments is not manifested in a single monument, but in many monuments together. (553-554)

Thus, in the Late Bronze Age, monuments were likely a place of gathering, whether for a single event or recurring ritual episodes over decades, that assisted the population in their adaptation to pastoralism and the exploration of novel forms and scales of communal organization not present before the DSK.[4]

[4] Although the data presented in this chapter seem to corroborate a communal model of monument construction, it would be irresponsible of me to take this for granted, so I seek to clarify my comments. While I argue that khirigsuur monuments were a place to (re)define a cooperative social organization that may have been unfeasible prior to the Bronze Age, the analysis here could be read slightly differently. First I should state that I would not suggest that Bronze Age populations in Mongolia were egalitarian, or that DSKC factions were not vying for various heterarchical structures. For example, the meaning behind the often distinct grouping of circular- and square-fenced khirigsuurs is still unknown to us as archaeologists. I must also propose that it is possible that the

The ecological and vocational facets of the occupational landscape corroborate the cursory conclusions put forth in this chapter. The spatial analytics of lithic and ceramic surface scatters (Chapter 4) showed that Late Bronze Age camps/households were few and tightly clustered, and that the same locales were used steadily with little alteration of the spatial pattern, indicating a community-based approach. Likewise, in Chapter 5, the exploration into the elemental composition of ceramics clearly demonstrated that Bronze Age ceramic sources were more restricted (like their habitational extent) and local when compared to later eras.

Thus, it seems that the collection of khirigsuurs throughout the Bayankhongor landscape were built with meaning and purpose; deliberate ritual action and geographic placement signal communally-focused scales of social organization. The recurrence of khirigsuur monumentality and ritual is likely meant to "produce the continuation or endurance of tradition, though, of course, because they are enacted periodically" the semiotic content of memorialization can be subtly altered or appropriated (Jones 2007: 44-45).

It is now necessary to explore diachronic burial and ritual patterns into the Early and Mid-Iron Age. This trajectory will allow a better assessment of the neoevolutionary models I argue against, as well as situate the way materiality and memory operate to legitimize connections with the past, or create histories that are wholly imagined (Van Dyke 2011: 237). Accordingly, I will argue that contrary to a categorical and evolutionary approach that proposes a positive increase in linear complexity from the Late Bronze Age to the Late Iron Age, data from Bayankhongor reveal that this simplified model may not account for the dynamism involved in this process. Instead the local-scale dissection of two slab burial excavations will provide

monumental arrangement could signify *some* kind of conflict or opposition between DSKC groups building under the same architectural tradition. More research is needed to elaborate on this issue.

additional evidence that the political economic transitions from the Late Bronze to the Iron Age were multi-faceted and complicated.

6.4. A Closer Look at the Terraces of Bor Shoroonii Am and Shatar Chuluu

After righting the fallen deer stone at Bor Shoroonii Am, I continued to think about the potential fluidity of landscapes and their monumental components. As we have just seen, monuments can be physically enhanced through the addition of ritual satellite features, such as with Late Bronze Age khirigsuurs. Monuments can also be wholly removed, moved, and/or appropriated into other architectural forms, such as the inclusion of pilfered deer stones for use in Iron Age slab burials. With these alterations to the feature, the monument itself and the embodied understandings of the surrounding landscape are modified. These monumental amendments are the focus of the following section, in which I detail two slab burial excavations (SG-1 and SG-2)—one of which included a purloined deer stone. Although the withdrawal and placement of deer stones into slab burial features would seem to indicate a kind of desecration (Johannesson 2011), I argue the act is also an attempt at an association with the perceived strength and cohesiveness of earlier, and briefly contemporary, DSK monumental landscape.

Funerary patterns in the Iron Age differ greatly from the DSK epoch. Wright states that "there is a change in the make-up of monumental sites during the first millennium BC when they move from the diverse pastiche of the Bronze Age to the rigid homogeneity of the Xiongnu period." (Wright 2015: 561). As such, slab burials and subsequent Xiongnu cemeteries are much fewer in number than their khirigsuur predecessors. Slab burials are often located in small groups with other slab burials, or built in the vicinity of khirigsuur features. Xiongnu burials and their cemeteries are regularly cataloged as a segregated and homogeneous collection of features. For

example, within the 76 km² survey area, a total of 325 khirigsuurs to a mere 46 slab burials were recorded. Moreover, only one Xiongnu cemetery was noted west of the Northern Bayankhongor Project during vehicle reconnaissance, but this was outside of the formal study zones and beyond the scope of this dissertation (we recorded a total of 35 Xiongnu burials there).

Despite a dramatic decrease in the number of slab burial monuments, two Loci in northern Bayankhongor emphasize the recurring investment into early-to-mid Iron Age monumentality. The terraces of Bor Shoroonii Am (NBP-015) in Locus A and the site of Shatar Chuluu (Locus B; NBP-010) are both comprised of a suite of monuments from the Bronze and Iron Ages. The planview of Bor Shoroonii Am (Figure 6.13) shows a collection of circular khirigsuurs, the largest of which is surrounded by numerous non-descript circular and square burial features, three deer stones, four empty circular or horseshoe-shaped deer stone platforms, and two slab burials (SG-1 and SG-2).

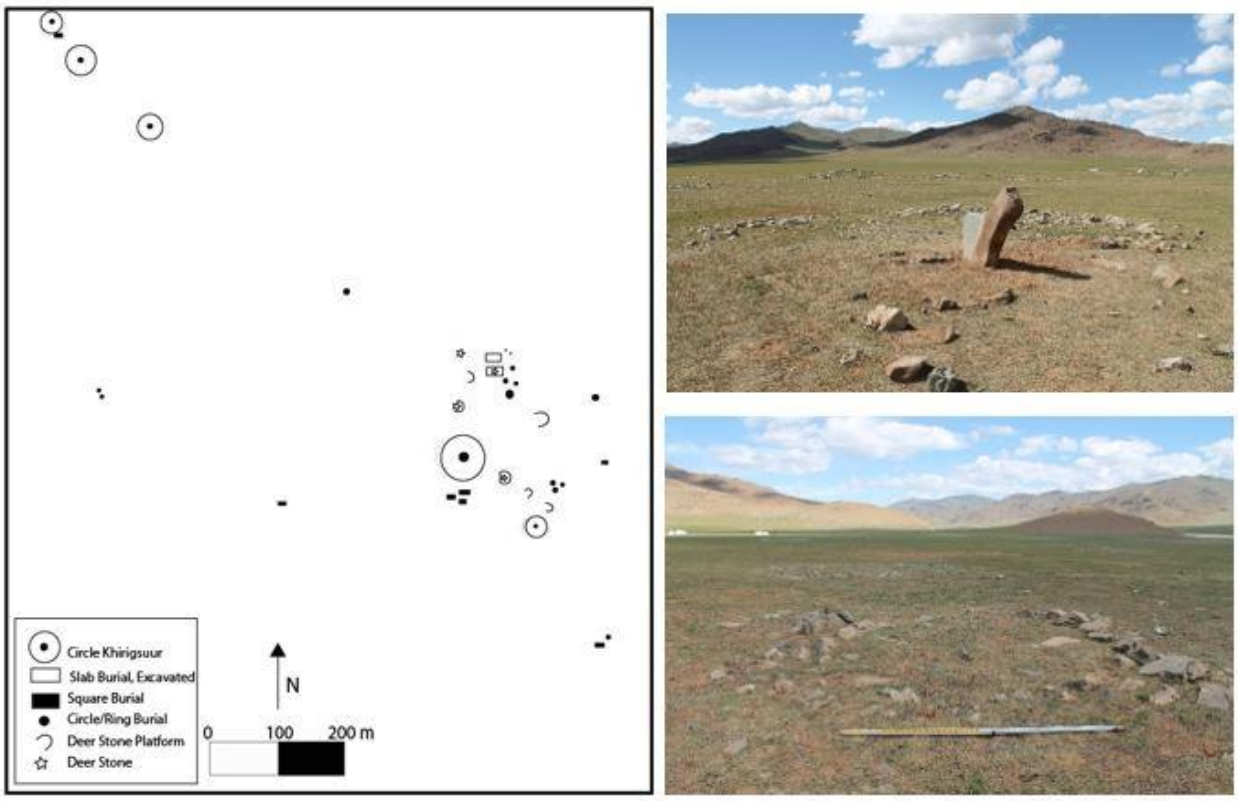


Figure 6.13. Simplified planview of Bor Shoroonii Am (NBP-0 15) at left, and two of the deer stones within their platforms (right). Note the deer stone in the bottom right is before excavation and is only partially visible the right of the enclosure. Photos by J. Bayarsaikhan.

Across the river at Shatar Chuluu (Figure 6.14), there are again numerous monuments from various eras. Pertinent to the discussion here are the few circular khirigsuurs at the northern end of the terrace mentioned earlier and the dense collection of features complementing the large square-fenced khirigsuurs towards the southern end of the uplift. Hundreds of small satellites, circle burials, and ill-defined features wrap around it in concentrically-ordered chaos. Nine typical slab burials, the distal end of a broken deer stone, and two slab burials entirely constructed with repurposed deer stones are evidence of a remarkably altered ceremonial landscape.

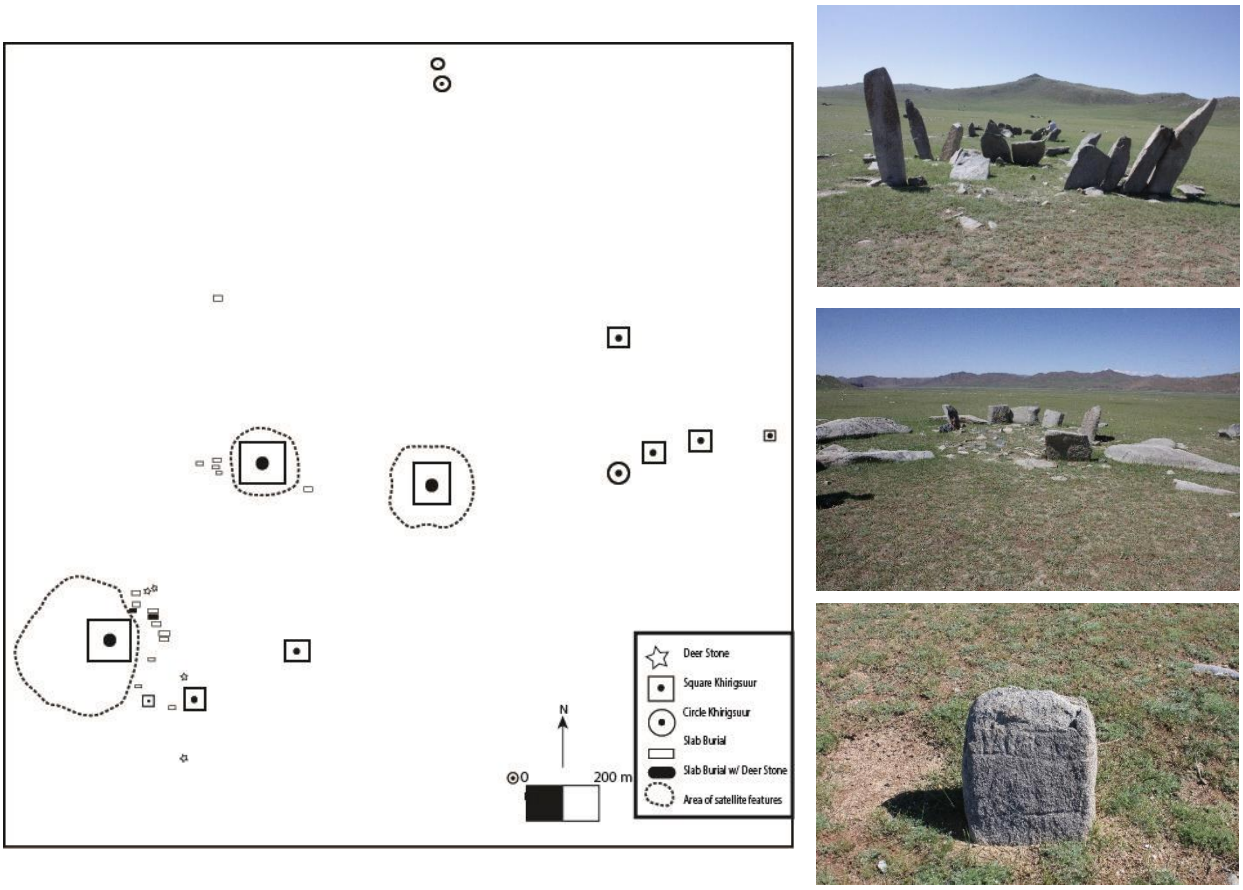


Figure 6.14. Simplified planview of Shatar Chuluu (Locus B) and photos of a slab burial constructed of eight deer stones (top right), another slab burial with a deer stone incorporated (middle), and a broken deer stone perhaps damaged during an attempt to move it in antiquity (bottom).

6.5. Discussion and Interpretation

Landscapes are malleable. Memory is fallible. To alter the landscape takes directed labor, and to change minds takes even more. Although khirigsuurs with large cairns and single-course boundaries running for tens-to-hundreds of meters may look impressive, the labor necessary to construct them is minimal—especially considering returning rituals add satellite features for breadth and stones at the central cairn for height. In contrast, however, moving and righting the deer stone described at the top of the chapter would have been *extremely* difficult in

antiquity. Horses, relatives, and neighbors in lieu of the UAZ-452 and the 15-person NBP crew bring a vivid picture to mind, and emphasizes the remarkable amount of energy that would be needed to rework the monumental assemblage.

The force needed to move these stelae was exceptional, as was their importance in social and religious spheres, poignantly evident by their reuse as an overt attempt to align, contend with, or erase the memorial (and material) comportment of the DSK complex. I hypothesize that the terraces of Bor Shoroonii Am and Shatar Chuluu may be inter-related and mixed. Or, at the very least, each location was heavily remodeled during the Late Bronze-Iron Age transition within their own contexts. I posit two options for the disturbed areas:

1. Multiple vacant platforms that usually house deer stones are plainly present at Bor Shoroonii Am. Undoubtedly, at least one of these deer stones was reused in a slab burial on the same terrace (SG-1). However, the number of unambiguous empty platforms on the terrace suggests that other deer stones may be missing. I argue the absent deer stones may be now part of the slab burials at Shatar Chuluu.

2. Each terrace was modified within itself, with deer stones in each area being uprooted to add to a slab burial's prestige, and simultaneously subtract, a significant socio-cosmological influence from the cosmopolitan DSK stone menagerie.

In either scenario, I argue that it is clear that these two loci were places of excessive and directed efforts toward the construction of a unique and mottled landscape. The people building slab burials were aware of the meaning and substance attached to the components of the DSK monuments, and as such, used them in purposeful and conspicuous ways. The situation in northern Bayankhongor is reminiscent of the case studies presented at the opening of the chapter— where, in New England, lower socio-economic groups appropriated the cenotaphic symbols of the upper-class to manipulate the memory and legibility of their status; or when Velasco argued that the articulation between the funerary landscapes and agentive ancestors was considered so strong that the construction of additional monuments and their positions could

potentially allow for a new ordering of social and cosmological structures. The recombinatory character of slab burial construction with older deer stones also places additional strain on neoevolutionary frameworks and its persistent vestiges of cultural succession congruent with burial form. Rubertone writes that, "standard archaeological approaches that construct linear narratives tracing the successive replacement of one archaeological culture by another" identify places of cosmological importance "that may not conform to community memories" (Rubertone 2008: 17).

Inhabitants repurposed the stelae presented here in such a conspicuous yet measured way that would, at least on the surface, imply a marked change in social structure and substantial increases in surplus time and energy moving into the Iron Age. Initially, this inference might seem to corroborate the assumptions and neoevolutionary stages that often blanket diachronic analysis in Mongolia and other places where non-agricultural communities are the subject. But due to the proven impermanent qualities of landscape it is necessary to take a more detailed look into the slab burial excavations at Bor Shoroonii Am. The construction, funerary objects, and dating of these two features will ultimately offer a modified narrative contrasting with a monolithic model of linear evolution.

6.6. The Slab Graves at Bor Shoroonii Am

The two excavated graves were similar in size and construction style. Built right next to one another, both measured approximately 5 m x 4 m and were oriented east-west, and were fashioned with boulder-like stones instead of the typical slabs—much like what was reported by the Italian-Mongolian expedition in central Bayankhongor near Orog Nuur (Günchinsüren 2006; see Appendix F). Their adjacent placement and likenesses strongly imply they were constructed

either together, or around the same period. Slab Grave-2 was dated using a horse tooth recovered during excavation.[5] Calibrated carbon dates (95% CI) place the feature between 800-551 BCE, with the most concentrated calibration indicating construction in the early 8th century BCE (Figure 6.15).

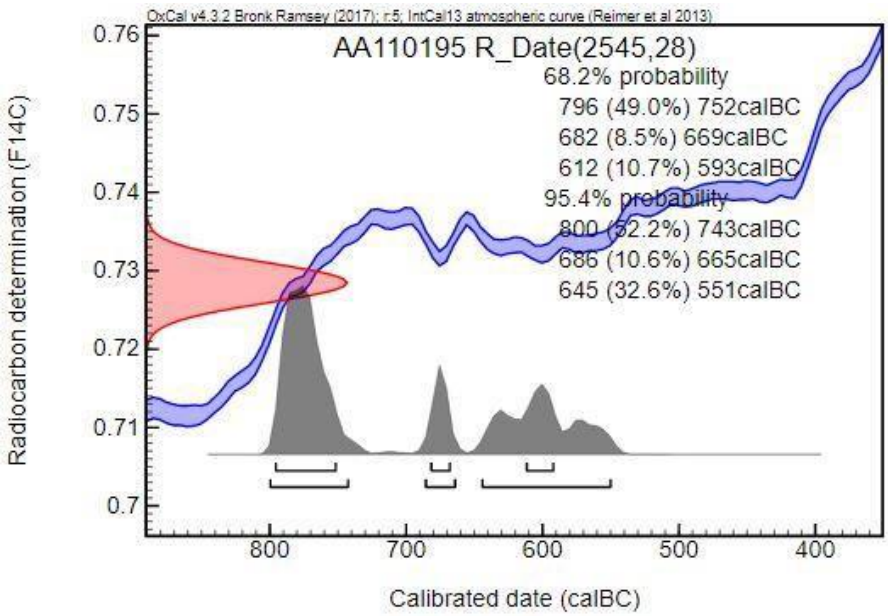


Figure 6.15. Output of carbon dating on horse tooth from Slab Grave-2.

[5] Carbon dating was completed at the University of Arizona's Accelerator Mass Spectrometry Lab.

The first slab grave to be excavated was the southern feature (SG-1). Its most distinctive quality was the deer stone located in the center of the enclosure. After the team completed surface cleaning, it was evident to the team that the burial was likely looted, given the chaotic arrangement of stones that formed the boundaries of the monument. Subsequent removal of stones finally exposed a monument shape that probably more closely represented its look in antiquity (Figure 6.16).



Figure 6.16. SG-1 after surface cleaning (top). At bottom, the superfluous stones have been removed. Note the deer stone in the center. Looking east.

Prior to formal excavation, the deer stone was first uncovered and recorded in detail with photography and sketches from multiple angles. The deer stone and boundary stones were then moved aside and excavation commenced. Excavators reached a shallow depth of approximately 75 cm below datum within the stain of the would-be burial pit. Unfortunately, no osteological remains were present except for unidentifiable long bones, but the team did collect over eighty pieces of a ceramic vessel as well as a single bone bead. The sherds were mixed throughout the excavation levels confirming our suspicion the feature had been disturbed.

Although the burial pit was empty, the broken vessel found throughout SG-1 was an important subsurface find as one of the sole correlates for the interpretation of the monument. Because of the disturbed contexts causing degrees of soil moisture, composition, and bioturbation to be applied differently to vessel fragments, the sherds were in varying states of preservation and overall color. Yet, because we recovered most of the pot, it is possible to consider the defined and distinctive surface decorations further, as well as speculate about possible vessel form.

The ornamentation on the recovered vessel is baroque and ornate, and much more exquisite than most ceramics associated with the Bronze and Iron Age (Figure 6.17; see Appendix E). Decorations on the vessel are in three distinctive bands, produced with multiple types of tools and techniques. The top register is the most pronounced with a closely-aligned and large punctate pattern, making a range of square- to hour-glass shaped impressions. Below is an additive element, best described as a raised section of clay, marked with three horizontal tics at even intervals. As a separator between registers, this element looks like a strip of braided hair or prepared felt. Finally, in the tertiary space at the bottom is a vertical comb striation that appears to slowly lift as the decoration approaches the bottom of the vessel.

The lip of the pot was flat, with a t-rim beveled slightly inwards, comprising a moderate ~20 cm estimated diameter. The neck and body of the vessel seemed only to mildly bow-out, suggesting a small to a medium-sized jar. Excavators recovered very few pieces of the vessel's base. Those that were recovered showed a bottom rounded and smooth as if they might fit with a conical footed or tripod vessel form. If the vessel was in-fact three-legged, it could be an influence from the *li* tripod (Figure 6.18) one of the most common vessel forms of the Xiajiadian era (1000-600 BCE) in northeast China. (Shelach 2009b: 20; see Zhimin 1992 for an overview).

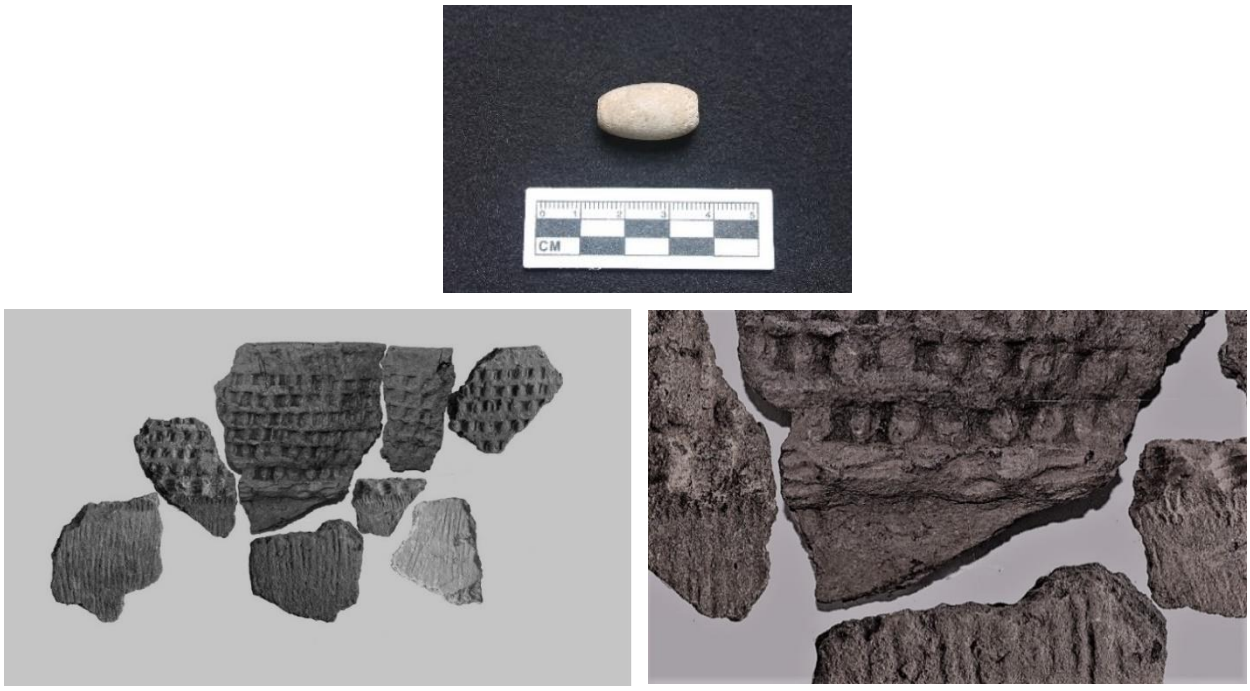


Figure 6.17. Objects recovered from SG-1. Bone bead, top (Photo by J. Bayarsaikhan). The grey-scale photo at left is a regrouping of the vessel to show the decoration, and at right is a detail of the different decorations described in the text.

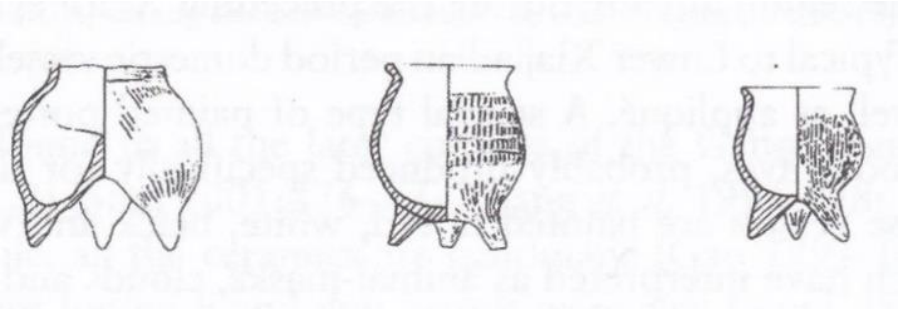


Figure 6.18. Examples of li tripod vessels (from Shelach 2009b).

The inclusion of a deer stone and an exquisite ceramic vessel as components of SG-1, may at first glance, be evidence of a complete shuffling of socio-economic structures in the Early Iron Age—especially when compared to DSK monuments' lack of grave goods and proposed social organization of community. However, I argue that the architecture and recovered objects belie the dynamism and detail of the Bronze-Iron Age transition in Bayankhongor. Instead, I suggest this transition was permeated with processes of semiotic- and social-posturing on the surface, that contrast with actual circumstances *in* the ground. "Bodies and grave goods, writes Van Dyke (2011: 239), "are often burried—hidden from view and forgotten—while highly visible tumuli and grave markers may be erected, then reinterpreted over time." Further investigation into the sister-feature, Slab Grave-2 (Figure 6.19), will help elucidate how these slab burials were employing semiotics as a mechanism to further an ideological message.



Figure 6.19. Photo of SG-2 mid-excavation. Note the stain marking the top of the burial chamber and the zooarchaeological remains in the upper right corner of the grave, looking east.

Excavation of the second slab grave on Bor Shoroonii Am's terrace was an integral step taken by the Northern Bayankhongor Project team to better trace the transition from the Bronze to the Iron Ages in Mongolia. This burial was approximately 270 cm deep at the base of the burial pit, where excavators uncovered a largely unarticulated human skeleton. The remainder of the human osteological material was scattered throughout the stratigraphic levels, again indicating that this feature was looted—likely in antiquity. Post-excavation analysis determined that the interred was a male, approximately 40-60 years of age at death (see Appendix B for full report). At the same horizontal level as the top of the burial chamber, excavators exposed a series of wooden planks creating a platform running perpendicular to the east-west orientation of the interred (Figure 6.20).



Figure 6.20. Planview, cross-section, and overhead photo of SG-2. From Bayarsaikhan et al. (2018). Photo by J. Bayarsaikhan.

In addition to the wooden materials in this strata there were 41 crania of sheep, goat, and horse at the eastern section of the burial. Ratios of the recovered species were biased towards *Ovis/Capra* remains (n= 33; 81%) over *Equus* (n=8; 19%) (Figure 6.21). Interestingly, the inhumed horses showed evidence of blunt-force trauma to the top of the skull, likely caused by ritual slaughter. Some of the equid specimens were also lacking a "wolf tooth," or vestigial pre-molar, a dentistry practice commonly associated with metal bits and harnesses, which are

sometimes recovered within slab burials (see Appendix B; Taylor et al. 2018; Bayarsaikhan et al. 2018).

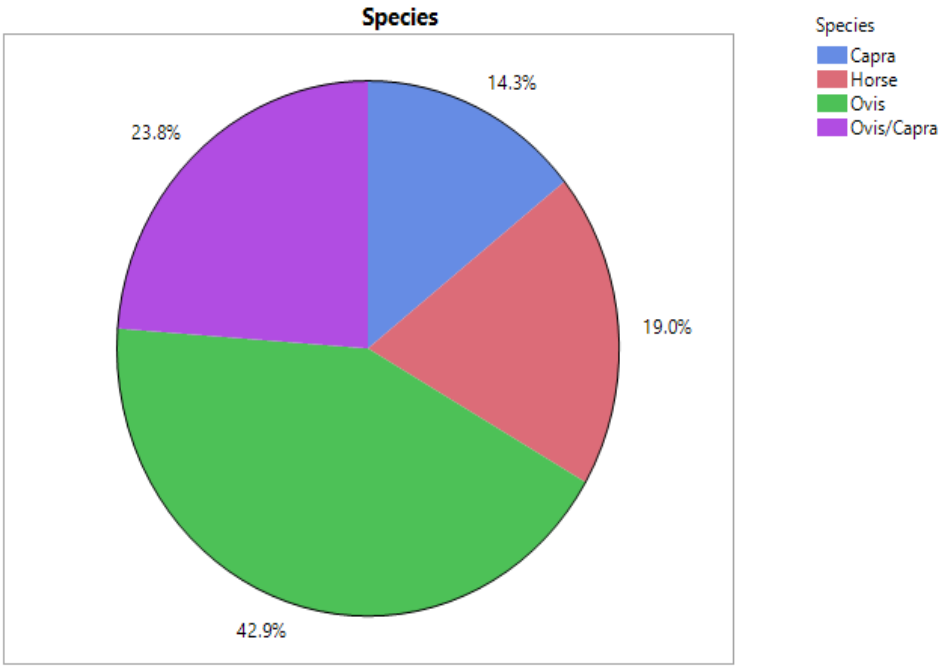


Figure 6.21. Pie chart showing the ratios of animal species recovered from SG-2.

The extensive faunal materials recovered from SG-2 are the subject of the next section. Due to the low representation of equid crania, the following zooarchaeological analysis concentrates on the distinguishing of species and age of the sheep/goat skeletal materials and their interpretation in the context of the Mongolian Bronze-Iron Age transition.

6.7. Zooarchaeological Analysis of Faunal Materials from SG-2

Human-animal relations play a dominant, albeit non-exclusive, role in the life of pastoral nomads (Arnold and Greenfield 2004: 97; Miracle and Forenbaher 2005: 255; Hesse and

Wapnish 1986). Mimicking V. Gordon Childe's contribution to the Neolithic and Urban revolutions (1950, 1936), Sherratt's (1981) outline of the "secondary products revolution" suggested a shift towards milk and wool productions would take place a few millennia after initial domestication. The new subsistence tactic, he stated, would have a similar effect the Neolithic revolution had, as the novel strategy now allowed populations to expand and inhabit marginal habitats with increased success (Greenfield 1988). Numerous authors have also pointed out the connection between the development of particular secondary products and shifts in social and economic ontologies (see, for example, Kohl 2007; Halstead 1998, 1996; Zeder 1994; Stein 1987; Miracle and Forenbaher 2005; Mainland and Halstead 2005; Postgate 1975).

Although regional pursuits of secondary products occurred at different rates (Marciniak 2011), the earliest evidence for milking comes from a frieze from the Ninhursag Temple at Tell al-Ubaid in Mesopotamia, dating to approximately 2600 BCE; wool production in the Near East and Europe begins to appear in the Chalcolithic, while, in East Asia, archaeological evidence suggests specialized wool production was not common until the Bronze Age, reflecting "the time lag between the development of wooly sheep and their spread" to the East. (from Greenfield 2010: 33-37; citing Good 2001). Citing Li (2009), Greenfield writes about the importance of curing regional vacancies of zooarchaeological profiles and analysis:

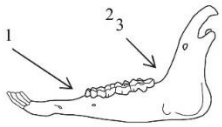
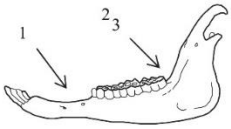
> A final new direction is the need to increase our understanding on the timing of the appearance and nature of spread of secondary products exploitation in regions beyond the Near East and Europe. Eastern Asia is the last major geographic region in the Old World where there is such little information and has largely been ignored since Sherratt framed his model. There is little available from India and even less from China. The little available data (e.g., the zooarchaeological harvest profiles from the Late Shang period site of Anyang) indicate that the cattle and sheep were primarily exploited for their primary products. This suggests that the exploitation of their secondary products had not yet arrived at even this very late date of the second half of the second millennium BCE. (2010: 37)

Because of the clear lacunae throughout Asia recognized by Greenfield, the careful examination of the sheep/goat crania found in SG-2 closely followed previously established methodologies.

First, if possible, it was necessary to determine the particular species of each skull. Because mandibles, crania, and teeth are a few of the most robust skeletal elements, they preserve well for in-depth evaluation, helping ameliorate excessive analytical error (Greenfield 1988; Payne 1973). As such, my identification of the heads were double-checked through a combination of both metric and non-metric criteria.

Payne (1985, 1973), Silver (1969), Prummel and Frisch (1986), and Halstead and Collins (2002) outline familiar non-metric characteristics that helped in my zooarchaeological classifications of sheep and goat (Figure 6.22). For example, along the lateral edge of the mandible and positioned posterior to the pre-molars, a foramen is often found on sheep but is typically lacking for goats. If present on goats, the foramen is biased slightly anteriorly to the tooth row. Further, posterior to the third adult molar, the lateral face of the mandible "usually has a more or less pronounced hollow in goat which is typically" smaller or completely absent in sheep (Payne 1985: 548). What is more, the shape of the molars themselves can in some cases help in species identification. Both Payne as well as Halstead and Collins, describe the morphological differences in tooth form:

> The buccal edge of the disto-buccal cusp of M1 and M2 often points strongly in a posterior direction in goat, while typically it is relatively symmetrical in sheep […] The mesial part of the buccal edge of the mesio-buccal cusp of M3 is typically convex in sheep, but often concave or flat in goat. (Payne 1985: 548)

		
Criterion	**Ovis**	**Capra**
1	Foramen often occurs on lateral face of mandible below the P2-4. (Halstead et al., 2002, MD.1)	Foramen usually absent on lateral face of mandible. If it occurs it is typically found anterior to the P2. (Halstead et al., 2002, MD.1)
2	Immediately posterior to M3 on the lateral face of the mandible there is no depression or hollow. A single obvious sinus is often present. [Criterion can only be evaluated after M3 is fully erupted and mandible has achieved full size.] (Halstead et al., 2002, MD.2)	Immediately posterior to M3 on the lateral face of the mandible there is a more or less pronounced hollow. Hollow has no sinus. [Criterion can only be evaluated after M3 is fully erupted and mandible has achieved full size.] (Halstead et al., 2002, MD.2).
3	Same as above. (Halstead et al., 2002, MD.2)	Hollow may have two or more indistinct sinuses. [Criterion can only be evaluated after M3 is fully erupted and mandible has achieved full size.] (Halstead et al., 2002, MD.2)

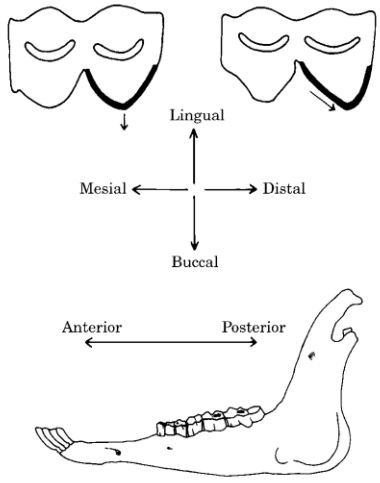


Figure 6.22. Images showing the non-metric differences in sheep and goat mandibles (from Zeder and Pilaar 2010) and teeth (from Halstead and Collins 2002).

Unfortunately, it was not possible to unequivocally determine species for every specimen, especially when the animal was extremely young (Halstead and Collins 2002: 552). This necessitated the creation of a binned category of Sheep/Goat complementing singular identifications of Sheep *or* Goat, an approach that is common in zooarchaeological analysis (Greenfield 2010: 34).

After the identification of species, I again used non-metric criteria to estimate the age of the sacrificed animal. The age at the time of death is calculated using a combination of four characteristics focused on teeth: which tooth is being recorded, if the tooth is complete or broken, its state of eruption, and its state of wear (Payne 1973: 285). Silver (1969: 290) notes that "it is possible to infer, from a single tooth" the feeding habits and age of the animal if close attention is paid to tooth-eruption timelines and wear; he states that for sheep/goat the mandibular M1 generally erupts at approximately three months, M2 erupts after one year, and

M3 breaches the gumline at the latter side of two years old. After tooth eruption, attrition of the enamel begins in 3-5 months.

In corroboration with the eruption sequence, I then followed Payne's (1985, 1973) commonly-used wear-stages in which I calculate the amount of exposed dentine with a visual assessment of pre-molars and Molars 1-3. As wear increases "more and more of the crown is worn away, and detail is obscured by the deposition of secondary cement and calculus until, in advanced wear, the crown of the tooth may be completely worn away, leaving nothing but worn stumps" (Payne 1985: 142). Utilizing these techniques together, I compiled Table 6.1 as a textual and quick-reference guide in place of the schematic recording style suggested by Payne.[6]

Table 6.1. Reference guide used to age sheep/goat specimens from the excavation of SG-2.

Stage	Wear Characteristic 1	Wear Characteristic 2	Relevant Eruption Classification	Approx. Age
A	m3 still unworn		M1 erupts at 3 months	0-6 months
B	m3 in wear	M1 unworn	M2 erupts at 9-12 months	6-12 months
C	m1 in wear	M2 unworn	M3 erupts at 18-24 months	1-2 years
D	M2 in wear	M3 unworn		2-3 years
E	M3 in wear	M3 posterior cusp unworn		3-4 years
F	Posterior cusp of M3 in wear	M3 worn in all cusps but not heavily		4-5 years
G	M3 worn in all cusps but not heavily	M2 worn in all cusps but not heavily;		5-6 years
H	M3 worn in all cusps but not heavily	M2 worn in all cusps moderately		6-7 years
I	M3 heavily worn	M2 moderate to severe wear		7-8 years
J	M3 heavily worn	M2 heavily worn		8-9 years

Assembling the eruption and wear characteristics prompted the segregation of ten discrete age categories for sheep and goat, A-J, which I then utilized to create a culling profile.

[6] Payne used a set of complex symbols in his seminal 1973 article. However, these codes were confusing and thus replaced with numeric values and textual benchmarks for the determination of wear in NBP specimens.

In addition to the non-metric characteristics, I also documented several metrics. Using Von den Dreisch's (1976) classic guide on the measurement of animal bones, up to 14 dimensions were recorded where applicable (see Appendix F). Locations of the measurements included cranial profiles and breadth, maxillary, and mandibular rows of pMs and M1-3, as well as ramus heights and weights of each element.[7]

Although the faunal remains discussed in this chapter derive from a funerary context and not a midden or other domestic setting, I argue that the assemblage of crania is still an excellent cross-section of particular economic pursuits and herd management that reflect decisions made in the framework of everyday subsistence. Culling strategies take on many forms and can be brought about through a range of catalysts. Hesse and Wapnish (1986) write that pastoralists are concerned with a variety of issues that influence a herder's decision to slaughter an animal:

> […] 1) pasture quality, controlled by stocking rate, seasonal movement, and nutritional value of the forage; 2) herd management, related to temperament of the flock, protection from predators, and number of herdsmen; and 3) profitability, dependent on scheduling of extractive activities, timing of slaughter, access to markets, resistance to disease, and the relative value of the products (hide, meat, milk, wool). (12-13)

The complexity of human-animal relations in nomadic contexts cannot be overstated. Animals comprise a tripartite interlocution with social organization and networks, political and semiotic capital, and economic strategies that all operate simultaneously on the occupational landscape.

Survivorship curves are often operationalized to determine herding policies and directives toward certain products: milk, meat, or wool. Of course, these "mortality models for milk, meat, and wool production represent optimizing strategies," and may not be congruent with herders exploiting their stock with complete rationality, "but for the simple reason that optimization strategies are the most clearly definable [they are] the most useful yardstick to measure actual

[7] These measurements were taken preemptively in the hope that more specimens are recovered and a larger database of metrics can be amassed for further research.

behavior" (Halstead 1998: 7). To be sure, pastoralists rarely keep flocks for a single product (in practice, herders *often* aim for a combination of products [Ibid.: 5]) but herding communities *will* place relative values on different products depending on a given set environmental and socio-economic factors (Payne 1973: 281). And by extension, each extracted product, whether milk, meat, or wool will have a correlative effect on the ratio of live species, the labor necessary to herd, and the selection of culled animals. For example, meat production requires more pasture and fodder but less labor than dairying to harvest an equivalent caloric intake (Mainland and Halstead 2005: 117). In regards to culling rhythms aimed at optimization, Marom and Bar-Oz (2009) describe Payne's idealized curves based on his research at the site of Aşvan Kale, Turkey:

> Specialized meat production is identifiable by a sharp drop in the survivorship curve between 1 and 3 years of age, when sheep and goats attain their optimal weight. Milk production typically involves culling of most males during the first quarter of the first year of life, when the milk supply of the lactating females is secure, since continued lactation decreases the amount of milk available for sale or exchange. Specialized wool production involves some culling of lambs during the first year of life, but the majority of the herd, often consisting of castrated males and females, is retained into adulthood. (1184)

Comparing optimal curves to archaeological patterns in faunal assemblages is extremely useful in the multifaceted unpacking of a political economy. Essentially, the faunal remains here encompass the occupational landscape *par excellence*, representing ecological strategies, vocational and labor divisions, as well as the potential for animals (and their products) to act as material indices of socio-political conditions. As such, a cursory glance at the two slab burials and their grave goods would likely suggest that the interred were of significant social influence, evident by deer stone reuse that would take exceptional force to rearrange, decorated pottery, and the investment of numerous animals for ritual sacrifice and feasting. This initial interpretation gives-way to hypotheses that the animals 1) were likely gifted by multiple families or groups, and 2) would consist of only the most substantial and prized specimens (as a symbol of status).

To be clear, the abundant presence of culled animals (n=41) would certainly suggest that a single family *did not* supply the entire sacrifice (which would likely decimate the homeostasis of a herd), but that individual (or a handful of) animals were likely gifted from various groups or families, with each animal being selected from within a herd that demands its own particular management strategy. However, when we consider the semiotic and cosmological power of purloined deer stones, the careful construction of the timber-covered grave shaft, and pottery in the adjacent sister burial, one would presume that the zoological dedications would include the fattiest and most robust animals—congruent and explicit representation of the supposed elite status of the deceased. However, some of these assumptions are contradicted and muddled by the calculation of the survivorship curves.

Instead, the faunal remains from the slab burial proved to be in line with a herding strategy aimed at milk and meat production, although favoring milk (Figure 6.23).

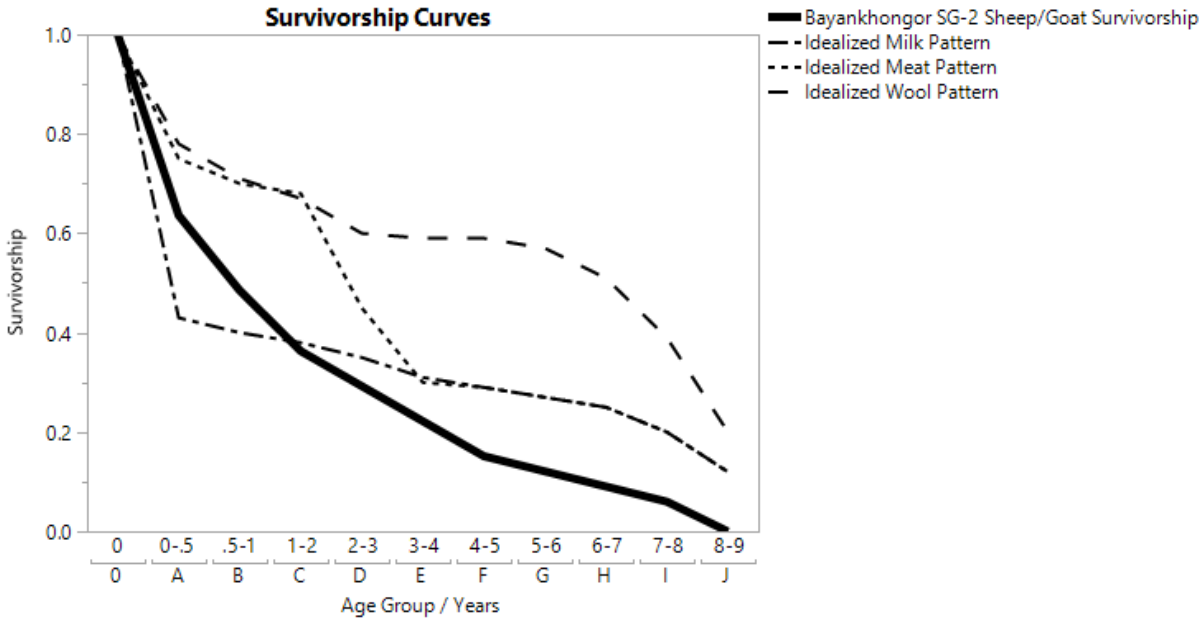


Figure 6.23. Sheep/goat survivorship from SG-2 with idealized patterns discussed in the text.

Nearly 60% of the individual goat and sheep specimens were killed prior to one year, with nearly 80% of the sheep/goat assemblage dead by age four. This roughly fits with the previously discussed models that reason "if there is a high proportion (~80%) of very immature animals are in the assemblage, milk production is suggested," but if equal ratios of immature, subadults and adults are represented, meat is implied (Marom and Bar-Oz 2009: 1186). In other words, the sacrificial animals in SG-2 were likely chosen according to a coordinated and conservative plan that would least disrupt their herds—a decision made more in accordance with pragmatism than ritual feasting—as most of the specimens were immature and had likely not reached prime weight by the time of death. I hypothesize, then, that if the majority of animals chosen were prime-aged and portly it would suggest the presence of a sustained subsistence surplus, and by proxy, ecological practices that were routinized and perfected to grow said surplus. However, throughout this dissertation, I have argued that ecological patterns were mixed and experimental while vocational practices were also interrupted in the first-half of the first millennium BCE. I argue the conservative culling profile from SG-2 further strengthens this hypothesis.

It is here that the impermanence of stone and memory are operative mechanisms in the creation of authority—real or imagined. The surface characteristics of the slab burials, constructed with large boulders and an appropriated deer stone, may clearly signal a hierarchical social order at first glance. The exquisite pottery and faunal assemblage may seem to corroborate this conclusion further. However, a multi-faceted approach to these contexts imply that those messages communicated using material culture may not be congruent with actual circumstances, and in fact, indicate a social process of memory manipulation or usurpation. Fortes (1945: 98) states that, "[…] the [number and] selection of [sacrificial] animals[s] depends on a multiplicity of factors, such as the relative importance of the shrine at which it is offered, the importance of

the occasion, the status of the suppliant, or the group offering the sacrifice." To these conditional situations, I would add the concepts of presentation and performance, through which the desired effect (and its potential future efficacy) of the funerary rites is manifested.

Trying to be brief and summarize, the analysis of the two slab burials at Bor Shoroonii Am supports the utilization of occupational landscapes in lieu of linear frameworks of progress. The features and assemblages comprising the slab burials would seem to follow a neoevolutionary trajectory in which hierarchies and fully-formed pastoral nomadism were becoming common throughout the Iron Age steppe, but detailed investigations of economic and symbolic aspects of the contexts suggest the situation was more complicated. In contrast, I argue that the two slab burials represent an attempt to create a more-or-less imagined connection to the past: revered objects from prior eras are used in the contemporary context, the inclusion of an attractive ceramic vessel, and the sacrificing of numerous herd animals could be read to indicate the presence of a more centralized political structure and refined pastoral strategy—monument construction, mobilized labor, and surplus food are elements of the evolutionary diachronic portmanteau, after all. However, the details uncovered from culling patterns suggest that, even for individual(s) of high status, the community was unable to provide the highest-quality animals for feasting and sacrifice, but in their place, delivered animals that would least disrupt their overall herd composition and management when killed. It was a practice of latent conservatism performed at a context aimed at the establishment of social differentiation and ostentation, which, may have succeeded on the "surface" but is challenged by materials recovered beneath it. I maintain that this paradoxical funerary context is further support of my overall argument in which the first-half of the first millennium BCE was a period of uncertainty and

experimentation—ecologically, vocationally, and semiotically. A full quotation encapsulates the issue comprehensively:

> The re-use of earlier monuments and objects is perhaps the most graphic and visible way in which we can see ancient people engaging directly with the past. But there are many others. These include the raising of a tombstone to commemorate a relative, the remains of feasting and drinking equipment in a grave, a decision to place a weapon with the corpse, the cremation of the body and the collection of the remains for burial. All in different ways could be regarded as strategies by which the living sought to remember the dead, both recalling the constructing aspects of their identity, or destroyed, subsuming, dispersing others. (Williams 2003: 10)

6.8. Conclusion

The architecture and funerary goods of Slab Graves-1 and -2, the multiple slab burials built with repurposed deer stones at Shataar Chuluu, and the spatial positioning and canon of khirigsuur construction provide much-needed insight into the Bronze-Iron Age transition in Mongolia. By analyzing the semiotic and monumental elements of the occupational landscape diachronically, and with multiple lines of evidence, I posit:

1) The economic pursuits, specifically herding practices and combinations, of the Late Bronze and Iron Age appear to have continuity, but both also present a modicum of conservatism and uncertainty. Communally-built khirigsuurs and the horse heads retrieved from their surrounding satellites indicate a typical culling pattern aimed at the preservation of the herd. The survivorship curves from SG-2 also indicate a restrained or cautious slaughter profile aligned with milk (and meat) production. Acknowledging the pitfall that the specimens were in a ritual not domestic context, it is possible to say then, that the adoption of pastoral nomadism may have been relatively slow and uneven in regards to perfecting the subsistence strategy. Chapters 4 and 5 showcased an increase in the scope of habitations and clay sources into the

Iron Age, as well as inconsistencies in commodity production—all of which would intimate that the occupational landscape is being viewed and used differently over time.

2) Deer stones were obviously revered. Being repurposed into slab burial monuments at multiple Loci in Northern Bayankhongor signals a deliberate attempt to associate or conflict with the deep cosmological and socio-political meanings of the DSK landscape. The labor and traction needed to move the deer stones would have been extensive (noted from our attempt to right a deer stone after excavation), such that the action—on the surface—would hint at characteristics like surplus labor and by extension a widespread and definitive hierarchy akin to neoevolutionary propositions. However, this was not the case below the surface as the survivorship curves contradict the architectural excesses and well-made pottery. At the very least, the reuse of deer stones into slab graves was a powerful mechanism to manipulate and attempt to recreate images of authority through the discursiveness of the landscape.

3) The semiotic inconsistency between the surface and sub-surface burial context of SG-2, I argue, conceptually mirrors the contradiction between concepts of linear progress and occupational landscapes. Although neoevolutionary frameworks may appear to have coherency in macro-scale chronologies and regions, occupational landscapes encourage the analysis of multiple archaeological materials at different complementary resolutions which ultimately guide the construction of a more nuanced and true-to-life narrative of social life in Late Bronze and Iron Age Mongolia. Moving further interpretively, I also argue that the analysis of the slab graves here may align with the aristocratic-commoner model put forth by Chang and

> Sneath. Put succinctly, the fluid heterarchical characteristics of social cohesion within this model imply an oscillation of social arrangements and structures. This fluidity, then, I would suggest, was intimately articulated with the mechanisms and processes people chose to employ when navigating, or trying to rearrange, political economic conditions, such as those monumental and memorial processes seen here.

Although in this study I promote the investigation of everyday materials over a focus on graves due to their overdetermined epistemological position in steppe archaeology, it is clear that funerary rites and their material assemblages play a key role in the way archaeologists decipher life in antiquity. However, I caution that interments should not be indices of "one culture replacing the other" in a succession of increased social complexity and diachronic movement, but, as an alternative, be viewed as a container for memory (and its fallibility by appropriation or forgetting) and political action—social processes at work. Taking on this perspective increases our understanding of the motivations and circumstances of the time; it allows for the peopling of faceless pasts. Finally, data mined using this perspective further point to the first-half of the first millennium BCE—specifically the early decades of the 8th century BCE according to carbon-dated material from SG-2— as a period of untidiness and ambivalence, one of experimentation but also purposeful attempts at the production or reworking of social and ideological capital.

To be completely transparent, I should note that although the overall argument of my dissertation argues for oscillating heterarchical arrangements as ecological and vocational practices shift, my interpretation of a conservative culling profile does not discount the possibility of an emerging hierarchy within malleable horizontal structures. Heterarchy does not imply the absence of vertically ranked social strata. Therefore, I would be remiss to deny the possibility of contemporaneous groups and individuals vying for hierarchical power, authority,

and social status within a political structure made pliable by the processes of (im)mobility, territorial claims, and alterations to pottery preparation as well the spatial expansion of raw clay sourcing. In short, the two slab burials are admittedly quite extraordinary and would likely be read by onlookers as evidence of important individuals and the reification of an emerging hierarchy. However, the analysis of the culling pattern as an example of conservative ritual performance does support the conclusion for a turbulent first-half of the first millennium BCE, where attempts at hierarchical production were likely caught, and worked within, the uncertainty of the period. In the final chapter I will attempt to synthesize a broader picture of the dynamic occupational landscape and expand upon the cursory conclusions introduced throughout this study.

CHAPTER 7: CONCLUDING REMARKS

By means of a holistic and multi-scalar occupational landscape approach, I have attempted to reposition ancient pastoral nomads at the forefront of social science exploration, demonstrating their intricate internal dynamics. In doing so, I argued that despite vocal critiques of neoevolutionary frameworks there are vestiges that remain which have had very real consequences to scholarship. These consequences included falsely solidified associations between economic strategies and political forms, as well as problematic methodological biases toward funerary excavation and a reliance on their architectural forms as the basis for chronological inference. Together this reinforced the concept of time as a linear construction and "one of the most persistent visions in western society" and scholarship (McGlade 1999: 143, 147).

Intending to move beyond linear models and the privileged position of burials, I investigated an assortment of materials at various chronological and spatial resolutions: diachronic changes of ecological strategies and land-use patterns, interruptions to vocational consistency for potters, and the usurpation of semiotic messages for political tact. At issue within these investigations were the concepts of mobility, knowledge transfer and skilled activities, as well as memory and forgetting—each working as a social process to engender change or continuity. As a result, I argued that, contrary to linear evolutionary models, the first-half of the first millennium BCE was a period of uncertainty, interruption, and experimentation both economically and politically (Figure 7.1).

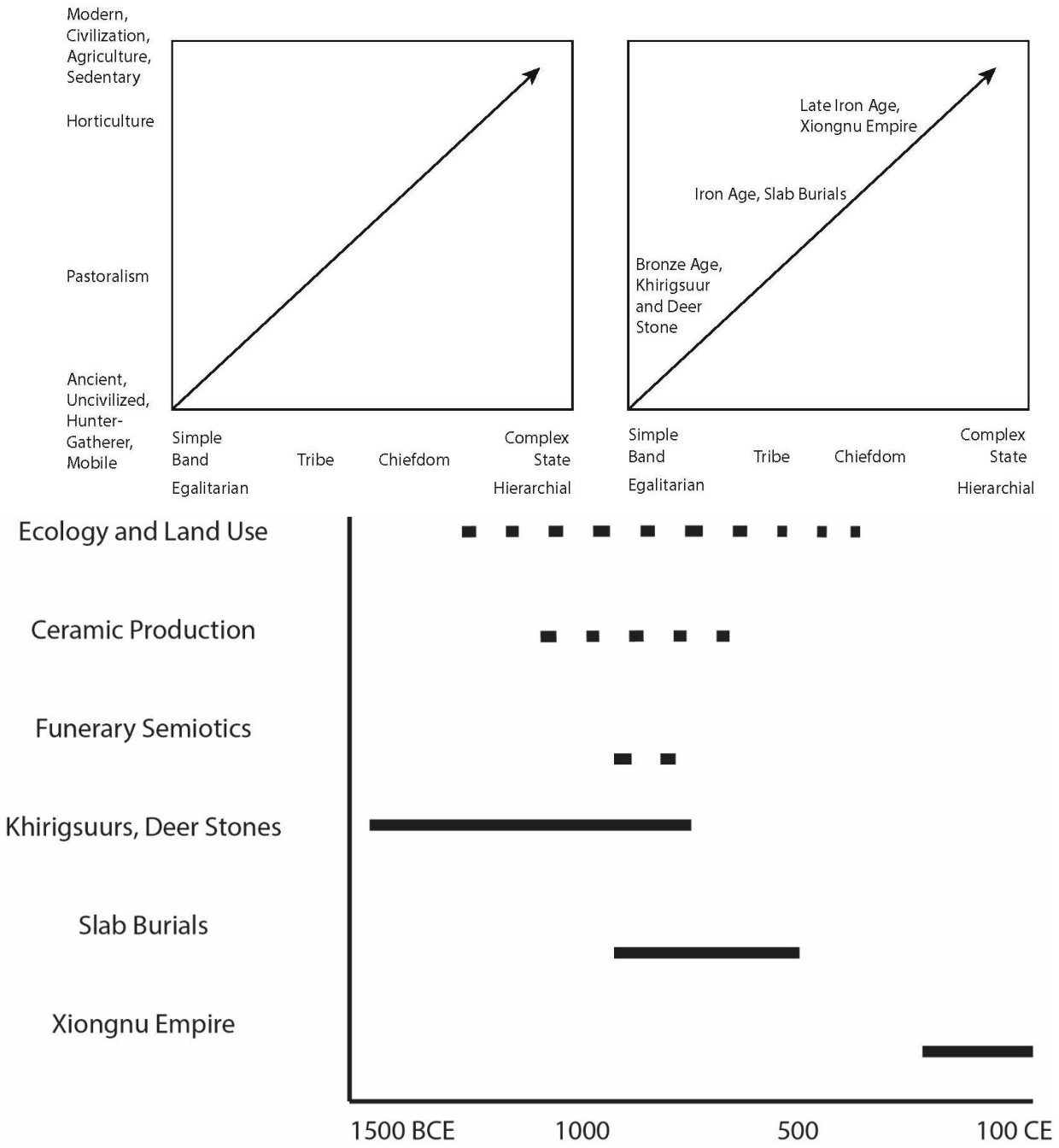


Figure 7.1 Two schematics that represent the evolutionary vestiges at work in general, and on the Mongolian steppe (top). At bottom, the chronology shows how "interruptions" and uncertainties plot onto eras indexed by burial forms and their "cultural replacements" over time.

This concept of fluctuation was buttressed by a model of authority specific to the Eurasian steppe. Chang and Sneath's aristocratic-commoner organization allows for heterarchical and hierarchical fluidity, not a reliance on kinship or chiefs as an assumed static archetype. Instead, oscillations would be characteristic in times of insecurity.

Accordingly, the three facets of the occupational landscape presented in this dissertation can together form a dynamic picture of the Late Bronze-Iron Age transition in Bayankhongor, Mongolia. To review, I tentatively posit the following conclusions:

1) Chapter 4 investigated the spatial patterning of lithics (and their morphology) and ceramic scatters. Indexical of habitation and activity centers, lithic assemblages and tool occurrences suggested that prehistoric populations in Bayankhongor likely used an admixture of itinerancy and sedentism as pastoral practices were tried and evaluated. Likewise, spatial inquiries into the diachronic patterning of diagnostic ceramic demonstrated that Late Bronze Age habitations were very clustered. Subsequently, in the Early Iron Age there was an initially slow expansion of habitation sites, with a clear and sharp peak of spatial extent occurring in the Middle Iron Age. In the late Iron Age, approaching the rise of the Xiongnu Empire, spatial statistics showed that habitations from this era reverted to an overwhelmingly clustered pattern.

2) In Chapter 5 I employed ceramic data from standard metrics as well as molecular composition. Measurements of thickness and the colors of the interior and exterior of sherds—indicative of standardized practice and firing conditions, respectively—was suggestive of a loss of technical identity or disruptions in the transferring of skill and knowledge in regards to craft production. In the Late Bronze and Early Iron Age, standard deviations of vessel thickness were high, possibly indicating that pottery production in these areas was likely local with numerous potters operating at household or valley scales. In contrast, the standard deviations in the Iron

Age and Late Iron drop drastically. I would suggest that this decrease in standard deviation represents a solidification of potting techniques and skill, with fewer and better trained potters being characteristic of these periods. Portable X-Ray Fluorescence showed that the sources of raw clay procurement expanded or changed during the Iron and Late Iron Age, thus mirroring the conclusions from the standard metrics.

3) Finally, the analyses of Late Bronze and Iron Age monumentality was included as a representation of the semiotic aspect of the occupational landscape. Chapter 6 first discussed the spatial arrangements of khirigsuurs by type, shape, and counts of supplemental satellite features. Like other scholars, I too found that the patterning and construction of khirigsuurs probably reflected local and communal organizations. I contend that these organizational structures would begin to break down in the Early Iron Age. Consequently, the assessment of two 8th century BCE Early Iron Age slab burials (SG-1 and -2) exemplified how symbols, mental templates, and tangible objects can be usurped to challenge or reinforce previous cosmologies and ideologies by influencing the malleability of memory. However, the efficacy of usurpation here is dependent on surface treatments of the graves. To be specific, the inclusion of a purloined deer stone into the architecture of the slab burial signifies an attempt to either align with or appropriate the ideological potency and significance of the deer stone-khirigsuur complex. Further, the presence of well-made decorated pottery and over forty sacrificial animal crania would initially suggest that economic pursuits were capable of producing extensive surplus, and that vocational competencies were continuous and unremitting. However, in previous chapters I proved this was probably not the case. Thus, the conservative culling pattern—one that showed herding strategies were aimed mainly at milk production as opposed to a more robust strategy focusing on multiple products and surplus—is seemingly contradictory and unexpected when compared to the

extraordinary aesthetics of the grave. In short, while the characteristics of the two slab burials may indicate the deceased individual was part of an emerging elite, subsurface analyses demonstrate that the development of hierarchical relationships was not altogether straightforward.

I should again note that each aspect of the occupational landscape are part and parcel, with reverberations from one influencing the others. For example, mobility and ecological experimentation rearranged landscape-use and associated rhythmic patterns of migration, ultimately affecting the way potter's prepared and produced their wares. Likewise, mobility and economic experimentation in the Early and Mid-Iron Ages may have strained the more local structures of political organization of the Late Bronze Age, allowing for the usurpation of ideological messaging and an attempt to reshuffle the once-localized guidelines into more regionally homogenous regulations that would permit the rise of hierarchies in the Iron and Late Iron Ages. At this stage, I also must caution that it is admittedly difficult to correlate the archaeological materials presented in this study with definitive or specific implications. Data do not allow us to apprehend the creation of multi-faceted economic strategies and (seasonal) migratory patterns, the presence and actions of other subject positions and vocations outside of potters, or the plethora of methods of political tact in the creation of ranked (vertically or horizontally) structures. Nevertheless, the general patterning I have discussed does allow for informed hypotheses, which may only apply particularly to Bayankhongor, but could be applicable elsewhere in Mongolia.

Late Bronze Age society in Mongolia—or at least in Bayankhongor—was likely ordered on local or supra-local scales of governance. These local scales, I suggest, may have been arranged on lines of appanage-like land-tenure systems that map onto an aristocratic-commoner

dichotomy. This, I argue, is evident through the patterning of habitation sites, pottery techniques and sources of raw clays, as well as the spatial and architectural characteristics of khirigsuur monument construction. The clustered values of Nearest Neighbor ratios for the Late Bronze Age could certainly imply that budding pasture politics were mainly negotiated proximally as populations were not using the landscape at vast extents. Further, ceramic analyses confirm that pottery was produced by numerous local—or household—craftsmen. The abnormality and large ranges of the standard deviations for vessel thickness imply a lack of standardization and skill, just as the variations of interior/exterior vessel color may be indexical of heterogenous firing conditions and only a moderate degree artisanal expertise. The position and dispersal of khirigsuurs also indicates localized understandings of the landscape, where square and circular-fenced khirigsuurs pattern together and at specific places to flag group-presence and to demarcate and assign territorial pasturage. What is more, the addition of a few select khirigsuurs with exceptional numbers of additional satellite features in each Locus implies these spaces were used to solidify community identity through recurring ritual. While it is currently unclear how population demographics parse onto khirigsuur type and size, their overall patterning does suggest an intimate understanding of how and where to build them, a knowledge that was likely regulated by groups or individuals in authority like religious leaders or members of an aristocratic class.

At the turn of the first millennium, however, I argue that the localized patterns of authority began to dissolve. The increased use of the horse in the Early Iron Age may have encouraged prehistoric pastoral nomads to test the landscape and their subsistence strategies in different combinations and configurations, which I posit, would have opened the possibility for topological reworkings of the localized aristocratic-commoner dichotomy typical of the Late

Bronze Age. Ecological experimentation and wider migratory patterns likely eroded those de jure power structures of localized communities, allowing for various individuals, groups, and title-associations to vie for legitimate authority based on de facto circumstances. Thus, systems of governance likely waxed and waned between more local and wider regional organization as the strategies and decisions of prehistoric actors pushed the limits of sustainability and communal cohesion.

Within these oscillations, appanage-like systems and pasture-tenure guidelines were likely challenged by agentive actors sporadically and intermittently with heterarchical negotiations that continued from the Early Iron to the beginning of the Late Iron Ages (ca. 800-300 BCE). However, the political space unlocked by economic experimentation and scalar political oscillations provided the opportunity for those same actors to fabricate hierarchical relationships. This I argue, can be seen in the analyses of Slab Grave-1 and -2, where the aesthetics of grave form and funerary goods suggest an elite status of the interred, but the culling profile indicates that economic surplus was not presently attainable. I would also add that these unsteady scalar oscillations of political authority likely influenced the position of slab burial construction (as intrusive to khirigsuur spaces, or as segregated groups of slab burials) to reflect the shifting influences on pasture tenureship and the effort to produce clear hierarchical ranks. Therefore, within the heterarchical uncertainty of the Early and Middle Iron Ages, hierarchical process were also occurring simultaneously, with both structural endeavors being catalyzed by agentive strategies and decision-making. These are social processes, not static systems guided by chiefs and segmentary lineages, extra-somatic forces, or the assumed intensification of hierarchies based on linear or evolutionary trajectories.

The shift from the Middle to the Late Iron Age is also significant. After the peak of habitation extent and ecological experimentation in the middle of the first millennium BCE, patterns of settlement in the Late Iron Age return to a constricted pattern—a clustering statistically greater than even the Nearest Neighbor ratios of the Late Bronze Age. It would seem, then, that agro-pastoralist pursuits were becoming more customary and comfortable with populations having a better understanding of thresholds and combinations of economic strategies. Additionally, there were distinct changes to pottery production starting in the Mid-Iron Age and continuing into the Late Iron Age—namely an increase standardized vessel thickness, refined firing techniques, and the expansion of sources for raw clay procurement. Together these data suggest a recodification of local structures of governance, pasture politics, and increased specialization of craft producers which permeated inter-regionally foreshadowing the rise of the Xiongnu polity.

In conclusion, I attempted to show that the transition from the Late Bronze to the Iron Age in Bayankhongor, Mongolia may have been a period of uncertainty and should not be defined as an unadulterated linear increase in social complexity. Instead the shift was intermittent and episodic, evident by the relative and absolute chronological details gleaned from the analyses of habitation dispersal, craft production, and funerary performance. Therefore, in the reworking of epistemological frameworks that archeologists use —moving away from the elements of the diachronic portmanteau and assumptions of linear political economic growth—to the broad and holistic occupational landscape presented here, I have questioned the way archaeological contexts are viewed and dealt with. In contrast to the assumptions found tucked into linear concepts like neoevolution, Late Bronze and Iron Age populations of Mongolia lived within a complicated polyrhythmic society (Lefebvre 2004) where overlapping structures and cultural

institutions shift and strain independently causing topological mutations to social life—processes rarely advancing in synchronous tandem. Acknowledging temporality in this way essentially provides a different focus. Initially on grand narratives and the replacement or advancement of cultures often evidenced by the waxing and waning of burial forms (or other materials, for that matter) in linear successions of complexity, the sensitivity to scale and the tripartite refracting concept of "work" and "labor" within occupational landscapes can emphasize interruptions or instability as important actions in the social sphere while also recognizing cultural continuity. James McGlade expands on this concept:

> Instability [is] far from being an aberration within a 'stable' system […] Such discontinuities are in fact thresholds of change where the role of human agency and/or idiosyncratic behaviors assume paramount significance in the production and reproduction of societal structures […] History is, in the final analysis, a plurality of times, both continuous and discontinuous, the product of contingent and deterministic forces. (1999: 152, 159)

Accepting that instability has the potential to act as a counterpoint to the grand narratives of evolution and the continuities of the *longue durée* (Harris 2004: 162; Braudel 1958), archaeologists can operationalize a more complete look at the dynamics of human life as a mixture of intermittent untidiness and disorder (Bender 2001) within overarching homeostasis.

Herein lies one of the major future challenges for the archaeology of Mongolia and the discipline in general: guarding for the resurfacing of the vestiges of evolution while being cognizant about how our discourses surrounding ancient communities are formed. Based on the success of this study, I ultimately suggest that future research agendas should continue to focus on the recovery of everyday material culture and social processes, using extraordinary funerary rites and grave goods as corroborative, not determinative elements, in the composition of chronologies and descriptions of prehistoric pastoral nomads. In this way, occupational landscapes can aid in a realignment of our epistemological and temporal conceptualizations of

the deep past, encouraging non-essentialized, holistic, and people-centered views of the ofttimes unwieldy human condition.

APPENDICES

APPENDIX A: NBP-027 HEARTH EXCAVATION

The hearth at NBP-027 (0640008E, 5077026N) was located during a series of shovel tests on a well-drained terrace along the Tuin Gol. The area consisted of dense scatters of lithics and ceramic, and also included multiple modern ger platforms. The hearth was found at the northern-most segment of the electromagnetic anomaly (25mN, 15mE in Figures A.1 and A.2.).

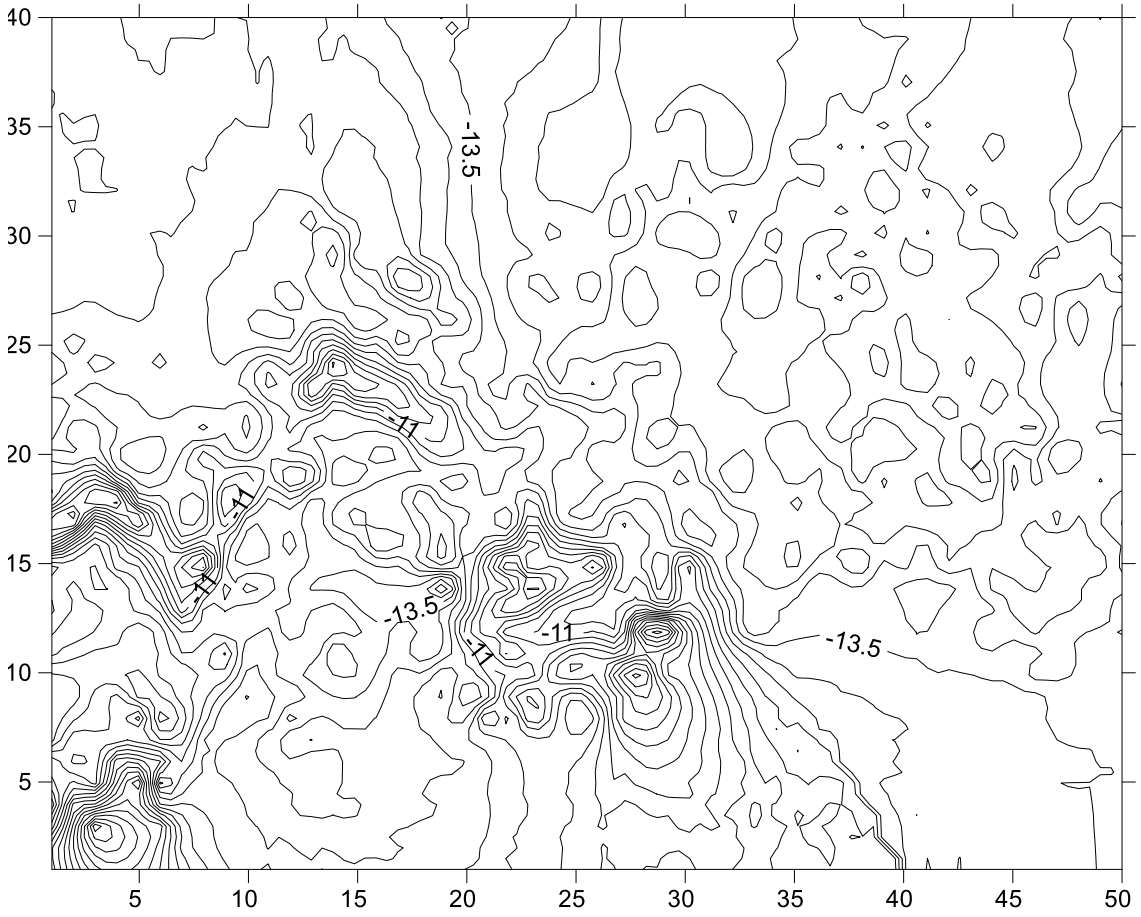


Figure A.1. A "topographic" output of anomalous electromagentic readings from the EM-38.

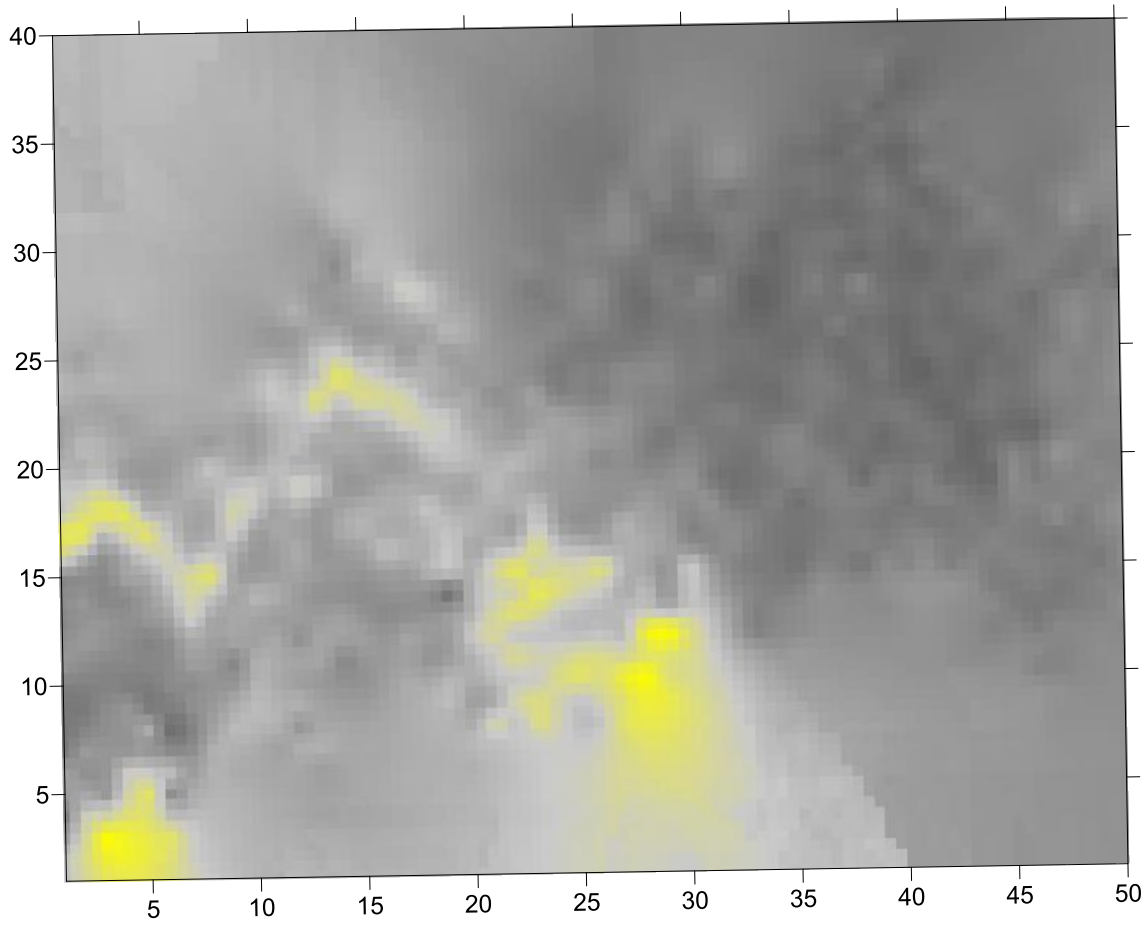


Figure A.2. A “heat-map” output of anomalous electromagentic readings at NBP-027.

User Information	*Laboratory Information*
Submitter: Lowry, K.B. User ID: Lowry charcoal Expected age: Unknown Sample origin: Byanhkhongor, Mongolia	AA-number: AA108574 Laboratory number: X30803 Sample type: charcoal Pretreatment: ABA Carbon yield: 69% Carbon mass: 1.57 mg

Results	
$\delta^{13}C$ (± 0.1‰):	-23.3 ‰
Fraction of modern carbon:	0.8825 +- 0.0028
Uncalibrated ^{14}C Age:	1,004 +- 25 years BP
Calibration Program / Dataset:	OxCal 4.2 / IntCal13 atmospheric
Calendar Age Range (68%):	995 calCE to 1034 calCE
Calendar Age Range (95%):	986 calCE to 1148 calCE

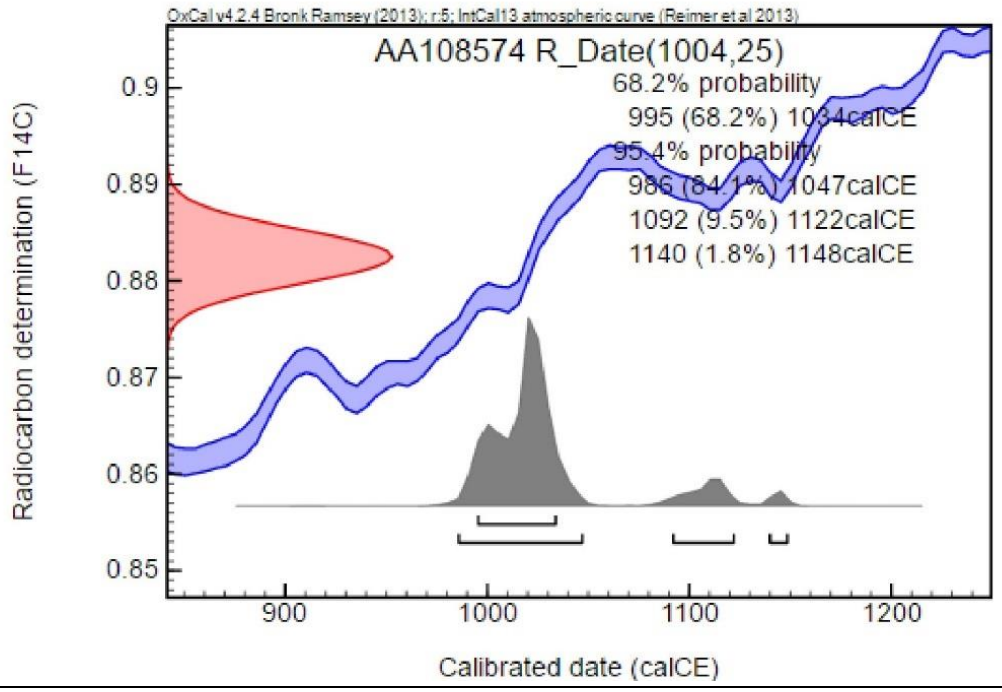


Figure A.3. Carbon-dating results for the excavated hearth at NBP-027.



Figure A.4. Hearth at NBP-027 after surface cleaning and removal of Level 1. Note the dark stain at the right of the unit.



Figure A.5. Hearth and adjacent units at NBP-027. A possible post-hole was present in the 1 x 1 unit in the background.



Figure A.6. Excavation of hearth at NBP-027, mid-Level 2. We had to stop excavation here due to the end of the field season.

APPENDIX B: BURIAL EXCAVATION, SALVAGE, AND OSTEOLOGICAL REPORTS

NBP-015, Slab Grave-1

GPS: 0629895E, 5140782N



Figure B.1. Photo of cleared surface of Slab Grave-1. Note the large deer stone in the middle of the rectangular stone box. Photos stitched and compiled by Jerry Tuvshinjargal.

This burial contained unidentifiable human long-bones and a single horse scapula. Ceramic was also recovered and is represented in figures and discussion within Chapter 6.

NBP-015, Slab Grave 2

GPS: 0629895E, 5140795N



Figure B.2. Photo of grave shaft and human osteological remains. Photo by J. Bayarsaikhan.



Figure B.3. Human osteological remains from Slab Grave-2.

Osteological Report by Dr. Jeremy Beach (IUPUI)

Level 70-75

One cervical vertebra. Likely 4 or 5. No pathologies noted. And a single humerus, proximal left. Including the epiphysis and shaft, trochanters, and head. Nothing remarkable to note. The shaft from the second layer likely articulates. The scattered recovery points to looting and heavy disturbance.

Level 110-120

Minimum of 7 fragments. 2 representing long bones, upper extremities. One is a humerus shaft, and the other is likely a distal shaft portion of an ulna (because of the narrow aspect of the medullary cavity and overall shape). 5 fragments representing the left os coxa. 2 are part of the ilium (iliac crest) and articulate with each other. 1 part is the pubis bone, likely superior ramus. However, from the pubis, the sex is not determinable. Two bones are of the iliac crest, and two bones are the ilium, and the other is either ilium or ischium but it is hard to tell because there is not more of the acetabulum. Both parts of the acetabulum articulate. The acetabulum is slightly lipped and large (lipping suggests habitual use of some kind, i.e. squatting), irregularly shaped in proximal-distal aspect, but hard to judge without the rest. As far as sex goes, we have the greater

sciatic notch, and it appears slightly (1-5) male (4). Other than that, no other indications of sex, trauma, or irregularities.

Level 120- 250

Lower Body: Missing the left femur. Right femur broken post mortem at mid-shaft. Slight arthritic lipping on patellar surface. Judging by the size of the femoral head, it is likely a male. Both patellae are present. Both tibiae and fibulae are present. Left foot all the tarsals are present except for the medial cuneiform. Only metatarsal on left side is number two. Moving to the right foot, all tarsals are present. All the metatarsals are present as well. The right tibia has some damage to the tibial plateau, constituting three fragments.

Upper Body: Two cervical vertebrae are present, five thoracic, and *six* lumbar (sometimes found in Mongolian populations) as well. The lumbar show slight lipping, indicative of arthritis. A minimum of four ribs on the left side, and a minimum of seven on the right side. Left clavicle is present, with distinct muscle marks/attachment structures. One complete radius on the left-hand side. Nearly complete radius and ulna on the right-hand side, both of which have excavation fractures on the distal ends. Left hand is missing two carpals—the triquetral and trapezium. On the right hand, we are missing the capitate and scaphoid. On the left, we are missing the first metacarpal, and on the right, we are missing the first and fifth metacarpals, but the intermediate cuneiform is present. Right pubis is present, and is very worn suggesting old age. Left ischium is present. Again, the sciatic notch appears male (grade of 4).

Level 252-270:

Right clavicle with large muscle attachments. Proximal portion of the left humerus, but missing the head. One cervical vertebra (axis, C-2), two thoracic vertebra, and one sternal rib end. A portion of the right ischium, which includes part of the acetabulum. The left femoral head is also present.

Teeth: Lower left canine, with half the crown missing and significant dentin exposure and adherent calculus. Also present is a lower left third molar (M3). It has significant wear and most of the cusps are completely worn except for the mesial-lingual cusp. Some adherent calculus, and has an extra root on the buccal side (which sometimes occurs with northern Asian groups). There was also a mandibular P4, left.

The manubrium and the proximal portion of the left ulna were also present in this level. Broken right talus.

Overall Determination: Sex is male. Age is likely between 40-60. The scattered depths of the skeletal remains suggest a good deal of time between time of burial and looting due to the fact that the muscle tissue would have to have decomposed in order for the bones to be strewn about as they were. The skull and all of its elements are completely missing.

Table B.1. Ages of faunal specimens from Slab Grave-2. Horse sexing and aging determined by Dr. William Taylor

Species	Age in Years	Sex
Horse	1-2	NA
Horse	1-2	M
Horse	11-20	F
Horse	2-2.5	JU
Horse	0.5-0.75	JU
Horse	Unknown	NA
Horse	Unknown	NA
Horse	4-7	
Ovis/Capra	1-2	
Ovis	0.5-1.5	
Ovis	4-6	
Ovis/Capra	0.25-0.75	
Ovis	0.25-0.75	
Capra	6-8	
Ovis	0.25-0.75	
Ovis	0.75-1	
Ovis/Capra	0.25-0.75	
Ovis/Capra	0.25-0.75	
Ovis	1.5-2	
Ovis	3-4	
Ovis	4-6	
Ovis	0.25-0.75	
Ovis	4-6	
Ovis	6-8	
Ovis	8-10	
Ovis/Capra	0.25-0.75	
Ovis/Capra	0.25-0.75	
Capra	0.25-0.75	
Ovis	0.25-0.75	
Ovis	0.25-1	
Ovis	4-6	
Capra	0.25-1	
Ovis	3-4	
Ovis	1-2	
Ovis	0.25-1	
Capra	4-6	

Table B.1 (continued). Ages of faunal specimens from Slab Grave-2. Horse sexing and aging determined by Dr. William Taylor

Species	Age in Years	Sex
Ovis/Capra	0.25-0.75	
Ovis/Capra	0.5-1	
Capra	8-10	
Ovis/Capra	0.25-1	
Ovis/Capra	Unknown	
Capra	6-8	



Figure B.4. Horse from Slab Grave-2 showing signs of blunt-force trauma likely made during the sacrificial process. Photo by W. Taylor.

Horse Mound Excavations at NBP-015

by Dr. William Taylor (University of Colorado)

Archaeological investigations at Bor Shorootiin Am (BSA, NBP-015) by the 2015 Mongolian-American Northern Bayankhongor Project excavated three individual horse crania from late Bronze Age ritual structures.

Excavations at BSA ritual structures had two primary goals:

1. Identify bone or tooth material suitable for radiocarbon dating, in order to estimate the calendar age of deer stones and khirigsuurs at BSA
2. Evaluate whether adult male transport horses were preferentially buried near the East and Southeast side of deer stone and khirigsuur monuments

Excavation methods:

The site was surveyed and mapped using Global Positioning System (GPS). For each of the three horse mounds, we laid a 2.5-3.5 meter grid across the mound surface, with the longitudinal axis aligned precisely to magnetic North. After cleaning the surface grass and photographing each mound, we mapped and documented the precise position of each rock in the mound. Each feature was then carefully excavated until horse remains were identified, after which we stabilized and cleaned the bone, mapped each skull *in situ*, recorded the orientation of the skull, and photographed and mapped each a final time. All dirt removed was screened with 1/16" mesh. After excavation, all features were backfilled to their original state.

Excavation results:

Horse Mound 1

This feature is located in a ring of horse mounds to the east of Slab Graves 1 and 2. No deer stones are currently present, but this area may have originally contained one of the three new deer stones documented at BSA. HM1 is the centermost of a ring of eight mounds, located on the SE side. The mound is approximately 130 cm (N-S) and 110cm (E-W) in diameter. At a depth of 39 cm, we discovered the skull of an adult male horse, along with all teeth, four hoof bones and an articulated vertebral column. The skull was 53 cm long, and oriented 110 degrees SE.



Figure B.5. Horse mound 1 before excavation.



Figure B.6. Horse Mound 1, horse skull.



Figure B.7. Horse Mound 1, after backfill.

Horse Mound 2

This feature is located along the west side of the large khirigsuur at BSA. The mound measures 165 cm (N-S) by 160 cm (E-W). At a depth of 25 cm, we discovered the skull of a very young horse (foal) only 23 cm in length, oriented approximately 120 degrees SE. Although the skull was poorly preserved, most of its teeth remained intact.



Figure B.8. Horse Mound 2 before excavation, after cleaning.



Figure B.9. Horse Mound 2, skull of young horse (foal)

Horse Mound 3

This feature is located immediately to the S of Horse Mound 3, also along the west side of the large khirigsuur at BSA. Together, the two mounds form a pair. This mound is 155 cm (N-S) by 165 cm (E-W), although the interior has few rocks and appears to have been disturbed. No intact horse remains were found, but we discovered two individual horse teeth at a depth of 30 cm. The teeth also belong to a foal or baby horse, and were found underneath a round ceramic artifact of unknown function. Because this ceramic appears to be Bronze Age in origin, it was likely part of the original burial.



Figure B.10. Horse Mound 3, before excavation after cleaning.



Figure B.11. Round ceramic artifact, Horse Mound 3



Figure B.12. Horse Mound 3, showing tooth of young horse.

Summary:

Three horse mounds excavated through this project produced tooth or bone remains which will provide us with a precise chronological estimate for deer stone and khirigsuur construction at Bor Shoroonii Am. All structures were backfilled and restored to their original state. Results support the idea that male horses were buried along the ritually significant East and Southeast side of monuments. Most interestingly, this project also raises the new possibility that very young foals were sacrificed and buried in specific locations such as the western edge of khirigsuurs.

NBP-020, Robbed/Exposed Slab Burial

GPS: 0636355E, 5129049N



Figure B.13. Overview of the robbed slab burial, looking north (left) and a detail of osteological remains that were on the ground surface (right).

Osteological report by Dr. Jeremy Beach (IUPUI).

Cranial Remains:

There are a total of eight fragments representing the cranial remains found at NBP-020, Feature #5.

Occipital: The only portion of the occipital bone that is represented is the squamousal region, including most of the lambdoidal suture. The cruciform eminence is present on the internal surface. The external occipital protuberance is quite robust, thus suggesting the remains represent a male individual.

Temporals: Portions of both the left and right temporal bones are present. The left temporal is only represented by the petrious pyramid. It is sun bleached, suggesting prolonged exposure to the elements. The right temporal is nearly intact, with the expectation of the missing petrious pyramid. There is also a portion of the right greater wing of the sphenoid articulated with the right temporal bone. The size of the mastoid process is large, suggesting a possible male individual.

Parietal: There is only a very small portion of the left parietal bone that includes a part of the lambdoidal suture. This bone articulates with occipital bone that is present.

Midfacial: Two fragments represent the midfacial region. First, is the right zygomatic bone that is fully articulated with the zygomatic process of the right maxilla. This articulated fragment appears to have been partially buried since the zygomatic bone remains soil stained, while the zygomatic process of the right maxilla is sun bleached. The second fragment is much larger and contains several bones: the alveolar region of the right maxilla, the entire left maxilla, the maxillary process of the left zygomatic, and several small portions of the sphenoid. When taken as a whole, this fragment has portions of the left infra-orbital border and about 2/3 of the nasal aperture. Several teeth appear to have been lost antemortem, due to the various stages of alveolar crypt resorption that is present on the remains. Teeth that were lost antemortem include: LM^2, LM^3, RI^1, RI^2, RP^3, RM^1, RM^2, and RM^3.

Mandible: About 2/3 of the mandible is present for analysis. The portions that are absent include a portion of the left body and ascending ramus. The large, robust mental eminence suggests that the remains shows no signs of resorption): RP_3. Several teeth have been lost antemortem, since the alveolar crypts are completely resorbed: RP_4, RM_1, RM_2, RM_3, LP_4, LM_1.

Shoulder Girdle:

Clavicle: A fragmented, single right clavicle is present for analysis. Only the lateral half of the clavicle is present. The conoid tubercle is quite robust. As with other remains the clavicle appears to have been partially buried, since the inferior aspect of the bone is sun bleached and the superior aspect displays signs of soil staining.

Scapulae: There are a total of three scapulae fragments. Unlike all other elements available for analysis, examination of the scapulae remains suggests a MNI of two individuals. The rationale behind this hypothesis is rooted in the fact that there are two left glenoid fossae for analysis. One fragment includes the following features: a portion of the medial border and an intact acromion and coracoid process. The second fragment simply includes a portion of the lateral border. The final fragment (without a glenoid fossa) includes a portion of the lateral border, almost extending into the inferior angle.

Hands:

Only a single hand (left) is present for analysis and is represented by two bones: the fourth metacarpal and scaphoid. Both bones appear to have been exposed to the elements for prolonged periods of time, since both bones are sun bleached.

Leg:

Only a single leg is present and is represented by a partial fragment of the head of the femur. No diagnostic features are present on the head; therefore stature, sex, and siding are not possible.

Foot:

A single fragment of the proximal right fourth metatarsal is present for analysis. This bone is sun bleached and appears to have been exposed to the elements.

Torso:

Ribs: A total of seven rib fragments are present for analysis (five left and two right). Of the five left fragments two include the vertebral articulations and three are midshaft fragments. Both of the right rib fragments include the vertebral articulations. Only two of the rib fragments (one left, one right, and both with vertebral articulations).

Vertebra: Only one vertebra is present for analysis. This single fragment is constituted by half of a thoracic vertebral body

Dentition:

A total of nine teeth are present for analysis (three maxillary and six mandibular) including: LM^1, LP^4, LP^3, LP_3, LC_1, LI_2, RI_1, RI_2, RC_1. Several alveolar crypts remain unresorbed, thus indicating that the following teeth were lost postmortem: LC^1, LI^2, LI^1, RC^I, and RP_3. The maxillary teeth appear to show little macrowear. However, it should be mentioned that there is extensive coronal damage to the LP^3 and LM^1 (most likely taphonomic). Conversely, it should be mentioned that there is extensive macrowear on all of the mandibular teeth. The wear on these teeth (extreme labial beveling) suggest that there may have been a malocclusion between the mandibular and maxillary teeth, since the observable wear patterns run contrary to what should be expected. Finally, the LI_1 is not present for observation. However, there is no observable crypt that is present for analysis. This suggests one of several possibilities: 1) agenesis of the LI_1 or; 2) LI_1 never erupted and is therefore embedded in the alveolar bone.

Summary:

In summary, there appear to be at least two individuals interred within the slab grave (Feature #5) at NBP-020, as evidenced by the two right scapulae fragments including glenoid fossae. Several of the fragmentary remains have osteological features that suggest the sex and to a lesser extent age of the individual.

NBP-013, Shape Burial

GPS: 0643496E, 5088819N

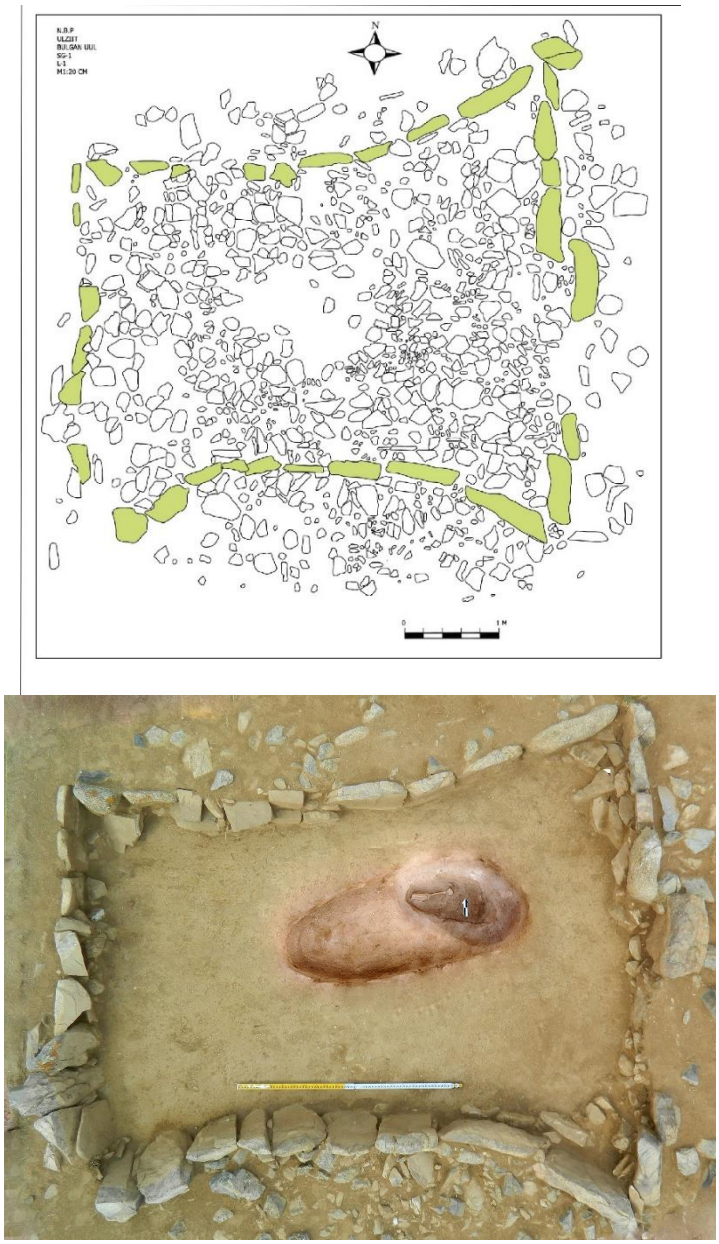


Figure B.14. Planview of the shape burial during cleaning (top) and the grave completed (bottom). Photos and drawings by Jerry Tuvshinjargal.

User Information	*Laboratory Information*
Submitter: Taylor, W. User ID: NMM 078 Expected age: ~1300 BC Sample origin: Bayankhungor, Ulziit, Bulgan Uul (Mongolia)	AA-number: AA108307 Laboratory number: X30616 Sample type: Horse tooth Pretreatment: ABA Collagen yield: 3.8% Carbon yield: 31% Carbon mass: 1.01 mg

Results	
$\delta^{13}C$ (± 0.1‰):	-20.2 ‰
Fraction of modern carbon:	0.7342 +- 0.0025
Uncalibrated ^{14}C Age:	2,482 +- 27 years BP
Calibration Program / Dataset:	OxCal 4.2 / IntCal13
Calendar Age Range (68%):	756 calBCE to 543 calBCE
Calendar Age Range (95%):	773 calBCE to 492 calBCE

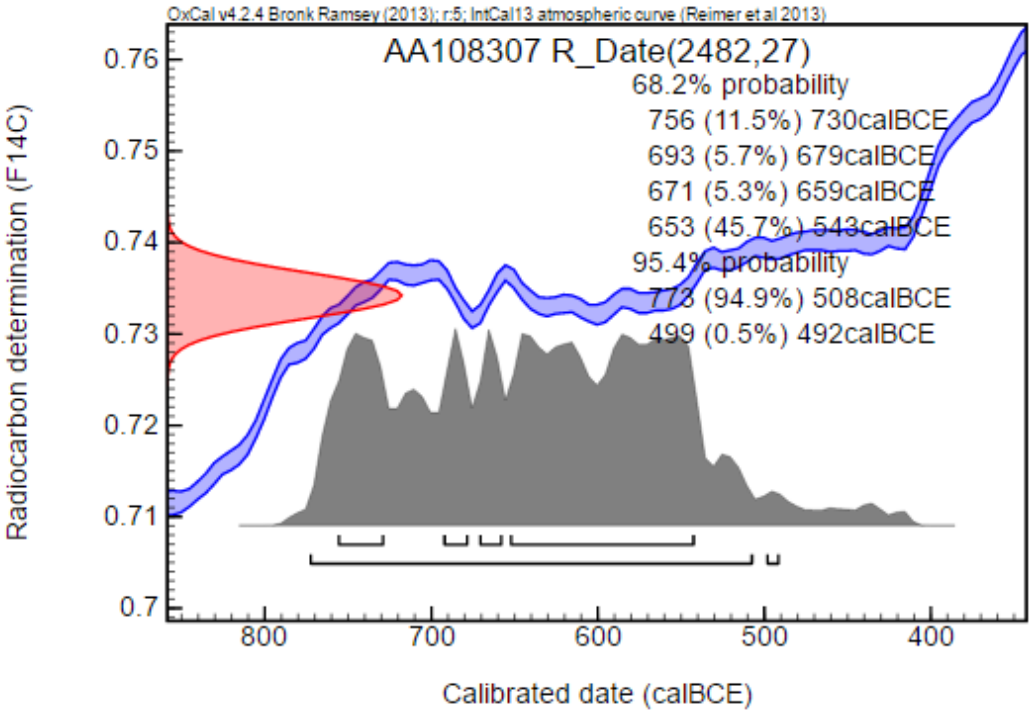


Figure B.15. Carbon-dating results for the shape burial at NBP-013.

Osteological report by K. Bryce Lowry

This burial contained a juvenile, of unknown sex. At the upper portion of the body, the right humerus shaft is present but badly broken, while the left is intact except for the unfused proximal portion which is missing. The humerus epiphyses are argued fuse at approximately 20 years of age (Bass 1971). The posterior portion of the atlas is also present.

The right first rib is present along with three other rib fragments of unknown side.

Radius elements for both sides are present. The left element includes the proximal and distal portions demonstrating the lack of epiphyseal fusion. These part fuse at approximately age 15, thus the individual is likely pre-pubescent.

The left innominate is badly broken, but the superior ramus and inferior ramus are present in pieces. The posterior-superior portion of the ilium/iliac rest were preserved, with part of the body. On the right, the ilium is completely intact, showing one part of the tripartite ossification center—as does the pubic symphysis/inferior ramus, and ischium. According to Bass' field manual, the ilium/ischium/pubis fuse as early as 7-8 years old, but can take as long as 17 years of age to completely fuse.

The right femur is intact, with the head unfused but recovered. The left femur is complete except for the distal end. On both specimens the lesser trochanter appears to have begun fusing, but is only a little eminence—and according to Bass, it grows with age. The lesser trochanter begins to fuse at less than 11 years of age, while the head fuses at ages less than 15 years.

Both tibias are present with proximal and distal ends unfused. These elements fuse at 18-20 years, well beyond the estimated age range of this individual.

A left calcaneus was recovered, as well as talus elements from both sides.

Overall Determination:

The interred was a young child, most likely pre-pubescent. According to the skeletal markers used to determine age that were still present, it is suggested that the individual was between 10 and 12 years of age.



Figure B.16. Human skeletal materials from shape burial at NBP-013.

NBP-027 Circular Slab Grave 1

GPS: 0640275N, 5079340E



Figure B.17. Overview photo of circular slab burial excavation at NBP-027. Photo by J. Bayarsaikhan and J. Tuvshinjargal.

Osteological Report by K. Bryce Lowry

Cranium: The left temporal and zygomatic are badly damaged or missing, and the region of thee left supraorbital foramen has recent trowel marks in it. The alveolar region is mostly intact yet the nasal cavity and frontal process of the zygomatic is badly damaged. Nasal conchae also damaged.

Part of the right posterior temporal bone is missing causing a cavity in the skull, thus appearing to be lost/broken during excavation or transport. However, the right zygomatic and its alveolar/frontal and temporal processes are intact.

Brow ridges are distinct (grade of 4). All cranial sutures appear to be obliterated. There is one possible pathology however, a small 3 x 2 cm depression at the back of the head, on the right parietal, just laterally from the sagittal foramina.

Teeth remaining in the alveolar region are both incisors, both canines, and both Pm1. The rest were found while screening or fell-out after excavation. Two upper molars with three roots, and one with four. All are very worn.

Mandible: The left temporomandibular condyle and the coronoid process are both missing. However, the rest of the mandible is intact. The mandibular eminence is prominent (again a 4), strongly suggesting the specimen is male. Only three teeth remain in the mandible—the left incisor, left canine, and left M3. The M3 is extremely worn.

Postcranial: Both the atlas and axis are present, including three more cervical vertebrae. Continuing down the spine, there are three thoracic vertebrae. The right clavicle is present along with at least two right rib fragments. On the left three rib fragments are preserved. In regards to the lateral appendages, a partial left scapula, the entire left humerus, and left radius are present—but the radius is missing the proximal end.

The left ischium is missing, however, the entire ilium and iliac crest is present along with the greater sciatic notch (grade of 3), which is neither narrow nor wide. The auricular surface is quite worn. On the left the entire innominate is intact, with a small portion of the ischium and superior ramus deteriorated. The ribbing of the pubic symphysis is difficult to determine, but it does look worn suggesting old age. The acetabulum of the left innominate is quite large with an exaggerated lunate surface.

Both of the proximal portions of the femur are present, but the femoral heads were not recovered. The left femur, however, does extend to just superior to the condyles. One portion of the left tibia (proximal) is also present. Portions of the patella (side unknown) were recovered along with a generous portion of long bone fragments.

Overall Determination: The interred is likely male and 50-65 years of age. The possible trauma/irregularity at the back of the head should be investigated further.



Figure B.18. Human skeletal material from circular slab grave at NBP-027.

NBP-027 Circular Slab Grave 2

GPS: 0640281E, 5079319N



Figure B.19. Overview photo of circular slab grave-2 at NBP-027. Photo by Z. Batsaikhan and J. Tuvshinjargal.



Figure B.20. Photo of final excavation levels. The burial was empty except for a few pieces of pottery. Photo by J. Tuvshinjargal.



Figure B.21. Two body sherds recovered from the otherwise empty circular slab grave excavated at NBP-027.



Figure B.22. Foot of ceramic vessel showing exterior and cross-section.



Figure B.23. Profile view of rim from circular slab burial 2. Characteristics of the rim include: T-rim, slightly beveled, has raised collar/additive element and punctate decoration on neck. Likely a bowl.

NBP-027, Circle Burial, Double Grave

GPS: 0639686E, 5076849N

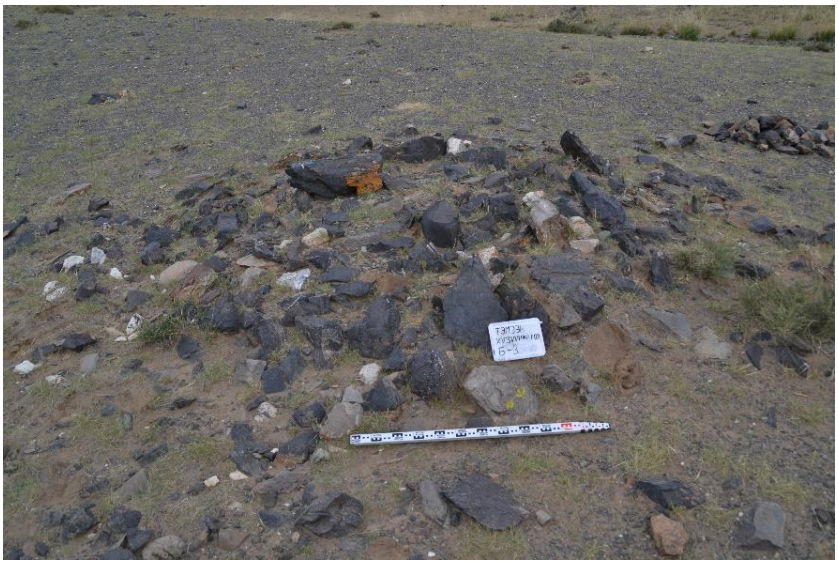


Figure B.24. Photo of burial prior to excavation.



Figure B.25. Burial chamber and skeletal remains.

Left Individual, Male



Figure B.26. Skeletal remains of individual on left.

Osteological Report by K. Bryce Lowry

Cranium: The cranium is very fractured due to the weight of soil and stones, but most of it remains. Most of the zygomatic and anterior facial features are crushed into the parietals and occipital (with the zygomatic from each side being disarticulated), there is however, a large mastoid process (4) that could suggest a male individual. Part of the frontal cavity has also broken away.

The sagittal and occipital sutures are not quite closed, pointing to young-to-middle age individual—maybe 35-50 years of age. Brow ridges are not very prominent, and would be scored a 3. The mandible is broken at posteriorly before the coronoid process and temporomandibular

articulations, but both of these portions were recovered during excavation. The mandibular eminence like the brow ridges are not prominent despite a fairly robust mandible overall (3), but the mandibular spines are very distinct (and this is another marker of sex, possibly male). The teeth present in the mandible are the two front incisors, canines, and a single premolar on each side. All are extremely worn. The left portion of the mandible, however, does show that two teeth were lost during excavation, while the right side appears to demonstrate that molars were lost and healed during the life of the individual. Three teeth were bagged separately. I believe these are upper alveolar teeth and include an incisor, canine and a premolar.

Post-cranial: Both left and right clavicles are present. However, on the right, the lateral portion is missing. Left and right scapulae were recovered, but the bodies are badly damaged, leaving only the coracoid and olecranon processes. Nearly five whole thoracic vertebrae were recovered, while 6 lumbar are present. eleven rib fragments from the left and fourteen ribs from the right are extant—including the first rib.

Both humeri were found, with the left being nearly intact. The right is broken mid-shaft. On both sides of the body the ulna and radius were found intact. Five bones from the left hand were recovered and include the scaphoid, capitate, hamate, and a single distal phalange. On the right hand, a 3rd and 5th metacarpal, the hamate and the triquetral were also found.

The anterior portion of the manubrium and the distal portion of the sternum are present.

No obvious pathologies were found in this segment of the body, except for some slight lipping on the vertebral bodies.

The left innominate is present with few breaks, except for the inferior iliac spine and a portion of the superior ramus. The greater sciatic notch is narrow, and the pubic symphysis appears quite worn. The left innominate only has a portion of the acetabulum, and superior iliac spine, and the superior ramus which is disarticulated, are left.

The left side of the sacrum is present, yet the other lateral edge is completely missing.

The left femur is completely intact and very robust, while the right femur is missing the proximal portion and most of the femoral head except for a few fragments. The distal end, on the medial epicondyle is also missing.

Both fibulas are present with the proximal ends maintaining their integrity, but the right's distal portion is missing. The tibias are both in good condition, except for the left tibial plateau and right medial malleolus. Fragments have been recovered, but they do not fit together. The right patella is also present.

Only the talus of both feet remained.

Overall: This is likely a 35-50 year-old male (due to sutures, greater sciatic notch, and brow ridges).

Right Individual, Female



Figure B.27. Skeletal remains of individual on the right.

Cranium: The skull of this specimen is very badly damaged, yet some indicators of age and sex remain. The sagittal and occipital sutures are not close to closing, instead the gaps between them suggest a young age. The frontal bone is nearly completely missing except for a few pieces of the frontal cavity, and the right pars orbitalis. The lateral-inferior portion of the sphenoid (the left

lateral pterygoid process) is also present along with the cavity at the midline. Both temporal bones are unsurprisingly intact as they are robust bones, including both petrous portions. The mastoid processes are not very prominent (2), suggesting a sex of female. The occipital bone is broken, yet the nuchal lines and the occipital protuberance further confirm a female as they would also be scored quite low (2-3). Also broken away from the main planus portion of the occipital is the squamous portion which includes the foramen magnum, and the occipital condyles of both sides. Six small fragments are also present.

The alveolar process is broken upon the inter-palatine suture. Many of the teeth were lost during excavation and through lack of screening. The only upper teeth present are the 1st and 2nd molars on both sides, and a possible upper left canine bagged separately. The posterior portion is broken, so the last molars are not present. The left frontal process is still attached to the alveolar.

The mandible is completely intact, except for the right mandibular epicondyle. All of the teeth are present, but the third molar has yet to fully erupt. This marker again, suggests a young age at death. The third molars also appear to have five cusps, a trait sometimes found in Asian populations. Overall, the teeth are hardly worn with cusps and grooves clearly visible.

Postcranial: The right scapula is present but the distal and proximal portions (including the coracoid and olecranon processes) are broken off. However, the spine is still attached, as is the glenoid fossa. On the opposite side, only the clavicle remains with the medial manubrial articulation being broken off. The extreme lateral portion which articulates with the olecranon process is slightly damaged, but this was likely due to normal taphanomic processes.

Moving further inferiorly past the shoulder girdle to the arms, the right humerus is present and complete at both the proximal and distal ends. However, the head of the humerus appears unfused (but recovered). This element usually fuses at approximately 17-21 years of age. The left humerus is also present but lacking the distal portion. The head was not recovered, but again the proximal portion shows a lack of complete fusion.

At the lower arms, only the shaft of the left radius is present, with a possible shaft segment of the right ulna also being recovered.

In total there are ten rib shaft fragments—five from the right and five from the left. Also included are two thoracic vertebrae.

Only one distal phalange was recovered.

Both patellae are present. On the left leg, half of the femur shaft is present, but he head is missing. The distal epicondyles, although disarticulated, were recovered. On the right, a small segment of the femur is present, likely the proximal portion of the shaft. In total there are 29 unidentifiable long bone fragments which likely compose the rest of the femur, tibia, and fibula.

Feet: The right navicular was recovered, as was the superior portion of the left calcaneus.

Overall Determination: Generally, this specimen is much more gracile than its interred counterpart. I suggest that the skeleton is a young female, approximately 20-35 years of age.

NBP-027, Square Khirigsuur

GPS: 0639645E, 5076821N

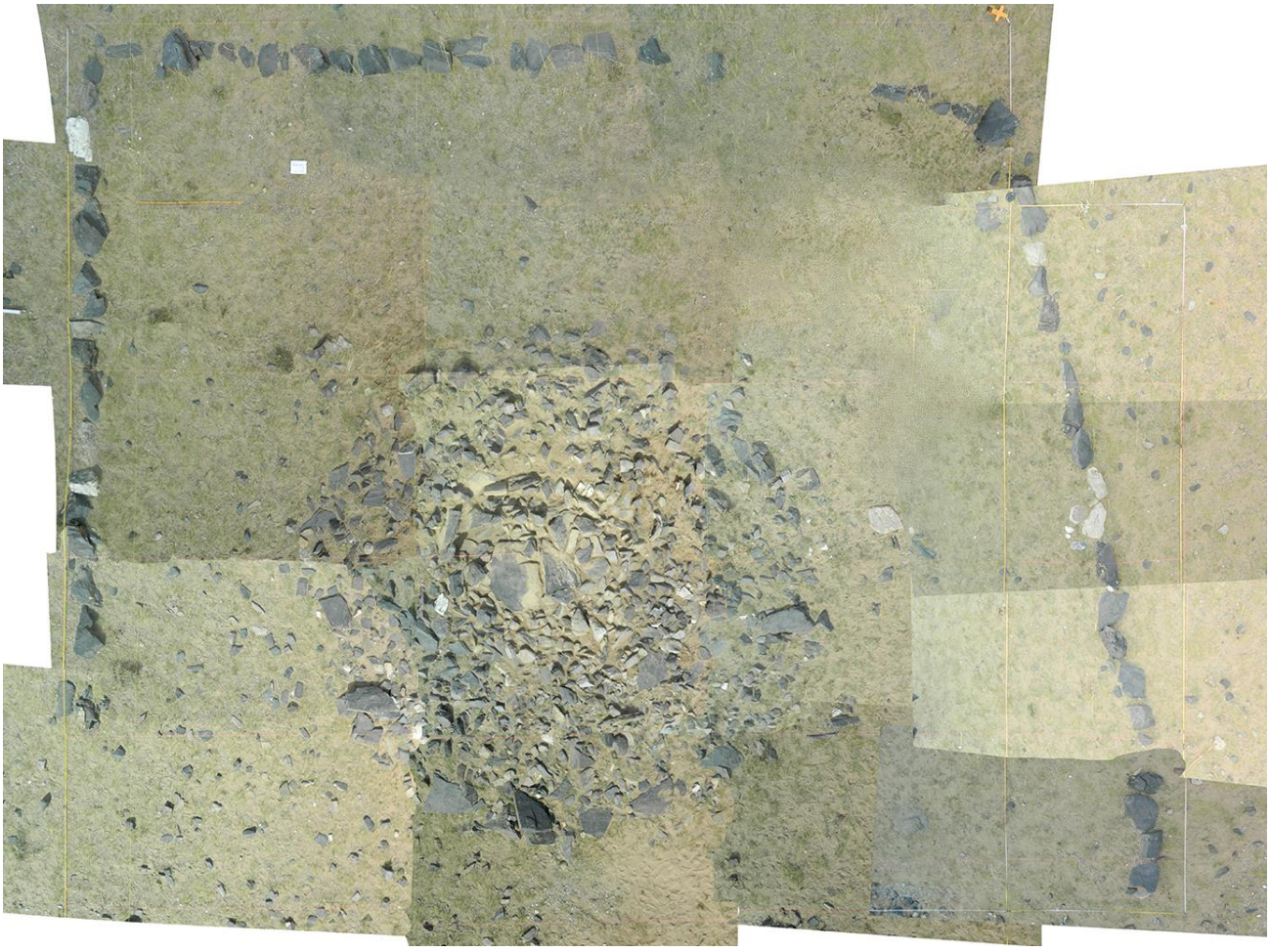


Figure B.28. Planview photo of khirigsuur prior to excavation. Photos taken and stitched by J. Tuvshinjargal.



Figure B.29. Excavated grave shaft and skeletal material from khirigsuur.

Osteological Report by K. Bryce Lowry

Upper Body: This upper portion of this individual was recovered in nearly complete composition. First, the skull is nearly intact, with only the right temporal process and the right inferior portion of the zygomatic being broken. The left temporal process also has a small piece missing. The sagittal, temporal, and occipital sutures are closing, but are far from obliterated, suggesting an age range of 30-35. The inferior portion of the skull is also in good condition with the right styloid process still remaining as well as the right pterygoid process of the sphenoid. The mastoid processes are not robust, but not quite gracile either (3), making this signature a difficult one to use for sexing the individual. Many teeth are not present within the alveolar region. That said, there are five teeth present on the right side: the incisor, canine, Pm1, M2, and

M3. The supraorbital ridges are not very prominent as they would be in a male, thus there is another signature that biases towards a female determination.

The mandible is nearly complete with only the left coracoid process and temporomandibular articulation missing. Moreover, most of the teeth remain in their places: on the left, all the teeth are present; on the right only M2 is missing. Strangely, the mandibular eminence is also in the middle in terms of prominence—neither a strong signature for either male or female (3).

Both scapulae are present, with only slight perforations in the body. The clavicles are also well intact, with only the left medial articulation having a slight chip.

Although some are fragmented, it seems that all the ribs were recovered. Many of the vertebral connections have superfluous bone growth on the facet regions, correlating with growths on the vertebrae.

The manubrium and sternum are present (and not fused), but the xyphoid process was not recovered and it does not appear fused—yet this does not always occur at any age. On the posterior portion of the manubrium irregular pores were noted in the bone.

All seven cervical vertebrae were recovered, either in full or with partial bodies or transverse processes. Six (including the transitional) thoracic vertebrae are present which show slightly lipping on the bodies. All five lumbar were recovered, but the spines and transverse processes appear to carry some sort of pathology that likely is related to the ribs and thoracic lipping.

Moving to the upper limbs, both humeri are present, with only the left trochlea appearing to be damaged. The right ulna and radius are complete, although slightly stained with dirt, but this is likely a natural taphanomic issue and not a pathology. The left radius is broken at the proximal portion of the shaft, while the let ulna is in three large pieces. Again, they are dark brown, nearly black, in color.

The feet are largely missing. The only elements recovered are the right cuboid, the left navicular, and to middle toe phalanges.

Lower Body: Again, this part of the skeleton is very complete. The left and right innominate are nearly fully intact, except for the right posterior iliac crest, and the left inferior iliac spine. The pelvic girdle is quite robust, yet the greater sciatic notch is wide, slightly suggesting female sex. The pubic symphysis is quite worn, with very few grooves remaining, and according to Bass should be assigned to either stage 7 or 8 of wear. This would put the individual in the 35-45 year age range. Moreover, on the anterior portions of the pubic symphysis, the pubic tubercle is quite large, and on the superior ramus just anterior to the symphysis an unusual undulating growths/deterioration. This is likely a pathology, but the precise cause is currently unknown. Further, the auricular sulcus is quite wide, also suggesting female. Just superior from the auricular surface, boney pathologies were noted. This may be in association with arthritic signatures on the sacrum and lower lumbar vertebrae.

The sacrum may show some signs of spinabifida as the medial crest is fused and slightly bumpy. The right posterior portion is broken away.

Both femurs are in very good condition. The right has no recent or old breaks, and on the left, only the posterior portion intercondylar groove is damaged. No pathologies or unusual markers to note.

Both tibia are also well preserved. The left tibia is missing a part of the latero-anterior tibial plateau. There is also a strange lipping around the plateau, maybe indicative of degenerative bone loss or inconsistent articulations? The location of the right tibia is very interesting. During excavation, the right tibia along with most of the feet bones were found on the left side of the interred, at about the height of the femur.

Both fibula are resent and intact, with only the right's proximal head being broken off and not recovered.

In regards to the feet; on the right we recovered the calcaneus, navicular, first cuneiform, talus, and all five metatarsals. On the left, the calcaneus, talus, and second and third cuneiforms were found. The first metatarsal is also present, along with its medial and distal phalange.

Elements that we were unable to side or determine if hand or foot elements are four medial phalanges and five distal phalange ends.

In addition, the right cuboid, the left navicular, and to middle toe phalanges were bagged with the upper portion of the skeleton.

Overall Determination: Although the age and sex signatures of this individual were muddled at best, I would argue that they do skew towards female. Age is likely around 30-35 years. The individual may have suffered back pain in her lower back.

NBP-027, Circle Burial

GPS: 0638573E, 5078189N

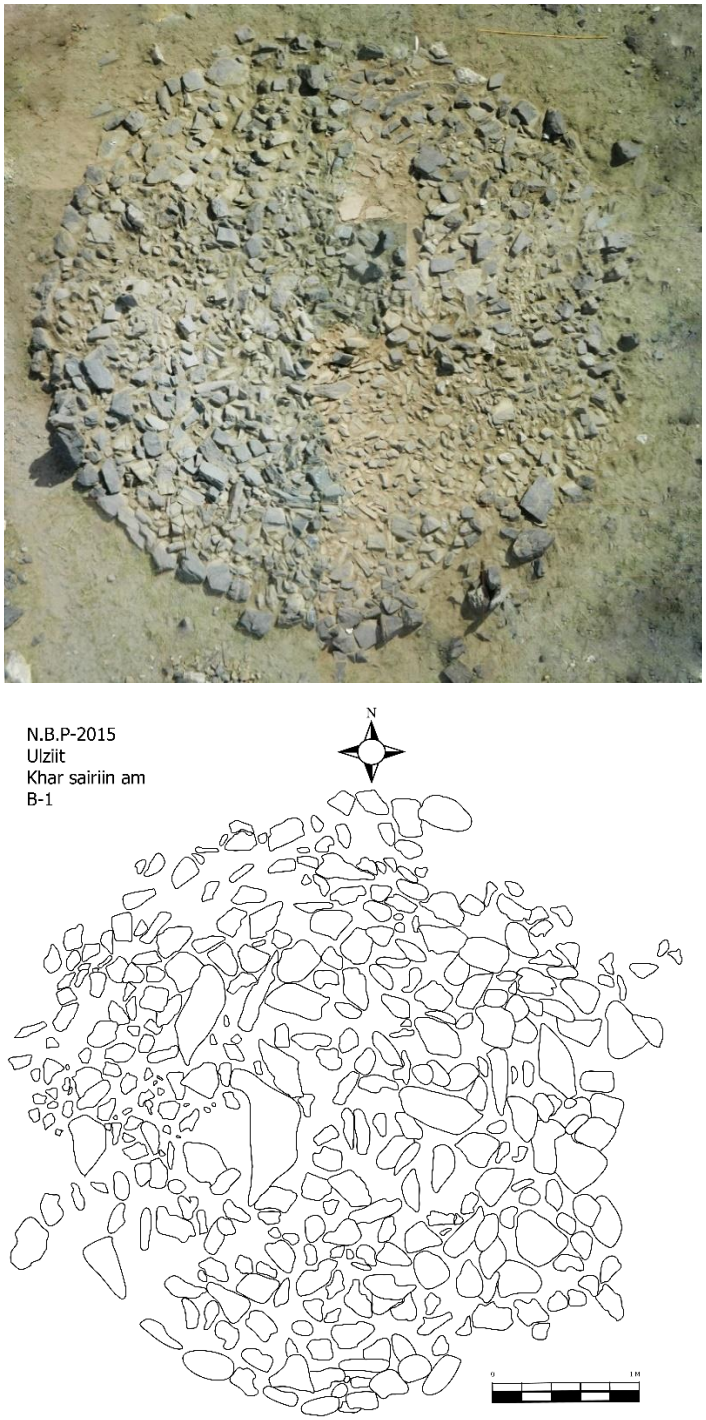


Figure B.30. Photo and planview of circle burial prior to excavation.



Figure B.31. Skeletal material from circle burial at NBP-027.

Osteological Report by K. Bryce Lowry

Cranium: The skull is quite intact except for the distal portions and parts of the alveolar process. None of the sutures are closed, and in fact are still very distinct (except for the frontal/sagittal which is closed). Supra-orbital ridges are not very distinct (3), nor are the frontal protuberances. Individual has supra-orbital foramina, not notches. The right mastoid process is bigger than the left, but bias towards male. However, the occipital protuberance is nearly absent (1) yet the nuchal lines are raised fairly prominently. Styloid processes are broken, as is the left atlas articular surface along the foramen magnum. All of the teeth are missing except the 2nd and 3rd left molars which are still in the alveolar process. It looks as if the upper canines and incisors were lost in life, and the bone healed, but Pm1/C1, M1, and M2 have sockets still remaining.

The mandible is completely intact. No teeth remaining in the alveolar process, but it seems only the incisors and pre-molars remained during life, as there is strong evidence of bone reabsorption

toward the back of the mouth. The mental eminence is very prominent (4-5) as are the mental spines

Upper Body: The right and left clavicles are missing their lateral articulations. Both scapulae are present but in very poor conditions. The left scapula has the coracoid process and the glenoid fossa intact but is missing much of the medial body. The right scapula is not intact, missing most of the body. However, the lateral ridge and the coracoid process were recovered. Humeri from both sides are present and in good condition, but the left is missing the some of the humeral head at the fossa connection Both sides for the ulna and radius are completely intact.

The left hand has all five metacarpals, the capitate, hamate, pisiform, lunate, and triquetral. Only the capitate of the right hand remains.

Both first ribs were recovered. Easily sided ribs are as follows: 5 right, 5 left. Many fragments of ribs. The manubrium is largely intact but broken at the distal and proximal ends.

Both femurs are completely intact, except for the medial condyles which are missing some of the medial portion of the. The right innominate is badly damaged at the inferior ramus and iliac spine. The left is much better shape, only missing the auricular surface and the ischial spine. The pubic symphyses are not completely worn, with 3-5 ridges being still clearly visible. The greater sciatic notch is quite wide, possibly indicating female.

8 cervical vertebrae were recovered, which includes the axis and atlas. The thoracic and lumbar vertebrae were almost all in fragments (14 possible thoracic frags, and a single nearly-complete lumbar).

Lower Body: The right tibia is badly damaged at the shaft, but the proximal plateau and distal articulations are intact. The right fibula is also broken mid shaft. Although the left tibia is broken at the mid shaft as well, much of the element still remains.

Both patellae were recovered.

Both feet appear to have all the elements, including cuneiforms and cuboids.

Overall Determination: This individual is likely a female between the ages of 35-50.

APPENDIX C: FEATURE INDEX

Table C-1 Feature Index

Shatar Chuluu	nbp-018	86	629596	5142789	Ceramic	Ceramic Scatter			0	0	0	0	on river, at cut bank, great camp spot	Bronze						
Shatar Chuluu	nbp-018	57	630136	5140748	Ceramic	ISO Ceramic Find			0	0	0	0		Bronze						
Shatar Chuluu	nbp-018	62	631005	5141880	Ceramic	ISO Ceramic Find			0	0	0	0	Brick	Other, Historical						
Shatar Chuluu	nbp-018	75	630717	5142372	Ceramic	ISO Ceramic Find			0	0	0	0		Bronze?						
Shatar Chuluu	nbp-018	76	630538	5142516	Ceramic	ISO Ceramic Find			0	0	0	0		Unknown						
Shatar Chuluu	nbp-018	78	630098	5142758	Ceramic	ISO Ceramic Find			0	0	0	0		Unknown						
Shatar Chuluu	nbp-018	84	629309	5143508	Ceramic	ISO Ceramic Find			0	0	0	0	bogs within this area, may explain lack of ceramic; this piece likely washed in;	Bronze						
Shatar Chuluu	nbp-020	1	636066	5129074	Ceramic	Ceramic Scatter			0	0	0	0		Bronze?						
Shatar Chuluu	nbp-020	16	636596	5128920	Ceramic	ISO Ceramic Find			0	0	0	0	on top of F15 (slab burial)	Bronze?						
Shatar Chuluu	nbp-020	26	636776	5128878	Ceramic	ISO Ceramic Find			0	0	0	0		Xiongnu						
Shatar Chuluu	nbp-020	28	636884	5128597	Ceramic	ISO Ceramic Find			0	0	0	0	both near rodent holes, likely washed down from the south mountain face as the	Iron						
Shatar Chuluu	nbp-020	29	637241	5128278	Ceramic	ISO Ceramic Find			0	0	0	0		Bronze?						
Shatar Chuluu	nbp-020	32	639294	5126799	Ceramic	ISO Ceramic Find			0	0	0	0	not in a likely camp area, strange position, near rodent burrows	Bronze/Iron						
Shatar Chuluu	nbp-021	8	640113	5119103	Ceramic	Ceramic Scatter			0	0	0	0	near rodent holes, different depostion in this valley?	Bronze?						
Shatar Chuluu	nbp-021	11	639844	5117878	Ceramic	Ceramic Scatter			0	0	0	0	on a patch of barren land, suggests there is more throughout valley but	Bronze						
Shatar Chuluu	nbp-021	4	640492	5119465	Ceramic	ISO Ceramic Find			0	0	0	0	glazed, slipped	Other, Historical						
Shatar Chuluu	nbp-021	7	640340	5119046	Ceramic	ISO Ceramic Find			0	0	0	0	bout 40 m from river to west, and almost on road	Unknown						
Shatar Chuluu	nbp-021	10	640148	5118514	Ceramic	ISO Ceramic Find			0	0	0	0		Bronze						
Shatar Chuluu	nbp-021	12	639781	5117748	Ceramic	ISO Ceramic Find			0	0	0	0	large piece	Bronze						
Shatar Chuluu	nbp-021	13	639319	5117429	Ceramic	ISO Ceramic Find			0	0	0	0	right along river bank, likely alluvial depost	Unknown						
Shatar Chuluu	nbp-022	22	639239	5140463	Ceramic	Ceramic Scatter			0	0	0	0	found on khirigsuur mound	Bronze						
Shatar Chuluu	nbp-022	60	639270	5140170	Ceramic	Ceramic Scatter			0	0	0	0	found on e mound of khirisuur	Bronze						
Shatar Chuluu	nbp-022	77	639745	5142642	Ceramic	ISO Ceramic Find			0	0	0	0	found on the mound	Bronze						
Bulgan Uul	nbp-023	2	638840	5090630	Ceramic	Ceramic Scatter			0	0	0	0	slag/ iron; spindle whirl	Bronze						
Bulgan Uul	nbp-026	15	635062	5090071	Ceramic	Ceramic Scatter			0	0	0	0		Bronze						
Bulgan Uul	nbp-026	28	634841	5088853	Ceramic	Ceramic Scatter			0	0	0	0		Late Iron						

Table C.1 (continued). Feature Index

Bulgan Uul	nbp-026		13	634520	5088592	Ceramic	ISO Ceramic Find			0	0	0	0	near winter camp	Bronze						
Bulgan Uul	nbp-026		16	634184	5089083	Ceramic	ISO Ceramic Find			0	0	0	0		Bronze						
Bulgan Uul	nbp-026		20	634176	5088701	Ceramic	ISO Ceramic Find			0	0	0	0	two pieces	one piece of iron						
Bulgan Uul	nbp-026		23	634543	5088710	Ceramic	ISO Ceramic Find			0	0	0	0	manchu	Other, Historical						
Bulgan Uul	nbp-026		26	635111	5090384	Ceramic	ISO Ceramic Find			0	0	0	0	not as coarse	Bronze/Iron						
Bulgan Uul	nbp-027		72	640001	5077006	Ceramic	Ceramic Scatter			0	0	0	0		Unknown						
Bulgan Uul	nbp-027		84	639996	5078158	Ceramic	ISO Ceramic Find			0	0	0	0	large and small piece	Bronze						
Bulgan Uul	nbp-027		107	639753	5076752	Ceramic	ISO Ceramic Find			0	0	0	0		Turk?						
Bulgan Uul	nbp-028		31	642647	5080715	Ceramic	Ceramic Scatter			0	0	0	0		Bronze						
Bulgan Uul	nbp-028		57	639611	5074421	Ceramic	Ceramic Scatter			0	0	0	0		Bronze						
Bulgan Uul	nbp-028		65	639838	5075695	Ceramic	Ceramic Scatter			0	0	0	0	30x40m scatter	Bronze						
Bulgan Uul	nbp-028		13	640667	5077248	Ceramic	ISO Ceramic Find			0	0	0	0	BIG decorated piece	Bronze						
Bulgan Uul	nbp-028		18	640862	5078244	Ceramic	ISO Ceramic Find			0	0	0	0		Bronze						
Bulgan Uul	nbp-028		23	640550	5077430	Ceramic	ISO Ceramic Find			0	0	0	0		Unknown						
Bulgan Uul	nbp-028		36	641206	5079122	Ceramic	ISO Ceramic Find			0	0	0	0		Mongol						
Bulgan Uul	nbp-028		49	639450	5074830	Ceramic	ISO Ceramic Find			0	0	0	0		Bronze						
Bulgan Uul	nbp-028		62	640036	5076386	Ceramic	ISO Ceramic Find			0	0	0	0		Turk?						
Bulgan Uul	RA_nbp-029		13	638755	5077809	Ceramic	ISO Ceramic Find			0	0	0	0	near also Qing pottery	Bronze						
Bulgan Uul	RA_nbp-029		18	638533	5078232	Ceramic	ISO Ceramic Find			0	0	0	0	rim sherd	Bronze						
Bulgan Uul	RA_nbp-029		19	638277	5078509	Ceramic	ISO Ceramic Find			0	0	0	0		Bronze						
Bulgan Uul	RA_nbp-029		22	636773	5079310	Ceramic	ISO Ceramic Find			0	0	0	0		Bronze	0					
Bulgan Uul	RA_nbp-029		30	638535	5078235	Ceramic	ISO Ceramic Find			0	0	0	0	with metal	Unknown	0					
Shatar Chuluu	NBP-001		15	637791	5138226	Lithic	Lithic Scatter							Bounding UTMs: 0637777, 5138451; 0637815, 5138236; 0637745, 5138176.	Unknown						
Shatar Chuluu	NBP-001		16	637791	5138226	Lithic	Lithic Scatter Dogleash								Unknown						
Shatar Chuluu	nbp-001, F15a		1	637714	5138239	Lithic	ISO Lithic Find			0	0	0	0	Blad Core	PaleoNeolithic						
Shatar Chuluu	nbp-001, F15a		2	637782	5138184	Lithic	ISO Lithic Find			0	0	0	0	Flake	PaleoNeolithic						
Shatar Chuluu	nbp-001, F15a		3	637635	5138435	Lithic	ISO Lithic Find			0	0	0	0	Core	PaleoNeolithic						
Shatar Chuluu	nbp-001, F15a		4	637799	5138159	Lithic	ISO Lithic Find			0	0	0	0	Core?	PaleoNeolithic						
Shatar Chuluu	nbp-001, F15a		7	637778	5138447	Lithic	ISO Lithic Find			0	0	0	0	Flake, Retouched	PaleoNeolithic						
Shatar Chuluu	nbp-001, F15a		34	637634	5138279	Lithic	ISO Lithic Find			0	0	0	0	Core, Exhausted	PaleoNeolithic						
Shatar Chuluu	nbp-001, F15a		35	637791	5138226	Lithic	Lithic Scatter			0	0	0	0	about 100 pieces	PaleoNeolithic						
Shatar Chuluu	NBP-006	ISO-1		633249	5139705	Lithic	ISO Lithic Find								Unknown						
Shatar Chuluu	NBP-008	ISO-2		633381	5140737	Lithic	Lithic, Core Fragment								Unknown						
Shatar Chuluu	NBP-012		25	639290	5144720	Lithic	Lithic Scatter								Unknown						
Bulgan Uul	nbp-013		21	644257	5090105	Lithic	ISO Lithic Find			0	0	0	0	blade core, Group 2	Neolithic						
Bulgan Uul	nbp-013		26	644255	5090122	Lithic	ISO Lithic Find			0	0	0	0	pebble core	PaleoNeolithic						
Bulgan Uul	nbp-013		211	644036	5089905	Lithic	ISO Lithic Find			0	0	0	0	core, exhausted; Group 3	PaleoNeolithic						
Bulgan Uul	nbp-013		213	644188	5089714	Lithic	ISO Lithic Find			0	0	0	0	micro-blade core, Group 4	PaleoNeolithic						
Bulgan Uul	nbp-013		226	643975	5088064	Lithic	ISO Lithic Find			0	0	0	0		PaleoNeolithic						
Bulgan Uul	nbp-013		2	644189	5090245	Lithic	Lithic Scatter			0	0	0	0	Group 1							
Bulgan Uul	nbp-013		27	642808	5089844	Lithic	Lithic Scatter			0	0	0	0	with a piece of slag	PaleoNeolithic						
Bulgan Uul	nbp-013		212	643787	5090000	Lithic	Lithic Scatter			0	0	0	0	Group 3, with some slag/iron ore	Bronze						
Bulgan Uul	nbp-013		214	644180	5089714	Lithic	Lithic Scatter			0	0	0	0	Group 4	PaleoNeolithic						
Bulgan Uul	nbp-013		220	644077	5090260	Lithic	Lithic Scatter			0	0	0	0	Group 5	Neolithic						
Bulgan Uul	nbp-013		222	643901	5091472	Lithic	Lithic Scatter			0	0	0	0	Group 5	with slag						
Bulgan Uul	nbp-013		224	643782	5091227	Lithic	Lithic Scatter			0	0	0	0	Group 5	PaleoNeolithic						
Bulgan Uul	nbp-013		225	643520	5090982	Lithic	Lithic Scatter			0	0	0	0	Group 5, with core	PaleoNeolithic						

Table C.1 (continued). Feature Index

Bulgan Uul	NBP-013	31	644176	5090272	Lithic	Lithic Scatter								Located on ridge directly overlooking the river; Many lithics found in dry drainage,	Unknown							
Shatar Chuluu	nbp-015	12	630072	5141118	Lithic	ISO Lithic Find			0	0	0	0			PaleoNeolithic							
Shatar Chuluu	nbp-015	13	630041	5140754	Lithic	ISO Lithic Find			0	0	0	0			PaleoNeolithic							
Shatar Chuluu	nbp-015	14	630020	5140749	Lithic	ISO Lithic Find			0	0	0	0		flake near F2	PaleoNeolithic							
Shatar Chuluu	nbp-015	19	630095	5140376	Lithic	ISO Lithic Find			0	0	0	0			PaleoNeolithic							
Shatar Chuluu	nbp-015	32	629867	5140724	Lithic	ISO Lithic Find			0	0	0	0		tool, chopper	PaleoNeolithic							
Shatar Chuluu	nbp-015	44	629947	5140638	Lithic	ISO Lithic Find			0	0	0	0		core	PaleoNeolithic							
Shatar Chuluu	nbp-015	48	629608	5140852	Lithic	ISO Lithic Find			0	0	0	0		one tool	PaleoNeolithic							
Shatar Chuluu	nbp-015	67	629139	5141456	Lithic	ISO Lithic Find			0	0	0	0		no photo	PaleoNeolithic							
Shatar Chuluu	nbp-015	69	629990	5140905	Lithic	ISO Lithic Find			0	0	0	0		off terrace, found at end of day	PaleoNeolithic							
Shatar Chuluu	nbp-015	11	629981	5141321	Lithic	Lithic Scatter			0	0	0	0		3 lithics on north west facing hill	PaleoNeolithic							
Shatar Chuluu	nbp-015	15	630174	5140576	Lithic	Lithic Scatter			0	0	0	0			PaleoNeolithic							
Shatar Chuluu	nbp-015	34	629875	5140751	Lithic	Lithic Scatter			0	0	0	0		scattered over deer stone	Neolithic							
Shatar Chuluu	nbp-015	44	629535	5141333	Lithic	Lithic Scatter			0	0	0	0		south facing slope, quarter way west up the valley	PaleoNeolithic							
Shatar Chuluu	nbp-015	47	629566	5141092	Lithic	Lithic Scatter			0	0	0	0		halfway into valley down the north range	PaleoNeolithic							
Shatar Chuluu	nbp-017	3	627735	5141288	Lithic	Lithic Scatter			0	0	0	0			PaleoNeolithic							
Shatar Chuluu	nbp-019	4	623447	5140720	Lithic	ISO Lithic Find			0	0	0	0		microblade core	PaleoNeolithic							
Shatar Chuluu	nbp-021	3	640492	5119465	Lithic	ISO Lithic Find			0	0	0	0		probably natural	Neolithic							
Shatar Chuluu	nbp-021	5	640292	5119416	Lithic	ISO Lithic Find			0	0	0	0		near rodent hole, strange position	PaleoNeolithic							
Shatar Chuluu	nbp-021	9	640334	5118958	Lithic	ISO Lithic Find			0	0	0	0		near road, looks like shatter but may not be cultural;	Neolithic							
Shatar Chuluu	nbp-022	37	638970	5140420	Lithic	ISO Lithic Find			0	0	0	0			PaleoNeolithic							
Bulgan Uul	nbp-026	27	635012	5088672	Lithic	ISO Lithic Find			0	0	0	0		retouch?	Neolithic							
Bulgan Uul	nbp-027	22	639582	5076885	Lithic	ISO Lithic Find			0	0	0	0		Core	PaleoNeolithic							
Bulgan Uul	nbp-027	23	639622	5076852	Lithic	ISO Lithic Find			0	0	0	0		Core	PaleoNeolithic							
Bulgan Uul	nbp-027	75	639589	5076926	Lithic	ISO Lithic Find			0	0	0	0			PaleoNeolithic							
Bulgan Uul	nbp-027	85	639393	5078277	Lithic	ISO Lithic Find			0	0	0	0			PaleoNeolithic							
Bulgan Uul	nbp-027	86	640064	5078399	Lithic	ISO Lithic Find			0	0	0	0		2 macro flakes	PaleoNeolithic							
Bulgan Uul	nbp-027	93	640314	5079338	Lithic	ISO Lithic Find			0	0	0	0		core	PaleoNeolithic							
Bulgan Uul	nbp-027	100	639750	5076559	Lithic	ISO Lithic Find			0	0	0	0		tool? macro flake	PaleoNeolithic							
Bulgan Uul	nbp-027	101	639743	5076540	Lithic	ISO Lithic Find			0	0	0	0			PaleoNeolithic							
Bulgan Uul	nbp-027	104	639646	5076631	Lithic	ISO Lithic Find			0	0	0	0		core	PaleoNeolithic							
Bulgan Uul	nbp-027	109	639528	5076231	Lithic	ISO Lithic Find			0	0	0	0			PaleoNeolithic							
Bulgan Uul	nbp-027	113	640393	5079558	Lithic	ISO Lithic Find			0	0	0	0			PaleoNeolithic							
Bulgan Uul	nbp-027	114	639544	5076676	Lithic	ISO Lithic Find			0	0	0	0			PaleoNeolithic							
Bulgan Uul	nbp-027	115	640275	5079340	Lithic	ISO Lithic Find			0	0	0	0		near excavation site	PaleoNeolithic							
Bulgan Uul	nbp-027	116	639884	5078348	Lithic	ISO Lithic Find			0	0	0	0			PaleoNeolithic							
Bulgan Uul	nbp-027	117	639554	5076677	Lithic	ISO Lithic Find			0	0	0	0		core/chopper?	PaleoNeolithic							
Bulgan Uul	nbp-027	3	639992	5077424	Lithic	Lithic Scatter			0	0	0	0			Neolithic							
Bulgan Uul	nbp-027	7	640042	5077731	Lithic	Lithic Scatter			0	0	0	0		with core, and possible slag;	Neolithic							

Table C.1 (continued). Feature Index

Bulgan Uul	nbp-027	9	639992	5077985	Lithic	Lithic Scatter			0	0	0	0									
Bulgan Uul	nbp-027	21	639647	5076826	Lithic	Lithic Scatter			0	0	0	0	along and within khirigsuurs and slab burials, not a single density; flags pulled	Neolithic							
Bulgan Uul	nbp-027	30	639931	5077091	Lithic	Lithic Scatter			0	0	0	0	small, around Circle Burial	Paleo Neolithic							
Bulgan Uul	nbp-027	92	640276	5079102	Lithic	Lithic Scatter			0	0	0	0		Paleo Neolithic							
Bulgan Uul	nbp-027	102	639640	5076562	Lithic	Lithic Scatter			0	0	0	0		Paleo Neolithic							
Bulgan Uul	nbp-027	105	639693	5076631	Lithic	Lithic Scatter			0	0	0	0	nice materials; macro core, blade core	Paleo Neolithic							
Bulgan Uul	nbp-027	108	639627	5076286	Lithic	Lithic Scatter			0	0	0	0	along upper terrace edge	Paleo Neolithic							
Bulgan Uul	nbp-028	12	640526	5077050	Lithic	ISO Lithic Find			0	0	0	0		Paleo Neolithic							
Bulgan Uul	nbp-028	24	640547	5077451	Lithic	ISO Lithic Find			0	0	0	0		Paleo Neolithic							
Bulgan Uul	nbp-028	34	641698	5079714	Lithic	ISO Lithic Find			0	0	0	0	nice red material, x2	Paleo Neolithic							
Bulgan Uul	nbp-028	43	640598	5078034	Lithic	ISO Lithic Find			0	0	0	0	red material, x1	Paleo Neolithic							
Bulgan Uul	nbp-028	50	639446	5074882	Lithic	ISO Lithic Find			0	0	0	0	microblade core	Paleo Neolithic							
Bulgan Uul	nbp-028	63	640657	5077597	Lithic	ISO Lithic Find			0	0	0	0	red chert	Paleo Neolithic							
Shatar Chuluu	nbp-001, F15a	36	637612	5138106	Lithic and Cer	Lithic and Ceramic			0	0	0	0	possible run off, or habitation?	Bronze							
Shatar Chuluu	NBP-010	50	638483	5132115	Lithic and Cer	Lithic and Ceramic Scatter							9 pieces of ceramic, and a single flake	Unknown							
Bulgan Uul	nbp-013	2	644274	5090117	Lithic and Cer	Lithic and Ceramic			0	0	0	0	Group 1	Bronze							
Bulgan Uul	nbp-013	15	644177	5089374	Lithic and Cer	Lithic and Ceramic			0	0	0	0	with slag as next feature	Bronze							
Bulgan Uul	nbp-013	218	641223	5089917	Lithic and Cer	Lithic and Ceramic			0	0	0	0	Group 3	Bronze							
Bulgan Uul	nbp-013	221	643520	5090982	Lithic and Cer	Lithic and Ceramic			0	0	0	0	Group 5, five pieces of ceraimic and a core test	Bronze							
Bulgan Uul	nbp-014	2	644060	5088840	Lithic and Cer	Lithic and Ceramic			0	0	0	0	next to metallurgical site	Bronze?							
Shatar Chuluu	nbp-017	1	627729	5141293	Lithic and Cer	Lithic and Ceramic			0	0	0	0		Bronze							
Shatar Chuluu	nbp-018	22	631128	5140823	Lithic and Cer	Lithic and Ceramic			0	0	0	0	potential slag? long-term homestead? huge scatter of ceramic, some lithics;	Bronze							
Shatar Chuluu	nbp-018	56	630700	5141665	Lithic and Cer	Lithic and Ceramic			0	0	0	0	medium sized ceramic scatter, about 30 meters E-W, main GPS is the large BA	Paleo Neolithic							
Shatar Chuluu	nbp-019	3	623350	5140710	Lithic and Cer	Lithic and Ceramic			0	0	0	0		Bronze							
Shatar Chuluu	nbp-021	16	640036	5118950	Lithic and Cer	Lithic and Ceramic			0	0	0	0	picked up by Mok at end of survey; at W side of valley along slope; 3 sets of ceramic; one egg	Neolithic							

Table C.1 (continued). Feature Index

Bulgan Uul	nbp-024	3	638634	5090430	Lithic and Cer	Lithic and Ceramic			0	0	0	0	scattered south, southeast of the corral in background of photo	Bronze;Other, Historical;Turk?					
Bulgan Uul	nbp-025	3	637050	5087660	Lithic and Cer	Lithic and Ceramic			0	0	0	0	scattered around both the main and secondary corral	a few found in the space between					
Bulgan Uul	nbp-027	74	639991	5076957	Lithic and Cer	Lithic and Ceramic			0	0	0	0		Bronze?					
Bulgan Uul	nbp-027	87	640117	5078438	Lithic and Cer	Lithic and Ceramic			0	0	0	0		Bronze					
Bulgan Uul	nbp-027	94	640421	5079540	Lithic and Cer	Lithic and Ceramic			0	0	0	0	nearly a full pot of BA, Xiongnu rim	Bronze					
Bulgan Uul	nbp-027	103	639630	5076641	Lithic and Cer	Lithic and Ceramic			0	0	0	0	30 x 50 m scatter, with glassy chalcedony	Paleo;Neolithic					
Bulgan Uul	nbp-027	106	639567	5076609	Lithic and Cer	Lithic and Ceramic			0	0	0	0	between monuments	Paleo;Neolithic					
Bulgan Uul	nbp-027	122	639930	5077033	Lithic and Cer	Lithic and Ceramic			0	0	0	0	microblade	Paleo;Neolithic					
Bulgan Uul	nbp-028	13	640653	5077262	Lithic and Cer	Lithic and Ceramic			0	0	0	0	one flake in wash, from picture it looks like the artifacts could be in situ and a camp site	Bronze					
Bulgan Uul	nbp-028	28	641408	5078916	Lithic and Cer	Lithic and Ceramic			0	0	0	0	contains a baige-ware that is coarse, maybe earlier than late bronze age	Bronze?					
Bulgan Uul	nbp-028	29	641478	5079120	Lithic and Cer	Lithic and Ceramic			0	0	0	0		Bronze?					
Bulgan Uul	nbp-028	32	642826	5081057	Lithic and Cer	Lithic and Ceramic			0	0	0	0	nice red stone	Paleo;Neolithic					
Bulgan Uul	nbp-028	64	641133	5078376	Lithic and Cer	Lithic and Ceramic			0	0	0	0		Early Bronze					
Shatar Chuluu	nbp-001, F15a	23	637726	5138232	Metal	Metal Knife, Blade			0	0	0	0	end portion	Bronze					
Shatar Chuluu	nbp-001, F15a	27	637719	5138221	Metal	Slag			0	0	0	0	really slag? has some weight to it	Unknown					
Shatar Chuluu	nbp-001, F15a	33	637721	5138209	Metal	Slag			0	0	0	0		Bronze?					
Bulgan Uul	nbp-013	28	643803	5089842	Metal	Metal Knife, Blade			0	0	0	0	Group 3	Bronze					
Bulgan Uul	nbp-013	22	644184	5090102	Metal	Slag			0	0	0	0	Group 2	Bronze?					
Bulgan Uul	nbp-013	216	644225	5089352	Metal	Slag			0	0	0	0	none	Unknown					
Bulgan Uul	nbp-014	3	644145	5088795	Metal	Slag			0	0	0	0	very large slag scatter	Unknown					
Bulgan Uul	nbp-014	3	644145	5088795	Metal	Slag			0	0	0	0	with bronze knife	Unknown					
Bulgan Uul	nbp-024	2	638666	5090487	Metal	Slag			0	0	0	0	iron ore too	Bronze?					
Bulgan Uul	nbp-026	7	637944	5088866	Metal	Slag			0	0	0	0		Unown					
Bulgan Uul	nbp-026	17	634166	5088948	Metal	Slag			0	0	0	0	natural? have it checked	Bronze?					
Bulgan Uul	nbp-026	18	634200	5088241	Metal	Slag			0	0	0	0	likely natural/ iron ore	Unknown					
Bulgan Uul	nbp-026	19	634226	5088774	Metal	Slag			0	0	0	0	have this checked	Unknown					
Bulgan Uul	nbp-026	22	634527	5088816	Metal	Slag			0	0	0	0		Unknown					
Bulgan Uul	nbp-026	24	634186	5089589	Metal	Slag			0	0	0	0	check?	Unknown					
Bulgan Uul	nbp-026	25	634127	5088621	Metal	Slag			0	0	0	0	check?	Unknown					
Bulgan Uul	nbp-026	29	634000	5090347	Metal	Slag			0	0	0	0	have checked	Unknown					
Bulgan Uul	nbp-027	73	640003	5077002	Metal	Slag			0	0	0	0	togo fragment? just throw away?	Other, Historical					
Bulgan Uul	nbp-027	118	639765	5076614	Metal	Slag			0	0	0	0	and lithic	Unknown					

Table C.1 (continued). Feature Index

Other 2011	AMU-21	1	543137	5089058	Monument	Standing Stone						4			Unknown		Robbed				
Other 2011	AMU-22	1	555335	5119843	Monument	Khirigsuur	circle	11.4			8.5	3			Bronze						
Other 2011	AMU-22	2	553593	5119917	Monument	Khirigsuur	square		14.7	11.8	8.9	4			Bronze						
Other 2011	AMU-5	10	555027	5221374	Monument	Circle Burial		9.5							Unknown						
Other 2011	AMU-5	17	555102	5221026	Monument	Circle Burial		7.1							Unknown						
Other 2011	AMU-5	21	553804	5221127	Monument	Circle Burial		7							Unknown						
Other 2011	AMU-5	22	553336	5221585	Monument	Circle Burial		8.3							Unknown						
Other 2011	AMU-5	28	553134	5222879	Monument	Circle Burial		11.5							Unknown						
Other 2011	AMU-5	31	553098	5222904	Monument	Circle Burial		7.5						old khirigsuur with fence washed out?	Bronze?						
Other 2011	AMU-5	35	553046	5222731	Monument	Circle Burial		7							Bronze?						
Other 2011	AMU-5	1	555264	5220840	Monument	Khirigsuur	none				13	Other	1		Bronze						
Other 2011	AMU-5	2	555264	5220834	Monument	Khirigsuur	square		45	58	15	7			Bronze	Pathway	Built Up Corners				
Other 2011	AMU-5	3	555200	5220815	Monument	Khirigsuur	square		16	17	13	4	8		Bronze	Standing Stones					
Other 2011	AMU-5	4	555164	5220821	Monument	Khirigsuur	circle	19.5			7.8	1			Bronze						
Other 2011	AMU-5	5	555104	5221136	Monument	Khirigsuur	square		61	68	20.2	8			Bronze	Built Up Corners					
Other 2011	AMU-5	7	555509	5221122	Monument	Khirigsuur	square		25	32.5	13	6			Bronze	Built Up Corners					
Other 2011	AMU-5	8	555054	5221305	Monument	Khirigsuur	square		49	50	13	8			Bronze	Built Up Corners					
Other 2011	AMU-5	9	555067	5221419	Monument	Khirigsuur	circle	13.5			8	1			Bronze						
Other 2011	AMU-5	12	554981	5221251	Monument	Khirigsuur	square		14	16	10.5	8	10		Bronze	Built Up Corners					
Other 2011	AMU-5	13	555044	5221233	Monument	Khirigsuur	square		15	21	10.5	4	12		Bronze						
Other 2011	AMU-5	14	555035	5221203	Monument	Khirigsuur	square		20.7	25	11	4	15		Bronze						
Other 2011	AMU-5	15	555015	5221062	Monument	Khirigsuur	square		14.5	19	12	8			Bronze	Built Up Corners					
Other 2011	AMU-5	16	555057	5221068	Monument	Khirigsuur	none	7.4				other	13	Circle Burial with ring of rings	Bronze						
Other 2011	AMU-5	18	555158	5221069	Monument	Khirigsuur	square		6.3	6.8	3	4			Bronze						
Other 2011	AMU-5	19	554639	5221126	Monument	Khirigsuur	square		42.7	52	16	4			Bronze						
Other 2011	AMU-5	20	553772	5221132	Monument	Khirigsuur	square		37	41	18	4	18		Bronze						
Other 2011	AMU-5	23	553391	5221289	Monument	Khirigsuur	square		54	66	18	4			Bronze						
Other 2011	AMU-5	24	553671	5220986	Monument	Khirigsuur	square		22.5	29.5	13.5	4	7		Bronze						
Other 2011	AMU-5	25	552857	5221361	Monument	Khirigsuur	circle	16.5			9.5	1			Bronze	Robbed					
Other 2011	AMU-5	26	552878	5221349	Monument	Khirigsuur	square		16	15.5	9	8			Bronze	Built Up Corners					
Other 2011	AMU-5	27	553151	5222893	Monument	Khirigsuur	circle	8			3.5	4			Bronze	Standing Stones					
Other 2011	AMU-5	29	553114	5222838	Monument	Khirigsuur	square		11.5	14	7.5	8			Bronze	Standing Stones					
Other 2011	AMU-5	30	553105	5222913	Monument	Khirigsuur	circle	15			5.5	1			Bronze						
Other 2011	AMU-5	34	553061	5222930	Monument	Khirigsuur	circle	6			3	1			Bronze?						
Other 2011	AMU-5	36	553030	5222941	Monument	Khirigsuur	square		7.4	6	4	4			Bronze						
Other 2011	AMU-5	23b	553391	5221295	Monument	Rectangle (Sub)	Feature		37	6					Bronze						
Other 2011	AMU-5	6	555177	5221109	Monument	Ring Burial		11							Unknown						
Other 2011	AMU-5	11	555015	5221376	Monument	Square Burial			4	4					Unknown						
Other 2011	AMU-5	32	553090	5222928	Monument	Square Burial			6	6					Bronze?						
Other 2011	AMU-6	1	552723	5218628	Monument	Deer Stone								8 deer stones not in situ?, around robbed Circle Burial?	Iron						
Other 2011	AMU-7	2	508058	5208229	Monument	Circle Burial		8							Bronze?	Standing Stones					
Other 2011	AMU-7	9	508886	5208333	Monument	Circle Burial		5							Unknown						
Other 2011	AMU-7	11	508884	5208430	Monument	Circle Burial	none	6.3				3			Middle Bronz	Standing Stones					
Other 2011	AMU-7	1	508871	5207051	Monument	Khirigsuur	none	17				other			Bronze						
Other 2011	AMU-7	5	508817	5208339	Monument	Khirigsuur	circle	22			7	3			Bronze						
Other 2011	AMU-7	7	508853	5208323	Monument	Khirigsuur	circle	14			4.5	3			Bronze						
Other 2011	AMU-7	14	508840	5208410	Monument	Khirigsuur	circle	19			6	3			Bronze						
Other 2011	AMU-7	3	508828	5208306	Monument	Ring Burial		12.5							Unknown						
Other 2011	AMU-7	4	508317	5208317	Monument	Ring Burial		5.5							Unknown						
Other 2011	AMU-7	6	508835	5208329	Monument	Slab Burial			4.4	4.4					Iron						
Other 2011	AMU-7	12	508865	5208406	Monument	Slab Burial			3	1.3					Iron						
Other 2011	AMU-7	8	508845	5208354	Monument	Square Burial			4.5	8					Middle Bronze?						
Other 2011	AMU-7	10	508885	5208354	Monument	Square Burial		4	7				1		Bronze?						
Other 2011	AMU-7	13	508854	5208413	Monument	Square Burial			11	4					Middle Bronz	Standings Stones					

Other 2011	AMU-9	2	506815	5215270	Monument	Deer Stone							1.5 x .5	Bronze						
Other 2011	AMU-9	1	506725	5215776	Monument	Turk Burial							man stone	Turk						
Shatar Chuluu	nbp_015	1	629910	5140796	Monument	Circle Burial		6.2	0	0	0	0		Bronze?						
Shatar Chuluu	NBP-001	3	637774	5138171	Monument	Circle Burial		9.3					Shape undefinable	Unknown						
Shatar Chuluu	NBP-001	17	637715	5138405	Monument	Circle Burial		2.3					Looks similar to satellite	Unknown						
Shatar Chuluu	NBP-001	1	637772	5138232	Monument	Khirigsuur	square		46.5	75.5	14.5	6	21 Robbed	Bronze	Robbed					
Shatar Chuluu	NBP-001	4	637813	5138291	Monument	Khirigsuur	square		11.9	15.2	7.6	8		Bronze						
Shatar Chuluu	NBP-001	10	637789	5138465	Monument	Khirigsuur	circle	7.3			2.5	3		Bronze						
Shatar Chuluu	NBP-001	11	637794	5138481	Monument	Khirigsuur	circle	4.9			2	3		Bronze						
Shatar Chuluu	NBP-001	12	637718	5138629	Monument	Khirigsuur	square		5.2	9	4.7	4	Robbed	Bronze	Robbed					
Shatar Chuluu	NBP-001	13	637724	5138596	Monument	Khirigsuur	circle	8.2			4.6	2	Pathway	Bronze	Pathway					
Shatar Chuluu	NBP-001	18	637684	5138394	Monument	Khirigsuur	square		14.2	18.6	7.2	8	Corners built up	Bronze	Built Up Corners					
Shatar Chuluu	NBP-001	19	637631	5138277	Monument	Khirigsuur	circle	10.8			4.7	1		Bronze						
Shatar Chuluu	NBP-001	4	637218	5138594	Monument	Khirigsuur	square		6.1	6.9	4	4	On drainage ditch	Bronze						
Shatar Chuluu	NBP-001	5	637778	5138278	Monument	Rectangle (Sub)	Feature		28.5	5.6				Bronze?						
Shatar Chuluu	NBP-001	2	637766	5138180	Monument	Ring burial		8.6						Unknown						
Shatar Chuluu	NBP-001	6	637782	5138391	Monument	Ring Burial		4.6						Mongol?						
Shatar Chuluu	NBP-001	8	637766	5138428	Monument	Ring Burial		5.5						Unknown						
Shatar Chuluu	NBP-001	9	637780	5138452	Monument	Ring Burial		5						Unknown						
Shatar Chuluu	NBP-001	14	637724	5138597	Monument	Rock Art							One wild goat, one horned ungulate, faces south	Unknown						
Shatar Chuluu	NBP-001	7	637785	5138430	Monument	Square Burial			6.2	8.2			Shape is hard to determine	Unknown						
Shatar Chuluu	NBP-002	46	637732	5131966	Monument	Circle Burial		2.5						Unknown						
Shatar Chuluu	NBP-002	1	637337	5138516	Monument	Khirigsuur	square		11.2	11.8	5.7	8	Corners built up	Bronze	Built Up Corners					
Shatar Chuluu	NBP-002	2	637281	5138526	Monument	Khirigsuur	square		12.4	11.9	5.6	8	Corners built up, ceramic	Bronze	Built Up Corners					
Shatar Chuluu	NBP-002	3	637263	5138507	Monument	Khirigsuur	none				7.1	Other		Bronze						
Shatar Chuluu	NBP-003	1	636694	5137857	Monument	Khirigsuur	square		7.8	9.2		4	Mound indistinct	Bronze						
Shatar Chuluu	NBP-003	2	636621	5137774	Monument	Khirigsuur	none				3.8	Other	Bottom of hill	Bronze						
Shatar Chuluu	NBP-004	1	635116	5138544	Monument	Circle Burial		4.6					Disturbed	Unknown	Robbed					
Shatar Chuluu	NBP-004	2	635180	5138538	Monument	Circle Burial		4.8						Unknown						
Shatar Chuluu	NBP-004	3	635027	5138594	Monument	Circle Burial		6.8						Unknown						
Shatar Chuluu	NBP-004	9	634920	5138676	Monument	Circle Burial		5.8						Unknown						
Shatar Chuluu	NBP-004	4	635052	5138666	Monument	Khirigsuur	square		6.5	8.8	4.9	4	Corners built up	Bronze						
Shatar Chuluu	NBP-004	7	634957	5138641	Monument	Khirigsuur	circle	7.1				1.00		Bronze						
Shatar Chuluu	NBP-004	12	634800	5138844	Monument	Khirigsuur	square		21.1	23.2	9.9	8	Negative Circles	Bronze	Negative Circles					
Shatar Chuluu	NBP-004	5	635046	5138666	Monument	Ring Burial		4.3					Near Road	Unknown						
Shatar Chuluu	NBP-004	8	634942	5138676	Monument	Ring Burial		5.1						Unknown						
Shatar Chuluu	NBP-004	10	634916	5138698	Monument	Ring Burial		5.8						Unknown						
Shatar Chuluu	NBP-004	6	634948	5138637	Monument	Rock Art							Modern? Rock Art faces north	Unknown						
Shatar Chuluu	NBP-004	11	634898	5138708	Monument	Square Burial			3.6	5.8			Shape is indistinct	Unknown						
Shatar Chuluu	NBP-005	1	634358	5138904	Monument	Circle Burial		4						Unknown						
Shatar Chuluu	NBP-005	4	633528	5139161	Monument	Circle Burial		3.4						Mongol?						
Shatar Chuluu	NBP-005	3	633860	5138997	Monument	Khirigsuur	circle	7.3				1.00	Built with large stones	Bronze						
Shatar Chuluu	NBP-005	2	634363	5138898	Monument	Ring Burial		10.1					Natural?	Unknown						
Shatar Chuluu	NBP-005	5	632903	5139135	Monument	Square Burial			3	3.4			Located on terrace slope	Unknown						
Shatar Chuluu	NBP-006	5	633231	5139725	Monument	Circle Burial		2.4					Near road	Unknown						
Shatar Chuluu	NBP-006	6	633238	5139725	Monument	Circle Burial		2.6						Unknown						
Shatar Chuluu	NBP-006	7	632835	5139701	Monument	Circle Burial		2.6						Unknown						
Shatar Chuluu	NBP-006	8	632836	5139703	Monument	Circle Burial		2.3						Unknown						
Shatar Chuluu	NBP-006	9	632823	5139840	Monument	Circle Burial		2.3						Unknown						
Shatar Chuluu	NBP-006	10	632608	5139825	Monument	Circle Burial		2.6						Unknown						
Shatar Chuluu	NBP-006	12	632918	5139863	Monument	Circle Burial		8						Unknown						
Shatar Chuluu	NBP-006	13	633240	5139878	Monument	Circle Burial		3.4					Shape is indistinct	Unknown						
Shatar Chuluu	NBP-006	16	633565	5139740	Monument	Circle Burial		5.6						Unknown						

Table C.1 (continued). Feature Index

Shatar Chuluu NBP-006	17	633674	5139780	Monument	Circle Burial		5.8						Unknown						
Shatar Chuluu NBP-006	15	633455	5139802	Monument	Khirigsuur	circle	22.2			11.7	2	8	Pathway to south	Bronze	Pathway				
Shatar Chuluu NBP-006	1	633398	5139694	Monument	Square Burial			2.6	3.2			3.00	Oriented north	Unknown					
Shatar Chuluu NBP-006	2	633333	5139613	Monument	Square Burial			5.9	6.7				Oriented North	Unknown					
Shatar Chuluu NBP-006	3	633261	5139715	Monument	Square Burial			3.1	6.3				Oriented north	Unknown					
Shatar Chuluu NBP-006	4	633236	5139635	Monument	Square Burial			2.9	3.7				Shape is indistinct	Unknown					
Shatar Chuluu NBP-006	14	633401	5139797	Monument	Square Burial			7.2	4.2			1.00	Pathway to south,	Unknown	Pathway				
Shatar Chuluu NBP-007	2	634058	5139758	Monument	Circle Burial		2.7							Unknown					
Shatar Chuluu NBP-007	2	634058	5139756	Monument	Circle Burial		1.8							Unknown					
Shatar Chuluu NBP-007	2	634057	5139754	Monument	Circle Burial		2.1							Unknown					
Shatar Chuluu NBP-007	2	634055	5139753	Monument	Circle Burial		1.8							Unknown					
Shatar Chuluu NBP-007	3	633948	5139788	Monument	Circle Burial		3.3						Stones only slightly sedimented, disordered	Unknown					
Shatar Chuluu NBP-007	4	634077	5139814	Monument	Circle Burial		4.5							Unknown					
Shatar Chuluu NBP-007	5	634136	5139867	Monument	Circle Burial		1.8							Unknown					
Shatar Chuluu NBP-007	5	634134	5139871	Monument	Circle Burial		4.9							Unknown					
Shatar Chuluu NBP-007	5	634133	5139877	Monument	Circle Burial		1.8							Unknown					
Shatar Chuluu NBP-007	6	634160	5139893	Monument	Circle Burial		3.4							Unknown					
Shatar Chuluu NBP-007	7	634214	5139902	Monument	Circle Burial		4.8							Unknown					
Shatar Chuluu NBP-007	8	634210	5139900	Monument	Circle Burial		6							Unknown					
Shatar Chuluu NBP-007	12	633786	5139964	Monument	Circle Burial		3.3						Robbed	Unknown					
Shatar Chuluu NBP-007	17	634197	5139977	Monument	Circle Burial		3.5							Unknown					
Shatar Chuluu NBP-007	18	634200	5139976	Monument	Circle Burial		3.7							Unknown					
Shatar Chuluu NBP-007	1	634190	5139730	Monument	Khirigsuur	square		37	49.4	15.8	7	36	Two pathways to east and southwest, two rows of satellites	Bronze	Pathway				
Shatar Chuluu NBP-007	13	635538	5139998	Monument	Khirigsuur	circle	56.4			9.7	1			Bronze	Robbed				
Shatar Chuluu NBP-007	14	632691	5140476	Monument	Khirigsuur	circle	18.7			6.7	3		Standing stones at cardinal directions,	Bronze	Standing Stones				
Shatar Chuluu NBP-007	15	632743	5140487	Monument	Khirigsuur	circle	10.5			3.7	3		Standing stones (fallen) at cardinal directions	Bronze	Standing Stones				
Shatar Chuluu NBP-007	16	633771	5140029	Monument	Khirigsuur	circle	6.2			2	1		Fence is hard to see	Bronze					
Shatar Chuluu NBP-007	19	634318	5139851	Monument	Khirigsuur	circle	17.2			8.1	3		Arms to north, Standing stones	Bronze	Arms	Standing Stones			
Shatar Chuluu NBP-007	20	632782	5140496	Monument	Khirigsuur	circle	11			3.9	1			Bronze					
Shatar Chuluu NBP-007	1	634197	5139764	Monument	Rectangle (Sub)	Feature		25.8	3.7				North of F1	Bronze?					
Shatar Chuluu NBP-007	13	635550	5140035	Monument	Rectangle (Sub)	Feature		27.5	6.5				North of F13	Bronze?					
Shatar Chuluu NBP-007	9	634171	5139839	Monument	Turk Burial			2.1	2.5					Turk					
Shatar Chuluu NBP-008	5	633658	5140237	Monument	Circle (Sub)	Feature	3.2							Bronze?					
Shatar Chuluu NBP-008	70	634724	5141143	Monument	Circle (Sub)	Feature	4.4							Bronze?					
Shatar Chuluu NBP-008	75	635048	5140714	Monument	Circle (Sub)	Feature	4.4							Bronze?					
Shatar Chuluu NBP-008	1	633947	5140171	Monument	Circle Burial		2.9							Unknown					
Shatar Chuluu NBP-008	2	633932	5140163	Monument	Circle Burial		6.6							Unknown					
Shatar Chuluu NBP-008	3	633925	5140214	Monument	Circle Burial		4							Unknown					
Shatar Chuluu NBP-008	11	632848	5140853	Monument	Circle Burial		10						Robbed	Unknown					
Shatar Chuluu NBP-008	15	632978	5140783	Monument	Circle Burial		6.4							Unknown					
Shatar Chuluu NBP-008	26	633385	5140938	Monument	Circle Burial		3.8						Disordered	Unknown					
Shatar Chuluu NBP-008	36	633929	5140167	Monument	Circle Burial		6.5							Unknown					
Shatar Chuluu NBP-008	37	633944	5140175	Monument	Circle Burial		3.8						Robbed?	Unknown	Robbed				
Shatar Chuluu NBP-008	38	633925	5140150	Monument	Circle Burial		4						Built with small stones	Unknown					
Shatar Chuluu NBP-008	40	633821	5140816	Monument	Circle Burial		2.4						Robbed?	Unknown	Robbed				

Table C.1 (continued). Feature Index

Shatar Chuluu	NBP-008	41	633575	5141441	Monument	Circle Burial		1.5						Built with large stones, Located near drainage ditch	Mongol?					
Shatar Chuluu	NBP-008	57	634023	5140963	Monument	Circle Burial		9.5							Unknown					
Shatar Chuluu	NBP-008	58	634313	5140866	Monument	Circle Burial		4.8							Unknown					
Shatar Chuluu	NBP-008	73	634358	5140914	Monument	Circle Burial		3.7							Unknown					
Shatar Chuluu	NBP-008	80	635525	5140800	Monument	Circle Burial		8.5							Unknown					
Shatar Chuluu	NBP-008	5	633649	5140203	Monument	Khirigsuur	square		18.8	24.4	10.5	6		Standing stone in central mound	Bronze	Standing Stones				
Shatar Chuluu	NBP-008	6	633633	5140256	Monument	Khirigsuur	circle	7.3				3.00		Standing stones (fallen) at cardinal directions (new type?)	Bronze	Standing Stones				
Shatar Chuluu	NBP-008	7	632787	5140679	Monument	Khirigsuur	circle	5.9			2.1	3		Standing stones at cardinal directions	Bronze	Standing Stones				
Shatar Chuluu	NBP-008	8	632789	5140701	Monument	Khirigsuur	circle	16.8			5.1	1			Bronze					
Shatar Chuluu	NBP-008	9	632820	5140730	Monument	Khirigsuur	square		10.7	11.3	4.6	8		Corners built up	Bronze	Built Up Corners				
Shatar Chuluu	NBP-008	10	632837	5140759	Monument	Khirigsuur	circle	14.2			4.8	3		Standing stones at cardinal directions	Bronze	Standing Stones				
Shatar Chuluu	NBP-008	12	632877	5140858	Monument	Khirigsuur	circle	6.3			2.3	1			Bronze					
Shatar Chuluu	NBP-008	13	632893	5140822	Monument	Khirigsuur	none				6.80	Other		Built with large stones	Bronze					
Shatar Chuluu	NBP-008	14	632960	5140830	Monument	Khirigsuur	circle	14.3			5.5	1			Bronze					
Shatar Chuluu	NBP-008	16	632937	5140664	Monument	Khirigsuur	circle	20			8	1			Bronze					
Shatar Chuluu	NBP-008	17	632966	5140636	Monument	Khirigsuur	circle	9.2			3.4	3		Standing stones at cardinal directions	Bronze	Standing Stnes				
Shatar Chuluu	NBP-008	18	632924	5140629	Monument	Khirigsuur	circle	10.6			5.8	1			Bronze					
Shatar Chuluu	NBP-008	19	633261	5140575	Monument	Khirigsuur	circle	13.7			6.9	3		Standing stones at cardinal directions	Bronze	Standing Stones				
Shatar Chuluu	NBP-008	20	633288	5140517	Monument	Khirigsuur	circle	18			5.5	1			Bronze					
Shatar Chuluu	NBP-008	21	633360	5140563	Monument	Khirigsuur	square		27.8	37.8	8	6	12	Corners built up, One lithic found in vicinity	Bronze	Built Up Corners				
Shatar Chuluu	NBP-008	22	633365	5140617	Monument	Khirigsuur	square		26	29.2	8.5	9	13	Pathway to east	Bronze	Pathway				
Shatar Chuluu	NBP-008	23	633367	5140735	Monument	Khirigsuur	square		36.8	42.2	10.4	6	22	Corners built up,	Bronze	Built Up Corners				
Shatar Chuluu	NBP-008	24	633322	5140866	Monument	Khirigsuur	square		9.5	9.8	4	8		Corners built up with standing stones	Bronze	Built Up Corners				
Shatar Chuluu	NBP-008	25	633351	5140939	Monument	Khirigsuur	square		8.7	9.7		4		Central mound washed out	Bronze					
Shatar Chuluu	NBP-008	31	633132	5141719	Monument	Khirigsuur	circle	19			9	3		Standing stones at cardinal directions	Bronze	Standing Stones				
Shatar Chuluu	NBP-008	32	633116	5141407	Monument	Khirigsuur	square		20.8	27.7	12.5	9	34	Corners built up, Pathway to east	Bronze	Built Up Corners	Pathway			
Shatar Chuluu	NBP-008	33	635167	5141426	Monument	Khirigsuur	none				10.90	Other		Robbed?	Bronze					
Shatar Chuluu	NBP-008	35	633662	5140725	Monument	Khirigsuur	square		17.5	26.7	8.7	6	7	Corners built up	Bronze	Built Up Corners				
Shatar Chuluu	NBP-008	39			Monument	Khirigsuur	square		19.6	25	10.5	6		Porches	Bronze	Porches				
Shatar Chuluu	NBP-008	48	634122	5142130	Monument	Khirigsuur	none				8.80	Other			Bronze					

Table C.1 (continued). Feature Index

Shatar Chuluu	NBP-008	54	633830	5141394	Monument	Khirigsuur	square		22.8	29.5	13.7	6	28	Corners built up, Robbed,	Bronze	Built Up Corners					
Shatar Chuluu	NBP-008	55	634062	5141190	Monument	Khirigsuur	square		25.4	23.5	9	8	4		Bronze						
Shatar Chuluu	NBP-008	61	634573	5140836	Monument	Khirigsuur	square		17	17.8	8	8		Corners built up	Bronze	Built Up Corners					
Shatar Chuluu	NBP-008	70	634721	5141148	Monument	Khirigsuur	circle	19			8.8	1	1		Bronze						
Shatar Chuluu	NBP-008	72	635005	5141302	Monument	Khirigsuur	none				8.40	Other		Elev. is 2172 m	Bronze						
Shatar Chuluu	NBP-008	74	635075	5140781	Monument	Khirigsuur	circle	15.8			8.5	1	8	Porch on south side	Bronze	Porch					
Shatar Chuluu	NBP-008	75	635025	5140687	Monument	Khirigsuur	square		22	24.8	8.1	8		Corners are built up	Bronze	Built Up Corners					
Shatar Chuluu	NBP-008	76	635115	5140625	Monument	Khirigsuur	square		14.2	16.8	8	8		Corners built up	Bronze	Built Up Corners					
Shatar Chuluu	NBP-008	78	635416	5140626	Monument	Khirigsuur	square		20.5	20.6	7.3	8		Corners built up	Bronze	Built Up Corners					
Shatar Chuluu	NBP-008	79	635506	5140709	Monument	Khirigsuur	circle	23			7.7	1			Bronze						
Shatar Chuluu	NBP-008	81	635539	5140839	Monument	Khirigsuur	none				7.10	Other			Bronze						
Shatar Chuluu	NBP-008	82	635977	5140128	Monument	Khirigsuur	square		5.3	6	4.4	4			Bronze						
Shatar Chuluu	NBP-008	83	635903	5140033	Monument	Khirigsuur	circle	14.7			6.3	2		Pathway to east	Bronze	Pathway					
Shatar Chuluu	NBP-008	84	636231	5139945	Monument	Khirigsuur	square		14	15.2	9.6	8	6	Corners built up	Bronze	Built Up Corners					
Shatar Chuluu	NBP-008	85	636439	5140243	Monument	Khirigsuur	none				9.20	Other		Located on drainage ditch	Bronze						
Shatar Chuluu	NBP-008	86	636511	5139770	Monument	Khirigsuur	circle	23.2			11.5	2, 3	67	Built up at cardinal directions, two pathways to north and west	Bronze	Built Up Corners					
Shatar Chuluu	NBP-008	45	633680	5142205	Monument	Line Feature			6.8	1.4				Unknown function	Unknown						
Shatar Chuluu	NBP-008	46	633699	5142193	Monument	Line Feature			8.5	1.5				Unknown function	Unknown						
Shatar Chuluu	NBP-008	5	633646	5140233	Monument	Rectangle (Sub)	Feature		7.8	3.4					Bronze?						
Shatar Chuluu	NBP-008	23	633366	5140770	Monument	Rectangle (Sub)	Feature		12.4	4.6					Bronze?						
Shatar Chuluu	NBP-008	23	633383	5140776	Monument	Rectangle (Sub)	Feature		2.8	2.3					Bronze?						
Shatar Chuluu	NBP-008	75	635030	5140713	Monument	Rectangle (Sub)	Feature		10	5					Bronze?						
Shatar Chuluu	NBP-008	86	636518	5139726	Monument	Rectangle (Sub)	Feature		2.1	4.8				South of F86	Bronze?						
Shatar Chuluu	NBP-008	86	636514	5139726	Monument	Rectangle (Sub)	Feature		2.8	5.7					Bronze?						
Shatar Chuluu	NBP-008	4	633775	5140214	Monument	Ring Burial		3.8							Unknown						
Shatar Chuluu	NBP-008	28	632829	5141220	Monument	Ring Burial		10.1							Unknown						
Shatar Chuluu	NBP-008	34	633354	5141327	Monument	Ring Burial		6							Unknown						
Shatar Chuluu	NBP-008	42	633725	5141739	Monument	Ring Burial		6.3							Xiongnu?						
Shatar Chuluu	NBP-008	71	634884	5141217	Monument	Ring Burial		5							Unknown						
Shatar Chuluu	NBP-008	77	635142	5140624	Monument	Ring Burial		4.8							Unknown						
Shatar Chuluu	NBP-008	29	632796	5141388	Monument	Rock Art								Faces south; First panel: fourteen figures; one archer, three possible horses, two wild goats,	Unknown						
Shatar Chuluu	NBP-008	30	632752	5141372	Monument	Rock Art								One horned gazelle/ibex and one undefined figure	Unknown						
Shatar Chuluu	NBP-008	47	633819	5142343	Monument	Rock Art								Rock art faces south, One wild goat	Unknown						
Shatar Chuluu	NBP-008	49	634033	5141463	Monument	Rock Art								Two panels; Rock art faces southwest (through F53); Three figures total; First Panel:	Unknown						

Table C.1 (continued). Feature Index

Shatar Chuluu	NBP-008	50	634059	5141456	Monument	Rock Art							Three panels in same vicinity; Images pecked deep; Three figures: One anthropomo	Unknown					
Shatar Chuluu	NBP-008	51	634058	5141448	Monument	Rock Art							One panel; One unhorned ungulate	Unknown					
Shatar Chuluu	NBP-008	52	634057	5141441	Monument	Rock Art							Two Panels: First panel: Two wild goats; Second Panel: One animal possibly	Unknown					
Shatar Chuluu	NBP-008	53	634040	5141445	Monument	Rock Art							One Panel; One wild goat and one wild sheep; Very artistic; Elev. 2194	Unknown					
Shatar Chuluu	NBP-008	56	634091	5141213	Monument	Rock Art							Rock art faces west to river valley and is located just north of F55; One Panel: Two horned	Unknown					
Shatar Chuluu	NBP-008	59	634450	5140956	Monument	Rock Art							Rock art faces southeast; One Panel; Five figures: One is horned; one wild goat,	Unknown					
Shatar Chuluu	NBP-008	60	634489	5140906	Monument	Rock Art							One Panel; Two figures, but indistinct	Unknown					
Shatar Chuluu	NBP-008	62	634576	5140835	Monument	Rock Art							Two panels, Four figures: one wild sheep, two horses, one deer, and one unknown	Unknown					
Shatar Chuluu	NBP-008	63	634627	5140890	Monument	Rock Art							One panel; Three figures: two wild goat and one wild sheep	Unknown					
Shatar Chuluu	NBP-008	64	634637	5140890	Monument	Rock Art							One panel; Two wild goats	Unknown					
Shatar Chuluu	NBP-008	65	634646	5140887	Monument	Rock Art							One panel; Two figures: one man walking with marked gender (phallus) and one	Unknown					
Shatar Chuluu	NBP-008	66	634647	5140887	Monument	Rock Art							One panel; One figure of horse	Unknown					

Table C.1 (continued). Feature Index

Shatar Chuluu	NBP-008	67	634647	5140887	Monument	Rock Art							One panel; Three figures: two wild goat and one wild sheep	Unknown						
Shatar Chuluu	NBP-008	68	634651	5140886	Monument	Rock Art							One panel; Symbol (Tamdag/Tribal Symbol?): Circle with dot in it, line coming out	Unknown						
Shatar Chuluu	NBP-008	69	634699	5140975	Monument	Rock Art							One panel; One figure of horse/unhorned ungulate	Unknown						
Shatar Chuluu	NBP-008	27	633132	5141204	Monument	Square Burial			6.9	4.2				Unknown						
Shatar Chuluu	NBP-008	43	633779	5141827	Monument	Square Burial			1.6	2.4				Unknown						
Shatar Chuluu	NBP-008	44	633802	5142066	Monument	Square Burial			3.2	2.2				Unknown						
Shatar Chuluu	NBP-009	2	637382	5131985	Monument	Circle Burial		5.1						Unknown						
Shatar Chuluu	NBP-009	3	637413	5132076	Monument	Circle Burial							Built with small stones	Unknown						
Shatar Chuluu	NBP-009	4	637428	5132074	Monument	Circle Burial		1.85						Unknown						
Shatar Chuluu	NBP-009	5	637431	5132075	Monument	Circle Burial		1.7						Unknown						
Shatar Chuluu	NBP-009	6	637438	5132075	Monument	Circle Burial		2.2						Unknown						
Shatar Chuluu	NBP-009	7	637443	5132075	Monument	Circle Burial		1.2						Unknown						
Shatar Chuluu	NBP-009	8	637447	5132071	Monument	Circle Burial		2.7						Unknown						
Shatar Chuluu	NBP-009	9	637448	5132070	Monument	Circle Burial		2.9						Unknown						
Shatar Chuluu	NBP-009	10	637460	5132068	Monument	Circle Burial		2.8						Unknown						
Shatar Chuluu	NBP-009	11	637476	5132065	Monument	Circle Burial		2.3						Unknown						
Shatar Chuluu	NBP-009	12	637480	5132064	Monument	Circle Burial		3.1						Unknown						
Shatar Chuluu	NBP-009	13	637428	5132056	Monument	Circle Burial		2.35						Unknown						
Shatar Chuluu	NBP-009	14	637437	5132054	Monument	Circle Burial		2.6						Unknown						
Shatar Chuluu	NBP-009	15	637443	5132051	Monument	Circle Burial		1.3						Unknown						
Shatar Chuluu	NBP-009	16	637513	5132109	Monument	Circle Burial		2.25						Unknown						
Shatar Chuluu	NBP-009	17	637516	5132107	Monument	Circle Burial		1.25						Unknown						
Shatar Chuluu	NBP-009	18	637532	5132097	Monument	Circle Burial		1.75						Unknown						
Shatar Chuluu	NBP-009	19	637552	5132021	Monument	Circle Burial		2.5						Unknown						
Shatar Chuluu	NBP-009	20	637642	5132009	Monument	Circle Burial		1.9						Unknown						
Shatar Chuluu	NBP-009	21	637644	5132008	Monument	Circle Burial		1.8						Unknown						
Shatar Chuluu	NBP-009	22	637646	5132007	Monument	Circle Burial		1.7						Unknown						
Shatar Chuluu	NBP-009	23	637650	5131999	Monument	Circle Burial		3						Unknown						
Shatar Chuluu	NBP-009	24	637657	5131988	Monument	Circle Burial		2.3						Unknown						
Shatar Chuluu	NBP-009	25	637661	5131974	Monument	Circle Burial		2.3						Unknown						
Shatar Chuluu	NBP-009	26	637642	5131947	Monument	Circle Burial		4.4						Unknown						
Shatar Chuluu	NBP-009	27	637659	5131954	Monument	Circle Burial		4.3						Unknown						
Shatar Chuluu	NBP-009	28	637672	5131964	Monument	Circle Burial		2.9						Unknown						
Shatar Chuluu	NBP-009	29	637673	5131982	Monument	Circle Burial		1.5						Unknown						
Shatar Chuluu	NBP-009	30	637680	5131984	Monument	Circle Burial		4.6					Robbed	Unknown	Robbed					
Shatar Chuluu	NBP-009	31	637681	5131998	Monument	Circle Burial		4.3						Unknown						
Shatar Chuluu	NBP-009	32	637716	5131992	Monument	Circle Burial		3.1						Unknown						
Shatar Chuluu	NBP-009	33	637727	5131988	Monument	Circle Burial		1.8						Unknown						
Shatar Chuluu	NBP-009	34	637730	5131986	Monument	Circle Burial		1.2						Unknown						
Shatar Chuluu	NBP-009	35	637734	5131988	Monument	Circle Burial		1.93						Unknown						
Shatar Chuluu	NBP-009	36	637738	5131993	Monument	Circle Burial		1.3						Unknown						
Shatar Chuluu	NBP-009	37	637744	5131995	Monument	Circle Burial		1						Unknown						
Shatar Chuluu	NBP-009	38	637746	5131993	Monument	Circle Burial		1.2						Unknown						
Shatar Chuluu	NBP-009	39	637741	5131993	Monument	Circle Burial		2.7					Robbed?	Unknown	Robbed					
Shatar Chuluu	NBP-009	40	637737	5131985	Monument	Circle Burial		1.9						Unknown						
Shatar Chuluu	NBP-009	41	637738	5131985	Monument	Circle Burial		0.9						Unknown						
Shatar Chuluu	NBP-009	42	637721	5131980	Monument	Circle Burial		1.5						Unknown						
Shatar Chuluu	NBP-009	43	637723	5131977	Monument	Circle Burial		1.2						Unknown						
Shatar Chuluu	NBP-009	44	637727	5131973	Monument	Circle Burial		1.7						Unknown						
Shatar Chuluu	NBP-009	45	637728	5131974	Monument	Circle Burial		1.4						Unknown						
Shatar Chuluu	NBP-009	47	637725	5131956	Monument	Circle Burial		1.3						Unknown						
Shatar Chuluu	NBP-009	48	637723	5131953	Monument	Circle Burial		2.1						Unknown						
Shatar Chuluu	NBP-009	49	637723	5131956	Monument	Circle Burial		2.6						Unknown						
Shatar Chuluu	NBP-009	50	637714	5131970	Monument	Circle Burial		1.5						Unknown						
Shatar Chuluu	NBP-009	51	637713	5131972	Monument	Circle Burial		1.2						Unknown						
Shatar Chuluu	NBP-009	52	637711	5131973	Monument	Circle Burial		1.2						Unknown						
Shatar Chuluu	NBP-009	53	637709	5131978	Monument	Circle Burial								Unknown						
Shatar Chuluu	NBP-009	54	637706	5131977	Monument	Circle Burial		1.3						Unknown						
Shatar Chuluu	NBP-009	55	637702	5131974	Monument	Circle Burial		1.4						Unknown						

Table C.1 (continued). Feature Index

Shatar Chuluu	NBP-009	56	637692	5131969	Monument	Circle Burial		1.7						Unknown						
Shatar Chuluu	NBP-009	57	637690	5131968	Monument	Circle Burial		1.6						Unknown						
Shatar Chuluu	NBP-009	58	637678	5131859	Monument	Circle Burial		1.9						Unknown						
Shatar Chuluu	NBP-009	59	637679	5131858	Monument	Circle Burial		1.3						Unknown						
Shatar Chuluu	NBP-009	60	637681	5131852	Monument	Circle Burial		2.4						Unknown						
Shatar Chuluu	NBP-009	61	637672	5131934	Monument	Circle Burial		2.6						Unknown						
Shatar Chuluu	NBP-009	62	637682	5131936	Monument	Circle Burial		3.1						Unknown						
Shatar Chuluu	NBP-009	63	637690	5131956	Monument	Circle Burial		3						Unknown						
Shatar Chuluu	NBP-009	64	637708	5131962	Monument	Circle Burial		2.4						Unknown						
Shatar Chuluu	NBP-009	65	637703	5131947	Monument	Circle Burial		3						Unknown						
Shatar Chuluu	NBP-009	66	637692	5131938	Monument	Circle Burial		2						Unknown						
Shatar Chuluu	NBP-009	67	637694	5131930	Monument	Circle Burial		2.5						Unknown						
Shatar Chuluu	NBP-009	68	637684	5131906	Monument	Circle Burial		2.4						Unknown						
Shatar Chuluu	NBP-009	69	637689	5131911	Monument	Circle Burial		2.4						Unknown						
Shatar Chuluu	NBP-009	70	637697	5131913	Monument	Circle Burial		2.2						Unknown						
Shatar Chuluu	NBP-009	71	637712	5131924	Monument	Circle Burial		2.5						Unknown						
Shatar Chuluu	NBP-009	72	637725	5131939	Monument	Circle Burial		2.9						Unknown						
Shatar Chuluu	NBP-009	73	637736	5131956	Monument	Circle Burial		1.9						Unknown						
Shatar Chuluu	NBP-009	74	637736	5131958	Monument	Circle Burial		1.8						Unknown						
Shatar Chuluu	NBP-009	75	637740	5131949	Monument	Circle Burial		2.1						Unknown						
Shatar Chuluu	NBP-009	76	637752	5131954	Monument	Circle Burial		2.1						Unknown						
Shatar Chuluu	NBP-009	77	637767	5131964	Monument	Circle Burial		1.8						Unknown						
Shatar Chuluu	NBP-009	78	637770	5131954	Monument	Circle Burial		1.9						Unknown						
Shatar Chuluu	NBP-009	79	637753	5131943	Monument	Circle Burial		2.1						Unknown						
Shatar Chuluu	NBP-009	80	637750	5131932	Monument	Circle Burial		1.8						Unknown						
Shatar Chuluu	NBP-009	81	637751	5131926	Monument	Circle Burial		1.7						Unknown						
Shatar Chuluu	NBP-009	82	637732	5131929	Monument	Circle Burial		1.9						Unknown						
Shatar Chuluu	NBP-009	83	637742	5131927	Monument	Circle Burial		2.3						Unknown						
Shatar Chuluu	NBP-009	84	637714	5131911	Monument	Circle Burial		1.9						Unknown						
Shatar Chuluu	NBP-009	85	637720	5131910	Monument	Circle Burial		2						Unknown						
Shatar Chuluu	NBP-009	86	637725	5131909	Monument	Circle Burial		2.2						Unknown						
Shatar Chuluu	NBP-009	87	637728	5131910	Monument	Circle Burial		1.6						Unknown						
Shatar Chuluu	NBP-009	88	637753	5131911	Monument	Circle Burial		4.1						Unknown						
Shatar Chuluu	NBP-009	89	637771	5131918	Monument	Circle Burial		1.7						Unknown						
Shatar Chuluu	NBP-009	90	637781	5131917	Monument	Circle Burial		1.5						Unknown						
Shatar Chuluu	NBP-009	91	637795	5131915	Monument	Circle Burial		1.4						Unknown						
Shatar Chuluu	NBP-009	93	637951	5131801	Monument	Circle Burial		1.8						Unknown						
Shatar Chuluu	NBP-009	94	637919	5131816	Monument	Circle Burial		2.4						Unknown						
Shatar Chuluu	NBP-009	95	637901	5131818	Monument	Circle Burial		1.9						Unknown						
Shatar Chuluu	NBP-009	92	638096	5131873	Monument	Deer Stone			2.58	0.5			Fallen ; .58 m long and .5 m wide, .2 m thick; One side of stone is visible and contains four carved	Bronze						
Shatar Chuluu	NBP-009	1	637347	5132029	Monument	Ring Burial		2.4						Unknown						
Shatar Chuluu	NBP-009	96	637489	5132062	Monument	Ring Burial		1.9					Low slabs used for construction ; Different that the rest of the features at this site	Unknown						
Shatar Chuluu	NBP-010	46	638245	5132345	Monument	Bal Bals							First bal bal of 38	Turk						
Shatar Chuluu	NBP-010	46	638365	5132316	Monument	Bal Bals							Last bal bal of 38	Turk						
Shatar Chuluu	NBP-010	49	638498	5132111	Monument	Bal Bals							First of 33	Turk						
Shatar Chuluu	NBP-010	49	638652	5132083	Monument	Bal Bals							Last of 33	Turk						
Shatar Chuluu	NBP-010	57	639091	5132228	Monument	Bal Bals							First bal bal of 47	Unknown						
Shatar Chuluu	NBP-010	57	639677	5132190	Monument	Bal Bals							Last of 47 Bal Bals, Oriented 100-280 degrees	Unknown						
Shatar Chuluu	NBP-010	99	638593	5134043	Monument	Circle (Sub) Feature		2.7						Unknown						
Shatar Chuluu	NBP-010	112	639063	5133831	Monument	Circle (Sub) Feature		3						Bronze?						
Shatar Chuluu	NBP-010	5	637638	5132250	Monument	Circle Burial		1.5					Located on edge of terrace	Unknown						
Shatar Chuluu	NBP-010	9	637888	5132299	Monument	Circle Burial		3.5						Unknown						
Shatar Chuluu	NBP-010	9	637876	5132290	Monument	Circle Burial		3.8						Unknown						
Shatar Chuluu	NBP-010	9	637832	5132280	Monument	Circle Burial		3.4						Unknown						
Shatar Chuluu	NBP-010	9	637862	5132248	Monument	Circle Burial		3.9						Unknown						
Shatar Chuluu	NBP-010	9	637845	5132248	Monument	Circle Burial		3.9						Unknown						

Table C.1 (continued). Feature Index

Shatar Chuluu	NBP-010	9	637829	5132253	Monument	Circle Burial		3.2					Standing stone	Unknown	Standing Stones					
Shatar Chuluu	NBP-010	9	637798	5132291	Monument	Circle Burial		2						Unknown						
Shatar Chuluu	NBP-010	9	637761	5132295	Monument	Circle Burial		2						Unknown						
Shatar Chuluu	NBP-010	9	637803	5132276	Monument	Circle Burial		2.4						Unknown						
Shatar Chuluu	NBP-010	9	637832	5132119	Monument	Circle Burial		4.2						Unknown						
Shatar Chuluu	NBP-010	9	637830	5132141	Monument	Circle Burial		3.1						Unknown						
Shatar Chuluu	NBP-010	9	637738	5132114	Monument	Circle Burial		2.6						Unknown						
Shatar Chuluu	NBP-010	9	637761	5132164	Monument	Circle Burial		3						Unknown						
Shatar Chuluu	NBP-010	9	637791	5132169	Monument	Circle Burial		4						Unknown						
Shatar Chuluu	NBP-010	9	637794	5132142	Monument	Circle Burial		4.1						Unknown						
Shatar Chuluu	NBP-010	9	637809	5132155	Monument	Circle Burial		5						Unknown						
Shatar Chuluu	NBP-010	9	637842	5132175	Monument	Circle Burial		2.2						Unknown						
Shatar Chuluu	NBP-010	9	637807	5132249	Monument	Circle Burial		5.7					Robbed	Unknown						
Shatar Chuluu	NBP-010	10	638038	5132107	Monument	Circle Burial		1.1						Unknown						
Shatar Chuluu	NBP-010	11	638058	5132068	Monument	Circle Burial		1.7						Unknown						
Shatar Chuluu	NBP-010	19	638038	5132164	Monument	Circle Burial		1.9						Unknown						
Shatar Chuluu	NBP-010	32	637984	5132358	Monument	Circle Burial		2.5						Unknown						
Shatar Chuluu	NBP-010	33	638011	5132363	Monument	Circle Burial		2.4						Unknown						
Shatar Chuluu	NBP-010	34	637967	5132401	Monument	Circle Burial		2.2						Unknown						
Shatar Chuluu	NBP-010	35	637952	5132401	Monument	Circle Burial		1.3						Unknown						
Shatar Chuluu	NBP-010	37	637922	5132458	Monument	Circle Burial		2.7						Unknown						
Shatar Chuluu	NBP-010	38	638029	5132383	Monument	Circle Burial		2						Unknown						
Shatar Chuluu	NBP-010	39	638015	5132349	Monument	Circle Burial		1.9						Unknown						
Shatar Chuluu	NBP-010	40	638035	5132345	Monument	Circle Burial		2					Headstone to east	Unknown						
Shatar Chuluu	NBP-010	43	638141	5132274	Monument	Circle Burial		1.2						Unknown						
Shatar Chuluu	NBP-010	44	638148	5132272	Monument	Circle Burial		2						Unknown						
Shatar Chuluu	NBP-010	45	638164	5132267	Monument	Circle Burial		2						Unknown						
Shatar Chuluu	NBP-010	54	639369	5131927	Monument	Circle Burial		3.2					Arms, Pathway?	Unknown	Arms	Pathway				
Shatar Chuluu	NBP-010	55	639263	5132101	Monument	Circle Burial		2.4						Unknown						
Shatar Chuluu	NBP-010	56	639234	5132082	Monument	Circle Burial		2.2						Unknown						
Shatar Chuluu	NBP-010	59	638464	5132519	Monument	Circle Burial		2.6						Unknown						
Shatar Chuluu	NBP-010	60	638462	5132517	Monument	Circle Burial		2.40						Unknown						
Shatar Chuluu	NBP-010	61	638459	5132524	Monument	Circle Burial		2.9						Unknown						
Shatar Chuluu	NBP-010	62	638457	5132522	Monument	Circle Burial		2						Unknown						
Shatar Chuluu	NBP-010	66	638312	5132599	Monument	Circle Burial		4.3					Located inside fence of F63	Unknown						
Shatar Chuluu	NBP-010	93	638182	5133155	Monument	Circle Burial		4						Unknown						
Shatar Chuluu	NBP-010	94	638180	5133159	Monument	Circle Burial		2					Headstone	Unknown						
Shatar Chuluu	NBP-010	100	638637	5134074	Monument	Circle Burial		4.2						Unknown						
Shatar Chuluu	NBP-010	101	638636	5134069	Monument	Circle Burial		3.9						Unknown						
Shatar Chuluu	NBP-010	102	638633	5134062	Monument	Circle Burial		2.5						Unknown						
Shatar Chuluu	NBP-010	113	639076	5133750	Monument	Circle Burial		5.3						Unknown						
Shatar Chuluu	NBP-010	15	638088	5132022	Monument	Deer Stone			0.5				Broken	Bronze						
Shatar Chuluu	NBP-010	28	637974	5132318	Monument	Deer Stone			3	0.7			Fallen	Bronze						
Shatar Chuluu	NBP-010	31	637985	5132326	Monument	Deer Stone			2.5	0.5			Fallen	Bronze						
Shatar Chuluu	NBP-010	9	637903	5132185	Monument	Khirigsuur	square		62	82.5	15.2	6	77.00	Negative circles to east	Bronze	Negative Circles				
Shatar Chuluu	NBP-010	12	638115	5132002	Monument	Khirigsuur	square		37.7	54.5	13	6	53	Corners built up, Slab burials	Bronze	Built Up Corners				
Shatar Chuluu	NBP-010	16	638021	5132041	Monument	Khirigsuur	square		18.5	14.4	7.4	8	8	Slab burial	Bronze					
Shatar Chuluu	NBP-010	47	638400	5132163	Monument	Khirigsuur	square		64	54.5	12.5	6	33	Corners built up, grave shaft, arms to east, slab burial	Bronze	Built Up Corners				
Shatar Chuluu	NBP-010	53	639026	5132004	Monument	Khirigsuur	circle	17			8.7	2	29	Two pathways to north and northeast	Bronze?	Pathway				
Shatar Chuluu	NBP-010	63	638320	5132617	Monument	Khirigsuur	square		75	91	20.5	5	84	Lithic found within fence	Bronze					
Shatar Chuluu	NBP-010	65	638340	5132549	Monument	Khirigsuur	none				5.20	Other			Bronze					
Shatar Chuluu	NBP-010	73	639046	5132430	Monument	Khirigsuur	square		67	94.2	19.2	6	456	Mound altered to make corral	Bronze					
Shatar Chuluu	NBP-010	81	639277	5132636	Monument	Khirigsuur	circle	44.5			15.3	1	31	Arms to east	Bronze	Arms				
Shatar Chuluu	NBP-010	82	639400	5132708	Monument	Khirigsuur	square		47	40	13	6	49	Arms to northeast	Bronze	Arms				

Table C.1 (continued). Feature Index

Shatar Chuluu	NBP-010	95	639335	5133064	Monument	Khirigsuur	square		36	55.2	13.7	6	61	Corners built up, arms to east	Bronze	Built Up Corners					
Shatar Chuluu	NBP-010	96	639698	5132743	Monument	Khirigsuur	square		21	24.2	11.2	4	16	Deer stone foundation to east	Bronze						
Shatar Chuluu	NBP-010	98	638552	5134029	Monument	Khirigsuur	circle	42.2			8.5	1			Bronze						
Shatar Chuluu	NBP-010	103	638664	5134041	Monument	Khirigsuur	circle	14.5				3			Bronze						
Shatar Chuluu	NBP-010	104	638670	5134025	Monument	Khirigsuur	square		5.2	4		8.00	Standing stones		Middle Bronze	Standing Stones					
Shatar Chuluu	NBP-010	108	638758	5133875	Monument	Khirigsuur	circle	21.2			7.6	3		Standing stones at cardinal directions	Bronze	Standing Stones					
Shatar Chuluu	NBP-010	109	638781	5133825	Monument	Khirigsuur	circle	17.5			7.3	3		Standing stones at cardinal directions	Bronze	Standing Stones					
Shatar Chuluu	NBP-010	110	638800	5133787	Monument	Khirigsuur	circle	22.8			7.8	1			Bronze						
Shatar Chuluu	NBP-010	112	639036	5133811	Monument	Khirigsuur	square		27.4	27.2	13.8	8	17	Corners built up	Bronze	Built Up Corners					
Shatar Chuluu	NBP-010	9	637815	5132203	Monument	Rectangle (Sub) Feature			26	53.2					Bronze?						
Shatar Chuluu	NBP-010	73	639073	5132481	Monument	Rectangle (Sub) Feature			62	4.2					Bronze						
Shatar Chuluu	NBP-010	98	638581	5134049	Monument	Rectangle (Sub) Feature			15.3	5.5					Bronze?						
Shatar Chuluu	NBP-010	1	637621	5132167	Monument	Ring Burial		10.9						Robbed/Excavate, by Volkov?	Bronze?	Excavated					
Shatar Chuluu	NBP-010	2	637642	5132184	Monument	Ring Burial		12.4						Robbed/Excavated	Bronze?	Excavated					
Shatar Chuluu	NBP-010	4	637647	5132228	Monument	Ring Burial		6.8						Bronze?, Xiongnu?	Unknown						
Shatar Chuluu	NBP-010	9	637910	5132274	Monument	Ring Burial		5.4							Unknown						
Shatar Chuluu	NBP-010	9	637906	5132308	Monument	Ring Burial		4							Unknown						
Shatar Chuluu	NBP-010	9	637891	5132340	Monument	Ring Burial		4							Unknown						
Shatar Chuluu	NBP-010	9	637888	5132288	Monument	Ring Burial		4							Unknown						
Shatar Chuluu	NBP-010	51	638547	5132146	Monument	Ring Burial		3.5							Unknown						
Shatar Chuluu	NBP-010	52	638981	5131967	Monument	Ring Burial		4.5							Unknown						
Shatar Chuluu	NBP-010	58	638467	5132524	Monument	Ring Burial		2.7							Unknown						
Shatar Chuluu	NBP-010	70	638254	5132632	Monument	Ring Burial		5						Located south of large khirigsuur	Unknown						
Shatar Chuluu	NBP-010	74	639261	5132456	Monument	Ring Burial		7.4							Unknown						
Shatar Chuluu	NBP-010	75	639257	5132454	Monument	Ring Burial		2.6							Unknown						
Shatar Chuluu	NBP-010	76	639250	5132448	Monument	Ring Burial		6.2							Unknown						
Shatar Chuluu	NBP-010	77	639243	5132441	Monument	Ring Burial		8.5							Unknown						
Shatar Chuluu	NBP-010	78	639226	5132424	Monument	Ring Burial		5.8							Unknown						
Shatar Chuluu	NBP-010	79	639211	5132412	Monument	Ring Burial		6.5							Unknown						
Shatar Chuluu	NBP-010	80	639204	5132402	Monument	Ring Burial		6.2							Unknown						
Shatar Chuluu	NBP-010	106	638717	5134066	Monument	Rock Art								Rock art looks east-southeast; Buddhist writing and three figures of wild sheep and	Unknown						
Shatar Chuluu	NBP-010	107	638738	5134070	Monument	Rock Art								; Rock art looks south-southeast; Six figures: Five wild goat and sheep, and one	Unknown						
Shatar Chuluu	NBP-010	114	639581	5133484	Monument	Rock Art								Rock art faces south; Buddhist writing and two symbols; Symbol is likely a	Unknown						
Shatar Chuluu	NBP-010	115	638238	5131972	Monument	Rock Art								7 horned ungulates	Unknown						
Shatar Chuluu	NBP-010	13	638081	5132003	Monument	Slab Burial			5.4	3.2					Iron						

Table C.1 (continued). Feature Index

Shatar Chuluu	NBP-010	14	638081	5132003	Monument	Slab Burial			6.4	3.8			There is a museum/archaeology number on one of the slabs which reads "АНГ 2008";	Iron						
Shatar Chuluu	NBP-010	17	638008	5132054	Monument	Slab Burial			3	4.9				Iron						
Shatar Chuluu	NBP-010	18	638005	5132144	Monument	Slab Burial			3.7	5.3				Iron						
Shatar Chuluu	NBP-010	20	638020	5132220	Monument	Slab Burial			2.5	6			Robbed?, Oriented n-s	Iron	Robbed					
Shatar Chuluu	NBP-010	21	638018	5132229	Monument	Slab Burial			3	5.2			Missing stones on south and southeast	Iron						
Shatar Chuluu	NBP-010	22	637998	5132268	Monument	Slab Burial			5	3.6				Iron						
Shatar Chuluu	NBP-010	24	637994	5132279	Monument	Slab Burial			6.8	4.7			Built with five deer stones	Bronze						
Shatar Chuluu	NBP-010	25	637992	5132288	Monument	Slab Burial			4.4	3.3			Corners oriented to cardinal directions, missing slabs on south	Iron						
Shatar Chuluu	NBP-010	27	637973	5132309	Monument	Slab Burial			6.2	4.5				Iron						
Shatar Chuluu	NBP-010	29	637972	5132322	Monument	Slab Burial			6	3.3			North corners have fallen	Iron						
Shatar Chuluu	NBP-010	30	637968	5132331	Monument	Slab Burial			4.6	3				Iron						
Shatar Chuluu	NBP-010	48	638414	5132153	Monument	Slab Burial			4.4	4.4			Located within fence of F47	Iron						
Shatar Chuluu	NBP-010	64	638379	5132584	Monument	Slab Burial			3	4.7				Iron						
Shatar Chuluu	NBP-010	67	638261	5132604	Monument	Slab Burial			3.1	3.6				Iron						
Shatar Chuluu	NBP-010	68	638257	5132613	Monument	Slab Burial			4.3	3.6			Missing slabs at south and west	Iron						
Shatar Chuluu	NBP-010	69	638255	5132621	Monument	Slab Burial			4.7	4.1				Iron						
Shatar Chuluu	NBP-010	71	638239	5132610	Monument	Slab Burial			4.3	3.9			Nearly all slabs fallen	Unknown						
Shatar Chuluu	NBP-010	91	638186	5133147	Monument	Slab Burial			5.3	3.8			Slabs mostly fallen	Iron						
Shatar Chuluu	NBP-010	92	638185	5133151	Monument	Slab Burial			2.8	2.1				Iron						
Shatar Chuluu	NBP-010	3	637622	5132206	Monument	Square Burial			2.8	1				Mongol?						
Shatar Chuluu	NBP-010	9	637855	5132296	Monument	Square Burial			4.5	1.8				Unknown						
Shatar Chuluu	NBP-010	26	637978	5132294	Monument	Square Burial			4.5	5.1				Unknown						
Shatar Chuluu	NBP-010	42	638118	5132261	Monument	Square Burial			1.9	1.9				Unknown						
Shatar Chuluu	NBP-010	89	639288	5132609	Monument	Square Burial			4.4	3.3			Located east of F81	Unknown						
Shatar Chuluu	NBP-010	97	638651	5133632	Monument	Square Burial			6.9	4.2			Good construction	Unknown						
Shatar Chuluu	NBP-010	105	638654	5134026	Monument	Square Burial			2.3	2				Unknown						
Shatar Chuluu	NBP-010	111	638830	5133724	Monument	Square Burial			3.7	3.9			Headstone	Unknown						
Shatar Chuluu	NBP-010	112	639047	5133835	Monument	Square Burial			14	2.5				Bronze?						
Shatar Chuluu	NBP-010	9	637757	5132276	Monument	Standing Stone								Unknown						
Shatar Chuluu	NBP-010	72	638461	5132789	Monument	Turk Burial			1.5	2.2			Built with very low lying slabs with a headstone to the north	Turk?						
Shatar Chuluu	NBP-010	84	638402	5133156	Monument	Turk Burial			2.2	1.8				Turk						
Shatar Chuluu	NBP-010	85	638403	5133155	Monument	Turk Burial			2	1.7			Fallen standing stone to east	Turk						
Shatar Chuluu	NBP-010	86	638216	5133173	Monument	Turk Burial			2.6	2.3				Turk						
Shatar Chuluu	NBP-010	87	638213	5133170	Monument	Turk Burial			2.4	2.3				Turk						
Shatar Chuluu	NBP-010	88	638212	5133168	Monument	Turk Burial			3	3				Turk						
Shatar Chuluu	NBP-010	89	638211	5133164	Monument	Turk Burial			2.6	2.6				Turk						

Table C.1 (continued). Feature Index

Shatar Chuluu	NBP-010	30	638211	5133161	Monument	Turk Burial			2.2	2.7				Turk						
Shatar Chuluu	NBP-010	46	638231	5132351	Monument	Turk Burial			2.2	2.25				Bal Bals and man stones to east	Turk					
Shatar Chuluu	NBP-010	46	638214	5132318	Monument	Turk Burial								Lions, not in situ	Turk					
Shatar Chuluu	NBP-010	49	638483	5132116	Monument	Turk Burial			1.8	1.8				Robbed, man stones, Bal Bals	Turk					
Other 2012	NBP-011	33	593212	5107195	Monument	Circle Burial		4							Unknown					
Other 2012	NBP-011	23	593520	5107441	Monument	Khirigsuur	square		17	17	9	4	6		Bronze					
Other 2012	NBP-011	42	593142	5107087	Monument	Khirigsuur	circle	10				1		Mound blends with fence	Bronze					
Other 2012	NBP-011	24	593506	5107421	Monument	Rock Art								Five figures, including a horse, but the rest are undefinable	Unknown					
Other 2012	NBP-011	34	593496	5107705	Monument	Rock Art								Rock art faces east; One figure of wild sheep	Unknown					
Other 2012	NBP-011	37	593363	5107514	Monument	Rock Art								One wild goat, and three undetermined figures;ock art	Unknown					
Other 2012	NBP-011	39	593211	5107057	Monument	Rock Art								One wild sheep	Xiongnu					
Other 2012	NBP-011	41	593142	5107087	Monument	Rock Art								One possible camel, and one unhorned ungulate	Unknown					
Other 2012	NBP-011	44	593122	5107071	Monument	Rock Art								Too many figures to count; Almost entire rock outcrop is covered	Unknown					
Other 2012	NBP-011	45	593070	5107198	Monument	Rock Art								Many figures	Unknown					
Other 2012	NBP-011	40	593217	5107059	Monument	Slab Burial			3.5	3.5				Built against natural rock face	Iron					
Other 2012	NBP-011	19	593631	5107330	Monument	Xiongnu Burial		9							Xiongnu					
Other 2012	NBP-011	1	593719	5107457	Monument	Xiongnu Burial		3							Xiongnu					
Other 2012	NBP-011	2	593717	5107478	Monument	Xiongnu Burial		5							Xiongnu					
Other 2012	NBP-011	3	593711	5107486	Monument	Xiongnu Burial		5							Xiongnu					
Other 2012	NBP-011	4	593705	5107485	Monument	Xiongnu Burial		4							Xiongnu					
Other 2012	NBP-011	5	593703	5107494	Monument	Xiongnu Burial		6							Xiongnu					
Other 2012	NBP-011	6	593641	5107545	Monument	Xiongnu Burial		4							Xiongnu					
Other 2012	NBP-011	7	593699	5107464	Monument	Xiongnu Burial		7							Xiongnu					
Other 2012	NBP-011	8	593703	5107450	Monument	Xiongnu Burial		3							Xiongnu					
Other 2012	NBP-011	9	593711	5107441	Monument	Xiongnu Burial		3							Xiongnu					
Other 2012	NBP-011	10	593709	5107429	Monument	Xiongnu Burial		10							Xiongnu					
Other 2012	NBP-011	11	593701	5107441	Monument	Xiongnu Burial		11							Xiongnu Burial					
Other 2012	NBP-011	12	593686	5107448	Monument	Xiongnu Burial		6							Xiongnu					
Other 2012	NBP-011	13	593676	5107455	Monument	Xiongnu Burial		3							Xiongnu					
Other 2012	NBP-011	14	593662	5107436	Monument	Xiongnu Burial		6							Xiongnu					
Other 2012	NBP-011	15	593673	5107428	Monument	Xiongnu Burial		6							Xiongnu					
Other 2012	NBP-011	16	593669	5107420	Monument	Xiongnu Burial		6.5							Xiongnu					
Other 2012	NBP-011	17	593656	5107406	Monument	Xiongnu Burial		10							Xiongnu					
Other 2012	NBP-011	18	593642	5107388	Monument	Xiongnu Burial		11							Xiongnu					
Other 2012	NBP-011	20	593535	5107390	Monument	Xiongnu Burial		5							Xiongnu					
Other 2012	NBP-011	21	593529	5106429	Monument	Xiongnu Burial		5							Xiongnu					
Other 2012	NBP-011	22	593536	5107428	Monument	Xiongnu Burial		4							Xiongnu					
Other 2012	NBP-011	25	593310	5107270	Monument	Xiongnu Burial		6							Xiongnu					
Other 2012	NBP-011	26	593300	5107282	Monument	Xiongnu Burial		8							Xiongnu					
Other 2012	NBP-011	27	593291	5107298	Monument	Xiongnu Burial		8							Xiongnu					
Other 2012	NBP-011	28	593287	5107262	Monument	Xiongnu Burial		7							Xiongnu					

Table C.1 (continued). Feature Index

Other 2012	NBP-011	29	593285	5107254	Monument	Xiongnu Burial		7						Xiongnu					
Other 2012	NBP-011	30	593278	5107247	Monument	Xiongnu Burial		9						Xiongnu					
Other 2012	NBP-011	31	593273	5107281	Monument	Xiongnu Burial		9						Xiongnu					
Other 2012	NBP-011	32	593265	5107273	Monument	Xiongnu Burial		10						Xiongnu					
Other 2012	NBP-011	35	593388	5107649	Monument	Xiongnu Burial		5.5						Xiongnu					
Other 2012	NBP-011	36	593398	5107635	Monument	Xiongnu Burial		4						Xiongnu					
Other 2012	NBP-011	38	593326	5107479	Monument	Xiongnu Burial							Located near drainage ditch	Xiongnu					
Shatar Chuluu	NBP-012	6	639161	5143326	Monument	Circle Burial		1.3						Unknown					
Shatar Chuluu	NBP-012	8	638896	5143817	Monument	Circle Burial		1.8					On side of drainage ditch	Unknown					
Shatar Chuluu	NBP-012	9	638879	5143810	Monument	Circle Burial		2.2						Unknown					
Shatar Chuluu	NBP-012	10	638645	5143667	Monument	Circle Burial		9.8						Unknown					
Shatar Chuluu	NBP-012	26	639317	5144767	Monument	Circle Burial		3.4						Unknown					
Shatar Chuluu	NBP-012	28	639075	5144682	Monument	Circle Burial		3.2					Located next to drainage	Unknown					
Shatar Chuluu	NBP-012	36	638231	5145143	Monument	Circle Burial		2.9						Unknown					
Shatar Chuluu	NBP-012	42	637979	5145319	Monument	Circle Burial		6.5						Unknown					
Shatar Chuluu	NBP-012	46	638076	5144995	Monument	Circle Burial		5.2						Unknown					
Shatar Chuluu	NBP-012	2	639018	5143172	Monument	Khirigsuur	square		37	30	13.7	6	26 Corners built up, Two pathways to south and west	Bronze	Built Up Corners	Pathway			
Shatar Chuluu	NBP-012	14	638070	5144150	Monument	Khirigsuur	circle	8.9				1.00	Mound indistinct	Bronze					
Shatar Chuluu	NBP-012	20	637358	5144946	Monument	Khirigsuur	square		9	11.3	8.3	4	1 Corners built up	Unknown	Built Up Corners				
Shatar Chuluu	NBP-012	21	639279	5144569	Monument	Khirigsuur	none				10	Other	3 Arms, Proch to west	Unknown	Arms	Porch			
Shatar Chuluu	NBP-012	23	639320	5144673	Monument	Khirigsuur	square		11.4	9.6	6.4	8	4 Corners built up	Bronze	Built Up Corners				
Shatar Chuluu	NBP-012	24	639296	5144720	Monument	Khirigsuur	square		13.3	13.3	8.3	8	1 Corners built up	Bronze	Built Up Corners				
Shatar Chuluu	NBP-012	27	639224	5144690	Monument	Khirigsuur	circle	7				1.00		Bronze					
Shatar Chuluu	NBP-012	30	638992	5144851	Monument	Khirigsuur	square		17	13.9	6.6	4		Bronze					
Shatar Chuluu	NBP-012	32	638523	5144854	Monument	Khirigsuur	circle	22.5			8	1		Bronze					
Shatar Chuluu	NBP-012	33	638320	5145024	Monument	Khirigsuur	square				7	4.00	North and east sides are missing due to alluvial processes	Bronze					
Shatar Chuluu	NBP-012	37	638169	5145146	Monument	Khirigsuur	square		5.8	6.4		8	Corners built up	Bronze	Built Up Corners				
Shatar Chuluu	NBP-012	38	638137	5145188	Monument	Khirigsuur	square		11.9	14	8.5	8	Corners built up	Bronze	Built Up Corners				
Shatar Chuluu	NBP-012	39	638077	5145215	Monument	Khirigsuur	circle	12.1			6.6	1		Bronze					
Shatar Chuluu	NBP-012	40	637982	5145278	Monument	Khirigsuur	square		13	14.5	7.5	8	Fence is bent and appears rather circular	Bronze					
Shatar Chuluu	NBP-012	41	638012	5145301	Monument	Khirigsuur	square		5.8	6.3		8.00	Standing stones at cardinal directions	Bronze	Standing Stones				
Shatar Chuluu	NBP-012	43	637353	5145328	Monument	Khirigsuur	square		8.5	3.4	3.8	4		Bronze					
Shatar Chuluu	NBP-012	45	637665	5145290	Monument	Khirigsuur	square		17.4	14.4	13.3	8	6	Bronze					
Shatar Chuluu	NBP-012	2	639031	5143188	Monument	Rectangle (Sub) Feature			14.6	3.1				Bronze					
Shatar Chuluu	NBP-012	1	638998	5143137	Monument	Ring Burial		7.4						Unknown					
Shatar Chuluu	NBP-012	3	639069	5143131	Monument	Ring Burial		6						Unknown					
Shatar Chuluu	NBP-012	13	638211	5144103	Monument	Ring Burial		7.4						Unknown					
Shatar Chuluu	NBP-012	29	638943	5144812	Monument	Ring Burial		7						Unknown					
Shatar Chuluu	NBP-012	15	638051	5144124	Monument	Rock Art							Rock art looks east; Six figures: Five wild goat and symbol that looks like an 'X'; Elev.=	Unknown					

Table C.1 (continued). Feature Index

Shatar Chuluu	NBP-012	16	638054	5144126	Monument	Rock Art								Two figure: One large deer and one unhorned ungulate	Unknown						
Shatar Chuluu	NBP-012	17	638053	5144131	Monument	Rock Art								One wild goat	Unknown						
Shatar Chuluu	NBP-012	18	638049	5144142	Monument	Rock Art								One indistinct animal	Unknown						
Shatar Chuluu	NBP-012	19	638076	5144187	Monument	Rock Art								Four figures: One large wild goat, two wild sheep and a single unidentifiable animal;	Unknown						
Shatar Chuluu	NBP-012	22	639360	5144643	Monument	Rock Art								Rock art faces east; Five figures: One mother wild sheep and one baby wild sheep, as	Unknown						
Shatar Chuluu	NBP-012	31	638890	5144672	Monument	Rock Art								One panel; One figure of wild sheep	Unknown						
Shatar Chuluu	NBP-012	34	638253	5145110	Monument	Rock Art								Rock art faces south; Three figures: One wild goat, one Ibex, and one unidentifiabl	Unknown						
Shatar Chuluu	NBP-012	35	638257	5145121	Monument	Rock Art								Two figures of deer like animals	Unknown						
Shatar Chuluu	NBP-012	12	638198	5144112	Monument	Square Burial			7.8	8				Possible khirigsuur but construction is flat	Unknown						
Shatar Chuluu	NBP-012	44	637946	5145307	Monument	Square Burial			1	1					Unknown						
Shatar Chuluu	NBP-012	4	639158	5143255	Monument	Turk Burial			1.6	1.9					Turk						
Bulgan Uul	NBP-013	74	644197	5090044	Monument	Circle (Sub) Feature		4.3							Unknown						
Bulgan Uul	NBP-013	81	643698	5089224	Monument	Circle (Sub) Feature		4.4							Unknown						
Bulgan Uul	NBP-013	3	643530	5091105	Monument	Circle Burial		5.2							Unknown						
Bulgan Uul	NBP-013	7	643478	5090921	Monument	Circle Burial		6							Unknown						
Bulgan Uul	NBP-013	9	643393	5090912	Monument	Circle Burial		3.5							Unknown						
Bulgan Uul	NBP-013	11	643417	5090702	Monument	Circle Burial		4.3							Unknown						
Bulgan Uul	NBP-013	28	644196	5090324	Monument	Circle Burial		3.4							Unknown						
Bulgan Uul	NBP-013	29	644196	5090333	Monument	Circle Burial		4.8							Unknown						
Bulgan Uul	NBP-013	36	643841	5090806	Monument	Circle Burial		5.5						Robbed?	Unknown	Robbed					
Bulgan Uul	NBP-013	59	642973	5091658	Monument	Circle Burial		3.5							Unknown						
Bulgan Uul	NBP-013	69	643196	5090746	Monument	Circle Burial		2.5							Unknown						
Bulgan Uul	NBP-013	70	643224	5091065	Monument	Circle Burial		2.4						Possible ovoo	Unknown						
Bulgan Uul	NBP-013	80	643993	5089689	Monument	Circle Burial		2							Unknown						
Bulgan Uul	NBP-013	84	643490	5088800	Monument	Circle Burial		3.8							Unknown						
Bulgan Uul	nbp-013	102	643855	5087657	Monument	Khirigsuur	square		25	24	7.8	4	0								
Bulgan Uul	nbp-013	104	644170	5089203	Monument	Khirigsuur	square		15.5	12.5	6	8	0	KBL 360-1? W	Bronze	Built Up Corners					
Bulgan Uul	NBP-013	1	643509	5091107	Monument	Khirigsuur	square		7.5	7.8		8.00	8.00	Standing stones at corners	Middle Bron	Standing Stones					
Bulgan Uul	NBP-013	2	643542	5091092	Monument	Khirigsuur	square		6.6	8.8	7	4			Bronze						
Bulgan Uul	NBP-013	5	643583	5091012	Monument	Khirigsuur	none					Other		Robbed, No measurements	Bronze	Robbed					
Bulgan Uul	NBP-013	6	643491	5090938	Monument	Khirigsuur	square		11.3	12.3	6	8		Corners built up	Bronze	Built UP Corners					
Bulgan Uul	NBP-013	9	643407	5090907	Monument	Khirigsuur	square		14	13.5		8	8	Mound is washed out	Bronze						
Bulgan Uul	NBP-013	14	642545	5091674	Monument	Khirigsuur	square		7.6	10.9		4			Bronze						

Table C.1 (continued). Feature Index

Bulgan Uul	NBP-013	15	642527	5091754	Monument	Khirigsuur	square		6	5.4		4.00		Middle Bronze					
Bulgan Uul	NBP-013	17	642439	5091804	Monument	Khirigsuur	square		6.9	7.9		8		Bronze					
Bulgan Uul	NBP-013	18	642461	5091721	Monument	Khirigsuur	square		9	17	8.4	6		Bronze					
Bulgan Uul	NBP-013	22	642467	5091918	Monument	Khirigsuur	square		6	5.5		8.00	Standing stones at some corners, Robbed	Bronze	Standing Stones				
Bulgan Uul	NBP-013	23	642460	5091916	Monument	Khirigsuur	none					Other	No measurements due to robbing, burial chamber visible	Bronze?	Robbed				
Bulgan Uul	NBP-013	24	643666	5090689	Monument	Khirigsuur	square		12	13.4	5.8	8	Standing stones (fallen) at corners	Bronze	Standing Stones				
Bulgan Uul	NBP-013	25	643798	5090691	Monument	Khirigsuur	circle	5.8				1.00		Bronze					
Bulgan Uul	NBP-013	26	643839	5090634	Monument	Khirigsuur	circle	4.8				1.00		Bronze					
Bulgan Uul	NBP-013	27	644115	5090368	Monument	Khirigsuur	circle	5.5				1.00	Arms/Niche to south, or just an ovoo	Bronze	Arms				
Bulgan Uul	NBP-013	32	644291	5090140	Monument	Khirigsuur	circle	16.7			6.8	1		Bronze					
Bulgan Uul	NBP-013	33	641317	5090160	Monument	Khirigsuur	square			5		4.00	Many sides missing, so few measurements	Bronze					
Bulgan Uul	NBP-013	34	643855	5090673	Monument	Khirigsuur	circle	6.6				1.00		Bronze					
Bulgan Uul	NBP-013	35	643864	5090770	Monument	Khirigsuur	circle	6.2				1.00	Robbed?	Bronze	Robbed				
Bulgan Uul	NBP-013	38	643665	5090963	Monument	Khirigsuur	square		7.4	9.2	6.2	4		Bronze					
Bulgan Uul	NBP-013	40	643723	5091211	Monument	Khirigsuur	none					Other	No measurements	Bronze					
Bulgan Uul	NBP-013	44	643588	5091125	Monument	Khirigsuur	circle	8.2				3	Standing stones at cardinal directions, Mound is indistinct	Bronze	Standing Stones				
Bulgan Uul	NBP-013	46	643258	5091198	Monument	Khirigsuur	circle	11				1.00	Off high terrace on secondary terrace comprised mostly of sandy loam; Feature has	Bronze					
Bulgan Uul	NBP-013	47	643302	5091474	Monument	Khirigsuur	circle	17.3			9.6	1		Bronze					
Bulgan Uul	NBP-013	48	643178	5091476	Monument	Khirigsuur	circle	8				1.00	Located atop a rocky crag, and has a view of river; It appears due to the feature's precarious	Middle Bronze?					
Bulgan Uul	NBP-013	49	642920	5091575	Monument	Khirigsuur	square		19.6	13.1	9.1	4	Robbed?	Bronze	Robbed				
Bulgan Uul	NBP-013	50	642823	5091656	Monument	Khirigsuur	circle	6.3				1.00	Robbed?	Bronze	Robbed				
Bulgan Uul	NBP-013	51	642785	5091667	Monument	Khirigsuur	circle	7.7				1.00		Bronze					
Bulgan Uul	NBP-013	52	642786	5091690	Monument	Khirigsuur	circle	7.4			5.7	1		Bronze					
Bulgan Uul	NBP-013	53	642806	5091712	Monument	Khirigsuur	circle	6.9				1.00	Located on edge of dry drainage	Bronze					
Bulgan Uul	NBP-013	54	642827	5091677	Monument	Khirigsuur	circle	14.8			6.8	1	Negative circle to north	Bronze	Negative Circles				
Bulgan Uul	NBP-013	56	642847	5091689	Monument	Khirigsuur	circle	7.2				1.00		Bronze					
Bulgan Uul	NBP-013	58	642959	5091663	Monument	Khirigsuur	circle	11.6			8.1	3	Standing stones at cardinal directions	Bronze	Standing Stones				

Table C.1 (continued). Feature Index

Bulgan Uul	NBP-013	61	643102	5091687	Monument	Khirigsuur	circle	18			6.3	3		Standing stones at cardinal directions	Bronze	Standing Stones				
Bulgan Uul	NBP-013	62	643122	5091674	Monument	Khirigsuur	circle	7.6			3	1			Bronze					
Bulgan Uul	NBP-013	63	643130	5091640	Monument	Khirigsuur	square		9	12.1	5.1	4	3		Bronze					
Bulgan Uul	NBP-013	64	643188	5091676	Monument	Khirigsuur	circle	14.7			4.2	3		Standing stones at cardinal directions	Bronze	Standing Stones				
Bulgan Uul	NBP-013	65	643161	5091698	Monument	Khirigsuur	square		10.1	12.3	4.6	3			Bronze					
Bulgan Uul	NBP-013	67	643183	5091712	Monument	Khirigsuur	square		8.1	11.1	3.6	8			Bronze					
Bulgan Uul	NBP-013	68	643216	5091574	Monument	Khirigsuur	circle	19.2			9.2	1			Bronze					
Bulgan Uul	NBP-013	72	643947	5090021	Monument	Khirigsuur	circle	21			9.5	1			Bronze					
Bulgan Uul	NBP-013	74	644209	5090038	Monument	Khirigsuur	square		18.6	18.3	10.8	4	4	Mound built with few large stones	Bronze					
Bulgan Uul	NBP-013	75	644282	5090053	Monument	Khirigsuur	square		12.3	7.3	6	8	1		Bronze					
Bulgan Uul	NBP-013	76	644074	5089905	Monument	Khirigsuur	circle	6.9				1.00			Bronze					
Bulgan Uul	NBP-013	77	643988	5089763	Monument	Khirigsuur	circle	11.1			6	1			Bronze					
Bulgan Uul	NBP-013	81	643672	5089202	Monument	Khirigsuur	square		33.1	35.4	15.3	4	61		Bronze					
Bulgan Uul	NBP-013	82	643590	5088968	Monument	Khirigsuur	square		44.2	42.2	8	8			Bronze					
Bulgan Uul	NBP-013	86	643222	5089100	Monument	Khirigsuur	circle	7.5				1.00		Robbed?	Bronze	Robbed				
Bulgan Uul	NBP-013	87	643199	5089126	Monument	Khirigsuur	circle	6.4				3.00		Standing stones	Bronze	Standing Stones				
Bulgan Uul	NBP-013	88	643210	5089123	Monument	Khirigsuur	circle	3.2				1.00			Bronze					
Bulgan Uul	NBP-013	93	643281	5089285	Monument	Khirigsuur	square		21	27.2	11.7	5	6		Bronze					
Bulgan Uul	NBP-013	95	643533	5089604	Monument	Khirigsuur	square		11.4	12.3	7.1	4	1		Bronze					
Bulgan Uul	NBP-013	96	643576	5089849	Monument	Khirigsuur	square		5.8	9.3		8.00		Standing stones at north corners, Shape Burial?	Middle Bronz	Standing Stones				
Bulgan Uul	NBP-013	97	642591	5089526	Monument	Khirigsuur	square		9.8	9.5		8.00		Standing stones at corners	Middle Bronz	Standing Stones				
Bulgan Uul	NBP-013	99	642230	5091689	Monument	Khirigsuur	square		5	5		8.00		Two standing stones	Unknown	Standing Stones				
Bulgan Uul	NBP-013	100	643641	5090471	Monument	Khirigsuur	square		4	4		8.00		Possibly an ovoo	Bronze?					
Bulgan Uul	NBP-013	75	644274	5090060	Monument	Line (Sub)Feature			8.5	9.7				Cross shape outside main feature	Unknown					
Bulgan Uul	NBP-013	37	643683	5090947	Monument	Line Feature			3.4	2.8				Unknown function, old corral, drainage catch?	Unknown					
Bulgan Uul	NBP-013	39	643702	5090999	Monument	Line Feature		7.4						Possibly a burial?	Unknown					
Bulgan Uul	NBP-013	9	643365	5090912	Monument	Rectangle (Sub)Feature			7.3	4.6					Unknown					
Bulgan Uul	NBP-013	40	643618	5091202	Monument	Rectangle (Sub)Feature			5.6	5.8					Unknown					
Bulgan Uul	NBP-013	74	644223	5090025	Monument	Rectangle (Sub)Feature			2.6	7.4					Unknown					
Bulgan Uul	NBP-013	81	643680	5089228	Monument	Rectangle (Sub)Feature			35.9	4					Unknown					
Bulgan Uul	nbp-013	227	643928	5087935	Monument	Ring Burial		6	0	0	0		0		Unknown					
Bulgan Uul	NBP-013	6	643491	5090921	Monument	Ring Burial		5.4							Unknown					
Bulgan Uul	NBP-013	10	643419	5090705	Monument	Ring Burial		2.5							Unknown					
Bulgan Uul	NBP-013	12	643229	5090648	Monument	Ring Burial		4							Unknown					
Bulgan Uul	NBP-013	42	643607	5091137	Monument	Ring Burial		3.9							Unknown					
Bulgan Uul	NBP-013	43	643603	5091126	Monument	Ring Burial		4						Robbed?	Unknown	Robbed				
Bulgan Uul	NBP-013	45	643581	5091113	Monument	Ring Burial		4.7							Unknown					
Bulgan Uul	NBP-013	55	642834	5091659	Monument	Ring Burial		4							Unknown					
Bulgan Uul	NBP-013	57	642871	5091654	Monument	Ring Burial		4.2						Robbed	Unknown	Robbed				
Bulgan Uul	NBP-013	66	643147	5091722	Monument	Ring Burial		4.3							Unknown					
Bulgan Uul	NBP-013	71	643236	5090649	Monument	Ring Burial		3.6						Near shallow drainage	Mongol?					
Bulgan Uul	NBP-013	78	643979	5089712	Monument	Ring Burial		2.6							Unknown					
Bulgan Uul	NBP-013	79	643976	5089703	Monument	Ring Burial		3							Unknown					
Bulgan Uul	NBP-013	85	643470	5088800	Monument	Ring Burial		2.9							Unknown					
Bulgan Uul	NBP-013	89	643239	5089107	Monument	Ring Burial		3.4							Unknown					
Bulgan Uul	NBP-013	90	643247	5089109	Monument	Ring Burial		2.5							Unknown					

Table C.1 (continued). Feature Index

Bulgan Uul	NBP-013	4	643530	5091112	Monument	Rock Art							Two figures: Two wild goats; Panel overlooks F2 and F3 looking East	Unknown						
Bulgan Uul	NBP-013	13	643249	5090662	Monument	Rock Art							One wild sheep; Second Panel: One wild goat	Unknown						
Bulgan Uul	NBP-013	16	642476	5091837	Monument	Rock Art							Rock Art faces east; Three figures: One wild goat with baby, and one unidentifiabl	Unknown						
Bulgan Uul	NBP-013	19	642461	5091935	Monument	Rock Art							Located on top of a large hill; Rock Art faces south;; One 3m by 3m Panel; 23 total figures;	Unknown						
Bulgan Uul	NBP-013	20	642479	5091929	Monument	Rock Art							Two Panels; First Panel: Two wild sheep, and possible canine/wolf; Second Panel: One	Unknown						
Bulgan Uul	NBP-013	83	643484	5088810	Monument	Shape Burial			5.7	6.6				Bronze/Iron						
Bulgan Uul	NBP-013	98	642576	5089388	Monument	Shape Burial			5.3	4.5			Good construction	Bronze/Iron						
Bulgan Uul	NBP-013	60	643073	5091667	Monument	Slab Burial			3.9	2.8				Iron						
Bulgan Uul	NBP-013	8	643472	5090864	Monument	Square Burial			4.8	5.5				Unknown						
Bulgan Uul	NBP-013	30	644195	5090282	Monument	Square Burial			3.6	2.5				Unknown						
Bulgan Uul	NBP-013	40	643709	5091208	Monument	Square Burial			1.2	2.2				Unknown						
Bulgan Uul	NBP-013	41	643686	5091189	Monument	Square Burial			3.4	1.2			Slightly oval in shape	Unknown						
Bulgan Uul	NBP-013	91	643242	5089137	Monument	Square Burial			3.1	3.8				Unknown						
Bulgan Uul	NBP-013	94	643359	5089258	Monument	Square Burial			8	8.3				Unknown						
Bulgan Uul	NBP-013	92	643244	5089161	Monument	Khirigsuur	square		4.5	5		4.00		Middle Bronze?						
Bulgan Uul	nbp-013	101	643890	5087800	Monument	Turk Burial			4	4	0	0	south of large lithic and ceramic scatter, and also the metallurgical site	Turk?						
Shatar Chuluu	nbp-015	6	630434	5140242	Monument	Circle Burial		1.8	0	0	0	0		Unknown						
Shatar Chuluu	nbp-015	7	630433	5140251	Monument	Circle Burial		2	0	0	0	0								
Shatar Chuluu	nbp-015	8	630443	5140249	Monument	Circle Burial		1.3	0	0	0	0		Unknown						
Shatar Chuluu	nbp-015	9	630418	5139994	Monument	Circle Burial		2.8	0	0	0	0		Unknown						
Shatar Chuluu	nbp-015	16	630062	5140405	Monument	Circle Burial		4	0	0	0	0		Bronze?						
Shatar Chuluu	nbp-015	21	630003	5140625	Monument	Circle Burial		3	0	0	0	0	rodent disturbed	Unknown						
Shatar Chuluu	nbp-015	23	629986	5140641	Monument	Circle Burial		3.2	0	0	0	0	two next to each other	Unknown						
Shatar Chuluu	nbp-015	24	629988	5140643	Monument	Circle Burial		3.5	0	0	0	0		Unknown						
Shatar Chuluu	nbp-015	28	629885	5140634	Monument	Circle Burial		4	0	0	0	0		Unknown	Standing Stones					
Shatar Chuluu	nbp-015	38	629937	5140773	Monument	Circle Burial		8.6	0	0	0	0		Unknown						
Shatar Chuluu	nbp-015	50	629324	5140791	Monument	Circle Burial		2.5	0	0	0	0		Unknown						
Shatar Chuluu	nbp-015	51	629329	5140792	Monument	Circle Burial		2.6	0	0	0	0	standing stone	Unknown	Standing Stones					
Shatar Chuluu	nbp-015	61	628982	5141646	Monument	Circle Burial		5.3	0	0	0	0		Unknown						
Shatar Chuluu	nbp-015	74	628825	5140477	Monument	Circle Burial		4.9	0	0	0	0	next to each other, middle of valley	Unknown						
Shatar Chuluu	nbp-015	75	628824	5140483	Monument	Circle Burial		408	0	0	0	0		Unknown						

Table C.1 (continued). Feature Index

Shatar Chuluu nbp-015	88	628545	5140092	Monument	Circle Burial		1.8	0	0	0		0		Unknown							
Shatar Chuluu nbp-015	90	627758	5140555	Monument	Circle Burial		1.95	0	0	0		0	natural	Mongol							
Shatar Chuluu NBP-015	26	629933	5140641	Monument	Deer Stone		10	0	0	0		0	actual deer stone, bayaraa righted it; open t se, may coupled with previous;	Bronze/Iron							
Shatar Chuluu NBP-015	40	629871	5140823	Monument	Deer Stone			2.2	0.67	0		0	not in situ	Bronze							
Shatar Chuluu nbp-015	3	629988	5140709	Monument	Deer Stone w/o	none	unknown	0	0	0	Other	32	smattering of features/ likely khirigsuur or deer stone site	Bronze	Satellites						
Shatar Chuluu nbp-015	25	629970	5140626	Monument	Deer Stone w/o		13	0	0	0		13	without deer stone, open to west	Bronze							
Shatar Chuluu nbp-015	33	629874	5140739	Monument	Deer Stone w/o		14	0	0	0		23	without actual deer stone, open to the west	Bronze/Iron							
Shatar Chuluu nbp-015	36	629903	5140787	Monument	Deer Stone w/o		4.5	0	0	0		0	without deer stone present	Bronze							
Shatar Chuluu nbp-015	0	629835	5140782	Monument	EXU-Burial			0	0	0		0	BSA-SG-1	Bronze/Iron						Other	
Shatar Chuluu nbp-015	0	629874	5140737	Monument	EXU-Burial			0	0	0		0	Will's 1st Horsehead Mound							Other	
Shatar Chuluu nbp-015	0	629835	5140795	Monument	EXU-Burial			0	0	0		0	BSA-SG-2	Bronze						Other	
Shatar Chuluu nbp-015	20	629991	5140580	Monument	Khirigsuur	circle	27.8	0	0	11.4	1	37		Bronze							
Shatar Chuluu nbp-015	31	629869	5140684	Monument	Khirigsuur	circle	59	0	0	14	1	31		Bronze	Arms	Satellites					
Shatar Chuluu nbp-015	52	629361	5141203	Monument	Khirigsuur	circle	33	0	0	8.6	1	2		Bronze	Satellites						
Shatar Chuluu nbp-015	54	629259	5141278	Monument	Khirigsuur	circle	36.2	0	0	7.2	1	6	open to the east	Bronze	Satellites	Robbed					
Shatar Chuluu nbp-015	57	629223	5141360	Monument	Khirigsuur	circle	22	0	0	8	1	0		Bronze							
Shatar Chuluu nbp-015	66	628959	5141593	Monument	Khirigsuur	circle	11.5	0	0	5.6	1	0		Bronze							
Shatar Chuluu nbp-015	77	628738	5141480	Monument	Khirigsuur	circle	12.06	0	0	5.6	1	0		Bronze							
Shatar Chuluu nbp-015	53	629347	5141226	Monument	Rectangle (Sub)Fe			7	3.7	0		0	of feature 52	Bronze							
Shatar Chuluu nbp-015	55	629257	5141303	Monument	Rectangle (Sub)Fe			8.14	5.2	0		0	of feature 54	Bronze							
Shatar Chuluu nbp-015	2	630040	5140751	Monument	Ring Burial		10.8	0	0	0		12	open on n side, with sats surrounding, maybe a deerstone site, lithic knife found,	Bronze?							
Shatar Chuluu nbp-015	17	630070	5140404	Monument	Ring Burial		2.2	0	0	0		0		Bronze?							
Shatar Chuluu nbp-015	37	629926	5140787	Monument	Ring Burial		9	0	0	0		4	with a smaller circle in	Unknown	Satellites						
Shatar Chuluu nbp-015	43	629719	5140314	Monument	Ring Burial		2.3	0	0	0		0		Unknown							
Shatar Chuluu nbp-015	92	627798	5141359	Monument	Ring Burial		7.5	0	0	0		0		Unknown							
Shatar Chuluu nbp-015	45	629425	5141277	Monument	Rock Art			1	0.8	0		0	two dogs, one deer	Unknown			Panel, Multiple Images	Canine	ND Zoomorphic Horned		
Shatar Chuluu nbp-015	59	629051	5141516	Monument	Rock Art			0.4	0.2	0		0	1	Unknown			Single Image	Wild Goat			
Shatar Chuluu nbp-015	60	629048	5141517	Monument	Rock Art			0.5	0.45	0		0		Bronze			Single Image	Deer			
Shatar Chuluu nbp-015	62	628917	5141589	Monument	Rock Art			0.9	0.95	0		0		Unknown			Single Image	ND Zoomorphic Unhorned			
Shatar Chuluu nbp-015	63	628921	5141585	Monument	Rock Art			0.55	0.5	0		0	one camel, one unknown	Unknown			Panel, Multiple Images	ND Zoomorphic Unhorned	Camel		
Shatar Chuluu nbp-015	64	628937	5141667	Monument	Rock Art			0.1	0.2	0		0	one goat	Unknown			Single Image	Wild Goat			
Shatar Chuluu nbp-015	65	628835	5141605	Monument	Rock Art			0.3	0.6	0		0	one fawn	Unknown			Single Image	Deer			

Table C.1 (continued). Feature Index

Shatar Chuluu nbp-015	70	628918	5141418	Monument	Rock Art			0	0	0	0	2 wild goat, 2 dog, 1 deer, 1 unknown, se facing	Neolithic			Panel, Multiple Images	Wild Goat	Canine	Deer	Unknown	
Shatar Chuluu nbp-015	71	628924	5141429	Monument	Rock Art			0	0	0	0	muddy undetermined unhorned	Bronze?			Panel, Multiple Images	ND Zoomorphic Horned				
Shatar Chuluu nbp-015	72	628929	5141430	Monument	Rock Art			0	0	0	0	2 on separate panels	Neolithic?			Panel, Multiple Images	Wild Goat				
Shatar Chuluu nbp-015	79	628635	5141665	Monument	Rock Art			0	0	0	0	6 wild goat, 1 deer	Unknown			Panel, Multiple Images	Deer	Wild Goat	Wild Goat		
Shatar Chuluu nbp-015	80	628739	5141688	Monument	Rock Art			0	0	0	0		Unknown			Single Image	Wild Goat	Canine			
Shatar Chuluu nbp-015	81	628478	5141695	Monument	Rock Art			0	0	0	0	se facing	Unknown			Single Image	ND Zoomorphic Unhorned				
Shatar Chuluu nbp-015	82	628749	5141694	Monument	Rock Art			0	0	0	0		Neolithic			Single Image	Wild Goat				
Shatar Chuluu nbp-015	83	628742	5141747	Monument	Rock Art			0	0	0	0	2	Unknown			Panel, Multiple Images	Wild Goat				
Shatar Chuluu nbp-015	84	628740	5141748	Monument	Rock Art			0	0	0	0	looks se	Unknown			Panel, Multiple Images	Deer	Antrhopomorphic	Canine		
Shatar Chuluu nbp-015	85	628742	5141753	Monument	Rock Art			0	0	0	0	2	Neolithic			Panel, Multiple Images	Wild Goat				
Shatar Chuluu nbp-015	86	628733	5141791	Monument	Rock Art			0	0	0	0	5 to 6 figures	Neolithic			Panel, Multiple Images	Wild Goat				
Shatar Chuluu nbp-015	4	630087	5140670	Monument	Square Burial		3	2.4	3.4	0	0		Bronze?								
Shatar Chuluu nbp-015	5	630495	5140242	Monument	Square Burial			5	5.1	0	0	bronze	Bronze								
Shatar Chuluu nbp-015	10	630149	5140327	Monument	Square Burial			5	3.7	0	0	circle corner at north e	Unknown								
Shatar Chuluu nbp-015	18	630068	5140400	Monument	Square Burial			2.3	3.8	0	0		Bronze?								
Shatar Chuluu nbp-015	27	629839	5140646	Monument	Square Burial			6.6	3.6	0	3		Bronze/Iron								
Shatar Chuluu nbp-015	29	629866	5140637	Monument	Square Burial			4.5	4.2	0	0		Bronze?								
Shatar Chuluu nbp-015	30	629856	5140639	Monument	Square Burial			5.5	3.9	0	0		Unknown								
Shatar Chuluu nbp-015	39	629903	5140795	Monument	Square Burial			7	5.8	0	0		Unknown								
Shatar Chuluu nbp-015	49	629648	5140624	Monument	Square Burial			4	5.5	0	0	standing stone to east	Unknown	Standing Stones							
Shatar Chuluu nbp-015	56	629228	5141345	Monument	Square Burial			4.1	4.4	0	0	associated with feature 57	Bronze?								
Shatar Chuluu nbp-015	76	628848	5140524	Monument	Square Burial			2	3.3	0	0	middle of valley	Unknown								
Shatar Chuluu nbp-015	87	628642	5140069	Monument	Square Burial			1.4	2.4	0	0	prob natural	Unknown								
Shatar Chuluu nbp-016	1	628431	5139303	Monument	Rock Art			0	0	0	0		Neolithic			Single Image	Wild Goat				
Shatar Chuluu nbp-016	2	628436	5139323	Monument	Rock Art			40	80	0	0		Unknown			Single Image	Wild Sheep				
Shatar Chuluu nbp-016	3	628435	5139333	Monument	Rock Art			60	80	0	0		Neolithic			Single Image	Wild Sheep				
Shatar Chuluu nbp-018	39	631408	5141442	Monument	Bal Bals			7	11	0	0	Square burial with small standing stones?	Turk?	Standing Stones							
Shatar Chuluu nbp-018	10	631839	5141269	Monument	Circle Burial		10	0	0	0	3		Bronze								
Shatar Chuluu nbp-018	13	631662	5141357	Monument	Circle Burial		7.7	0	0	0	0	recorded as squre	Unknown								
Shatar Chuluu nbp-018	17	631661	5141286	Monument	Circle Burial		8	0	0	0	0		Unknown								
Shatar Chuluu nbp-018	20	631700	5141216	Monument	Circle Burial		6	0	0	0	0		Unknown								
Shatar Chuluu nbp-018	21	631682	5141210	Monument	Circle Burial		5	0	0	0	0		Unknown								
Shatar Chuluu nbp-018	24	631564	5141331	Monument	Circle Burial		3	11	0	0	0	looks like three mounds, one circular, 2 connected squares	Unknown								
Shatar Chuluu nbp-018	33	631427	5141376	Monument	Circle Burial		6	0	0	0	0		Unknown								

Table C.1 (continued). Feature Index

Shatar Chuluu nbp-018	35	631396	5141362	Monument	Circle Burial		3	0	0	0	0		Unknown	Standing Stones					
Shatar Chuluu nbp-018	45	631346	5141583	Monument	Circle Burial		7	0	0	0	0		Unknown						
Shatar Chuluu nbp-018	51	631088	5141191	Monument	Circle Burial		5	0	0	0	0		Unknown						
Shatar Chuluu nbp-018	53	630308	5141038	Monument	Circle Burial		3.35	0	0	0	0		Unknown						
Shatar Chuluu nbp-018	54	631051	5141105	Monument	Circle Burial		3.8	0	0	0	0		Unknown						
Shatar Chuluu nbp-018	58	631346	5141583	Monument	Circle Burial		11	0	0	0	0		Unknown						
Shatar Chuluu nbp-018	65	631262	5141799	Monument	Circle Burial		5	0	0	0	0	washed out	Unknown						
Shatar Chuluu nbp-018	66	631262	5141746	Monument	Circle Burial		4.2	0	0	0	0		Unknown						
Shatar Chuluu nbp-018	68	631051	5142092	Monument	Circle Burial		6.5	0	0	0	0		Unknown						
Shatar Chuluu nbp-018	69	630950	5142092	Monument	Circle Burial		5.4	0	0	0	0		Unknown						
Shatar Chuluu nbp-018	70	630530	5141969	Monument	Circle Burial		2	0	0	0	0		Unknown						
Shatar Chuluu nbp-018	7	631755	5141233	Monument	Khirigsuur	none	8.9	0	0	0	Other	1	Bronze						
Shatar Chuluu nbp-018	8	631758	5141272	Monument	Khirigsuur	square		18	20	7	8	0	Bronze						
Shatar Chuluu nbp-018	9	631770	5141290	Monument	Khirigsuur	none	10.5	0	0	0	Other	0	Bronze						
Shatar Chuluu nbp-018	11	631727	5141381	Monument	Khirigsuur	none	12	0	0	0	Other	0	standing stone to north	Bronze	Standing Stones					
Shatar Chuluu nbp-018	14	631668	5141324	Monument	Khirigsuur	circle	20	0	0	7	3	0		Bronze	Standing Stones					
Shatar Chuluu nbp-018	15	631704	5141315	Monument	Khirigsuur	circle	28	0	0	10.5	3	0		Bronze	Standing Stones					
Shatar Chuluu nbp-018	23	631604	5141299	Monument	Khirigsuur	square		13	11	10	8	0	looks like a small central mound with big square slabs SW of it, then four external corner	Bronze?	Standing Stones					
Shatar Chuluu nbp-018	27	631504	5141382	Monument	Khirigsuur	square		19	19	5	8	0	square	Bronze	Built Up Corners					
Shatar Chuluu nbp-018	31	631439	5141406	Monument	Khirigsuur	square		28	28	11	8	1	rock mounds at corners/cardinal directions?	Bronze	Standing Stones	Built Up Corners				
Shatar Chuluu nbp-018	37	631426	5141466	Monument	Khirigsuur	square		20	20	7	4	0		Bronze	Built Up Corners					
Shatar Chuluu nbp-018	40	631413	5141477	Monument	Khirigsuur	circle	18	0	0	6	1	0		Bronze						
Shatar Chuluu nbp-018	41	631370	5141483	Monument	Khirigsuur	square		19	18	12	4	0		Bronze						
Shatar Chuluu nbp-018	43	631379	5141519	Monument	Khirigsuur	circle	12	0	0	5	3	0	Type 3?	Bronze	Standing Stones					
Shatar Chuluu nbp-018	44	631347	5141533	Monument	Khirigsuur	square		17	15	6	8	0		Bronze	Built Up Corners					
Shatar Chuluu nbp-018	46	631274	5141593	Monument	Khirigsuur	square		37	34	15	9	0	pathways to NE corner and South fence	Bronze	Pathway					
Shatar Chuluu nbp-018	47	631363	5141630	Monument	Khirigsuur	circle	11	0	0	7	3	0	3 cardinal direction standing stones	Bronze	Standing Stones					
Shatar Chuluu nbp-018	48	631367	5141655	Monument	Khirigsuur	circle	15	0	0	6	1	0	circle fence?	Bronze						
Shatar Chuluu nbp-018	49	631376	5141612	Monument	Khirigsuur	square		11	13	6	4	0		Bronze						
Shatar Chuluu nbp-018	61	631048	5141880	Monument	Khirigsuur	square		31	25	11.38	4	0		Bronze						
Shatar Chuluu nbp-018	64	631262	5141799	Monument	Khirigsuur	square		16	11.6	7.6	5	0		Bronze						
Shatar Chuluu nbp-018	71	630749	5142380	Monument	Khirigsuur	square		20	16.8	9.4	9	0		Bronze						
Shatar Chuluu nbp-018	72	630765	5142393	Monument	Khirigsuur	circle	17	0	0	0	1	0		Bronze						
Shatar Chuluu nbp-018	73	630830	5142212	Monument	Khirigsuur	square		22.5	23.5	13	4	0	pathway s, e, w	Bronze	Pathway					
Shatar Chuluu nbp-018	80	630591	5143052	Monument	Khirigsuur	circle	11.95	0	0	5.4	3	0		Bronze	Standing Stones					
Shatar Chuluu nbp-018	82	630460	5143336	Monument	Khirigsuur	square		31	24.9	14	6	12		Bronze	Built Up Corners					
Shatar Chuluu nbp-018	83	630460	5143336	Monument	Khirigsuur	square		12.7	12.2	7.2	4	0		Bronze	Standing Stones					
Shatar Chuluu nbp-018	12	631691	5141379	Monument	Ring Burial		4.3	0	0	0		0		Unknown						
Shatar Chuluu nbp-018	1	631925	5141055	Monument	Rock Art			0	0	0		0	unknown direction, E? scratched	Other, Historical		Single Image	Wild Goat			
Shatar Chuluu nbp-018	2	631926	5141055	Monument	Rock Art			0	0	0		0	unknown direction, E?	Neolithic		Single Image	Wild Goat			
Shatar Chuluu nbp-018	3	631924	5141105	Monument	Rock Art			0	0	0		0	NW	Bronze		Single Image	Wild Goat	Single Image	Wild Goat	

Table C.1 (continued). Feature Index

Shatar Chuluu nbp-018	4	631936	5141251	Monument	Rock Art			0	0	0	0	2 deer, one 1 unhorned; three unknown unhorned?	Neolithic			Panel, Multiple Images	ND Zoomorphic Unhorned	Deer			
Shatar Chuluu nbp-018	5	631943	5141256	Monument	Rock Art			0	0	0	0	5 wild goat, 1 tamga, 1 horse, a few unidentifited	Neolithic			Panel, Multiple Images	ND Zoomorphic Unhorned	Canine	Tamga	Wild Goat	
Shatar Chuluu nbp-018	6	631945	5141253	Monument	Rock Art			0	0	0	0	hard rto identify	Neolithic			Single Image	Tamga				
Shatar Chuluu nbp-018	16	631700	5141324	Monument	Rock Art			0	0	0	0	17cm	Neolithic			Single Image	Wild Goat				
Shatar Chuluu nbp-018	19	631687	5141344	Monument	Rock Art			0	0	0	0		Neolithic			Single Image	Wild Goat				
Shatar Chuluu nbp-018	25	631632	5141387	Monument	Rock Art			0	0	0	0	.23x.61, anthropomorphic?; 3 horses	Bronze?			Panel, Multiple Images	Horse	Antrhopomorphic			
Shatar Chuluu nbp-018	26	631636	5141297	Monument	Rock Art			0	0	0	0	.12x.11; 3 horned	Neolithic			Panel, Multiple Images	Wild Goat				
Shatar Chuluu nbp-018	79	630617	5143027	Monument	Rock Art			0	0	0	0	looks w	Neolithic			Single Image	ND Zoomorphic Unhorned				
Shatar Chuluu nbp-018	18	631645	5141258	Monument	Square Burial			0	2.2	0	0		Unknown								
Shatar Chuluu nbp-018	28	631480	5141396	Monument	Square Burial			7	9	0	0		Bronze								
Shatar Chuluu nbp-018	29	631480	5141396	Monument	Square Burial			7	9	0	0		Bronze?								
Shatar Chuluu nbp-018	30	631439	5141419	Monument	Square Burial			5	7	0	0		Bronze?								
Shatar Chuluu nbp-018	32	631445	5141392	Monument	Square Burial			7	8	0	0		Unknown								
Shatar Chuluu nbp-018	34	631411	5141380	Monument	Square Burial			6	20	0	0	Mungguntaig, 4 corner grave	Bronze								
Shatar Chuluu nbp-018	36	631387	5141361	Monument	Square Burial			0	4	8	0		Bronze								
Shatar Chuluu nbp-018	42	631387	5141501	Monument	Square Burial			7	6	0	0		Bronze?								
Shatar Chuluu nbp-018	50	631316	5141427	Monument	Square Burial			1.9	1.5	0	0	Goat on standing stone in middle of square foundations, standing stone not in	Unknown	Standing Stones		Single Image	Wild Goat				
Shatar Chuluu nbp-018	67	631139	5141975	Monument	Square Burial			6.2	8	0	0		Unknown								
Shatar Chuluu nbp-018	81	630570	5143072	Monument	Square Burial			3.8	14.3	0	0	Mungguntaig?	Bronze								
Shatar Chuluu nbp-019	2	623376	5140715	Monument	Khirigsuur	none		0	0	12.65	Other	0	Bronze								
Shatar Chuluu nbp-020	3	636335	5129087	Monument	Circle Burial		5	0	0	0		0	Unknown								
Shatar Chuluu nbp-020	4	636352	5128061	Monument	Khirigsuur	circle	15.5	0	0	5.1	1	0	Bronze								
Shatar Chuluu nbp-020	6	636366	5128904	Monument	Khirigsuur	square		17	16.2	6.3	8	0	Bronze	Built Up Corners							
Shatar Chuluu nbp-020	7	636547	5128968	Monument	Khirigsuur	square		15.4	18.85	7	4	0	Bronze								
Shatar Chuluu nbp-020	24	636891	5129057	Monument	Khirigsuur	square		12.7	13	8	8	0	Bronze	Built Up Corners							
Shatar Chuluu nbp-020	25	636714	5128884	Monument	Khirigsuur	circle	12.5	0	0	0	1	0 robbed, fence washed out?	Bronze	Robbed							
Shatar Chuluu nbp-020	5	636355	5129049	Monument	Slab Burial			4.3	4.7	0		0 human bone on surface collected, along with one ceramic piece	Bronze/Iron	Robbed							
Shatar Chuluu nbp-020	8	636568	5128959	Monument	Slab Burial			3	3.4	0	0		Bronze/Iron								
Shatar Chuluu nbp-020	9	636575	5128948	Monument	Slab Burial			3	3	0	0		Bronze/Iron								
Shatar Chuluu nbp-020	10	636574	5128948	Monument	Slab Burial			1.5	2	0	0		Bronze/Iron								
Shatar Chuluu nbp-020	11	636567	5128938	Monument	Slab Burial			4	2.6	0	0	missing south side	Bronze/Iron								
Shatar Chuluu nbp-020	12	636580	5128943	Monument	Slab Burial			3.7	3.7	0	0	missing west side	Bronze/Iron								
Shatar Chuluu nbp-020	14	636586	5128921	Monument	Slab Burial			3.7	3.7	0	0	missing south side	Bronze/Iron								

Table C.1 (continued). Feature Index

Shatar Chuluu	nbp-020	15	636597	5128920	Monument	Slab Burial			2.8	2.6	0		0	missing south side	Bronze/Iron						
Shatar Chuluu	nbp-020	17	636606	5128919	Monument	Slab Burial			2	1.4	0		0		Bronze/Iron	Robbed					
Shatar Chuluu	nbp-020	18	636612	5128918	Monument	Slab Burial			2	1.4	0		0		Bronze/Iron						
Shatar Chuluu	nbp-020	19	636672	5128913	Monument	Slab Burial			3.6	2.6	0		0	missing se side	Bronze/Iron						
Shatar Chuluu	nbp-020	21	636688	5128932	Monument	Slab Burial			3.8	4.5	0		0		Bronze/Iron						
Shatar Chuluu	nbp-020	23	636852	5129145	Monument	Slab Burial			3.2	4.7	0		0	standing stone to NE	Iron	Standing Stones					
Shatar Chuluu	nbp-020	2	636317	5129059	Monument	Square Burial			4.9	2.5	0		0		Unknown						
Shatar Chuluu	nbp-020	13	636578	5128929	Monument	Square Burial			12.7	8	0		0		Unknown						
Shatar Chuluu	nbp-020	20	636664	5128917	Monument	Square Burial			6.4	5.9	0		0	in large inlet clearing	Unknown						
Shatar Chuluu	nbp-020	30	637137	5128337	Monument	Square Burial			4.3	5	0		0		Unknown						
Shatar Chuluu	nbp-021	2	640428	5119536	Monument	Circle Burial		6.2	0	0	0		0		Unknown						
Shatar Chuluu	nbp-021	1	641029	5121699	Monument	Ring Burial		3	0	0	0		0		Unknown						
Shatar Chuluu	nbp-022	1	639170	5139470	Monument	Circle Burial		6	0	0	0		0		Unknown						
Shatar Chuluu	nbp-022	2	639140	5139545	Monument	Circle Burial		5	0	0	0		0		Unknown						
Shatar Chuluu	nbp-022	3	639135	5139534	Monument	Circle Burial		6.5	0	0	0		0		Unknown						
Shatar Chuluu	nbp-022	7	638930	5139909	Monument	Circle Burial		7	0	0	0		0		Unknown	Standing Stones					
Shatar Chuluu	nbp-022	27	639068	5140184	Monument	Circle Burial		3	0	0	0		0		Unknown						
Shatar Chuluu	nbp-022	27	639065	5140185	Monument	Circle Burial		4	0	0	0		0		Unknown						
Shatar Chuluu	nbp-022	27	639058	5140181	Monument	Circle Burial		3	0	0	0		0		Unknown						
Shatar Chuluu	nbp-022	30	638994	5140251	Monument	Circle Burial		6.7	0	0	0		0	large stones	Bronze?						
Shatar Chuluu	nbp-022	31	638583	5140269	Monument	Circle Burial		13	0	0	0	3	0		Bronze?	Standing Stones					
Shatar Chuluu	nbp-022	40	639046	5141297	Monument	Circle Burial		3	0	0	0		0		Unknown						
Shatar Chuluu	nbp-022	40	639049	5141302	Monument	Circle Burial		6	0	0	0		0		Unknown						
Shatar Chuluu	nbp-022	47	639367	5139394	Monument	Circle Burial		5	0	0	0		0		Bronze?						
Shatar Chuluu	nbp-022	76	639607	5142580	Monument	Circle Burial		11	0	0	0		0		Bronze?						
Shatar Chuluu	nbp-022	78	640064	5142640	Monument	Circle Burial		9	0	0	0		0		Unknown						
Shatar Chuluu	nbp-022	79	639657	5142658	Monument	Circle Burial		7	0	0	0		0		Bronze?						
Shatar Chuluu	nbp-022	85	639604	5140217	Monument	Circle Burial		10	0	0	0		0		Bronze?						
Shatar Chuluu	nbp-022	6	638961	5139900	Monument	Khirigsuur	none		0	0	9	Other	0		Bronze						
Shatar Chuluu	nbp-022	8	638943	5139988	Monument	Khirigsuur	circle		0	0	7.6	1	0		Bronze						
Shatar Chuluu	nbp-022	9	638932	5139974	Monument	Khirigsuur	circle		0	0	9	1	0		Bronze						
Shatar Chuluu	nbp-022	10	638574	5139955	Monument	Khirigsuur	none		0	0	9.7	Other	0		Bronze						
Shatar Chuluu	nbp-022	11	638983	5139961	Monument	Khirigsuur	none		0	0	4.5	Other	0		Bronze						
Shatar Chuluu	nbp-022	12	638992	5139957	Monument	Khirigsuur	none		0	0	7.6	Other	0		Bronze						
Shatar Chuluu	nbp-022	13	639009	5139955	Monument	Khirigsuur	none		0	0	14	Other	0		Bronze						
Shatar Chuluu	nbp-022	14	639027	5139964	Monument	Khirigsuur	none		0	0	6.5	Other	0		Bronze						
Shatar Chuluu	nbp-022	15	639054	5139897	Monument	Khirigsuur	square		17	11.7	6.5	6	0		Bronze	Built Up Corners					
Shatar Chuluu	nbp-022	16	639091	5139929	Monument	Khirigsuur	square		20	22	12	8	8		Bronze	Standing Stones					
Shatar Chuluu	nbp-022	17	639077	5139974	Monument	Khirigsuur	none	12	0	0	10	Other	0		Bronze						
Shatar Chuluu	nbp-022	19	639104	5140014	Monument	Khirigsuur	square		16.5	17	11	4	6		Bronze						
Shatar Chuluu	nbp-022	20	639131	5140010	Monument	Khirigsuur	none	12	0	0	9	Other	0		Bronze						
Shatar Chuluu	nbp-022	21	639192	5139967	Monument	Khirigsuur	square		25	25	8	8	2		Bronze	Built Up Corners					
Shatar Chuluu	nbp-022	22	639238	5140043	Monument	Khirigsuur	circle	29	0	0	9.5	1	3		Bronze						
Shatar Chuluu	nbp-022	23	639183	5140062	Monument	Khirigsuur	circle	23	0	0	8	1	0		Bronze						
Shatar Chuluu	nbp-022	24	639154	5140047	Monument	Khirigsuur	square		12.4	15	8	8	0		Bronze	Built Up Corners					
Shatar Chuluu	nbp-022	25	639113	5140073	Monument	Khirigsuur	none		0	0	12	Other	7		Bronze						
Shatar Chuluu	nbp-022	26	635081	5140064	Monument	Khirigsuur	none		0	0	12	Other	0		Bronze						
Shatar Chuluu	nbp-022	29	639007	5140238	Monument	Khirigsuur	circle	17.3	0	0	8.6		3		Bronze						
Shatar Chuluu	nbp-022	32	638971	5140286	Monument	Khirigsuur	circle	21	0	0	9	3	0		Bronze	Standing Stones					
Shatar Chuluu	nbp-022	33	639021	5140278	Monument	Khirigsuur	square		13	14	11	8	23		Bronze	Built Up Corners					
Shatar Chuluu	nbp-022	34	638996	5140317	Monument	Khirigsuur	square		14.4	13	8.3	4	11	pathway to SE	Bronze	Pathway					
Shatar Chuluu	nbp-022	35	638970	5140313	Monument	Khirigsuur	square		17.6	15.2	10.8	4	10		Bronze	Built Up Corners					
Shatar Chuluu	nbp-022	37	638977	5140425	Monument	Khirigsuur	square		24	20	13	9	1	stone tool found on western satellite	Bronze	Pathway					
Shatar Chuluu	nbp-022	38	638928	5140389	Monument	Khirigsuur	square		4	3	2	4	0	human bone on surface	Bronze	Robbed					
Shatar Chuluu	nbp-022	39	638559	5140544	Monument	Khirigsuur	circle	17	0	0	12	1	5		Bronze	Robbed					
Shatar Chuluu	nbp-022	41	639070	5141549	Monument	Khirigsuur	circle	10	0	0	7	1	0		Bronze	Robbed					
Shatar Chuluu	nbp-022	42	639043	5141589	Monument	Khirigsuur	none		0	0	11	Other	0		Bronze	Robbed					
Shatar Chuluu	nbp-022	43	639040	5141698	Monument	Khirigsuur	none		0	0	10	Other	0		Bronze	Robbed					
Shatar Chuluu	nbp-022	44	639152	5141672	Monument	Khirigsuur	circle	17	0	0	8	1	1		Bronze	Robbed					

Table C.1 (continued). Feature Index

Shatar Chuluu	nbp-022	45	639789	5141866	Monument	Khirigsuur	square		13	11.5	7	4	0		Bronze							
Shatar Chuluu	nbp-022	46	639342	5139387	Monument	Khirigsuur	circle	30	0	0	10	1	2		Bronze							
Shatar Chuluu	NBP-022	48	639397	5139391	Monument	Khirigsuur	circle	30	0	0	12	1	7		Bronze							
Shatar Chuluu	NBP-022	49	639467	5139421	Monument	Khirigsuur	none		0	0	12	Other	0		Bronze							
Shatar Chuluu	nbp-022	52	639462	5140001	Monument	Khirigsuur	square		25	27	12	8	19		Bronze	Built Up Corners						
Shatar Chuluu	nbp-022	53	639308	5139333	Monument	Khirigsuur	square		24	25	12	8	16		Bronze	Built Up Corners						
Shatar Chuluu	nbp-022	59	639372	5140098	Monument	Khirigsuur	square		34	34	12	8	22	pathway to SW	Bronze	Pathway	Built Up Corners					
Shatar Chuluu	nbp-022	60	639270	5140170	Monument	Khirigsuur	square		18	18	11	4	42	Mongolian team's F10	Bronze							
Shatar Chuluu	nbp-022	61	639184	5140223	Monument	Khirigsuur	square		23	24	12	4	20		Bronze							
Shatar Chuluu	nbp-022	63	639264	5140259	Monument	Khirigsuur	square		29	29	17	4	34	arms to SW		Arms						
Shatar Chuluu	nbp-022	66	639332	5140381	Monument	Khirigsuur	none		0	0	15	Other	105	many satellites surrounding mound, no fence								
Shatar Chuluu	nbp-022	68	639194	5140717	Monument	Khirigsuur	square		21	21	10	4	0		Bronze							
Shatar Chuluu	nbp-022	69	639130	5140707	Monument	Khirigsuur	square		15	17	11	9	0	pathway to SW and SE	Bronze	Pathway						
Shatar Chuluu	nbp-022	70	639055	5140594	Monument	Khirigsuur	square		18	18	12	4	0	negative cirlces to SE	Bronze	Negative Circles						
Shatar Chuluu	nbp-022	71	639253	5141219	Monument	Khirigsuur	square		20	22	15	8	21	Mongolian Team's F21		Built Up Corners						
Shatar Chuluu	nbp-022	72	639382	5141725	Monument	Khirigsuur	square		24	23	12	4	4		Bronze							
Shatar Chuluu	nbp-022	73	639326	5141752	Monument	Khirigsuur	none		0	0	10	Other	0		Bronze?	Robbed						
Shatar Chuluu	nbp-022	74	639283	5143604	Monument	Khirigsuur	circle	32	0	0	10	1	4	Mongolian Team's 24	Bronze							
Shatar Chuluu	nbp-022	75	639736	5142583	Monument	Khirigsuur	square		26	29	10	4	10		Bronze							
Shatar Chuluu	nbp-022	77	639745	5142642	Monument	Khirigsuur	square		33	35	14	8	3	negative circle off fence to SE	Bronze	Built Up Corners	Negative Circles					
Shatar Chuluu	nbp-022	80	639818	5142353	Monument	Khirigsuur	circle	21	0	0	9	1	9		Bronze							
Shatar Chuluu	nbp-022	81	639852	5142382	Monument	Khirigsuur	circle	40	0	0	8	1	25	Mongolian Team's 31	Bronze							
Shatar Chuluu	nbp-022	82	639990	5141145	Monument	Khirigsuur	square		19	21	8	8	0		Bronze							
Shatar Chuluu	nbp-022	83	638740	5141096	Monument	Khirigsuur	square		16	16	9	4	12		Bronze							
Shatar Chuluu	nbp-022	39	633866	5140543	Monument	Rectangle (Sub)	Fe		12	2	0		0		Bronze							
Shatar Chuluu	nbp-022	5	639142	5139535	Monument	Ring Burial		4.3	0	0	0		0		Unknown							
Shatar Chuluu	nbp-022	65	639311	5140337	Monument	Ring Burial		10	0	0	0		0	Mongolian Team's 15	Bronze?							
Shatar Chuluu	nbp-022	84	639758	5141113	Monument	Ring Burial		9	0	0	0		0		Bronze?							
Shatar Chuluu	nbp-022	28	639026	5140218	Monument	Square Burial			1.6	4.7	0		1		Bronze?							
Shatar Chuluu	nbp-022	36	638970	5140313	Monument	Square Burial			5.5	5.1	0		0		Unknown							
Shatar Chuluu	nbp-022	62	639114	5140293	Monument	Square Burial			7	5	0		0		Bronze?							
Shatar Chuluu	nbp-022	64	639324	5140322	Monument	Square Burial			4	4	0		0	Mongolian Team's 14	Bronze?							
Shatar Chuluu	nbp-022	67	639423	5140596	Monument	Square Burial			5.4	4	0		0	Mongolian Team's F17	Bronze?							
Shatar Chuluu	nbp-022	50	639524	5139533	Monument	Turk Burial		4	0	0	0		0		Turk							
Shatar Chuluu	nbp-022	51	639465	5139555	Monument	Turk Burial		6	0	0	0		0	with balbal line	Turk							
Bulgan Uul	nbp-024	4	638464	5090436	Monument	Khirigsuur	square		13.3	9	6	4	0		Bronze	Robbed						
Bulgan Uul	nbp-024	5	638406	5090579	Monument	Khirigsuur	square		12	11	8.5	8	4		Bronze	Standing Stones						
Bulgan Uul	nbp-026	4	634834	5090315	Monument	Circle Burial		4.5	0	0	0		0		Unknown							
Bulgan Uul	nbp-026	9	635046	5090460	Monument	Circle Burial		6	0	0	0		0		Unknown							
Bulgan Uul	nbp-026	3	634576	5089168	Monument	Ring Burial		3	0	0	0		0		Unknown							
Bulgan Uul	nbp-026	5	634825	5090310	Monument	Ring Burial		6	0	0	0		0		Unknown							
Bulgan Uul	nbp-026	1	634942	5090256	Monument	Rock Art			0	0	0		0	two	Bronze?		Panel, Multiple Images	ND Zoomorphic Horned	Deer			
Bulgan Uul	nbp-026	2	635072	5089214	Monument	Rock Art			0	0	0		0	three figures?			Panel, Multiple Images	Deer	Unknown			
Bulgan Uul	nbp-026	8	634392	5088588	Monument	Rock Art			0	0	0		0		Neolithic		Single Image	Tamga				
Bulgan Uul	nbp-026	10	634378	5088617	Monument	Rock Art			0	0	0		0	two figures	Unknown		Panel, Multiple Images	ND Zoomorphic Horned	Deer			
Bulgan Uul	nbp-026	11	634353	5088690	Monument	Rock Art			0	0	0		0	two	Turk?		Panel, Multiple Images	Tamga				
Bulgan Uul	nbp-027	82	639455	5076439	Monument	Bal Bals			0	0	0		0		Turk							
Bulgan Uul	nbp-027	2	639933	5077145	Monument	Circle Burial		3.9	0	0	0		0	(f22)	Unknown							
Bulgan Uul	nbp-027	16	639603	5076889	Monument	Circle Burial		7.7	0	0	0		0		Unknown							
Bulgan Uul	nbp-027	32	639954	5077153	Monument	Circle Burial		3.6	0	0	0		0		Unknown							

Table C.1 (continued). Feature Index

Bulgan Uul	nbp-027	34	640053	5077006	Monument	Circle Burial		5.5	0	0	0	0	0		Unknown							
Bulgan Uul	nbp-027	37	639792	5077674	Monument	Circle Burial		5.4	0	0	0	0	0	maybe khirigsuur type 3,but missing distinct fence	Unknown	Standing Stones						
Bulgan Uul	nbp-027	39	639702	5077757	Monument	Circle Burial		5.2	0	0	0	0	0	khirigsuur?	Unknown							
Bulgan Uul	nbp-027	48	639843	5078176	Monument	Circle Burial		6.1	0	0	0	0	1		Bronze?							
Bulgan Uul	nbp-027	54	640123	5078920	Monument	Circle Burial		4.1	0	0	0	0	0	sdtanding stones at side	Unknown							
Bulgan Uul	nbp-027	55	640126	5078924	Monument	Circle Burial		3.7	0	0	0	0	0	standing stones on east side	Unknown							
Bulgan Uul	nbp-027	56	640132	5078929	Monument	Circle Burial		2.9	0	0	0	0	0	standing stones "small" on east side	Bronze?							
Bulgan Uul	nbp-027	61	640247	5079046	Monument	Circle Burial		4.9	0	0	0	0	0		Unknown							
Bulgan Uul	nbp-027	66	640297	5079382	Monument	Circle Burial		8.9	0	0	0	0	0	4 standing stones, khirigsuur type 3?	Bronze?	Standing Stones						
Bulgan Uul	nbp-027	68	640052	5077029	Monument	Circle Burial		2.9	0	0	0	0	0		Unknown							
Bulgan Uul	nbp-027	69	640052	5077007	Monument	Circle Burial		4.7	0	0	0	0	0		Unknown							
Bulgan Uul	nbp-027	70	640051	5077002	Monument	Circle Burial		1.6	0	0	0	0	0		Unknown							
Bulgan Uul	nbp-027	71	640011	5077010	Monument	Circle Burial		1.9	0	0	0	0	0	large stone in center of burial	Unknown	Standing Stones						
Bulgan Uul	nbp-027	79	639520	5076597	Monument	Circle Burial		2.9	0	0	0	0	0		Unknown							
Bulgan Uul	nbp-027	90	640248	5079080	Monument	Circle Burial		3.6	0	0	0	0	0		Unknown							
Bulgan Uul	nbp-027	91	640247	5079097	Monument	Circle Burial		7.3	0	0	0	0	0		Unknown							
Bulgan Uul	nbp-027	98	640050	5077031	Monument	Circle Burial		2	0	0	0	0	0		Unknown							
Bulgan Uul	nbp-027	111	639138	5074568	Monument	Circle Burial		6.1	0	0	0	0	0	missing west half	Unknown							
Bulgan Uul	nbp-027	123	639545	5076442	Monument	Circle Burial		1.2	0	0	0	0	0		Bronze?							
Bulgan Uul	nbp-027	125	639318	5076213	Monument	Circle Burial		3	0	0	0	0	0		Bronze?							
Bulgan Uul	nbp-027	127	639239	5076011	Monument	Circle Burial		4	0	0	0	0	0		Bronze?	Standing Stones						
Bulgan Uul	nbp-027	63	640280	5079316	Monument	EXU-Burial			0	0	0	0	0	slab/Circle Burial,Batsai khans (no human bone)	Bronze							
Bulgan Uul	nbp-027	64	640275	5079340	Monument	EXU-Burial			0	0	0	0	0	Bayaraa's burial; no artifacts; one skeleton, circle/slab burial	Unknown							
Bulgan Uul	nbp-027	2	639861	5077243	Monument	Khirigsuur	square		24.3	33.1	13.1	8	39		Bronze	Built Up Corners						
Bulgan Uul	nbp-027	4	639900	5077482	Monument	Khirigsuur	square		33.9	40.5	13.4	6	8		Bronze	Built Up Corners						
Bulgan Uul	nbp-027	5	639932	5077639	Monument	Khirigsuur	none		0	0	11.6	Other	0		Bronze	Robbed						
Bulgan Uul	nbp-027	6	640058	5077718	Monument	Khirigsuur	square		10.4	11.8	6	8	0	standing stone in middle	Bronze	Standing Stones						
Bulgan Uul	nbp-027	8	640064	5077885	Monument	Khirigsuur	square		16.9	18.1	8.3	8	0		Bronze	Built Up Corners						
Bulgan Uul	nbp-027	10	639727	5076904	Monument	Khirigsuur	circle	35	0	0	12	1	84		Bronze							
Bulgan Uul	nbp-027	12	639652	5076824	Monument	Khirigsuur	square		15.5	14.5	9	4	1		Bronze							
Bulgan Uul	nbp-027	14	639582	5076887	Monument	Khirigsuur	none		0	0	9.4	3	0		Bronze	Standing Stones						
Bulgan Uul	nbp-027	17	639577	5076899	Monument	Khirigsuur	circle	11.7	0	0	4.7	3	0		Bronze	Standing Stones						
Bulgan Uul	nbp-027	18	639562	5076908	Monument	Khirigsuur	circle	14.5	0	0	5.5	3	0		Bronze	Standing Stones						
Bulgan Uul	nbp-027	20	639587	5076972	Monument	Khirigsuur	circle	13.2	0	0	5.6	1	0		Bronze							
Bulgan Uul	nbp-027	24	639417	5076978	Monument	Khirigsuur	circle	14.45	0	0	7.3	Other	0	standing stones fallen, not carved	Bronze	Standing Stones						
Bulgan Uul	nbp-027	25	639428	5077015	Monument	Khirigsuur	none		0	0	9.04	Other	0		Unknown							
Bulgan Uul	nbp-027	26	639394	5077033	Monument	Khirigsuur	circle	13.4	0	0	5.3	1	7									
Bulgan Uul	nbp-027	28	639569	5077026	Monument	Khirigsuur	circle	9.8	0	0	3.9	1	0		Bronze							

Table C.1 (continued). Feature Index

Bulgan Uul	nbp-027	29	639932	5077048	Monument	Khirigsuur	square		11.28	16	6.5	8	0	small standing stones at corners	Bronze	Standing Stones						
Bulgan Uul	nbp-027	33	639953	5077186	Monument	Khirigsuur	circle	12	0	0	6	1	0		Bronze							
Bulgan Uul	nbp-027	35	639952	5077187	Monument	Khirigsuur	circle	13	0	0	8	1	2		Bronze?							
Bulgan Uul	nbp-027	36	639764	5077669	Monument	Khirigsuur	circle	12	0	0	5.1	3	0	northeast two small standing stones	Bronze	Standing Stones						
Bulgan Uul	nbp-027	40	639687	5077804	Monument	Khirigsuur	square		12	12	6	4	0	recorded as Circle Burial, details estimated	Unknown	Built Up Corners						
Bulgan Uul	nbp-027	42	639794	5077989	Monument	Khirigsuur	square		10.5	10.2	4.3	4	0		Bronze							
Bulgan Uul	nbp-027	44	639839	5078049	Monument	Khirigsuur	square		37	37.2	11.1	9	8	pathway to east	Bronze	Pathway						
Bulgan Uul	nbp-027	45	639917	5078040	Monument	Khirigsuur	square		29.2	29.4	11	9	31	walkway to east	Bronze	Pathway						
Bulgan Uul	nbp-027	50	639893	5078360	Monument	Khirigsuur	square		10.1	10.5	5.8	9	0	pathway to east from mound (3.3m), standing stones in north corner, one	Bronze	Pathway						
Bulgan Uul	nbp-027	53	640118	5078920	Monument	Khirigsuur	circle	8.5	0	0	11.2	1	5	recorded as square burial, MD Dimension Guessed	Bronze							
Bulgan Uul	nbp-027	59	640183	5079042	Monument	Khirigsuur	circle		11.2	12	6	3	0	standing stones in nw/sw corner, recorded as Circle Burial	Bronze	Standing Stones						
Bulgan Uul	nbp-027	77	639540	5076679	Monument	Khirigsuur	square		11.8	14.3	5.9	4	0	recorded as square burial	Bronze?							
Bulgan Uul	nbp-027	81	639466	5076481	Monument	Khirigsuur	circle	16	0	0	6.2	1	0	recorded as Circle Burial?	Bronze							
Bulgan Uul	nbp-027	88	640117	5078548	Monument	Khirigsuur	square		10.9	11.4	7.1	4	0		Bronze							
Bulgan Uul	nbp-027	89	640212	5078886	Monument	Khirigsuur	square		17.3	14.6	8.3	8	0		Bronze	Built Up Corners						
Bulgan Uul	nbp-027	95	640426	5079630	Monument	Khirigsuur	square		11.1	10.6	4.6	8	0	fence washed out	Bronze	Standing Stones						
Bulgan Uul	nbp-027	96	640520	5079580	Monument	Khirigsuur	square		17.2	21.4	9.7	8	0	GPS not recorded, pathway to east	Bronze	Pathway						
Bulgan Uul	nbp-027	110	639114	5074565	Monument	Khirigsuur	square		10	12	8	4	0		Bronze							
Bulgan Uul	nbp-027	131	639088	5074555	Monument	Khirigsuur	square		8	9.8	7	8	0		Bronze	Standing Stones						
Bulgan Uul	nbp-027	52	640092	5078838	Monument	Ring Burial		6.2	0	0	0		2	xiongnu?	Bronze?							
Bulgan Uul	nbp-027	76	639519	5076725	Monument	Ring Burial			0	0	0		0		Unknown							
Bulgan Uul	nbp-027	124	639320	5076214	Monument	Ring Burial		3.8	0	0	0		0	is picture correct?	Bronze?							
Bulgan Uul	nbp-027	126	639286	5076125	Monument	Ring Burial		3.7	0	0	0		0		Bronze?							
Bulgan Uul	nbp-027	19	639577	5076908	Monument	Rock Art			0	0	0		0	looks east	Neolithic		Panel, Multiple Images	ND Zoomorphic Horner				
Bulgan Uul	nbp-027	97	640473	5079614	Monument	Shape Burial			5.7	7.3	0		0	trapezoid shape	Unknown							
Bulgan Uul	nbp-027	15	639593	5076890	Monument	Slab Burial			4.7	3	0		0		Bronze/Iron							
Bulgan Uul	nbp-027	60	640209	5079054	Monument	Slab Burial			5.6	5.8	0		0	standing stones *small* in NW corner	Unknown	Standing Stones						
Bulgan Uul	nbp-027	13	639633	5076829	Monument	Square Burial			4.4	4	0		0	standing stones at corners	Unknown	Standing Stones						
Bulgan Uul	nbp-027	31	639945	5077152	Monument	Square Burial			5.3	3.5	0		0		Unknown							
Bulgan Uul	nbp-027	38	639748	5077730	Monument	Square Burial			4.8	6.7	0		0	circle?	Bronze?							
Bulgan Uul	nbp-027	41	639754	5077874	Monument	Square Burial			9.5	10.7	0	Other	0	more of a slab burial	Bronze?							

Table C.1 (continued). Feature Index

Bulgan Uul	nbp-027	43	639793	5078016	Monument	Square Burial			4.1	3.6	0		0	small standing stones to E	Bronze?	Standing Stones						
Bulgan Uul	nbp-027	46	639808	5078149	Monument	Square Burial			7.6	5.7	0		0	4 standing stones at corners; munguntaig ?	Bronze?	Standing Stones						
Bulgan Uul	nbp-027	47	639808	5078149	Monument	Square Burial			6.5	5.7	0		0	corner standing stones	Bronze?	Standing Stones						
Bulgan Uul	nbp-027	49	639814	5078261	Monument	Square Burial			4.6	5.2	0		0	circle?	Bronze?							
Bulgan Uul	nbp-027	51	639951	5078513	Monument	Square Burial			7.3	10.1	0		0	3 rocks at corners								
Bulgan Uul	nbp-027	58	640185	5079018	Monument	Square Burial			8.1	10.7	0		0		Unknown							
Bulgan Uul	nbp-027	62	640204	5079176	Monument	Square Burial			5.4	5	0		0	likely a khirigsuur with a collapsed mound	Unknown	Built Up Corners						
Bulgan Uul	nbp-027	65	640294	5079350	Monument	Square Burial			3.3	4.3	0		0		Unknown							
Bulgan Uul	nbp-027	67	640383	5079567	Monument	Square Burial			5.4	5.6	0		0	one small standing stone in E/W??? Corner	Unknown	Standing Stones						
Bulgan Uul	nbp-027	78	639572	5076697	Monument	Square Burial			4.3	5.2	0		0		Unknown							
Bulgan Uul	nbp-027	80	639522	5076591	Monument	Square Burial			5.9	5.2	0		0	standing stones on north side	Unknown	Standing Stones						
Bulgan Uul	nbp-027	99	640040	5077017	Monument	Square Burial			3	6.6	0		0		Unknown							
Bulgan Uul	nbp-027	119	640036	5077038	Monument	Square Burial			2.5	3.6	0		0		Unknown							
Bulgan Uul	nbp-027	128	639255	5076016	Monument	Square Burial			3	4.7	0		1	two standing stones outside, khirigsuur?	Bronze	Standing Stones						
Bulgan Uul	nbp-027	129	639231	5075967	Monument	Square Burial			3	4.6	0		0		Bronze?	Standing Stones						
Bulgan Uul	nbp-027	130	639162	5075847	Monument	Square Burial			7.3	6.3	5.5		0		Bronze?							
Bulgan Uul	nbp-027	11	639674	5076840	Monument	Turk Burial			3.8	3	0		0	.6 and .9 cm tall	Turk							
Bulgan Uul	nbp-028	4	640392	5077022	Monument	Circle Burial		7	0	0	0		0		Unknown							
Bulgan Uul	nbp-028	25	640509	5077284	Monument	Circle Burial		5	0	0	0		0		Unknown							
Bulgan Uul	nbp-028	26	640277	5077286	Monument	Circle Burial		4.4	0	0	0		0		Unknown							
Bulgan Uul	nbp-028	35	641219	5079271	Monument	Circle Burial		5.5	0	0	0		0	somewhat mounded but hard to tell	Bronze?							
Bulgan Uul	nbp-028	1	640339	5077063	Monument	Khirigsuur	square		13.4	18.6	7	8	0		Bronze	Built Up Corners						
Bulgan Uul	nbp-028	2	640320	5077101	Monument	Khirigsuur	circle	21.5	0	0	9	1	1		Bronze							
Bulgan Uul	nbp-028	3	640290	5077198	Monument	Khirigsuur	square		13	17	7	8	0		Bronze	Built Up Corners						
Bulgan Uul	nbp-028	6	640425	5077110	Monument	Khirigsuur	circle	15	0	0	4	1	0	looks like Circle Burial	Bronze							
Bulgan Uul	nbp-028	7	640496	5077117	Monument	Khirigsuur	square		8.4	9.5	4.3	8	0		Bronze	Built Up Corners						
Bulgan Uul	nbp-028	9	640528	5076551	Monument	Khirigsuur	none		0	0	11.1	Other	0		Bronze	Sunk In	Robbed					
Bulgan Uul	nbp-028	10	640489	5076930	Monument	Khirigsuur	squrae		9.5	9.6	4.3	8	0		Bronze	Built Up Corners						
Bulgan Uul	nbp-028	14	640877	5077474	Monument	Khirigsuur	square		12.8	12	5.5	8	0		Bronze	Standing Stones						
Bulgan Uul	nbp-028	37	640646	5078335	Monument	Khirigsuur	square		19	23	5.5	8	0		Bronze	Robbed	Built Up Corners					
Bulgan Uul	nbp-028	36	640651	5078310	Monument	Khirigsuur	square		6.8	6.8	3	8	0		Bronze	Standing Stones	Sunk In					
Bulgan Uul	nbp-028	45	640322	5077691	Monument	Khirigsuur	square		6.3	8.5	3	8	0		Bronze	Standing Stones						
Bulgan Uul	nbp-028	51	639642	5074150	Monument	Khirigsuur	square		14.6	14	8.4	4	0		Bronze							
Bulgan Uul	nbp-028	55	639632	5074428	Monument	Khirigsuur	square		16.5	18.6	9.6	8	0		Bronze	Built Up Corners						
Bulgan Uul	nbp-028	59	640080	5076494	Monument	Khirigsuur	none		0	0	6.6	Other	0	constructed as Circle Burial with slabs?	Bronze?							
Bulgan Uul	nbp-028	60	640496	5077174	Monument	Khirigsuur	square		8.9	8.9	4.5	4	1		Bronze							
Bulgan Uul	nbp-028	61	640496	5077165	Monument	Khirigsuur	circle	21.5	6.5	0	0	2	0		Bronze	Robbed	Pathway					

Table C.1 (continued). Feature Index

Bulgan Uul	nbp-028	74	642407	5080424	Monument	Khirigsuur	square		28.9	24.4	8.9	4	0	fence mostly missing	washed out								
Bulgan Uul	nbp-028	75	642868	5081049	Monument	Khirigsuur	square		22.8	19	8.5	8	0	standing stones at corners	Bronze	Standing Stones							
Bulgan Uul	nbp-028	8	640515	5077076	Monument	Ring Burial		6	0	0	0		0		Unknown	Robbed							
Bulgan Uul	nbp-028	19	640888	5077830	Monument	Ring Burial		6.2	0	0	0		0		Unknown								
Bulgan Uul	nbp-028	22	640557	5077439	Monument	Ring Burial		5.2	0	0	0		0		Unknown								
Bulgan Uul	nbp-028	56	639605	5074421	Monument	Ring Burial		5.9	0	0	0		0		Unknown								
Bulgan Uul	nbp-028	58	639609	5074869	Monument	Ring Burial		6.4	0	0	0		0		Unknown								
Bulgan Uul	nbp-028	67	639708	5074950	Monument	Rock Art			0	0	0		0	3-5 figures	Unknown		Panel, Multiple Images	Deer	Wild Goat	Unknown			
Bulgan Uul	nbp-028	68	639739	5074949	Monument	Rock Art			0	0	0		0	2 deer, one symbol	Bronze?		Panel, Multiple Images	Tamga	Deer				
Bulgan Uul	nbp-028	69	639749	5074997	Monument	Rock Art			0	0	0		0		Neolithic		Single Image	Wild Goat					
Bulgan Uul	nbp-028	70	639997	5075875	Monument	Rock Art			0	0	0		0	tamgas?	Unknown		Single Image	Tamga					
Bulgan Uul	nbp-028	71	640071	5076184	Monument	Rock Art			0	0	0		0	7 figures	multiple pictures		Panel, Multiple Images	Wild Goat	Deer	Canine	Tamga		
Bulgan Uul	nbp-028	72	640115	5076559	Monument	Rock Art			0	0	0		0	1 horse, 2 goat	Bronze?		Panel, Multiple Images	Horse	Wild Goat				
Bulgan Uul	nbp-028	11	640611	5076993	Monument	Shape Burial			3.6	3.3	0		0	square? slab?	Bronze/Iron								
Bulgan Uul	nbp-028	41	640655	5078176	Monument	Shape Burial			3.5	3	0		0	maybe just square? but with slight hourglass shape	Bronze/Iron								
Bulgan Uul	nbp-028	15	641178	5078234	Monument	Slab Burial			5.6	4.8	0		0		Bronze/Iron								
Bulgan Uul	nbp-028	39	640661	5078189	Monument	Slab Burial			1.75	1.2	0		0	standing stone site?	Unknown								
Bulgan Uul	nbp-028	40	640664	5078184	Monument	Slab Burial			3	2	0		0	recorded as square burial	Unknown								
Bulgan Uul	nbp-028	53	639668	5074505	Monument	Slab Burial			5.1	3.3	0		0	square burial?	Bronze/Iron								
Bulgan Uul	nbp-028	5	640402	5077053	Monument	Square Burial			2.2	6	0		0		Unknown								
Bulgan Uul	nbp-028	20	640597	5077339	Monument	Square Burial			7	5.5	0		0		Bronze/Iron								
Bulgan Uul	nbp-028	21	640598	5077391	Monument	Square Burial			6.6	3.7	0		0		Unknown								
Bulgan Uul	nbp-028	27	640265	5077176	Monument	Square Burial			2.2	1.6	0		0		Unknown								
Bulgan Uul	nbp-028	42	640650	5078172	Monument	Square Burial			2.5	3.25	0		0	maybe not a burial?	Bronze?								
Bulgan Uul	nbp-028	52	639652	5074500	Monument	Square Burial			4.8	5.3	0		0	square?	Bronze?								
Bulgan Uul	nbp-028	54	639662	5074511	Monument	Square Burial			2.6	2.9	0		0		Bronze/Iron								
Bulgan Uul	nbp-028	73	642173	5080129	Monument	Square Burial			4.2	8.2	0		1		Unknown								
Bulgan Uul	nbp-028	17	640854	5078251	Monument	Standing Stone			21.8	0	0		0	Four Heroes	21.8m is line								
Bulgan Uul	nbp-028	33	643178	5081209	Monument	Standing Stone			0	0	0		0	surrounded by box	Turk								
Bulgan Uul	nbp-028	46	639333	5075002	Monument	Standing Stone			0	0	0		0	H=1.55, w=.6, T=.1	Turk?								
Bulgan Uul	nbp-028	47	639310	5074945	Monument	Standing Stone			0	0	0		0	H=1.1, w=.25, t=.1	Turk?								
Bulgan Uul	nbp-028	48	639501	5074830	Monument	Standing Stone			0	0	0		0	H=1.67, w=.6, t=.1	Turk?								
Bulgan Uul	RA Recon	1	636882	5087139	Monument	Khirigsuur	none		0	0		8	Other	0	Bronze								
Bulgan Uul	RA Recon	2	636881	5087124	Monument	Khirigsuur	none		0	0		9	Other	0	standing stones to N	Standing Stones							
Bulgan Uul	RA Recon	3	636882	5087122	Monument	Khirigsuur	none		0	0		10	Other	0									
Bulgan Uul	RA Recon	4	636866	5087073	Monument	Khirigsuur	none		0	0		6	Other	0	Bronze								
Bulgan Uul	RA Recon	5	636869	5087066	Monument	Khirigsuur	none		0	0		8	Other	0	Bronze								
Bulgan Uul	RA Recon	6	636866	5087040	Monument	Khirigsuur	square		11	9	7	8	0			Built Up Corners							
Bulgan Uul	RA_nbp-029	2	639632	5074788	Monument	Circle Burial		4.4	0	0	0		0		Unknown								
Bulgan Uul	RA_nbp-029	17	638544	5078180	Monument	Circle Burial			0	0	0		0	NEED ALL INFO FOR THIS	Unknown								
Bulgan Uul	RA_nbp-029	RA-1b	643528	5091113	Monument	Circle Burial		2.5							Unknown								
Bulgan Uul	RA_nbp-029	3	639627	5074430	Monument	Khirigsuur	square		18.5	16.8	10	8	0	fence issing much of east and south		Built Up Corners							
Bulgan Uul	RA_nbp-029	14	638961	5077948	Monument	Khirigsuur	square		11	9.5	6.4	4	0		Bronze								

Table C.1 (continued). Feature Index

Bulgan Uul	RA_nbp-029	20	637703	5078629	Monument	Khirigsuur	none		0	0	5.3	Other	0	Circle Burial?	Bronze?								
Bulgan Uul	RA_nbp-029	21	636768	5079319	Monument	Khirigsuur	none		0	0	7	Other	0		Bronze								
Bulgan Uul	RA_nbp-029	24	636368	5079555	Monument	Khirigsuur	none		0	0	12	Other	0		Bronze								
Bulgan Uul	RA_nbp-029	26	636228	5079702	Monument	Khirigsuur	none		0	0	6.5	Other	0		Bronze								
Bulgan Uul	RA_nbp-029	RA-22b	642861	5091870	Monument	Khirigsuur	none				4	Other			Unknown								
Bulgan Uul	RA_nbp-029	4	639235	5072644	Monument	Rock Art			0	0	0		0	1 of each	Neolithic		Panel, Multiple Images	Wild Sheep	Wild Goat				
Bulgan Uul	RA_nbp-029	5	639244	5072649	Monument	Rock Art			0	0	0		0	8 figures over two nearby panels	Bronze?		Panel, Multiple Images	Wild Goat	ND Zoomporphic Unhorned	Wild Sheep	ND Zoomorphic Horned		
Bulgan Uul	RA_nbp-029	6	639248	5072648	Monument	Rock Art			0	0	0		0	two sides of boulder, one facing south; two wild goat, one sheep, one deer	Bronze?		Panel, Multiple Images	Wild Sheep	Wild Goat	Wild Goat	Deer		
Bulgan Uul	RA_nbp-029	7	639246	5072645	Monument	Rock Art			0	0	0		0		Neolithic		Single Image	Wild Goat					
Bulgan Uul	RA_nbp-029	8	639484	5072292	Monument	Rock Art			0	0	0		0		Bronze?								
Bulgan Uul	RA_nbp-029	9	638835	5077586	Monument	Rock Art			0	0	0		0	face NE, 3 figures?	Neolithic		Panel, Multiple Images	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	10	638871	5077738	Monument	Rock Art			0	0	0		0	two unidentified, rider?	Neolithic		Single Image	Anthropomorphic					
Bulgan Uul	RA_nbp-029	11	638855	5077751	Monument	Rock Art			0	0	0		0	very faded, figures?	Neolithic		Panel, Multiple Images	ND Zoomorphic Unhorned	ND Zoomorphic Horned				
Bulgan Uul	RA_nbp-029	23	636422	5079582	Monument	Rock Art			0	0	0		0		Neolithic		Single Image	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	25	636360	5079632	Monument	Rock Art			0	0	0		0	3-4 images	Bronze?		Panel, Multiple Images	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	27	636013	5079818	Monument	Rock Art			0	0	0		0		Neolithic		Single Image	Wild Goat					
Bulgan Uul	RA_nbp-029	28	636008	5079840	Monument	Rock Art			0	0	0		0		Bronze?		Single Image	ND Zoomorphic Horned					
Bulgan Uul	RA_nbp-029	31	635765	5079978	Monument	Rock Art			0	0	0		0		Bronze?		Panel, Multiple Images	Wild Sheet	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	34	635867	5079540	Monument	Rock Art			0	0	0		0		Neolithic		Single Image	Wild Goat					
Bulgan Uul	RA_nbp-029	35	635896	5079508	Monument	Rock Art			0	0	0		0	hunting scene with many deer	Bronze?		Panel, Multiple Images	Composite/Narrative	Anthropomorphic	Deer			
Bulgan Uul	RA_nbp-029	36	635835	5079507	Monument	Rock Art			0	0	0		0		Unknown								
Bulgan Uul	RA_nbp-029	37	636095	5079450	Monument	Rock Art			0	0	0		0		Bronze?		Panel, Multiple Images	Deer	ND Zoomorphic Unhorned	Unknown			
Bulgan Uul	RA_nbp-029	RA-1	643528	5091113	Monument	Rock Art									Unknown		Panel, Multiple Images	Wild Sheep					
Bulgan Uul	RA_nbp-029	RA-2	643432	5091307	Monument	Rock Art									Unknown		Panel, Multiple Images	Anthropomorphic	Wild Sheep	Canine	Unknown		
Bulgan Uul	RA_nbp-029	RA-3	643428	5091356	Monument	Rock Art									Unknown		Panel, Multiple Images	Wild Goat	Unknown				
Bulgan Uul	RA_nbp-029	RA-4	643437	5091377	Monument	Rock Art									Turk		Single Image	Tamga					
Bulgan Uul	RA_nbp-029	RA-5	643165	5091678	Monument	Rock Art									Unknown		Panel, Multiple Images	Anthropomorphic	Hunting	Deer	Wild Goat		
Bulgan Uul	RA_nbp-029	RA-6	643173	5091743	Monument	Rock Art									Unknown		Panel, Multiple Images	Anthropomorphic	Mounted Rider	Wild Goat			
Bulgan Uul	RA_nbp-029	RA-7	643157	5091752	Monument	Rock Art									Unknown		Panel, Multiple Images	Anthropomorphic	Tamga	Wild Goat			
Bulgan Uul	RA_nbp-029	RA-8	643125	5091767	Monument	Rock Art									Unknown		Panel, Multiple Images	Wild Goat					

Table C.1 (continued). Feature Index

Bulgan Uul	RA_nbp-029	RA-9	643087	5091755	Monument	Rock Art							Unknown								
Bulgan Uul	RA_nbp-029	RA-10	643078	5091775	Monument	Rock Art							Unknown		Composite/Narrative	Canine	Hunting	Deer	Wild Goat		
Bulgan Uul	RA_nbp-029	RA-11	643129	5091783	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-12	643073	5091783	Monument	Rock Art							Unknown		Panel, Multiple Images	Canine	Hunting	Tamga	Wild Goat		
Bulgan Uul	RA_nbp-029	RA-13	643066	5091787	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-14	643063	5091784	Monument	Rock Art							Unknown		Panel, Multiple Images	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-15	643053	5091792	Monument	Rock Art							Unknown		Panel, Multiple Images	Anthropomorphic	Deer	Horse	ND Zoomorphic Unhorned	Wild Goat	
Bulgan Uul	RA_nbp-029	RA-16	643054	5091790	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Sheep	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-17	643036	5091792	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Goat	Wild Sheep	Tamga			
Bulgan Uul	RA_nbp-029	RA-18	642991	5091805	Monument	Rock Art							Unknown		Single Image	Paint	Unknown				
Bulgan Uul	RA_nbp-029	RA-19	642957	5091815	Monument	Rock Art							Bronze?		Single Image	Deer					
Bulgan Uul	RA_nbp-029	RA-20	642933	5091835	Monument	Rock Art							Turk?		Panel, Multiple Images	Tamga					
Bulgan Uul	RA_nbp-029	RA-21	642927	5091839	Monument	Rock Art									Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-22	642861	5091876	Monument	Rock Art							Unknown		Panel, Multiple Images	Canine	Wild Sheep	Wild Goat	Tamga		
Bulgan Uul	RA_nbp-029	RA-23	642962	5091819	Monument	Rock Art							Unknown		Panel, Multiple Images	Tamga	Wild Goat	ND Zoomorphic Unhorned			
Bulgan Uul	RA_nbp-029	RA-24	643143	5091446	Monument	Rock Art							Unknown		Panel, Multiple Images	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-25	643140	5091448	Monument	Rock Art							Unknown		Panel, Multiple Images	Deer					
Bulgan Uul	RA_nbp-029	RA-26	642795	5091868	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Goat	Camel	ND Zoomorphic Unhorned			
Bulgan Uul	RA_nbp-029	RA-27	642788	5091865	Monument	Rock Art							Unknown		Composite/Narrative	Anthropomorphic	Hunting	Wild Goat			
Bulgan Uul	RA_nbp-029	RA-28	642480	5091939	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-29	642466	5091944	Monument	Rock Art							Unknown		Single Image	Wild Sheep					
Bulgan Uul	RA_nbp-029	RA-30	642459	5091936	Monument	Rock Art							Unknown		Single Image	Geometric					
Bulgan Uul	RA_nbp-029	RA-31	642455	5091943	Monument	Rock Art							Unknown		Panel, Multiple Images	Camel	Wild Goat	Wild Sheep	ND Zoomorphic Unhorned		
Bulgan Uul	RA_nbp-029	RA-32	642575	5091897	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Sheep	Wild Goat	Tamga			
Bulgan Uul	RA_nbp-029	RA-33	642587	5091898	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Goat	Unknown				
Bulgan Uul	RA_nbp-029	RA-34	642589	5091899	Monument	Rock Art							Unknown		Panel, Multiple Images	ND Zoomorphic Unhorned	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-35	642605	5091899	Monument	Rock Art							Unknown		Panel, Multiple Images	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-36	642608	5091898	Monument	Rock Art							Bronze?		Single Image	Deer					
Bulgan Uul	RA_nbp-029	RA-37	642629	5091907	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Goat					

Table C.1 (continued). Feature Index

Bulgan Uul	RA_nbp-029	RA-38	642650	5091887	Monument	Rock Art									Single image	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-39	642772	5091860	Monument	Rock Art							Unknown		Panel, Multiple Images	ND Zoomorphic Unhorned	Wild Goat			
Bulgan Uul	RA_nbp-029	RA-40	642750	5091880	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-41	642474	5091843	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Sheep	ND Zoomorphic Unhorned			
Bulgan Uul	RA_nbp-029	RA-42	642500	5091919	Monument	Rock Art									Single image	Wild Sheep				
Bulgan Uul	RA_nbp-029	RA-43	643473	5089625	Monument	Rock Art							Unknown		Panel, Multiple Images	Deer	ND Zoomorphic Unhorned	Unknown		
Bulgan Uul	RA_nbp-029	RA-44	643387	5089601	Monument	Rock Art							Unknown		Single image	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-45	643364	5089602	Monument	Rock Art							Unknown		Panel, Multiple Images	Deer	Wild Goat			
Bulgan Uul	RA_nbp-029	RA-46	643344	5089598	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-47	643261	5089547	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned			
Bulgan Uul	RA_nbp-029	RA-48	643233	5089513	Monument	Rock Art							Unknown		Unknown					
Bulgan Uul	RA_nbp-029	RA-49	643228	5089512	Monument	Rock Art							Unknown		Unknown					
Bulgan Uul	RA_nbp-029	RA-50	643220	5089504	Monument	Rock Art							Unknown		Unknown					
Bulgan Uul	RA_nbp-029	RA-51	643180	5089455	Monument	Rock Art							Unknown		Single image	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-52	643176	5089457	Monument	Rock Art							Unknown		Panel, Multiple Images	Canine	Wild Sheep	ND Zoomorphic Unhorned		
Bulgan Uul	RA_nbp-029	RA-53	643157	5089440	Monument	Rock Art							Unknown		Panel, Multiple Images	Tamga	Wild Goat	Unknown		
Bulgan Uul	RA_nbp-029	RA-54	643094	5089423	Monument	Rock Art							Unknown		Single image	Wild Sheep				
Bulgan Uul	RA_nbp-029	RA-55	643180	5089462	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Sheep	Wild Goat	ND Zoomorphic Unhorned		
Bulgan Uul	RA_nbp-029	RA-56	643239	5089525	Monument	Rock Art							Unknown		Single image	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-57	643254	5089534	Monument	Rock Art							Unknown		Composite/Narrative	Anthropomorphic	Deer	Hunting	Wild Sheep	
Bulgan Uul	RA_nbp-029	RA-58	643260	5089538	Monument	Rock Art							Unknown		Panel, Multiple Images	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-59	643419	5089620	Monument	Rock Art							Unknown		Panel, Multiple Images	ND Zoomorphic Horned				
Bulgan Uul	RA_nbp-029	RA-60	643542	5089639	Monument	Rock Art							Unknown		Panel, Multiple Images	Deer	Wild Goat			
Bulgan Uul	RA_nbp-029	RA-61	643528	5089638	Monument	Rock Art							Unknown		Panel, Multiple Images	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-62	643521	5089634	Monument	Rock Art							Unknown		Panel, Multiple Images	Deer	Wild Sheep			
Bulgan Uul	RA_nbp-029	RA-63	643412	5089618	Monument	Rock Art							Unknown		Single image	Deer				
Bulgan Uul	RA_nbp-029	RA-64	643389	5089619	Monument	Rock Art							Unknown		Panel, Multiple Images	ND Zoomorphic Unhorned	Unknown			
Bulgan Uul	RA_nbp-029	RA-65	638868	5090766	Monument	Rock Art							Unknown		Panel, Multiple Images	Deer	Tamga	Wild Goat	ND Zoomorphic Unhorned	
Bulgan Uul	RA_nbp-029	RA-66	638771	5090924	Monument	Rock Art							Unknown		Single image	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-67	638721	5090500	Monument	Rock Art							Unknown		Panel, Multiple Images	Anthropomorphic	Wild Goat			

Table C.1 (continued). Feature Index

Bulgan Uul	RA_nbp-029	RA-68	638672	5090545	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	Wild Sheep	Unknown				
Bulgan Uul	RA_nbp-029	RA-69	638676	5090555	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Wild Goat	Unknown				
Bulgan Uul	RA_nbp-029	RA-70	638612	5090520	Monument	Rock Art							Unknown			Single image	Wild Goat						
Bulgan Uul	RA_nbp-029	RA-71	638459	5090514	Monument	Rock Art							Unknown			Single image	Wild Goat						
Bulgan Uul	RA_nbp-029	RA-72	638502	5090468	Monument	Rock Art							Unknown			Single image	Wild Goat						
Bulgan Uul	RA_nbp-029	RA-73	638474	5090316	Monument	Rock Art							Unknown			Composite/Narrative	Anthropomorphic	Hunting	Horse	Wild Sheep	Wild Goat		
Bulgan Uul	RA_nbp-029	RA-74	638488	5090313	Monument	Rock Art							Unknown			Panel, Multiple Images	Canine	Wild Sheep	Wild Goat	ND Zoomorphic Unhorned			
Bulgan Uul	RA_nbp-029	RA-75	638404	5090284	Monument	Rock Art							Unknown			Single image	ND Zoomorphic Unhorned						
Bulgan Uul	RA_nbp-029	RA-76	638378	5090276	Monument	Rock Art							Unknown			Composite/Narrative	Anthropomorphic	Hunting	Deer	Wild Goat			
Bulgan Uul	RA_nbp-029	RA-77	637072	5087667	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Sheep	Wild Goat	Deer	Unknown			
Bulgan Uul	RA_nbp-029	RA-78	636984	5087403	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-79	636979	5087419	Monument	Rock Art							Unknown			Panel, Multiple Images	ND Zoomorphic Unhorned						
Bulgan Uul	RA_nbp-029	RA-80	636960	5087366	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat						
Bulgan Uul	RA_nbp-029	RA-81	636959	5087361	Monument	Rock Art							Unknown			Panel, Multiple Images	Canine	Deer	Wild Sheep	Wild goat	ND Zoomorphic Unhorned		
Bulgan Uul	RA_nbp-029	RA-82	636957	5087333	Monument	Rock Art							Unknown			Single image	Wild Goat						
Bulgan Uul	RA_nbp-029	RA-83	636947	5087302	Monument	Rock Art							Unknown			Panel, Multiple Images	Tamga	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-84	636946	5087259	Monument	Rock Art							Unknown			Panel, Multiple Images	Anthropomorphic	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-85	636945	5087250	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Sheep	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-86	636939	5087239	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-87	636866	5087124	Monument	Rock Art							Unknown			Composite/Narrative	Mounted Rider	ND Zoomorphic Unhorned	Deer	Wild Goat	Geometric	Tamga	
Bulgan Uul	RA_nbp-029	RA-88	636869	5087138	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-89	636862	5087117	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-90	636861	5087114	Monument	Rock Art							Unknown			Composite/Narrative	Canine	Horse	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-91	636867	5087110	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned	Unknown				
Bulgan Uul	RA_nbp-029	RA-92	636865	5087110	Monument	Rock Art							Unknown			Panel, Multiple Images	Shaman	Tamga	Wild Goat	Unknown			
Bulgan Uul	RA_nbp-029	RA-93	643107	5089288	Monument	Rock Art							Unknown			Composite/Narrative	Anthropomorphic	Deer	Camel	Wild Goat	ND Zoomorphic Unhorned		
Bulgan Uul	RA_nbp-029	RA-94	643105	5089284	Monument	Rock Art							Unknown			Panel, Multiple Images	Tamga	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-95	643087	5089270	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat						

Table C.1 (continued). Feature Index

Bulgan Uul	RA_nbp-029	RA-96	643077	5089258	Monument	Rock Art							Unknown			Single image	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-97	643054	5089222	Monument	Rock Art							Unknown			Composite/Narrative	Anthropomorphic	Canine	Hunting	Horse	Deer	Wild Goat
Bulgan Uul	RA_nbp-029	RA-98	643049	5089216	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-99	643046	5089216	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	Unknown				
Bulgan Uul	RA_nbp-029	RA-100	643037	5089208	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Canine	Wild Goat			
Bulgan Uul	RA_nbp-029	RA-101	643029	5089195	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	Unknown				
Bulgan Uul	RA_nbp-029	RA-102	643021	5089190	Monument	Rock Art							Bronze			Panel, Multiple Images	Deer	Tamga	Wild Goat			
Bulgan Uul	RA_nbp-029	RA-103	642579	5088970	Monument	Rock Art							Unknown			Single image	Tamga					
Bulgan Uul	RA_nbp-029	RA-104	642562	5088949	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Unknown				
Bulgan Uul	RA_nbp-029	RA-105	642559	5088942	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Canine	Wild Goat	Wild Sheep	ND Zoomorphic Unhorned	Other
Bulgan Uul	RA_nbp-029	RA-106	642501	5088914	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-107	642498	5088908	Monument	Rock Art							Unknown			Panel, Multiple Images	Canine	Wild Sheep	ND Zoomorphic Unhorned			
Bulgan Uul	RA_nbp-029	RA-108	642493	5088912	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	Wild Sheep				
Bulgan Uul	RA_nbp-029	RA-109	642491	5088910	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Anthropomorphic	Mounted rider	Wild Goat		
Bulgan Uul	RA_nbp-029	RA-110	642468	5088892	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	Deer	Wild Sheep			
Bulgan Uul	RA_nbp-029	RA-111	642323	5088820	Monument	Rock Art							Unknown			Panel, Multiple Images	Canine	Wild Goat	Wild Sheep	ND Zoomorphic Unhorned		
Bulgan Uul	RA_nbp-029	RA-112	642001	5088665	Monument	Rock Art							Unknown			Single image	Deer					
Bulgan Uul	RA_nbp-029	RA-113	641952	5088643	Monument	Rock Art							Unknown			Panel, Multiple Images	ND Zoomorphic Horned					
Bulgan Uul	RA_nbp-029	RA-114	641918	5088623	Monument	Rock Art							Unknown			Panel, Multiple Images	Anthropomorphic	Shaman	ND Zoomorphic Horned			
Bulgan Uul	RA_nbp-029	RA-115	641879	5088602	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-116	641861	5088599	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-117	641844	5088599	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Sheep					
Bulgan Uul	RA_nbp-029	RA-118	641809	5088578	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Unknown				
Bulgan Uul	RA_nbp-029	RA-119	641805	5088577	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-120	641785	5088561	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-121	641440	5088321	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-122	641411	5088326	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	Wild Sheep	Deer			
Bulgan Uul	RA_nbp-029	RA-123	640262	5088078	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					

Table C.1 (continued). Feature Index

Bulgan Uul	RA_nbp-029	RA-124	640214	5088076	Monument	Rock Art							Unknown			Panel, Multiple Images	Anthropomorphic	Camel	Wild Goat	Wild Sheep	ND Zoomorphic Unhorned	
Bulgan Uul	RA_nbp-029	RA-125	640184	5088066	Monument	Rock Art							Unknown			Composite/Narrative	Anthropomorphic	Hunting	Canine	Deer	Wild Goat	ND Zoomorphic Unhorned
Bulgan Uul	RA_nbp-029	RA-126	640139	5088011	Monument	Rock Art							Unknown			Panel, Multiple Images	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-127	640115	5087981	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-128	640101	5087972	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-129	640099	5087975	Monument	Rock Art							Unknown			Panel, Multiple Images	Unknown					
Bulgan Uul	RA_nbp-029	RA-130	640082	5087942	Monument	Rock Art							Unknown			Panel, Multiple Images	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-131	640070	5087934	Monument	Rock Art							Unknown			Single image	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-132	640064	5087942	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-133	640059	5087922	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Unknown				
Bulgan Uul	RA_nbp-029	RA-134	640058	5087918	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-135	640059	5087915	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-136	639029	5087732	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-137	637373	5088036	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	Wild Sheep	Deer	ND Zoomorphic Unhorned		
Bulgan Uul	RA_nbp-029	RA-138	637354	5088025	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Got	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-139	637337	5088007	Monument	Rock Art							Unknown			Single image	Anthropomorphic	Mounted Rider				
Bulgan Uul	RA_nbp-029	RA-140	637274	5087866	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-141	637216	5087828	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-142	637186	5087810	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-143	637179	5087807	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-144	637168	5087801	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-145	637147	5087791	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-146	637140	5087786	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-147	637137	5087781	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-148	637135	5087784	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-149	637137	5087775	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned	Unknown			
Bulgan Uul	RA_nbp-029	RA-150	636875	5087233	Monument	Rock Art							Unknown			Panel, Multiple Images	Horse	Deer	Wild Sheep	Wild Goat	ND Zoomorphic Unhorned	Unknown
Bulgan Uul	RA_nbp-029	RA-151	636842	5087205	Monument	Rock Art							Unknown			Composite/Narrative	Anthropomorphic	Wild Goat	Wild Sheep	Deer	ND Zoomorphic Unhorned	

Table C.1 (continued). Feature Index

Bulgan Uul	RA_nbp-029	RA-152	636834	5087193	Monument	Rock Art							Unknown			Composite/Narrative	Anthropomorphic	Hunting	Wild Goat	Deer	ND Zoomorphic Unhorned	
Bulgan Uul	RA_nbp-029	RA-153	636820	5087187	Monument	Rock Art							Unknown			Composite/Narrative	Anthropomorphic	Hunting	D	ND Zoomorphic Unhorned	Wild Goat	
Bulgan Uul	RA_nbp-029	RA-154	636807	5087170	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Sheep	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-155	636801	5087167	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-156	636796	5087168	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-157	636782	5087152	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-158	636771	5087138	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-159	636770	5087114	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-160	636855	5087101	Monument	Rock Art							Bronze			Single image	Deer					
Bulgan Uul	RA_nbp-029	RA-161	636856	5087106	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-162	636846	5087060	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Sheep	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-163	636845	5087049	Monument	Rock Art							Unknown			Panel, Multiple Images	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-164	636845	5087046	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goaat					
Bulgan Uul	RA_nbp-029	RA-165	636842	5087044	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Got	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-166	636845	5087041	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-167	636839	5087009	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goata	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-168	636829	5086992	Monument	Rock Art							Unknown			Composite/Narrative	Hunting	Canine	Deer	Wild Goat	ND Zoomorphic Unhorned	
Bulgan Uul	RA_nbp-029	RA-169	636823	5086946	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-170	636825	5086929	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-171	636826	5086925	Monument	Rock Art							Unknown			Panel, Multiple Images	Camel	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-172	636828	5086908	Monument	Rock Art							Unknown			Panel, Multiple Images	Anthropomorphic	Horse	Mounted rider	Wild Goat	ND Zoomorphic Unhorned	
Bulgan Uul	RA_nbp-029	RA-173	636839	5086888	Monument	Rock Art							Unknown			Panel, Multiple Images	Anthropomorphic	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-174	636842	5086880	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-175	636861	5086853	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-176	636870	5086840	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-177	636870	5086825	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-178	636869	5086795	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-179	636905	5086634	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					

Table C.1 (continued). Feature Index

Bulgan Uul	RA_nbp-029	RA-180	636905	5086610	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-181	636906	5086607	Monument	Rock Art							Unknown			Panel, Multiple Images	Horse					
Bulgan Uul	RA_nbp-029	RA-182	636917	5086568	Monument	Rock Art							Unknown			Single image	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-183	636918	5086558	Monument	Rock Art							Unknown			Composite/Narrative	Anthropomorphic	Hunting	Deer	Wild Goat		
Bulgan Uul	RA_nbp-029	RA-184	636922	5086550	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-185	636918	5086542	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-186	636918	5086529	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	Tamga	ND			
Bulgan Uul	RA_nbp-029	RA-187	636919	5086530	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-188	636918	5086512	Monument	Rock Art							Unknown			Panel, Multiple Images	Tamga	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-189	636918	5086503	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-190	636917	5086501	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-191	641602	5090089	Monument	Rock Art							Unknown			Panel, Multiple Images	Anthropomorphic	Mounted Rider	Camel	Hunting	ND Zoomorphic Unhorned	
Bulgan Uul	RA_nbp-029	RA-192	641556	5090070	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-193	641551	5090068	Monument	Rock Art							Unknown			Panel, Multiple Images	ND Zoomorphic Unhorned					
Bulgan Uul	RA_nbp-029	RA-194	641550	5090067	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-195	641548	5090066	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-196	641531	5090057	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-197	641456	5090021	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-198	641413	5089966	Monument	Rock Art							Unknown			Single image	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-199	641360	5089909	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-200	641351	5089901	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-201	641346	5089896	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned	Unknown			
Bulgan Uul	RA_nbp-029	RA-202	641342	5089891	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-203	641334	5089884	Monument	Rock Art							Unknown			Panel, Multiple Images	Anthropomorphic	ND Zoomorphic Horned	Wild Sheep	Wild Goat		
Bulgan Uul	RA_nbp-029	RA-204	641336	5089880	Monument	Rock Art							Unknown			Panel, Multiple Images	Anthropomorphic	Wild Goat	ND Zoomorphic Unhorned			
Bulgan Uul	RA_nbp-029	RA-205	641332	5089875	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-206	641285	5089837	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat					
Bulgan Uul	RA_nbp-029	RA-207	641267	5089819	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Shep	Wild Goat				

Table C.1 (continued). Feature Index

Bulgan Uul	RA_nbp-029	RA-208	641259	5089789	Monument	Rock Art							Unknown			Composite/Narrative	Anthropomorphic	Wild Goat	ND Zoomorphic Unhorned		
Bulgan Uul	RA_nbp-029	RA-209	641238	5089771	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-210	641227	5089762	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned			
Bulgan Uul	RA_nbp-029	RA-211	641221	5089762	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned			
Bulgan Uul	RA_nbp-029	RA-212	641212	5089753	Monument	Rock Art							Unknown			Single image	ND Zoomorphic Unhorned				
Bulgan Uul	RA_nbp-029	RA-213	641176	5089716	Monument	Rock Art							Unknown			Panel, Multiple Images	Canine	Deer			
Bulgan Uul	RA_nbp-029	RA-214	641169	5089704	Monument	Rock Art							Unknown			Composite/Narrative	Deer	Wild Goat	Canine	Wild Sheep	Horse	ND Zoomorphic Unhorned
Bulgan Uul	RA_nbp-029	RA-215	641162	5089700	Monument	Rock Art							Unknown			Panel, Multiple Images	Der	ND Zoomorphic Unhorned			
Bulgan Uul	RA_nbp-029	RA-216	641144	5089689	Monument	Rock Art							Unknown			Panel, Multiple Images	Mounted Rider	Wild Goat			
Bulgan Uul	RA_nbp-029	RA-217	641142	5089685	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Wild Goat			
Bulgan Uul	RA_nbp-029	RA-218	641135	5089679	Monument	Rock Art							Unknown			Single image	Wild Sheep				
Bulgan Uul	RA_nbp-029	RA-219	641097	5089630	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-220	641085	5089607	Monument	Rock Art							Unknown			Single image	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-221	641073	5089596	Monument	Rock Art							Unknown			Single image	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-222	639339	5091009	Monument	Rock Art							Unknown			Panel, Multiple Images	Camel	Horse	ND Zoomorphic Unhorned	Unknown	
Bulgan Uul	RA_nbp-029	RA-223	639348	5091019	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-224	639358	5091027	Monument	Rock Art							Unknown			Composite/Narrative	Anthropomorphic	Wild Goat	ND Zoomorphic Unhorned		
Bulgan Uul	RA_nbp-029	RA-225	639362	5091029	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-226	639529	5091209	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-227	639552	5091230	Monument	Rock Art							Unknown			Panel, Multiple Images	Anthropomorphic	Wild Goat	ND Zoomorphic Unhorned	Wild Sheep	Unknown
Bulgan Uul	RA_nbp-029	RA-228	639552	5091228	Monument	Rock Art							Unknown			Single image	Deer				
Bulgan Uul	RA_nbp-029	RA-229	639572	5091244	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned			
Bulgan Uul	RA_nbp-029	RA-230	639577	5091249	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-231	639714	5091347	Monument	Rock Art							Unknown			Single image	Deer				
Bulgan Uul	RA_nbp-029	RA-232	639714	5091348	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Mounted Rider	Horse	Wild Goat	Wild Shee
Bulgan Uul	RA_nbp-029	RA-233	639719	5091349	Monument	Rock Art							Unknown			Single image	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-234	639719	5091352	Monument	Rock Art							Unknown			Single image	Deer				
Bulgan Uul	RA_nbp-029	RA-235	639725	5091353	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Wild Goat			

Table C.1 (continued). Feature Index

Bulgan Uul	RA_nbp-029	RA-236	639726	5091354	Monument	Rock Art							Unknown			Panel, Multiple Images	Canine	Horse	Wild Goat	ND Zoomorphic Unhorned	
Bulgan Uul	RA_nbp-029	RA-237	639731	5091357	Monument	Rock Art							Unknown			Panel, Multiple Images	Anthropomorphic	Wild Got			
Bulgan Uul	RA_nbp-029	RA-238	639740	5091362	Monument	Rock Art							Unknown			Composite/Narrative	Anthropomorphic	Hunting	Canine	Wild Sheep Wild Goat	ND Zoomorphic Unhorned
Bulgan Uul	RA_nbp-029	RA-239	639754	5091365	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Wild Goat	ND Zoomorphic Unhorned		
Bulgan Uul	RA_nbp-029	RA-240	639763	5091364	Monument	Rock Art							Unknown			Panel, Multiple Images	Geometric	Wild Sheep	ND Zoomorphic Unhorned		
Bulgan Uul	RA_nbp-029	RA-241	639781	5091366	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat	ND Zoomorphic Unhorned			
Bulgan Uul	RA_nbp-029	RA-242	639804	5091376	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-243	639809	5091382	Monument	Rock Art							Unknown			Single image	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-244	639816	5091385	Monument	Rock Art							Unknown			Single image	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-245	639822	5091391	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-246	639830	5091397	Monument	Rock Art							Unknown			Composite/Narrative	Canine	Hunting	Wild Goat		
Bulgan Uul	RA_nbp-029	RA-247	639905	5091471	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer				
Bulgan Uul	RA_nbp-029	RA-248	639937	5091474	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Sheep	Wild Goat	Deer	ND Zoomorphic Unhorned	
Bulgan Uul	RA_nbp-029	RA-249	639938	5091473	Monument	Rock Art							Unknown			Panel, Multiple Images	Canine	Wild Got	ND Zoomorphic Unhorned	Unknown	
Bulgan Uul	RA_nbp-029	RA-250	639943	5091477	Monument	Rock Art							Unknown			Panel, Multiple Images	Deer	Canine	Wild Goat	Wild Sheep Unknown	
Bulgan Uul	RA_nbp-029	RA-251	639964	5091501	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat				
Bulgan Uul	RA_nbp-029	RA-252	639966	5091501	Monument	Rock Art							Unknown			Panel, Multiple Images	Wild Goat				
Bulgan Uul	RA_nbp-029	1	639930	5075350	Monument	Slab Burial			3.5	3.3	0	0		Bronze/Iron							
Bulgan Uul	RA_nbp-029	15	638587	5078108	Monument	Square Burial			3.2	3.4	0	0		Unknown							
Other 2012	Recon 1	2	598489	5093402	Monument	Circle Burial		3.8						Unknown							
Other 2012	Recon 1	7	599401	5092988	Monument	Circle Burial		7.5						Unknown							
Other 2012	Recon 1	8	599353	5092190	Monument	Circle Burial		7.4						Unknown							
Other 2012	Recon 1	10	599170	5092222	Monument	Circle Burial		6.8						Unknown							
Other 2012	Recon 1	18	602443	5089707	Monument	Circle Burial		6.9						Unknown							
Other 2012	Recon 1	1	598511	5093382	Monument	Khirigsuur	circle	26			7.8	3		Standing stones at cardinal directions	Standing Stones						
Other 2012	Recon 1	3	598840	5093260	Monument	Khirigsuur	circle	9.9				8		Robbed	Bronze	Robbed					
Other 2012	Recon 1	5	599101	5093101	Monument	Khirigsuur	square		15.6	12.8	9.6	8			Bronze						
Other 2012	Recon 1	6	599372	5092962	Monument	Khirigsuur	circle	16.5			8.5	7		Pathway to east	Bronze	Pathway					
Other 2012	Recon 1	9	599316	5092223	Monument	Khirigsuur	circle	23.2			11.7	1		Elev. 1813	Bronze						
Other 2012	Recon 1	11	599189	5092110	Monument	Khirigsuur	square		11.6	14.8	7.6	8			Bronze						
Other 2012	Recon 1	12	599136	5092049	Monument	Khirigsuur	circle	5.1				1.00			Bronze						
Other 2012	Recon 1	13	599307	5091993	Monument	Khirigsuur	square		12.3	9.3	6.7	4			Bronze						
Other 2012	Recon 1	14	599284	5091953	Monument	Khirigsuur	circle	7.4				1.00			Bronze						
Other 2012	Recon 1	15	601115	5091580	Monument	Khirigsuur	square		14.8	18.6	10.9	4	19		Bronze						
Other 2012	Recon 1	16	601806	5090444	Monument	Khirigsuur	square		13.4	13.8	10.5	9	11	Pathway to east	Bronze	Pathway					
Other 2012	Recon 1	17	602783	5089717	Monument	Khirigsuur	square		8.8	6.8	1.5	4		Quartz stone and shales in construction	Bronze						
Other 2012	Recon 1	19	602436	5089618	Monument	Khirigsuur	square		3.9	4		8.00		Standing Stones at corners		Standing Stones					

APPENDIX D: LITHIC DRAWINGS, DEFINITIONS, CATALOG, DATABASE

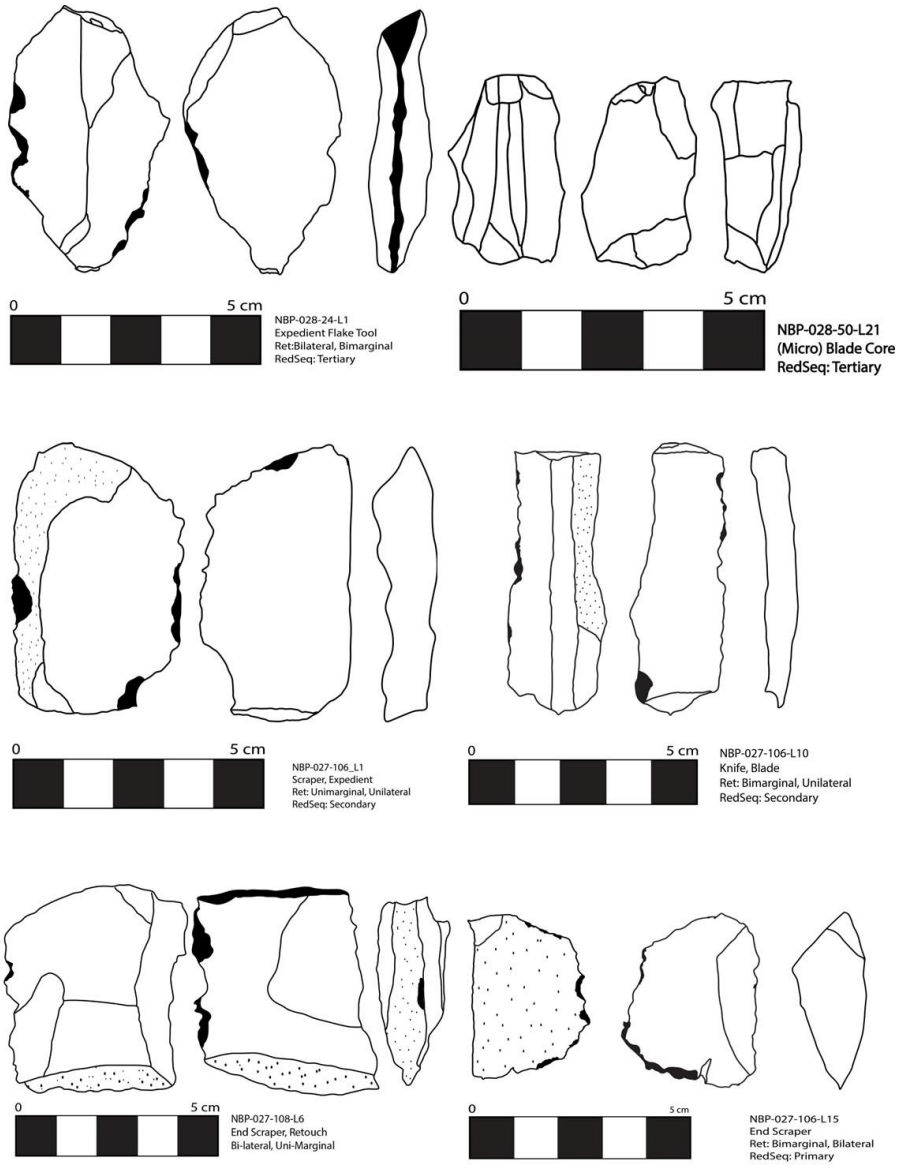


Figure D.1. Stone tool drawings.

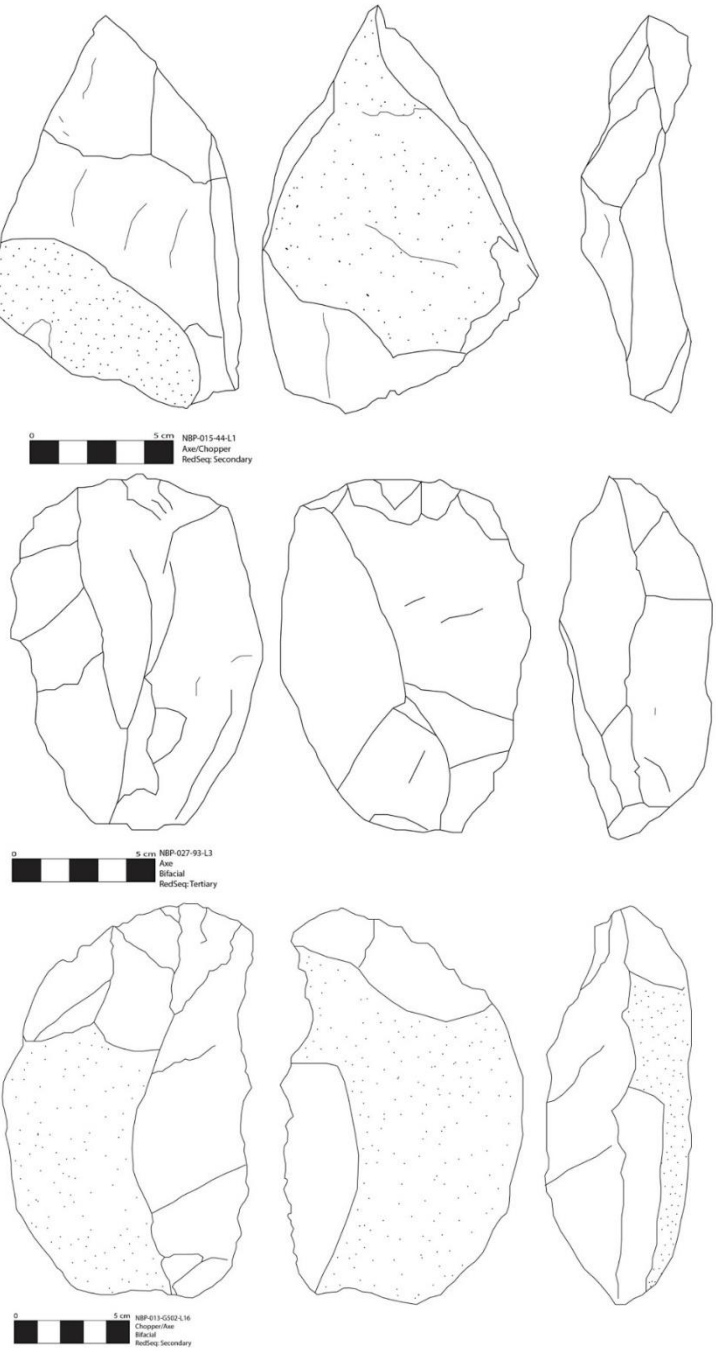


Figure D.1. Stone tool drawings (continued).

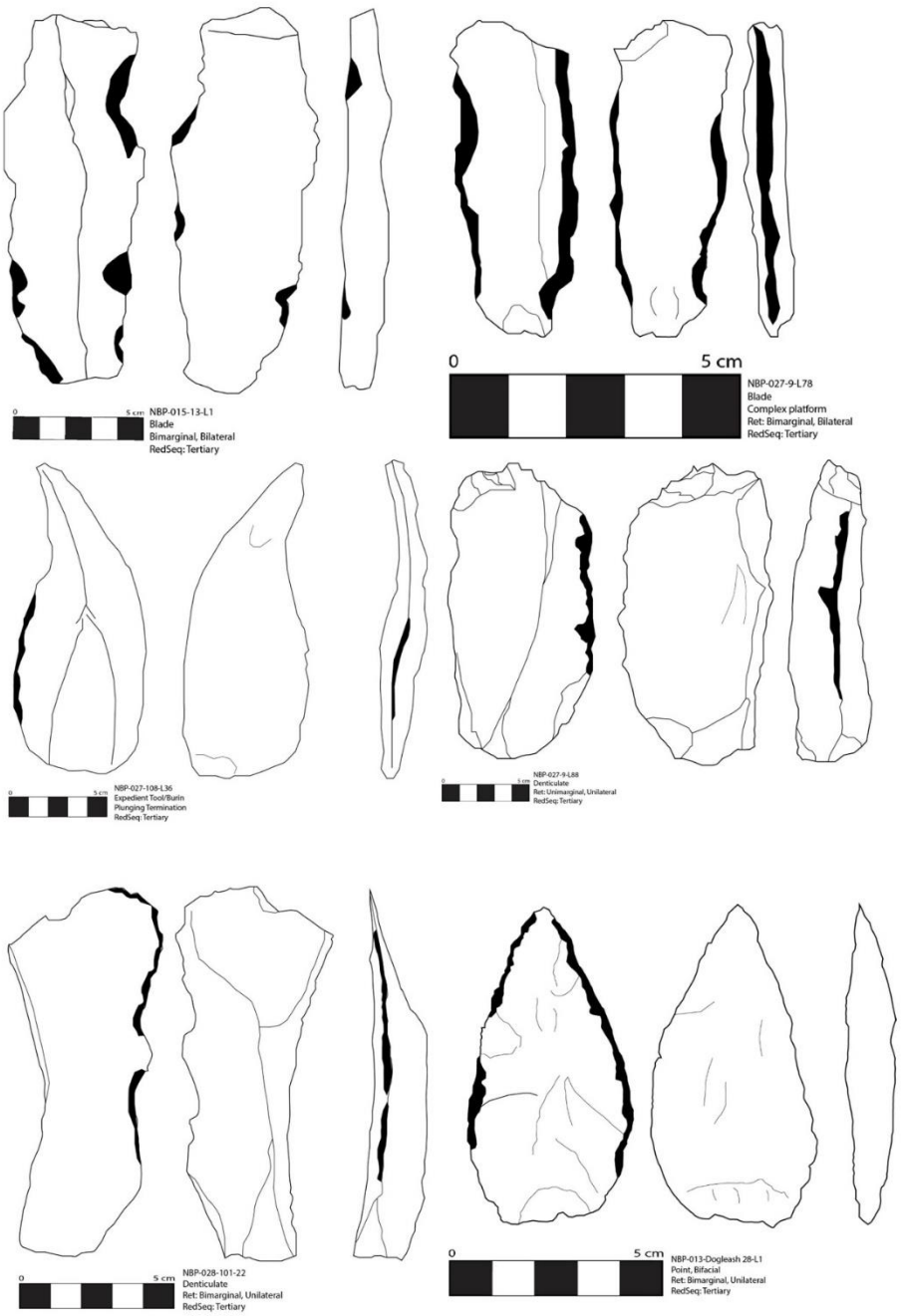


Figure D.1. Stone tool drawings (continued).

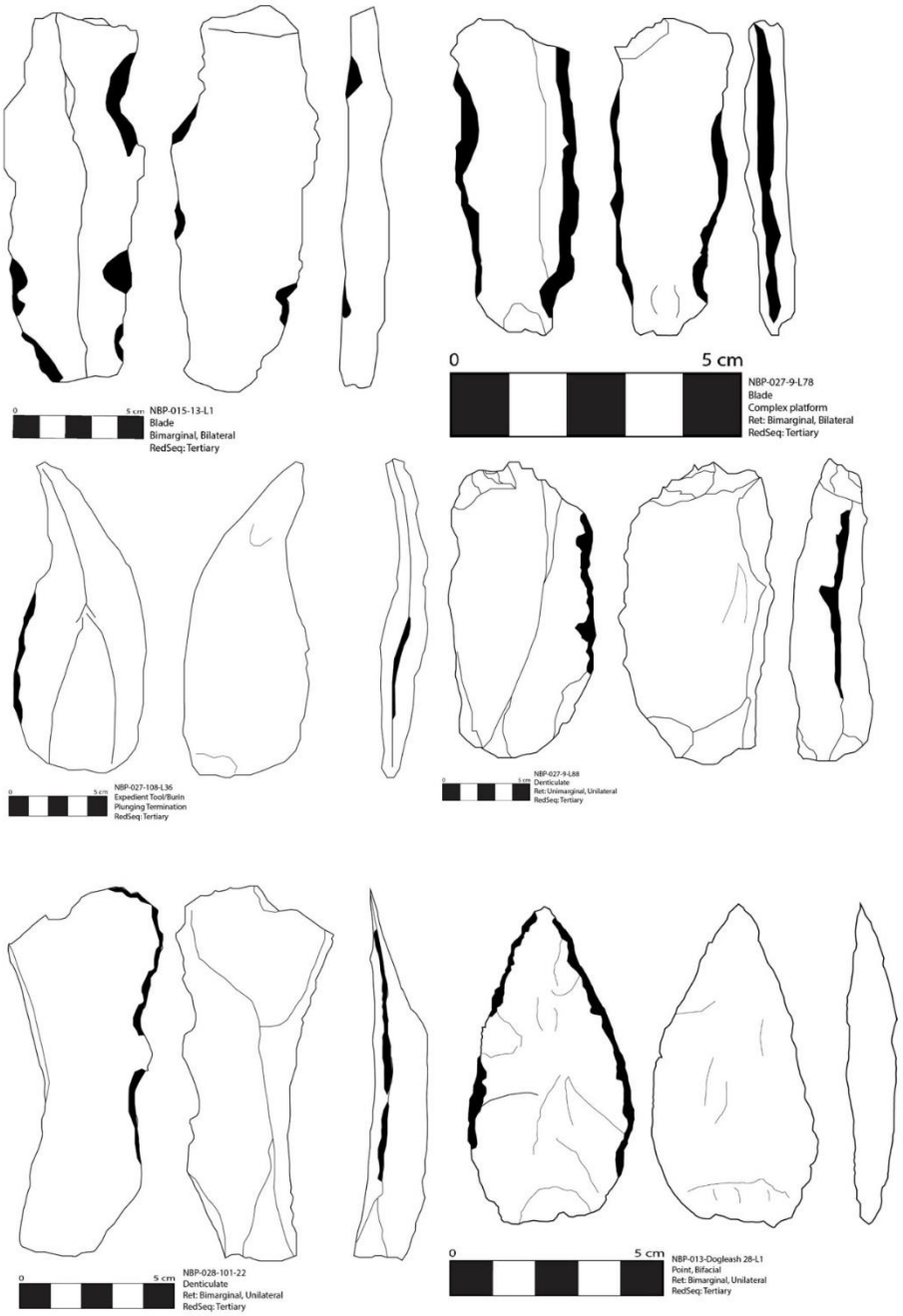
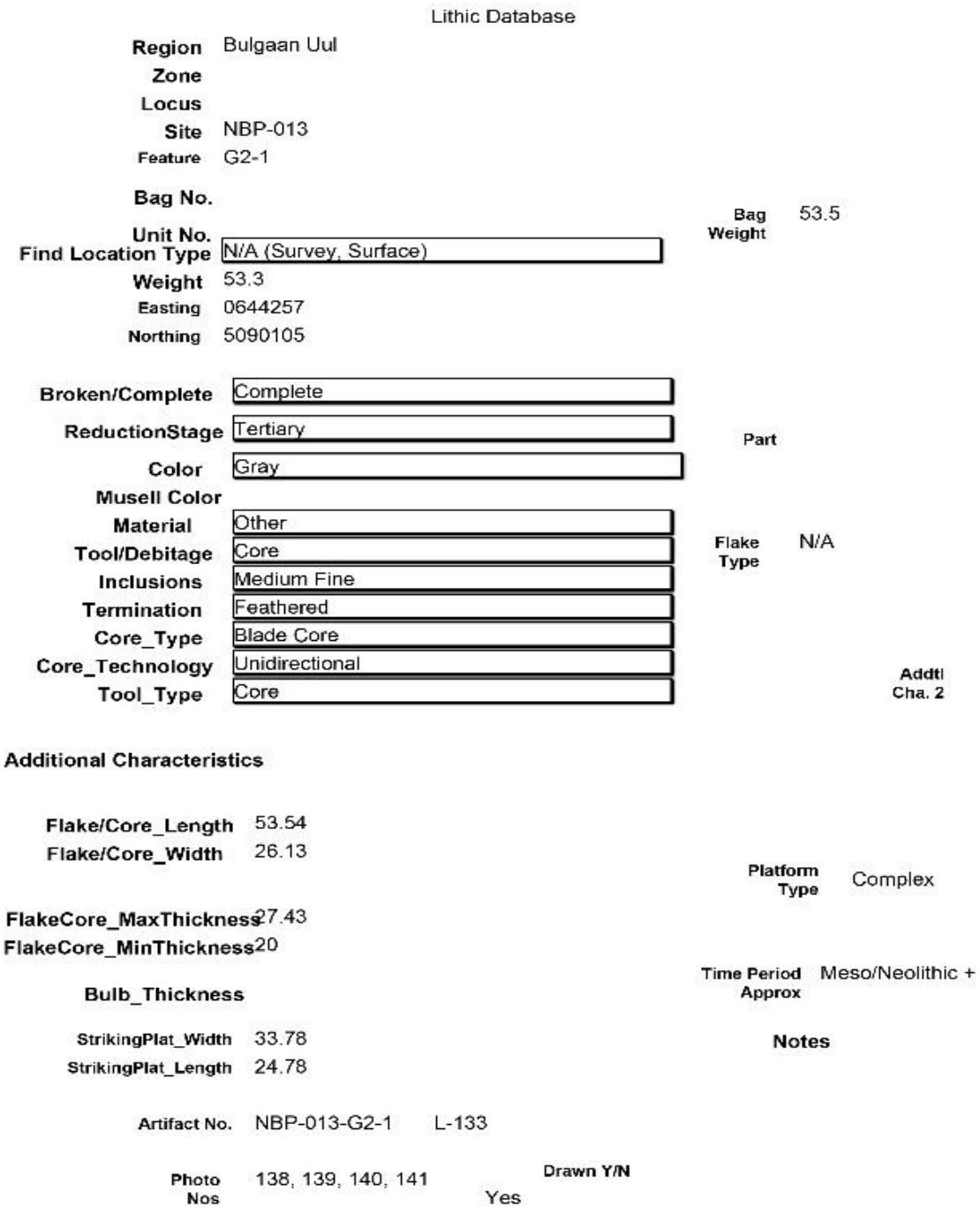


Figure D.1. Stone tool drawings (continued).

Table D.1 Lithic characteristics and definition

ATTRIBUTE	DEFINITION
Flake	Must have recognizable dorsal and ventral surfaces
Proximal Flake	Includes all flake debitage with a discernable point of applied force or striking platform
Bi-Polar Flake	Two points of applied force, often causing a "twist" in the flake
Bending Flake	Formed by cracks originating away from the point of force; often associated with the use of soft hammers or pressure flakers
Conchoidal Flake	A normal flake fracture with a bulb of percussion and striking platform. Ventral side will often not exhibit other pieces taken out, as opposed to dorsal side
Non-Flake Debitage	Characterized by one unrecognizable dorsal or ventral surface
Angular Shatter	Debitage lacking platforms, often having more than two flat surfaces
Flake Shatter	Includes all flake debitage with no recognizable striking platform; usually characterized by broken flakes missing proximal end
Flake Tool	Tools can be formal or expedient (i.e. retouched)
Formal Tool	Formal tools have "characteristics of advance preparation" and morphological consistency
Informal Tool	Often expediently made; retouch on flakes are dominant type but typified by great variability in morphology and function
Feather Termination	Most common termination, typified by tapering at distal end
Hinge Termination	Created when the force rolls away from the core, making a rounded or sloped end
Step Termination	A 90º termination
Plunging Termination	A termination that turns inward toward the objective piece/core
Cortical Platform	Composed of the unmodified cortical surface of the core. May or may not have dorsal cortex present
Flat Platform	Smooth surface which has been impacted to remove a detached piece. Often associated with uni-directional cores and articulate with the dorsal surface at 75-90º angles
Complex Platform	Platforms with a rounded surface or a surface composed of multiple flake scars or facets; often indicative of skill and precision
Abraded Platform	Smoothed by abrasion or rubbing; often indicative of skill or precision


Lithic Database

Region Bulgaan Uul
Zone
Locus
Site NBP-013
Feature G2-1

Bag No.
Unit No.
Find Location Type N/A (Survey, Surface)
Weight 53.3
Easting 0644257
Northing 5090105

Bag Weight 53.5

Broken/Complete Complete
ReductionStage Tertiary
Color Gray
Musell Color
Material Other
Tool/Debitage Core
Inclusions Medium Fine
Termination Feathered
Core_Type Blade Core
Core_Technology Unidirectional
Tool_Type Core

Part
Flake Type N/A
Addtl Cha. 2

Additional Characteristics

Flake/Core_Length 53.54
Flake/Core_Width 26.13
FlakeCore_MaxThickness 27.43
FlakeCore_MinThickness 20
Bulb_Thickness

Platform Type Complex
Time Period Approx Meso/Neolithic +
Notes

StrikingPlat_Width 33.78
StrikingPlat_Length 24.78

Artifact No. NBP-013-G2-1 L-133

Photo Nos 138, 139, 140, 141
Drawn Y/N Yes

Figure D.2. Example of lithic catalogue .

Lithic Database

Bulgaan Uul

Photo1



Photo2



Figure D.2. Example of lithic catalogue (continued).

Table D.2. Lithic database list

Region	Easting	Northing	Site	Feature	Bag Weight	Find Location	Weight	Complete?	RedStage	Part	Color	Material	FlakeType	Tool/Debitage	Inclusions	Termination	CoreType	CoreTechnology	ToolType	Addtl Characteristic	Addtl Cha. 2	Platform Type	Length	Width	MaxThick	MinThick	BulbThickness	StrikingPlatWidth	StrikingPlatLength	ArtifactNo.	Time Period
Shataar Chuluu	637714	5138233	NBP-001, 15a	1	18.4	N/A (Survey, Surface)	18.4	Complete	Tertiary		Blue-black	Chert		Core	Fine	N/A, Other	Blade Core	Unidirectional	Core			Flat	35.55	25.71	15.15	10.29	15.57	23.31	15.63	NBP-001-1 L-1	Neolithic +
Shataar Chuluu	637678	5138313	NBP-001, F15a	36	11.1	N/A (Survey, Surface)	11.20	Broken	Tertiary		Blue-black	Chert		Core	Fine	Step	Blade Core Fragment	Unidirectional	Core-Tool	Retouch	Core Trimming Element (CTE)	Abraded	43.9	24.76	7.74	7.62	8.05	7.98	15.18	NBP-001-15a L-1	Unknown
Shataar Chuluu	637799	5138159	NBP-001, F15a	4	107.4	N/A (Survey, Surface)	107.4	Complete	Secondary		Blue-black	Other		Core	Medium	N/A, Other	Core	Multidirectional	Core			Flat	58.75	53.87	32.78	30.83				NBP-001-4 L-1	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	153.6	N/A (Survey, Surface)	33.7	Complete	Tertiary		Blue-black	Andesite	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Scraper	Retouch		Flat	67.21	31.81	10.8	8.78	10.74	9.57	18.32	NBP- 027-108 L-1	Mesolithic
Bulgaan Uul	639627	5076286	nbp-027	108	153.6	N/A (Survey, Surface)	63	Complete	Primary		Blue-black	Other		Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	62.16	55.27	16.29	9.88	9.75	8.56	36.53	NBP- 027-108 L-2	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	153.6	N/A (Survey, Surface)	9.2	Broken	Secondary	Distal	Light Gray	Andesite	Bending	Flake Tool	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool	Retouch		Unknown	38.78	31.43	7.93	4.46				NBP- 027-108 L-3	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	153.6	N/A (Survey, Surface)	27.3	Broken	Primary	Middle	Blue-black	Other	Bending	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Scraper	Retouch	Expedient	Unknown	49.1	49.13	8.65	4.8				NBP- 027-108 L-4	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	153.6	N/A (Survey, Surface)	17.6	Complete	Tertiary		Light Gray-Blue	Chert	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	49.2	39.3	9.9	4.3	8.21	5.47	8.35	NBP- 027-108 L-5	Upper Paleolithic
Bulgaan Uul	639627	5076286	NBP-027	108	153.6	N/A (Survey, Surface)	1	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Core	Fine	Feathered	Blade Core Fragment	Unidirectional	Bladelet	Pressure Flaking		Complex	20.46	10.46	4.11	3.29	3.38	3	7.68	NBP- 027-108 L-6	Neolithic +
Bulgaan Uul	639627	5076286	NBP-027	108	153.6	N/A (Survey, Surface)	0.4	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	15.9	7.96	1.87	1.23	1.64	1.63	6.53	NBP- 027-108 L-7	Neolithic +
Bulgaan Uul	639627	5076286	NBP-027	108	153.6	N/A (Survey, Surface)	0.5	Broken	Tertiary	Proximal	Red-Orange	Chert	N/A	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	10.27	13.54	2.59	1.06	2.55	1.38	5.57	NBP-027-108 L-8	Neolithic +
Bulgaan Uul	639627	5076286	NBP-027	108	153.6	N/A (Survey, Surface)	0.3	Complete	Tertiary		Red-Brown	Chert		Non-Flake Debitage	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				15.3	5.56	2.04	1.43				NBP- 027-108 L-9	Neolithic +
Bulgaan Uul	639627	5076286	NBP-027	108	153.6	N/A (Survey, Surface)	0.5	Complete	Tertiary		Yellow	Chalcedony		Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				9.07	8.43	4.13	3.19				NBP- 027-108 L-10	
Bulgaan Uul	639627	5076286	NBP-027	108	153.6	N/A (Survey, Surface)	0.3	Complete	Tertiary		Yellow	Chert		Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				8.11	3.95	2.39	2.34				NBP-027-108 L-11	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	153.6	N/A (Survey, Surface)	0.3	Complete	Tertiary		Orange-Red	Chert	Bending	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	7.8	9.43	2.38	1.03	2.38	3.93	2.33	NBP- 027-108 L-1	Neolithic +
Shataar Chuluu	639627	5076286	NBP-027	108	153.6	N/A (Survey, Surface)	0.3	Complete	Tertiary		Brown-Yellow	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	11.39	8.21	2.49	151		2.59	6.63	NBP- 027-108 L-1	Unknown
Shataar Chuluu	640657	5077597	NBP-028	63	2	N/A (Survey, Surface)	2	Complete	Tertiary		Red-Brown	Chert		Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				22.7	16.33	8.13	3.3				NBP-028-63 L-1	Unknown
Shataar Chuluu	639835	5075695	NBP-028	65	23.4	N/A (Survey, Surface)	23.4	Complete	Primary		Blue-black	Other	N/A	Flake Tool	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	Scraper	Retouch	Expedient	[illegible]	36.33	46.29	11.85	7.65	8.49			NBP- 028-65 L-1	Middle Paleolithic
Shataar Chuluu	641478	5079120	NBP-028	29	30.2	N/A (Survey, Surface)	8.3	Complete	Tertiary		Light Gray	Other	Bending	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	32.83	32.11	8.5	4.45	8.41	9.17	23.84	NBP- 028-29 L-1	Unknown
Bulgaan Uul	641478	5079120	NBP-028	29	32.2	N/A (Survey, Surface)	21.8	Complete	Tertiary		Light Gray	Other	Compression	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Flake Tool	Retouch	Expedient	Complex	42.08	39.87	11.44	8.28	11.58	11.12	23.39	NBP- 028-29 L-2	Unknown
Bulgaan Uul	639750	5076559	NBP-027	100	285.4	N/A (Survey, Surface)	285.4	Complete	Primary		Brown	Rhyolite	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Chopper	Retouch		Flat	88.48	113.47	20.86	8.22	20.19	19.51	155.05	NBP-027-100 L-1	Lower Paleolithic
Bulgaan Uul	641698	5079714	NBP-028	34	8.5	N/A (Survey, Surface)	3.8	Complete	Tertiary		Red-Brown	Chert		Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	19.13	27.26	6.2	3.89				NBP- 028-34 L-1	Unknown
Bulgaan Uul	641698	5079714	NBP-028	34	8.5	N/A (Survey, Surface)	4.7	Complete	Tertiary		Red-Brown	Chert		Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	28.78	18.1	8.04	5.09				NBP-028-34 L-2	Unknown
Bulgaan Uul	639964	5077301	NBP-027	137	37.6	N/A (Survey, Surface)	34	Complete	Primary		Dark Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Retouch		Abraded	54.15	46.13	10.68	4.92	10.68	9.52	19.32	NBP- 027-137 L-1	Unknown
Bulgaan Uul	639964	5077301	NBP-027	137	37.6	N/A (Survey, Surface)	1.3	Complete	Tertiary		Red-Brown	Chert		Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	11.84	15.29	8.22	5.25				NBP-027-134 L-2	Unknown
Bulgaan Uul	639964	5077301	NBP-027	137	37.6	N/A (Survey, Surface)	1.5	Complete	Tertiary		Brown	Chert		Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	15.35	12.89	5.19	3.08				NBP- 027-137 L-3	
Bulgaan Uul	639964	5077301	NBP-027	137	37.6	N/A (Survey, Surface)	0.8	Complete	Tertiary		Red-Brown	Chalcedony	Bending	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	12.52	15.37	3.29	1.53	3.22	2.23	9.23	NBP-027-137 L-4	Unknown
Bulgaan Uul	642826	5081057	NBP-028	32	50.2	N/A (Survey, Surface)	20.7	Complete	Primary		Blue-black	Other	Bending	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	45.33	35.53	10.3	7.31	10.3	7.91	22.74	NBP- 028-32 L-1	Lower Paleolithic
Bulgaan Uul	642826	5081057	NBP-028	32	50.2	N/A (Survey, Surface)	13.6	Complete	Primary		Blue-black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	40.67	40.24	8.13	4.46	7.96	5.82	17.95	NBP- 028-32 L-2	Lower Paleolithic
Bulgaan Uul	642826	5081057	NBP-028	32	50.2	N/A (Survey, Surface)	11.5	Complete	Tertiary		Light Gray	Andesite	Compression	Flake Tool	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient	Retouch	Expedient	Unknown	29.58	33.89	8.99	7.68				NBP- 028-32 L-3	Unknown
Bulgaan Uul	642826	5081057	NBP-028	32	50.2	N/A (Survey, Surface)	1.4	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	24.97	15.27	3.44	1.92	3.3	2.88	4.71	NBP- 028-32 L-4	Neolithic +
Bulgaan Uul	642826	5081057	NBP-028	32	50.2	N/A (Survey, Surface)	0.8	Complete	Tertiary		Red-Brown	Chert	Bending	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.4	11.64	3.34	2.67	3.26	2.85	7.94	NBP-028-32 L-5	Neolithic +
Bulgaan Uul	642826	5081057	NBP-028	32	50.2	N/A (Survey, Surface)	1.7	Complete	Primary		Brown	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		[illegible]	20.38	14.38	3.91	3.24	4.58	44.47	11.05	NBP- 028-32 L-6	Unknown
Bulgaan Uul	642826	5081057	NBP-028	32	50.2	N/A (Survey, Surface)	0.6	Complete	Tertiary		Light Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	15.57	9.96	3.98	1.74	3.89	1.93	3.56	NBP- 028-32 L-7	Neolithic +
Bulgaan Uul	639743	5076540	NBP-027	101	29.6	N/A (Survey, Surface)	29.6	Complete	Secondary		Light Gray	Other	Bending	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	46.07	43.45	14.56	7.29	12.98	11.85	18.13	NBP- 027-101 L-1	Unknown
Bulgaan Uul	646547	5077451	NBP-028	24	17.8	N/A (Survey, Surface)	17.8	Complete	Tertiary		Light Black	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool	Retouch	Expedient	Complex	48.26	32.59	48.26	7.86	7.62	3.84	7.1	NBP- 028-24 L-1	Unknown
Bulgaan Uul	639446	5074882	NBP-028	50	11.1	N/A (Survey, Surface)	11.1	Complete	Tertiary		Brown-Yellow	Chert		Core	Fine	N/A, Other	Blade Core	Multidirectional	Core			Complex	31.09	16.95	12.9	10.44		11.97	13.07	NBP- 028-50 L-1	Neolithic +
Bulgaan Uul	640598	5078034	NBP-028	43	1.3	N/A (Survey, Surface)	1.3	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Unknown	18.61	17.4	4.56	2.55	2.28	0.91	1.56	NBP- 028-43 L-1	Neolithic +
Bulgaan Uul	641408	5078916	NBP-028	28	26.3	N/A (Survey, Surface)	26.3	Complete	Tertiary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	46.3	35.54	14.58	6.63	14.58	14.16	31.15	NBP- 028-28 L-1	Unknown
Bulgaan Uul	639544	5076676	NBP-027	114	8.7	N/A (Survey, Surface)	8.7	Broken	Tertiary	Proximal	Blue-black	Andesite	Compression	Flake (Proximal, Whole)	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Retouch		Abraded	25.99	37.98	7.68	4.44	7.22	2.73	8.94	NBP- 027-114 L-1	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	24.1	Complete	Secondary		Brown	Rhyolite	Conchoidal	Flake Tool	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	Scraper	Retouch		[illegible]	55.22	32.71	10.61	9.68	9.62	9.54	21.82	NBP-027-106 L-1	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	63.4	Complete	Primary		Blue-black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Core Trimming Element (CTE)		[illegible]	91.17	30.98	22.11	11.06	11.06	4.5	16.7	NBP- 027-106 L-2	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	28.3	Complete	Primary		Blue-black	Andesite	Bending	Flake Tool	Medium	Hinge	N/A (not a core)	N/A (if not a core)	Flake Tool	Retouch	Unimarginal, Bi-lateral	Flat	67.45	34.67	8.77	7.08	7.08	5.5	22.86	NBP-027-106 L-3	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	29.1	Complete	Secondary		Light Blue	Chert		Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Core Trimming Element (CTE)		Unknown	63.07	22.44	21.89	12.82				NBP- 027-106 L-4	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	42	Complete	Secondary		Light Blue	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	60.61	39.33	19.25	11.59	15.79	8.29	13.77	NBP- 027-106 L-5	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	15.7	Complete	Primary		Light Blue	Other		Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	59.67	27.04	11.98	4.4	10.15	5.31	6.26	NBP-027-106 L-6	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	13.7	Broken	Tertiary	Proximal	Blue-black	Other	Conchoidal	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.94	26.76	11.3	5.41	11.7	9.03	27.06	NBP-027-106 L-7	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	14	Complete	Tertiary		Light Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	34.19	32.07	906	7.67	7	7.49	18.13	NBP-027-106 L-8	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	24.7	Complete	Secondary		Blue-black	Other	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	50.63	50.4	8.91	4.42	9.06	3.23	8.02	NBP-027-106 L-9	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	12.8	Complete	Secondary		Blue-black	Other	Bi-Polar	Flake Tool	Medium	Plunging	N/A (not a core)	N/A (if not a core)	Blade	Retouch	Unimarginal, Uni-lateral	Complex	56.79	20.6	7.6	6.67	7.3	7	18.72	NBP-027-106 L-10	Upper Paleolithic
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	9.8	Broken	Secondary	Proximal	Blue-black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	31.32	36.01	7.18	2.92	7.18	5.62	16	NBP-027-106 L-1	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	10.2	Broken	Secondary	Proximal	Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	30.26	42.04	7.4	2.16	7.17	3.82	10.14	NBP-027-106 L-1	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	5.4	Complete	Secondary		Light Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	38.1	19.22	11.73	4.27	4.27	3.44	11.78	NBP-027-106 L-1	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	5.2	Complete	Tertiary		Black	Andesite		Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	38.4	14.82	10.6	5.28	4.2	2.48	8.91	NBP-027-106 L-1	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	19.1	Complete	Primary		Black		Compression	Flake Tool	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	End/Thumbnail Scraper	Retouch	Bi-Marginal, Bi-Lateral	Flat	39.57	39.49	15.7	5.13				NBP-027-106 L-1	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	8.4	Broken	Secondary	Middle		Other	Conchoidal	Flake Tool	Medium	Hinge	N/A (not a core)	N/A (if not a core)	Flake Tool	Retouch	Expedient	Unknown	24.01	45.17	6.73	3.91				NBP-027-106 L-1	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	5.1	Broken	Tertiary	Distal	Blue-black	Other	N/A	Flake Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	34.3	21.54	7.06	3.36				NBP-027-106 L-1	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	9.2	Broken	Secondary	Middle	Light Blue	Andesite		Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	21.79	39.35	8.59	3.85				NBP-027-106 L-1	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	8.5	Broken	Tertiary	Middle	Blue-black	Other		Flake Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Retouch		Unknown	30.86	32.14	6.2	5.76				NBP-027-106 L-1	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	3.6	Complete	Tertiary		Blue-black	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	41.08	15.85	6.15	3.35	5.97	4.54	10.28	NBP-027-106 L-2	Neolithic +
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	4.8	Broken	Primary	Distal	Blue-black	Other	Conchoidal	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	34.67	22.69	5.76	3.94				NBP-027-106 L-2	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	7.3	Complete	Secondary		Dark Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.53	23.07	6.91	4.86	6.45	4.06	10.94	NBP-027-106 L-2	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	4.5	Complete	Tertiary		Black	Other	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	40.85	16.49	6.95	3.05				NBP-027-106 L-2	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	1.7	Broken	Tertiary		Dark Gray	Other	N/A	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	16.54	24.7	3.68	1.83				NBP-027-106 L-24	
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	2	Broken	Tertiary	Proximal	Light Gray	Other		Flake (Proximal, Whole)	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	17.87	17.16	4.92	4.03	4.03	2.66	6.31	NBP-027-106 L-2	Unknown
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	1	Broken	Primary	Distal	Purple	Chalcedony		Flake Shatter	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	15.67	14.25	3.48	2.33				NBP-027-106 L-2	Neolithic +
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	0.4	Complete	Tertiary		Orange	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	13.77	11.33	2.62	1.77	2.67	2.6	3.96	NBP-027-106 L-2	Neolithic +
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	0.5	Complete	Tertiary		Red-Brown	Chert		Non-Flake Debitage	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	15.41	11.17	3.13	1.95				NBP-027-106 L-2	Neolithic +
Bulgaan Uul	636609	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	0.4	Complete	Tertiary		Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking			8.39	7.46	3.82	1.63	3.74	3.55	5.34	NBP-027-106 L-2	Neolithic +
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	0.4	Complete	Tertiary		Red-Brown	Chert		Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Unknown	18.06	7.28	2.88	1.35				NBP-027-106 L-3	Neolithic +
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	0.1	Broken	Tertiary		Red-Brown	Chert		Flake Tool	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Bladelet			Unknown	9.68	4.53	1.71	1.62				NBP-027-106 L-3	Neolithic +
Bulgaan Uul	639567	5076609	NBP-027	106	486.4	N/A (Survey, Surface)	13.6	Complete	Secondary		Light Blue	Chert		Core	Fine	N/A, Other	Blade Core	Unidirectional	Core		Expedient	Complex	28.2	30.41	10.55	7.54		1.21	7.94	NBP-027-106 L-3	Neolithic +
Bulgaan Uul	640526	5077050	NBP-028	12	3.5	N/A (Survey, Surface)	3.5	Complete	Tertiary		Brown-Yellow	Chert		Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	25.92	18.4	7.34	4.52	4.23	4.23	8.32	NBP-028-12 L-1	Neolithic +
Bulgaan Uul	641133	5078376	NBP-028	64	93.8	N/A (Survey, Surface)	58.8	Complete	Secondary		Light Blue	Other	Compression	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	45.02	49.19	22.84	18.07	20.5	19.57	48.93	NBP- 028-64 L-1	Unknown
Bulgaan Uul	641133	5078376	NBP-028	64	93.8	N/A (Survey, Surface)	20.1	Complete	Tertiary		Light Blue	Other		Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	45.87	40.85	10.05	9.98	9.57	5.61	13.51	NBP-028-64 L-2	Middle Paleolithic
Bulgaan Uul	641133	5078376	NBP-028	64	98.3	N/A (Survey, Surface)	10.8	Complete	Tertiary			Other	Compression	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	42.71	26.91	9.03	7.56	8.46	2.96	6.8	NBP-028-64 L-3	Unknown
Bulgaan Uul	641133	5078376	NBP-028	64	93.8	N/A (Survey, Surface)	4.3	Complete	Secondary		White	Quartz		Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	18.01	15.26	13.42	7.18				NBP-028-64 L-4	Neolithic +
Bulgaan Uul	640393	5079558	NBP-027	113	11.7	N/A (Survey, Surface)	11.7	Broken	Tertiary	Proximal	Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.2	48.36	8.36	3.02	9.6	9.18	26.09	NBP-028-64 L-1	Unknown
Bulgaan Uul	639646	5076631	NBP-027	104	353.8	N/A (Survey, Surface)	353.8	Complete	Primary		Light Blue	Other	N/A	Core	Medium Fine	N/A, Other	Core	Multidirectional	Core-Tool	Retouch	Bi-Marginal, Bi-Lateral	Unknown	91.08	78.14	41.91	39.08				NBP- 027-104 L-1	Middle Paleolithic
Bulgaan Uul	640653	5077262	NBP-028	13	38.5	N/A (Survey, Surface)	38.5	Complete	Secondary		Dark Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	43.83	59.81	13.05	7.55	13.2	6.94	16.7	NBP-028-13 L-1	Unknown
Bulgaan Uul	640275	5079340	NBP-027	115	44.6	N/A (Survey, Surface)	44.6	Complete	Primary		Light Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	42.56	47.61	17.25	11.24	18.1	17.54	19.96	NBP-027-115 L-1	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	1.4	N/A (Survey, Surface)	1.4	Complete	Secondary		White	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	17.27	19.93	7.76	0.85	6.69	5.43	8.3	NBP- 027-103 L-1	Neolithic +
Bulgaan Uul	639693	5076631	NBP-027	105	50.2	N/A (Survey, Surface)	16.1	Complete	Tertiary		Dark Gray	Other		Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Retouch	Unimarginal, Uni-lateral	Unknown	50.82	26.41	12.74	8.01				NBP-027-105 L-1	Unknown
Bulgaan Uul	639693	5076631	NBP-027	105	50.2	N/A (Survey, Surface)	6.9	Complete	Primary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.94	21.79	7.04	3.38	6.2	5.28	11.24	NBP-027-105 L-2	Unknown
Bulgaan Uul	639693	5076631	NBP-027	105	50.2	N/A (Survey, Surface)	4.4	Complete	Primary		Blue-black	Other		Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	29.48	20.39	6.95	4.07				NBP-027-105 L-3	Unknown
Bulgaan Uul	639693	5076631	NBP-027	105	50.2	N/A (Survey, Surface)	5.4	Complete	Secondary		Dark Gray	Chert	Conchoidal	Flake Tool	Fine	Hinge	N/A (not a core)	N/A (if not a core)	Flake Tool	Retouch	Unimarginal, Uni-lateral	[illegible]	24.72	18.3	10.92	7.87	6.28	2.71	10	NBP-027-105 L-4	Mesolithic
Bulgaan Uul	639693	5076631	NBP-027	105	50.2	N/A (Survey, Surface)	6.4	Complete	Tertiary		Brown-Yellow	Rhyolite	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient	Retouch	Unimarginal, Uni-lateral	Flat	38.43	20.5	9.72	3.36	9.93	8.33	15.98	NBP-027-105 L-5	Unknown
Bulgaan Uul	639693	5076631	NBP-027	105	50.2	N/A (Survey, Surface)	0.7	Complete	Secondary		Light Brown	Chert		Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	9.05	11.64	4.92	1.66				NBP-027-105 L-6	Neolithic +
Bulgaan Uul	639693	5076631	NBP-027	105	50.2	N/A (Survey, Surface)	0.4	Complete	Tertiary		Red-Orange	Chert		Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	9.36	11.23	2.53	1.87	2.43	1.83	8.65	NBP-027-105 L-7	Neolithic +
Bulgaan Uul	639693	5076631	NBP-027	105	50.2	N/A (Survey, Surface)	10.8	Complete	Tertiary		Brown-Yellow	Chert		Core	Fine	N/A, Other	Blade Core Fragment	Multidirectional	Core	Pressure Flaking		Complex	32.13	19.05	12.55	8.89	11.25	10.3	17.79	NBP-027-105 L-8	Neolithic +
Bulgaan Uul	639640	5076562	NBP-027	102	56.7	N/A (Survey, Surface)	13.9	Complete	Tertiary		Dark Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	43.94	28.41	9.16	7.08	7.42	5.85	15.03	NBP- 027-102 L-1	Unknown
Bulgaan Uul	639640	5076562	NBP-027	102	56.7	N/A (Survey, Surface)	5.7	Broken	Tertiary	Distal	Dark Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	26.67	30.32	3.67	3.58				NBP- 027-102 L-2	Unknown
Bulgaan Uul	639640	5076562	NBP-027	102	56.7	N/A (Survey, Surface)	14.9	Complete	Secondary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	45.32	26.73	11.42	5.84	10.29	5.43	4.22	NBP-027-102 L-3	Unknown
Bulgaan Uul	639640	5076562	NBP-027	102	56.7	N/A (Survey, Surface)	12.5	Complete	Primary		Dark Gray	Andesite		Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	41.22	33.94	6.93	0.39	3.8	3.23	14.13	NBP-027-102 L-4	Mesolithic
Bulgaan Uul	639640	5076562	NBP-027	102	56.7	N/A (Survey, Surface)	3.3	Complete	Tertiary		Light Gray-Blue	Andesite	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.02	28.26	5.66	3.76					Unknown
Bulgaan Uul	639640	5076562	NBP-027	102	56.7	N/A (Survey, Surface)	1.9	Complete	Tertiary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.97	24.96	3.48	1.84	3.07	1.64	2.15	NBP-027-102 L-6	Unknown
Bulgaan Uul	639640	5076562	NBP-027	102	56.7	N/A (Survey, Surface)	1.2	Complete	Secondary		Dark Gray	Other		Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	12.63	20.14	4.2	2.46	4.27	2.13	7.7	NBP-027-102 L-7	Unknown
Bulgaan Uul	639640	5076562	NBP-027	102	56.7	N/A (Survey, Surface)	2.3	Complete	Tertiary		Brown-Yellow	Chert		Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	15.23	14.42	8.56	4.59				NBP-027-102 L-8	Unknown

Table D.2 (continued). Lithic database list

Bulgaan Uul	639640	5076562	NBP-027	102	56.7	N/A (Survey, Surface)	1.6	Complete	Tertiary		Red-Brown	Chert		Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	16.74	20.71	4.26	1.85	3.46	1.77	3.92	NBP-027-102	L-9	Neolithic +
Bulgaan Uul	639693	5076631	NBP-027	105	335.1	N/A (Survey, Surface)	335.1	Complete	Secondary		Blue-black	Other	N/A	Flake Tool	Medium	Feathered	Core Fragment	Unidirectional	Chopper	Retouch	Unimarginal, Bi-lateral	Unknown	104.5	81.94	42.28	17.13				NBP- 027-105	L-9	Middle Paleolithic
Bulgaan Uul	639554	5076677	NBP-027	117	301.1	N/A (Survey, Surface)	301.1	Complete	Secondary		Light Blue	Andesite		Core	Medium	N/A, Other	Bi-Facial Thinned Core, Levallois	Multidirectional	Core			Abraded	100.1	74.16	34.12	17.51		32.22	62.38	NBP-027-117	L-1	Middle Paleolithic
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	185.4	Complete	Secondary		Dark Gray	Chert		Core	Medium Fine	N/A, Other	Core Exhausted	Multidirectional	Core		Bi-Marginal, Bi-Lateral	Cortical/Unmodified	96.93	43.09	43.33	19.71		32.68	31.64	NBP-027-108	L-1	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	167	Complete	Primary		Dark Gray	Other	Conchoidal	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Cortical/Unmodified	104.08	51.96	29.19	23.87		10.81	12.86	NBP-027-108	L-2	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	50	Complete	Primary		Blue-black	Andesite	Compression	Flake (Proximal, Whole)	Medium Coarse	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	56.15	46.6	16.81	9.25	17.91	17.85	39.37	NBP-027-108	L-3	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	100.3	Complete	Secondary		Blue-black	Andesite	Conchoidal	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	71.85	52.83	23.32	19.6				NBP-027-108	L-4	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	74.1	Complete	Secondary		Light Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Flat	88.99	30.78	23.65	16.55	11.99	10.15	18.28	NBP-027-108	L-5	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	66	Complete	Secondary		Dark Gray	Other	N/A	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	End/Thumbnail Scraper	Retouch	Unimarginal, Uni-lateral	Unknown	43.69	56.39	17.11	11.01				NBP-027-108	L-6	Upper Paleolithic
Bulgaan Uul	639627	5076286	NBP-027	108	36.4	N/A (Survey, Surface)	36.4	Complete	Primary		Light Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Abraded	71.6	25.07	16.59	10.8	11.75	11.47	23.23	NBP-027-108	L-7	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	68.8	Complete	Secondary		Dark Gray	Other	Conchoidal	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	67.85	53.48	22.33	11.08		24.09	38.89	NBP-027-108	L-8	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	30.5	Complete	Primary		Dark Gray	Other	N/A	Flake Shatter	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	32.94	43.66	14.86	11.19	14.74			NBP-027-108	L-9	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	21.9	Complete	Secondary		Blue-black	Other		Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	39.21	42.21	8.9	5.9	10.73	10.05	27.21	NBP-027-108	L-1	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	19.6	Complete	Secondary		Dark Gray	Andesite	Conchoidal	Flake Shatter	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	50.42	27.05	11.34	6.37				NBP-027-108	L-1	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	20.5	Complete	Secondary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	28.01	51.31	13.39	6.57	13.22			NBP-027-108	L-1	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	14.7	Complete	Tertiary		Dark Gray	Other		Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	48.36	22.75	9.61	7.04	8.02	2.41	5.38	NBP- 027-108	L-1	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	6.6	Broken	Secondary	Distal	Blue-black	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	20.74	42.01	5.67	3.59				NBP-027-108	L-1	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	4.7	Complete	Tertiary		Dark Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	28.34	17.74	6.63	44.28	7.34	7.37	16.05	NBP-027-108	L-1	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	401.5	Complete	Tertiary		Gray-Blue	Other	N/A	Core	Medium Fine	N/A, Other	Bi-Facial Thinned Core	Multidirectional	Core			Complex	117.94	59.01	57.09	39.99		13.7	19.96	NBP-001-35	L-1	Middle Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	153.9	Complete	Primary		Light Green-Blue			Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	Core-Tool			Cortical/Unmodified	67.48	63.9	32.31	20.33				NBP- 001-35	L-2	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	47	Complete	Primary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	Core Fragment	Unidirectional	N/A (if not a tool)		Core Trimming Element (CTE)	Abraded	51.93	36.6	17.89	14.16		12.56	19.28	NBP-001-35	L-3	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	30.1	Complete	Tertiary		Purple	Other		Flake Tool	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	Blade	Hafted	Unimarginal, Uni-lateral		82.89	39.23	9.65	5.08				NBP-0013-35	L-4	Upper Paleolithic
Shataar Chuluu	637791	5138226	NBP-0013	35	3430.5	N/A (Survey, Surface)	50.8	Complete	Primary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	83.32	33.75	13.97	7.04	7.23	3.71	17.44	NBP-001-35	L-5	Unknown
Shataar Chuluu	637791	5138226	NBP-0013	35	3430.5	N/A (Survey, Surface)	14	Complete	Tertiary		Light Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	30.03	3.57	10.49	5.72	8.41	5.75	9.87	NBP-001-35	L-6	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	22.6	Complete	Tertiary		Dark Gray	Other	Compression	Flake Tool	Medium	Hinge	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient	Retouch	Unimarginal, Uni-lateral	Flat	40.3	40.33	11.8	7.57	11.61	8.97	10.22	NBP-001-35	L-7	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	13	Complete	Primary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	40.42	32.39	10.25	4.66	11.51	3.57	7.33	NBP-001-35	L-8	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.7	Broken	Tertiary	Distal	Dark Gray	Other	N/A	Flake Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	31.32	44.9	7.15	5.17				NBP-0013-35	L-9	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	18.7	Complete	Tertiary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	47.95	31.38	11.86	7.31	7.28	6.84	18.8	NBP-001-35	L-10	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	35.2	Complete	Secondary	Middle	Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	41.11	53.81	17.78	11.3				NBP-001-35	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	45.2	Complete	Tertiary		Gray-Blue	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	69.8	39.17	15.94	7.04				NBP-001-35	L-12	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	27	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient	Expedient	Unimarginal, Bi-lateral	Cortical/Unmodified	44.89	46.4	12.24	10.36	14.99	15.06	12.84	NBP-001-35	L-13	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	14.1	Complete	Tertiary		Dark Gray	Other		Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	32.28	29.72	12.93	11.48				NBP-001-35	L-13	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	37.71	19.62	8.55	3.78	9	1.95	33.15	NBP-001-35	L-14	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.7	Complete	Tertiary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.83	31.01	5.09	2.1	4.54	2.73	6.45	NBP-001-35	L-15	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	25.8	Complete	Secondary		Light Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	39.56	50.04	14.54	7.01	10.33	4.37	14.31	NBP-001-35	L-16	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.3	Complete	Secondary		Light Gray	Other		Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	39.19	36.39	9.75	7.44	6.78	1.78	3.71	NBP-001-35	L-17	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.8	Complete	Tertiary		Dark Gray	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade	Retouch	Unimarginal, Bi-lateral	Flat	44.33	21.3	5.18	4.93	4.03	3.91	15.26	NBP-001-35	L-18	Mesolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	32.7	Complete	Tertiary		Yellow-Brown	Andesite		Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	41.79	49.4	14.75	13.53	15.61	11.46	31.74	NBP-001-35	L-19	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	18.7	Complete	Tertiary		Dark Gray	Other		Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	End/Thumbnail Scraper	Retouch	Bi-Marginal, Bi-Lateral	Complex	41.67	33.4	11.48	7.48	9.19	7.97	22.6	NBP-001-35	L-20	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.5	Complete	Tertiary		Light Blue	Other		Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	35.93	17.29	7.37	5.35	6.92	5.26	4.88	NBP-001-35	L-21	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	10.4	Complete	Tertiary		Gray-Blue	Andesite	Bending	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.52	33.67	9.29	5.63	4.16	2.28	9.67	NBP-001-35	L-22	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.1	Complete	Tertiary		Black	Andesite	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	39.28	24.11	7.57	5.29	5.72	4.2	16.18	NBP-001-35	L-22	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.8	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	25.3	18.23	2.66	2.45	3.23	3.35	8.54	NBP-001-35	L-23	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.3	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	19.26	26.6	6.36	3.94	6.26	551	14.56	NBP-001-35	L-24	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6	Broken	Secondary	Distal	Gray-Blue	Other		Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	39.72	21.19	7.43	3.48				NBP-001-35	L-25	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.4	Complete	Tertiary		Blue-black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	35.23	29.54	4.82	4.32	4.59	4.12	15.29	NBP-001-35	L-26	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.8	Broken	Tertiary	Distal	Gray-Blue	Andesite		Flake Shatter	Medium	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	22.19	18.42	6.67	4.97				NBP-001-35	L-27	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.9	Broken	Tertiary	Distal		Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	22.83	38.44	7.33	3.44				NBP-001-35	L-28	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	20.8	Broken	Secondary	Distal	Light Green-Blue		N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	27.34	57.06	12.03	10.5				NBP-001-35	L-29	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	13.3	Complete	Secondary		Blue-black	Chert	N/A	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Burin			Flat	44.29	31.4	11.09	6.4	5.69	2.44	13.17	NBP-001-35	L-30	Mesolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	20.1	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	41.77	43.34	10.73	4.3	11.64	12	44.1	NBP-001-35	L-31	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	11.8	Complete	Secondary		Light Blue	Other		Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	31.04	41.99	6.52	6.15	6.2	6.09	20.48	NBP-001-35	L-32	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	75.9	Broken	Secondary		Light Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	48.77	68.56	22.07	15.93				NBP-001-35	L-33	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	51.1	Complete	Secondary		Blue-black	Other	N/A	Core	Medium Fine	N/A, Other	Core Fragment	Multidirectional	Core		Bi-Facial	Complex	39.9	42.02	44.81	44.64	20.54	20.53	41.35	NBP-001-35	L-34	Upper Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	15.3	Complete	Secondary		Blue-black	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	44.01	43.99	8.08	6.13	6.87	3.9	7.99	NBP-001-35	L-35	Unknown
Shataar Chuluu	637729	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.4	Broken	Tertiary	Proximal	Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Abraded	22.86	30.26	4.53	2.41	4.43	4.11	16.09	NBP-001-35	L-36	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	17.1	Complete	Tertiary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	53.08	43.52	6.3	3.6	4.95	3.39	6.39	NBP-001-35	L-37	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	7.7	Complete	Tertiary		Light Gray	Other		Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	39.44	26.44	7.77	7	7.43	7.77	12.27	NBP-001-35	L-38	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.9	Complete	Tertiary		Light Blue	Chert	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Abraded	21.42	21.39	3.69	2.44	3.64	2.37	5.75	NBP-001-35	L-39	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.8	Complete	Secondary		Light Black	Other		Flake (Proximal, Whole)	Medium Coarse	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	28.72	20.41	4	3.64	4.14	2.3	7.85	NBP-001-35	L-40	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	34.9	Complete	Tertiary		Yellow-Brown	Rhyolite		Angular Shatter	Medium Coarse	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	45.28	28.28	27.03	10				NBP-001-35	L-41	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.6	Complete	Secondary		Blue-black	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	20.24	43.76	9.89	8.78	8.52	7.58	24.08	NBP-001-35	L-42	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	8.2	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	34.44	31.94	6.65	6.28	7.17	4.35	14.27	NBP-001-35	L-43	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	12.1	Complete	Primary		Blue-black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	38.55	37.57	12.11	9.22	7.86	5.8	9.53	NBP-001-35	L-44	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	11.6	Complete	Primary		Black	Other	Compression	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	25.14	37.27	10.52	6.6	10.49	10.79	30.76	NBP-001-35	L-45	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	13.9	Complete	Tertiary		Gray-Blue	Other	Bi-Polar	Flake Tool	Medium Fine	N/A, Other	Core Fragment	Multidirectional	Burin		Core Trimming Element (CTE)	Flat	53.96	23.33	16.81	8.11	4.47	1.76	13.25	NBP-001-35	L-46	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	14.9	Broken	Secondary	Distal	Dark Gray	Andesite	N/A	Non-Flake Debitage	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				58	23.9	11.44	8.65				NBP-001-35	L-47	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	41.7	Complete	Primary		Brown-Yellow	Andesite		Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	49.76	56.03	13.39	10	13	12.24	28.11	NBP-001-35	L-48	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	30.1	Complete	Tertiary		Light Green	Other	N/A	Angular Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	34.48	50.31	20.81	13.09				NBP-001-35	L-49	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	8.2	Complete	Secondary		Black	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Uni-lateral	Flat	45.24	25.82	7.56	5.27	6.13	2.79	4.71	NBP-001-35	L-50	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	13.5	Complete	Tertiary		Brown-Yellow	Rhyolite		Angular Shatter		N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	43.22	26.78	12.95	7.47				NBP-001-35	L-51	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9	Complete	Tertiary		Black	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	47.95	18.99	9.88	7.95	8.64	7.63	8.77	NBP-001-35	L-52	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.4	Complete	Secondary		Gray-Blue	Other	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	24.75	32.86	12.52	9.62				NBP-001-35	L-53	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	12.3	Complete	Primary		Gray-Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	42.69	27.15	11.38	7.38				NBP-001-35	L-54	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	13	Complete	Secondary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	27.14	45.94	9.93	6.63	8.37	6.1	11.43	NBP-001-35	L-55	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.8	Broken	Tertiary		Brown-Yellow	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	33.7	38.35	6.43	5.05	5.79	4.84	12.07	NBP-001-35	L-56	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.3	Complete	Tertiary		Light Blue	Other		Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	21.87	25.14	4.43	3.92	4.98	4.34	5.91	NBP-001-35	L-57	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	13.3	Complete	Tertiary		Light Gray	Other	Compression	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Unknown	46.45	20.16	10.23	5.21				NBP-001-35	L-58	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	15.4	Complete	Secondary		Light Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	32.21	40.01	13.27	7.32	13.56	5.64	4.78	NBP-001-35	L-59	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	N/A, Other	Core Fragment	Unidirectional	N/A (if not a tool)			Complex	20.26	37.14	1.02	7.06	9.69	3.57	6.83	NBP-001-35	L-60	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.1	Complete	Secondary		Light Blue	Other		Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	21.65	30.25	10.95	6.03	6.17	3.23	10.53	NBP-001-35	L-61	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.6	Complete	Tertiary		Gray	Other		Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	23.1	25.88	8.98	7.08	8.57	4.14	11.32	NBP-001-35	L-62	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.7	Complete	Primary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	32.79	23.75	7.56	3.69	7.06	3.13	2.18	NBP-001-35	L-63	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.5	Complete	Secondary		Dark Gray	Other	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	33.82	23.63	6.71	4.52	6.77	3.75	14.56	NBP-001-35	L-64	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	10.6	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	34.76	23.78	14.06	11.77	5.72	3.44	10.03	NBP-001-35	L-65	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.8	Complete	Secondary		Dark Gray	Other		Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	31.11	18.08	7.15	4.65				NBP-001-35	L-66	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.7	Complete	Secondary		Gray-Blue	Other		Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	33.45	17.79	12.57	7.8				NBP-001-35	L-67	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3	Complete	Tertiary		Dark Gray	Other		Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.67	17.28	5.16	4.56	4.69	4.45	6.83	NBP-001-35	L-68	
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	17.7	Complete	Primary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	46.33	32.47	10.49	10.09	8.95	7.99	21.4	NBP-001-35	L-69	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.2	Complete	Tertiary		Light Gray-Blue	Other	Bi-Polar	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Uni-lateral	Flat	32.04	41.69	9.24	3.91	4.28	3.65	12.68	NBP-001-35	L-70	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	13.2	Complete	Secondary		Light Gray-Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	50.33	23.73	11.48	4.75				NBP-001-35	L-71	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.4	Complete	Primary		Light Gray	Other		Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	21.18	31.69	5.78	4.06	5.75	2.11	7.29	NBP-001-35	L-72	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.3	Broken	Primary	Proximal	Light Gray-Blue	Other		Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	19.63	25.13	3.36	2.37	3.4	2.52	11.43	NBP-001-35	L-73	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.9	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.32	23.82	6.39	5.25	6.7	6.58	17.02	NBP-001-35	L-74	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	7.1	Complete	Secondary		Brown-Yellow	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	22.65	31.69	9.94	5.3	5.53	3.62	5.72	NBP-001-35	L-75	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.2	Complete	Primary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	25.99	37.11	9.7	6.67	9.51	3.49	9.3	NBP-001-35	L-76	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	19.5	Complete	Secondary		Gray-Blue	Other		Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	32.64	43.83	10.65	9.56				NBP-001-35	L-77	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.7	Complete	Secondary		Light Green	Other	Bi-Polar	Flake (Proximal, Whole)	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	32.67	27.14	11.25	8.39	10.37	11.33	16.33	NBP-001-35	L-78	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.2	Complete	Secondary		Gray-Blue	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	22.81	19.56	8.78	6.14				NBP-001-35	L-79	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	24.2	Complete	Primary		Gray-Blue	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	51.51	40.86	13.33	8.93		7.04	14.38	NBP-001-35	L-80	Unknown

Table D.2 (continued). Lithic database list

Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.3	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.18	27.17	5.51	3.67	5.65	3.31	17.76	NBP-001-35	L-81	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	11.1	Complete	Primary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	38.39	34.55	8.89	6.22	5.35	2.13	7.44	NBP-001-35	L-82	Unknown
Shataar Chuluu	637791	5138226	NBP-001		3430.5	N/A (Survey, Surface)	8.7	Complete	Tertiary		Dark Gray	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Flat	54.78	11.16	9.28	3.82	9.23	3.18	5.24	NBP-001-35	L-83	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	19.5	Complete	Secondary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	43.46	46.58	10.51	5.26	8.37	4.81	14.37	NBP-001-35	L-84	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.5	Complete	Tertiary	Proximal	Black	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.36	15.93	7.34	6.55	7.42	4.88	6.36	NBP-001-35	L-85	Unknown
Shataar Chuluu	638891	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	7.2	Complete	Tertiary		Gray	Other		Flake (Proximal, Whole)	Medium	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	34.45	23.5	9.46	5.69	7.72	3.03	16.73	NBP-001-35	L-86	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	25.19	13.33	5.18	2.96	2.67	2.45	8.57	NBP-001-35	L-87	Mesolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.6	Complete	Tertiary		Dark Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	25.96	15.65	3.28	2.74	2.65	1.73	4.81	NBP-001-35	L-88	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2	Broken	Tertiary	Distal	Gray	Other		Flake Shatter	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	14.13	19.48	5.41	5.19				NBP-001-35	L-89	
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.3	Broken	Angular Shatter	Distal	Gray-Blue	Other		Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	20.95	27.11	4.17	3.56				NBP-001-35	L-90	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	8.7	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	46.95	20	9.76	3.08	8.31	6.21	9.39	NBP-001-35	L-91	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.6	Broken	Tertiary	Lateral	Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				31.75	20.79	8.17	6.49	5.45	3.48	13.58	NBP-001-35	L-92	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.7	Complete	Secondary	Lateral	Gray-Blue		Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	34.48	28.89	6.36	3.41	4.76	2.41	5.69	NBP-001-35	L-93	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	13.1	Complete	Primary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	41.66	30.38	8.26	6.05	8.63	8.43	29.64	NBP-001-35	L-94	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	34.1	Complete	Secondary		Brown-Yellow	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Flat	53.47	32.06	20.95	14.33	8.89	4.01	13.18	NBP-001-35	L-95	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	18.7	Complete	Tertiary		Gray-Blue	Other		Flake Tool	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	Scraper		Unimarginal, Unilateral	Complex	29.35	45.82	12.81	8.46	10.69	4.95	13.54	NBP-001-35	L-95	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.8	Broken	Secondary	Lateral	Black	Other	N/A	Non-Flake Debitage	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	38.09	19.19	5.83	4.85	4.33	3.72	6.4	NBP-001-35	L-96	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	12.6	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	32.81	45.38	7	4.98	6.72	4.95	20.98	NBP-001-35	L-97	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	15	Complete	Tertiary		Gray-Brown	Andesite		Flake (Proximal, Whole)	Medium Coarse	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	42.11	31.52	9.46	6.61	7.69	5.77	14.14	NBP-001-35	L-98	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	10.2	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.42	38.72	8.77	4.69	6.53	5.52	21.67	NBP-001-35	L-99	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.7	Complete	Tertiary		Dark Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	32.24	24.17	5.89	3.58	3.35	1.4	7.93	NBP-001-35	L-10	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	12	Broken	Tertiary	Distal	Dark Gray	Other	N/A	Angular Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	38.42	28.1	14.24	5.19				NBP-001-35	L-10	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6	Complete	Tertiary		Light Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.67	23.41	6.87	3.1	7.71	6.72	20.89	NBP-001-35	L-102	
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.3	Complete	Tertiary		Dark Gray	Other		Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade			Complex	28.18	18.98	7.77	5.48	7.86	4.01	13.96	NBP-001-35	L-10	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.5	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	23	13.54	4.59	2.31	3.43	2.81	10.48	NBP-001-35	L-10	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.7	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	15.61	21.87	4.67	1.98	4.24	3.91	12.61	NBP-001-35	L-10	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	7.5	Complete	Primary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.29	33.98	5.72	5.95	5.37	3.24	10.74	NBP-001-35	L-10	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.6	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	22.9	18.5	4.31	2.32	4.15	3.17	5.77	NBP-001-35	L-10	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.2	Complete	Secondary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	21.73	33.89	7.19	3.37	7.14	5.38	6.24	NBP-001-35	L-10	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.5	Complete	Primary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	23.82	28.82	5.96	3.77	6.4	4.42	6.62	NBP-001-35	L-10	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.4	Complete	Tertiary		Red-Brown	Rhyolite	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	47.61	15.68	6.83	4.22				NBP-001-35	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.4	Complete	Secondary		Light Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	18.94	15.48	11.25	4.83				NBP-001-35	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.6	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.14	27.02	8.72	3.95	8.09	2.17	8.6	NBP-001-35	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.3	Broken	Tertiary	Distal	Dark Gray	Other	Compression	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Unknown	35.89	26.8	4.63	3.1				NBP-001-35	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	18	Complete	Tertiary		Gray-Blue	Other		Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	58.21	28.26	9.86	3.02				NBP-001-35	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.5	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	25.27	13.34	5.07	2.68	4.75	2.32	3.76	NBP-001-35	L-11	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	18.8	Broken	Tertiary	Lateral	Black	Other	Bending	Flake Shatter	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	53.95	25.79	15.21	5.09	6.67	4.4	7.81	NBP- 001-35	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	12.2	Complete	Secondary		Brown-Yellow	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	37.74	30.57	11.71	4.32	11.85	7.68	14.78	NBP-001-35	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	8.9	Complete	Primary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	35.43	38.29	6.78	4.31	6.8	2.31	4.22	NBP-001-35	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Flat	33.64	20.12	6.68	2.8	6.83	2.47	11.99	NBP-001-35	L-12	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.2	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	28.06	14.44	5.21	2.51	3.56	2	8.2	NBP-001-35	L-12	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.5	Complete	Primary		Gray	Other		Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	24.31	15.44	3.55	2.57	3.33	2.51	8.69	NBP-001-35	L-12	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.3	Complete	Tertiary		Dark Gray	Other		Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.14	25.51	7.31	2.69	4.44	2.11	5.34	NBP-001-35	L-12	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.3	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	22.02	19.67	4.82	3.54				NBP-001-35	L-12	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.4	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.29	27.11	3.84	3.27	5.73	6.07	20.19	NBP-001-35	L-125	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.5	Complete	Primary		Brown-Yellow	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	27.76	17.85	9.29	6.67	6.85	3.62	13.94	NBP-001-35	L-12	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.6	Complete	Primary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Flat	31.49	17.16	5.85	3.57	5.93	2.83	4.5	NBP-001-35	L-12	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	15.6	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Cortical/Unmodified	34	32.03	16.03	10.35	12.98	14.02	17.88	NBP-001-35	L-128	
Shataar Chuluu	637791	5137226	NBP-001	35	3430.5	N/A (Survey, Surface)	11.2	Complete	Secondary		Brown-Yellow	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	32.8	35.66	12	4.71	11.39	11.06	26.52	NBP-001-35	L-12	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	7.3	Broken	Secondary	Proximal	Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	34.72	33.93	5.25	4.5	5.51	1.1	5.45	NBP-001-35	L-13	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	11.8	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	36.63	28.39	10.52	5.48	10.81	4.02	8.36	NBP-001-35	L-13	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.7	Broken	Tertiary	Distal	Light Blue	Other		Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	21.2	25.59	5.59	3.24				NBP-001-35	L-13	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.8	Broken	Primary	Distal	Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	36.76	27.89	9.41	4.96				NBP-001-35	L-13	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1	Broken	Tertiary	Proximal	Light Gray	Other	Conchoidal	Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	12.14	24.84	2.64	2.51	2.7	1.84	8.56	NBP-001-35	L-13	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.5	Complete	Secondary		Light Green-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	29.03	28.63	5.05	4.96	5.12	3.8	15.88	NBP-001-35	L-13	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.3	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	27.52	7.91	4.81	2.94	3.86	3.29	5.66	NBP-001-35	L-13	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.3	Complete	Primary		Gray	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	25.18	14.8	4.68	3.38				NBP-001-35	L-13	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.1	Broken	Tertiary	Proximal	Gray-Blue	Other		Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	18.37	19.52	4.44	4.14	4.24	1.56	5.17	NBP-001-35	L-13	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.7	Broken	Secondary	Lateral	Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	25.71	21.27	6.92	4.84	5.26	4.14	12.52	NBP-001-35	L-13	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.1	Complete	Tertiary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	22.07	15.71	4.87	4.28	4.89	1.81	6.79	NBP-001-35	L-14	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1	Complete	Secondary		Blue-black	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	18.18	8.03	5.36	4.12				NBP-001-35	L-14	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.8	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	20.59	15.84	2.71	1.72	2.12	0.95	4.11	NBP-001-35	L-14	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.4	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	20.63	18.52	2.62	2.24	3.01	2.65	9.62	NBP-001-35	L-14	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	26.8	18.71	5.77	3.67	6.27	4.48	10.05	NBP-001-35	L-144	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	11.61	21.08	5.98	3.42	6.02	1.81	4.32	NBP-001-35	L-14	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.2	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	13.98	26.56	5.43	4.63	5.63	2.74	4.61	NBP-001-35	L-14	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.7	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Other			Cortical/Unmodified	31.74	16.95	4.84	4.17	6.08	6.35	9.89	NBP-001-35	L-14	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	14.1	Complete	Core		Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	44.47	24.17	10.73	7.32				NBP-001-35	L-14	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.5	Complete	Secondary		Light Gray	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	22.42	11.51	5.36	3.54				NBP-001-35	L-14	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	18.1	18.99	3.98	2.92	4	2.41	8.41	NBP-001-35	L-15	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	31.9	Complete	Secondary		Gray-Brown	Other	Compression	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	49.79	54.31	9.52	6.73	10.65	10.34	13.56	NBP-001-35	L-15	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	10.2	Complete	Secondary		Light Blue	Other		Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	27	37.96	12.95	6.07	8.84	1.85	7.79	NBP-001-35	L-15	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	23.55	27.17	5.39	2.72	4.44	2.98	7.63	NBP-001-35	L-15	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.5	Complete	Tertiary		Dark Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.44	29.99	3.94	3.5	3.7	1.31	4.62	NBP-001-35	L-15	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.8	Broken	Tertiary	Distal	Dark Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				32.13	17.33	4.17	2.84				NBP-001-35	L-15	Upper Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.3	Complete	Secondary		White	Rhyolite	N/A	Flake Shatter	Medium Coarse	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	20.79	21.43	6.73	6.01				NBP-001-35	L-15	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.8	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	27.89	23.95	5.99	4.37	5.67	2.79	8.42	NBP-001-35	L-15	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.8	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	16.99	10.8	5.4	3.07				NBP-001-35	L-15	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.4	Complete	Secondary		Light Gray	Other	Bi-Polar	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	32.33	16.2	6.14	5.26	6.53			NBP-001-35	L-15	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.1	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.5	19.91	7.93	4.07	7.38	7.65	14.06	NBP-001-35	L-16	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	7.3	Complete	Tertiary		Dark Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Flat	56.91	11.18	9.81	4.62	4.96	4	8.59	NBP-001-35	L-16	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	8.8	Complete	Tertiary		Dark Gray	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	43.26	19.04	16.87	7				NBP-001-35	L-16	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3..3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.39	34.63	6.39	4.8	5.22	4.53	12.96	NBP-001-35	L-16	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	8	Complete	Secondary		Gray	Other	N/A	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	19.13	29.44	10.74	10.24	10.44	9.53	18.27	NBP-001-35	L-16	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.1	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	24.1	19.87	7.24	6.74	6.82	6.17	13.9	NBP-001-35	L-16	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.3	Complete	Tertiary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	45.78	28.24	8.38	6.63	6.37	2.28	9.15	NBP-001-35	L-16	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.8	Complete	Secondary		Light Gray	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	31.65	23.74	8.97	4.29				NBP-001-35	L-16	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.9	Complete	Tertiary		Light Green-Blue	Other	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	23.02	18.45	3.17	1.48				NBP-001-35	L-16	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.9	Complete	Tertiary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.28	31.95	6.4	3.06	6.3	5.15	8.42	NBP-001-35	L-16	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.4	Complete	Tertiary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	21.51	16.9	2.55	2.44	2.75	1.56	5.25	NBP-001-35	L-17	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.6	Broken	Secondary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	24.5	25.55	4.33	3.49				NBP-001-35	L-171	
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.5	Complete	Tertiary			Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	23.8	11.45	8.61	6.14	5.18	4.68	9.36	NBP-001-35	L-17	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.2	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	17.46	22	2.98	2.64	2.4	1.63	5.25	NBP-001-35	L-17	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.5	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	19.08	24.49	11.66	3.65	11.26	11.32	16.37	NBP-001-35	L-17	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	21.6	Complete	Secondary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	45.74	27.06	13.47	8.28	6.15	2.88	4.67	NBP-001-35	L-17	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.9	Complete	Tertiary		Gray-Blue	Other		Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	45.77	24.27	4.74	2.87	3.88	3.02	10.47	NBP-001-35	L-17	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.3	Complete	Secondary		Gray	Other		Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	31.28	1.37	11.67	5.99				NBP-001-35	L-17	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	13.3	Complete	Tertiary		Gray-Blue	Other	Bi-Polar	Flake (Proximal, Whole)	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	51.98	33.91	7.43	6.35	7.88	5.53	5.7	NBP-001-35	L-17	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4	Complete	Tertiary		Gray	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	37.22	19.97	5.3	3.08	3.42	2.28	3.75	NBP-001-35	L-17	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium	Hinge	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient	Retouch	Unimarginal, Unilateral	Abraded	34.1	20.5	6.88	5.8	7.99	4.65	13.3	NBP-001-35	L-18	Unknown

Table D.2 (continued). Lithic database list

Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	16	Complete	Secondary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	37.38	31.61	12.61	8.83	12.8	9.2	20.8	NBP-001-35	L-18	Unknown
Shataar Chuluu	637791	5137226	NBP-001	35	3430.5	N/A (Survey, Surface)	27.5	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.54	51.23	17.75	14.05	16.9	5.2	20.01	NBP-001-35	L-18	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	10.2	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	35.01	40.37	6.99	4.79	6.07	3.51	13.61	NBP-001-35	L-18	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	7.7	Complete	Tertiary		Gray-Brown	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	31.54	28.32	19.44	6.74				NBP-001-35	L-18	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	20.6	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	43.3	34.84	16.36	7.85	13.17	3.74	6.63	NBP-001-35	L-18	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	24	Complete	Secondary		White	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	37	41.6	12.31	9.24	10.53	3.74	6.49	NBP-001-35	L-18	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.2	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.55	22.85	6.89	6.45	7.2	6.16	17.18	NBP-001-35	L-18	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	7.8	Complete	Secondary		White	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	37.81	25.7	9.08	4.44	8.86	1.46	6.56	NBP-001-35	L-18	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.1	Complete	Tertiary		Blue-black	Other	Bending	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	26.82	26.43	8.74	7.02	7.81	3.28	12.44	NBP-001-35	L-18	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.2	Complete	Secondary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	23.99	11.22	9.58	5.94				NBP-001-35	L-19	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.2	Broken	Tertiary	Middle	Gray	Other	Compression	Flake Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	19.71	28.17	6.63	5.99				NBP-001-35	L-19	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.8	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	16.97	23.98	3.56	1.92				NBP-001-35	L-19	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2	Complete	Tertiary		Light Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.59	26.85	5.07	2.38	5.38	1.47	10.11	NBP-001-35	L-19	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	10.7	Complete	Primary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Retouch	Unimarginal, Unilateral	Flat	32.3	26.78	8.65	5.06	7.67	6.43	24.63	NBP-001-35	L-19	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	14.69	17.38	3.51	2.67	3.63	2.77	4.99	NBP-001-35	L-19	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.6	Complete	Tertiary		Gray	Other		Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	19.94	17.15	4.8	1.52	4.63	4.13	14.22	NBP-001-35	L-19	Mesolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.7	Broken	Angular Shatter	Lateral	Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	30.48	16.29	5.34	3.43	3.67	3.02	11.98	NBP-001-35	L-19	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.9	Complete	Tertiary		Black	Other		Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Unimarginal, Unilateral	Unknown	16.6	20.26	5.56	3.19				NBP-001-35	L-19	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.6	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	42.41	35	5.61	4.75	5.16	4.23	15.71	NBP-001-35	L-19	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.7	Complete	Tertiary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.63	40.22	6.52	4.65	5.68	2.83	11.26	NBP-001-35	L-20	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.3	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	24.25	15.3	3.25	2.66	2.12	1.49	5.65	NBP-001-35	L-20	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.9	Complete	Secondary		Light Gray	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	21.81	22.85	4.69	3.63				NBP-001-35	L-20	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6	Complete	Secondary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.11	26.98	6.63	4.13	6.56	4.02	10.59	NBP-001-35	L-20	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.9	Complete	Tertiary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.37	21.85	10.37	4.85	8.74	7.19	11.1	NBP-001-35	L-20	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.1	Complete	Secondary		Light Green-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	25.19	24.35	5.48	5.14	5.77	6.08	15.54	NBP-001-35	L-20	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.4	Complete	Tertiary		Dark Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Abraded	21.55	13.48	6.51	2.85	4	2.94	8.76	NBP-001-35	L-20	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.7	Complete	Secondary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	15.99	25.97	5.28	4.34	3.95	2.69	12.78	NBP-001-35	L-20	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2	Complete	Tertiary		Dark Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.56	14.38	5.43	2.3	5.45	3.36	11.91	NBP-001-35	L-20	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3	Broken	Tertiary	Proximal	Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.46	20.05	4.85	3.44	4.83	1.69	5.9	NBP-001-35	L-20	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.5	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.32	14.29	6.52	2.97	6.96	5.35	13.83	NBP-001-35	L-21	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.2	Complete	Tertiary		Gray	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	30.84	23.59	7.98	5	5.37	3.75	10.11	NBP-001-35	L-21	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	14.2	Complete	Secondary		Gray-Brown	Andesite	Compression	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	45.97	25.8	12.39	8.14				NBP-001-35	L-21	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.6	Broken	Tertiary	Middle	Light Gray	Other	N/A	Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	14.22	18.34	4.18	3.83				NBP-001-35	L-21	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.2	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	16.37	15.33	3.93	3.91	3.79	3.42	8.86	NBP-001-35	L-214	
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	18.76	12.35	3.94	2.7	2.62	2.08	5.02	NBP-001-35	L-21	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.8	Complete	Tertiary		Gray	Other	N/A	Non-Flake Debitage	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	11.16	13.05	4.01	2.05				NBP-001-35	L-21	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.3	Complete	Tertiary		Gray	Other	N/A	Non-Flake Debitage	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Unknown	14.6	8.69	1.45	0.96				NBP-001-35	L-21	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1	Complete	Tertiary		Light Green-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	14.25	21.84	2.18	1.6	2.41	1.62	9.17	NBP-001-35	L-21	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	16.9	Complete	Tertiary		Light Green-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	53.88	34.34	10.22	4.89	3.99	4.6	8.75	NBP-001-35	L-22	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	35.6	Complete	Secondary		Gray	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	47.84	37.3	19.99	12.16				NBP-001-35	L-221	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.8	Complete	Secondary		Dark Gray	Other	Compression	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	30.19	17.84	10.18	3.66				NBP-001-35	L-22	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	8.7	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.46	39.14	10.25	6.2	9.13	4.46	9.47	NBP-001-35	L-22	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.6	Complete	Tertiary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.35	26.04	6.2	3.83	6.5	5.92	11.25	NBP-001-35	L-22	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	29.5	Complete	Secondary		Dark Gray	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	39.87	37.29	19.31	8.1				NBP-001-35	L-22	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.6	Complete	Secondary		Gray-Blue	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	39.51	16.6	11.67	4.07				NBP-001-35	L-22	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	10.2	Complete	Tertiary		Gray-Blue	Other		Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Burin			Complex	52.81	15.01	12.49	5.67	11.41	3.63	15.47	NBP-001-35	L-22	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	11.4	Complete	Tertiary			Other		Core	Medium	N/A, Other	Core Fragment	Unidirectional	Core			Complex	30.24	33.64	14.95	6.84				NBP-001-35	L-22	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	7	Complete	Tertiary		Gray-Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Flat	441.63	13.1	13.53	5.68				NBP-001-35	L-22	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.9	Complete	Tertiary		Light Gray	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade			Flat	31.23	18.71	5.87	3.45	4.06	0.84	5.04	NBP-001-35	L-23	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.9	Complete	Tertiary		Gray-Blue	Other	N/A	Non-Flake Debitage	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	20.78	15.47	5.46	3.7				NBP-001-35	L-23	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	33	Complete	Tertiary		Black	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.74	26.78	4.79	3.28	4.15	2.46	7.03	NBP-001-35	L-23	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.2	Broken	Tertiary	Proximal	Dark Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.94	26.15	4.82	4.56	5.19	4.27	5.63	NBP-001-35	L-23	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	18.19	10.8	2.88	1.56	2.76	2.66	6.85	NBP-001-35	L-23	'Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.6	Complete	Primary		Light Blue	Other		Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	24.92	14.47	3.61	1.85				NBP-001-35	L-23	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.3	Complete	Tertiary		Light Gray	Other	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.32	25.33	10.37	5.35				NBP-001-35	L-23	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.7	Broken	Tertiary		Brown-Yellow	Andesite	N/A	Flake Shatter	Medium Coarse	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	26.17	21.37	5.15	3.28				NBP-001-35	L-237	
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	29.77	20.04	7.01	3.98	6.62	6.27	12.99	NBP-001-35	L-23	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.8	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	12.08	20.25	2.37	1.82	2.75	2.96	9.95	NBP-001-35	L-23	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.7	Broken	Tertiary	Distal	Dark Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Unknown	15.71	17.22	2.38	1.07				NBP-001-35	L-24	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.7	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	24.38	15.17	8.42	6.45				NBP-001-35	L-24	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.62	10.86	7.13	2.22	5.58	3.87	3.51	NBP-001-35	L-24	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.2	Complete	Tertiary		Light Green-Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	16.38	16	9.87	6.2				NBP-001-35	L-24	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.2	Complete	Tertiary		Dark Gray	Other	Bending	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.01	29.1	6.49	3.04	2.57	1.59	2.97	NBP-001-35	L-24	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.4	Complete	Tertiary		Light Gray			Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Unknown	33.24	18.3	6.71	5.32	3.1	3	11.92	NBP-001-35	L-24	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	5	Complete	Secondary		Light Green	Other		Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	25.81	17.29	10.39	5.98				NBP-001-35	L-24	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	7.7	Complete	Secondary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	22.06	34.05	8.97	6.72	5.24	1.53	10.95	NBP-001-35	L-24	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.1	Complete	Secondary		Gray	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	22.16	24.06	5.94	5.68	6.31	5.54	16.58	NBP-001-35	L-24	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.9	Broken	Angular Shatter	Middle	Dark Gray	Andesite	N/A	Flake Shatter	Medium Coarse	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	23.03	32.32	5.27	3.98				NBP-001-35	L-24	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.1	Broken	Tertiary	Lateral	Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	Blade Core Fragment	N/A (if not a core)	N/A (if not a tool)			Complex	27.51	19.41	9.67	3.27	7.71	7.15	10.85	NBP-001-35	L-25	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.1	Complete	Tertiary		Light Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.11	19.02	8.08	4.05	4.94	2.02	3.94	NBP-001-35	L-25	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.1	Complete	Tertiary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	19.63	19.09	4.86	3.39	4.41	1.75	5.99	NBP-001-35	L-25	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.5	Complete	Secondary		Black	Other	Bending	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	14.53	21.15	8.56	3.02	7.7	6.9	12.57	NBP-001-35	L-25	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.6	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	15.63	6.32	5.14	2.63				NBP-001-35	L-25	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.6	Complete	Tertiary		Light Gray-Blue	Chalcedony		Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	15.27	14.99	2.49	1.6	2.16	1.31	4.99	NBP-001-35	L-25	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.7	Broken	Tertiary	Middle	Gray	Other	N/A	Flake Tool	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Unknown	12.55	15.63	3.03	1.9				NBP-001-35	L-25	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2	Complete	Secondary		Gray	Other		Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	20.99	18.63	5.75	2.98	5.46	5.4	11.38	NBP-001-35	L-25	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.2	Complete	Tertiary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	13.86	18.7	5.11	1.67	3.81	3.94	19.69	NBP-001-35	L-25	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Abraded	10.78	14.99	3.15	1.74	3.06	3.03	6.83	NBP-001-35	L-25	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.3	Complete	Tertiary		Gray	Other	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.71	13.57	4.12	2.97				NBP-001-35	L-26	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.8	Complete	Tertiary		Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	22.8	9.57	3.16	0.71				NBP-001-35	L-26	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.6	Complete	Tertiary		Dark Gray	Other	N/A	Non-Flake Debitage	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	13.02	10.83	3.22	1.22				NBP-001-35	L-26	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.6	Complete	Tertiary		Gray	Chert		Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	15.77	11.47	1.99	1.91	2.09	1.77	7.21	NBP-001-35	L-26	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.9	Broken	Tertiary	Middle	Gray	Chert	N/A	Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	11.46	13.5	3.62	3.02				NBP-001-35	L-26	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1	Complete	Tertiary		Light Gray	Other	Compression	Flake Shatter	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	23.07	11.42	2.25	1.17				NBP-001-35	L-26	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	0.5	Complete	Tertiary		Gray	Other		Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Bladelet			Unknown	18.55	7.71	2.63	1.89				NBP-001-35	L-26	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.1	Complete	Secondary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Complex	31.64	11.98	4.74	3.17	3.44	2.37	3.62	NBP-001-35	L-26	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	14.5	Broken	Tertiary		Black	Chert	Bi-Polar	Core	Fine	N/A, Other	Core Fragment	Unidirectional	Core				35.86	25.83	10.54	8.68				NBP-001-35	L-26	Mesolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	11.5	Complete	Secondary		Light Gray	Other	Bi-Polar	Core	Fine	N/A, Other	Core Fragment	Unidirectional	Core			Complex	55.59	36.68	6.32	3.38	4.83	2.3	5.51	NBP-001-35	L-26	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	35	Complete	Tertiary		Gray	Other		Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Flat	28.53	17.02	5.83	4.59	6.27	6.71	11.56	NBP-001-35	L-27	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	15.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Denticulate		Bi-Marginal, Bi-Lateral		27.86	46.61	11.36	4.45	8.06	7	10.31	NBP-001-35	L-271	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	11.9	Complete	Tertiary		Light Green	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	25.74	34.23	13.49	8.42				NBP-001-35	L-27	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	8.2	Broken	Tertiary	Proximal	Dark Gray	Other	Conchoidal	Flake Tool	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	Blade			Complex	45.76	27.07	5.82	3.34	6.04	5.95	17.04	NBP-001-35	L-27	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3	Broken	Tertiary	Middle	Black	Other	N/A	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Unknown	27.9	18.3	3.7	3.23				NBP-001-35	L-27	Mesolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	31.8	Broken	Tertiary		Light Gray-Blue	Other	N/A	Core	Medium Fine	N/A, Other	Blade Core Fragment	Unidirectional	Core			Complex	46.46	38.63	11.04	8.94		5.19	10.16	NBP-001-35	L-27	Mesolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	20.6	Complete	Secondary		Light Gray-Blue	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	46.89	23.82	17.05	8.26				NBP-001-35	L-276	
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	13.2	Complete	Tertiary		Gray	Other		Core	Medium Fine	Feathered	Blade Core Exhausted	Unidirectional	Core			Complex	27.04	30.25	13.1	8.26		3.14	13.59	NBP-001-35	L-27	Mesolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.6	Complete	Tertiary		Yellow-Brown	Rhyolite	Bi-Polar	Flake Shatter	Medium Coarse	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.92	19.21	5.55	3.91	5.83	4.07	8.84	NBP-001-35	L-27	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	8.8	Complete	Tertiary		Red-Brown	Chert	N/A	Core	Fine	N/A, Other	Blade Core Exhausted	Unidirectional	Core			Complex	22.99	20.21	13.69	12.46		5.88	10.3	NBP-001-35	L-27	Mesolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	13.4	Complete	Secondary		Gray-Blue	Other	Compression	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Denticulate		Bi-Marginal, Bi-Lateral	Flat	40.93	22.68	9.67	6.81	9.71	8.62	18.87	NBP-001-35	L-28	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.1	Complete	Tertiary	Proximal	Gray	Other	Bi-Polar	Flake Tool	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Bladelet		Unimarginal, Unilateral	Unknown	27.71	17.03	3.81	3.54	3.71	3.41	11.58	NBP-001-35	L-28	Mesolithic

Table D.2 (continued). Lithic database list

Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.3	Complete	Tertiary		Yellow-Brown	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade-Point		Unimarginal, Bi-lateral	Flat	31.97	17.78	5.21	3.18	2.75	2.32	6.74	NBP-001-35	L-28	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	9.6	Complete	Tertiary		Black	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	End/Thumbnail Scraper			Abraded	33.36	18.6	10.07	6.37	6.83	4.78	12.03	NBP-001-35	L-28	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	3.2	Complete	Tertiary		Black	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Uni-lateral	Flat	32.67	18.5	3.8	2.8	3.22	2.51	18.1	NBP-001-35	L-28	Mesolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	38.5	Complete	Tertiary		Light Green-Blue	Other	N/A	Core	Medium Fine	N/A, Other	Core Exhausted	Multidirectional	Core			Flat	31.86	39.02	18.48	17.24		15.43	28.33	NBP-001-35	L-28	Middle Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	24.6	Complete	Tertiary		Light Gray-Blue		Conchoidal	Flake Tool	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Bi-Marginal, Uni-lateral	Flat	35.98	38.4	14.65	10.25	14.08	14.17	39.4	NBP-001-35	L-28	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	4.7	Complete	Tertiary		Black	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade	Expedient	Unimarginal, Uni-lateral	Flat	31.91	19.98	5.59	4.46	4.06	3.56	13.09	NBP-001-35	L-28	Mesolithic
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	2.5	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Uni-lateral	Abraded	25.49	13.36	5.1	4.86	4.72	4.53	7.4	NBP-001-35	L-288	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	1.2	Complete	Secondary		Gray	Chalcedony		Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Bladelet	Pressure Flaking	Unimarginal, Uni-lateral	Flat	23.71	11.1	3.88	2.89	3.15	2.75	5.08	NBP-001-35	L-28	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	10.6	Complete	Tertiary		Gray-Blue	Other	Bi-Polar	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Blade	Core Trimming Element (CTE)	Unimarginal, Bi-lateral	Flat	53.14	17.41	9.45	4.41	7.96	7.27	16.25	NBP-001-35	L-29	Unknown
Shataar Chuluu	637791	5138226	NBP-001	35	3430.5	N/A (Survey, Surface)	6.3	Complete	Tertiary		Gray-Brown	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Point	Expedient	Bi-Marginal, Bi-Lateral	Complex	27.15	27.85	7.51	6.06	5.61	4.88	7.72	NBP-001-35	L-29	Unknown
Shataar Chuluu	637778	5138447	NBP-001	7	6.3	N/A (Survey, Surface)	6.3	Complete	Secondary		Black	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Bi-Marginal, Uni-lateral	Complex	30.63	21.76	8.15	6.73	6.72	5.73	15.65	NBP-001-7	L-1	Unknown
Shataar Chuluu	637635	5137435	NBP-001	3	340.8	N/A (Survey, Surface)	340.8	Complete	Tertiary		Black	Other	N/A	Core	Medium Fine	N/A, Other	Core	Multidirectional	Core-Tool			Complex	77.65	71.23	43.54	37.94	44.18	38.29	82.09	NBP-001-3	L-1	Upper Paleolithic
Shataar Chuluu	637782	5138184	NBP-001	2	31.1	N/A (Survey, Surface)	25.3	Complete	Secondary		Gray-Blue	Other	N/A	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	51.43	40.22	11.56	8.39	10.42	10.74	23.24	NBP-001-2	L-1	Unknown
Shataar Chuluu	637782	5138184	NBP-001	2	31.1	N/A (Survey, Surface)	5.8	Complete	Tertiary		Gray-Brown	Other	Bending	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.07	6.7	7.11	5.54	6.13	6.82	18.53	NBP-001-2	L-2	Unknown
Shataar Chuluu	637634	5138279	NBP-001	34	136.5	N/A (Survey, Surface)	42.3	Complete	Tertiary		Black	Chert		Flake Tool	Fine	Feathered	Core Exhausted	Multidirectional	End/Thumbnail Scraper		Bi-Marginal, Uni-lateral	Complex	41.73	39.86	17.35	7.72	15.52	17.25	46.26	NBP-001-34	L-1	Upper Paleolithic
Shataar Chuluu	637634	5138279	NBP-001	34	136.5	N/A (Survey, Surface)	94.3	Complete	Secondary		Light Green-Blue	Other	N/A	Core	Fine	N/A, Other	Pebble Core	Multidirectional	Core			Cortical/Unmodified	51.87	3.86	28.36	19.49		19.42	35.61	NBP-001-34	L-2	Unknown
Shataar Chuluu	629139	5141456	NBP-015	67	17	N/A (Survey, Surface)	7.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	51.34	15.5	7.09	4.77	7.48	6.69	10.29	NBP-015-67	L-1	Unknown
Shataar Chuluu	629139	5141456	NBP-015	67	17	N/A (Survey, Surface)	9.2	Complete	Tertiary		Light Gray	Andesite	Bending	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Uni-lateral	Flat	43.89	22.23	7.1	6.82	6.62	4.4	9.59	NBP-015-67	L-2	Unknown
Shataar Chuluu	629535	5141333	NBP-015	44	596.8	N/A (Survey, Surface)	546.3	Complete	Secondary		Gray	Other		Flake Tool	Medium Fine	N/A, Other	Core	Multidirectional	Axe	Expedient		Unknown	118.11	87.52	42.85	26.77				NBP-015-44	L-1	Lower Paleolithic
Shataar Chuluu	629535	5141333	NBP-015	44	596.8	N/A (Survey, Surface)	14.7	Complete	Secondary		Light Green-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	34.21	38.2	10.27	7.45	9.29	6.9	21.8	NBP-001-44	L-2	Unknown
Shataar Chuluu	629535	5141333	NBP-015	44	596.8	N/A (Survey, Surface)	3.9	Complete	Tertiary		Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	25.8	22.35	5.83	2.67	4.53	3.97	10.93	NBP-015-44	L-3	Unknown
Shataar Chuluu	629535	5141333	NBP-015	44	596.8	N/A (Survey, Surface)	7.8	Complete	Tertiary		Black	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.22	27.68	8.9	5.16	9.33	7.02	13.78	NBP-015-44	L-4	Unknown
Shataar Chuluu	629535	5141333	NBP-015	44	596.8	N/A (Survey, Surface)	0.6	Broken	Secondary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	11.27	13.59	3.17	1.12				NBP-015-44	L-5	Unknown
Shataar Chuluu	629535	5141333	NBP-015	44	596.8	N/A (Survey, Surface)	0.5	Complete	Tertiary	Distal	Gray	Chert	N/A	Flake Shatter	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	8.39	14.81	1.89	1.19				NBP-015-44	L-6	Unknown
Shataar Chuluu	629535	5141333	NBP-015	44	596.8	N/A (Survey, Surface)	24	Complete	Tertiary		Gray	Other	Compression	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Point	Hafted		Complex	47.31	36.32	17.43	9.47	9.73	3.68	12.37	NBP-015-44	L-7	Unknown
Shataar Chuluu	629867	5140724	NBP-015	32	171.88	N/A (Survey, Surface)	171.8	Complete	Secondary		Gray	Andesite	Bending	Flake Tool	Coarse	Feathered	N/A (not a core)	N/A (if not a core)	Chopper			Cortical/Unmodified	88.24	68.63	27.85	13.26	33.83	22.33	56.31	NBP-015-32	L-1	Lower Paleolithic
Shataar Chuluu	629875	5140751	NBP-015	34	47.5	N/A (Survey, Surface)	29.7	Complete	Secondary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	46.55	33.19	20.34	14.35				NBP-015-34	L-1	Unknown
Shataar Chuluu	629875	5140751	NBP-015	34	47.5	N/A (Survey, Surface)	14	Complete	Tertiary		Gray	Andesite	Compression	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	End/Thumbnail Scraper		Bi-Marginal, Uni-lateral	Flat	46.8	48.27	5.85	3.13	4.94	2.73	13.38	NBP-015-34	L-2	Unknown
Shataar Chuluu	629875	5140751	NBP-015	34	47.5	N/A (Survey, Surface)	3.4	Broken	Tertiary	Distal	Black	Chert		Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.9	28.67	6.81	3.7				NBP-015-34	L-3	Unknown
Shataar Chuluu	629875	5140751	NBP-015	34	47.5	N/A (Survey, Surface)	0.9	Complete	Secondary		Light Green-Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	18.11	9.09	5.51	3.22				NBP-015-34	L-4	Unknown
Shataar Chuluu	629990	5140905	NBP-015	69	18	N/A (Survey, Surface)	18	Complete	Secondary		Black	Andesite	Bending	Flake Tool	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient			Flat	54.6	37.32	8.55	5.37	8.5	3.4	7.08	NBP-015-69	L-1	Unknown
Shataar Chuluu	629981	5141321	NBP-015	11	25.4	N/A (Survey, Surface)	12.8	Complete	Primary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	38.3	33.29	9.32	6.56	6.47	33.77	12.4	NBP-015-11	L-1	Unknown
Shataar Chuluu	629981	5141321	NBP-015	11	25.4	N/A (Survey, Surface)	11.5	Complete	Primary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	35.41	33.99	9.17	5.15	9.447	8.95	23.76	NBP-015-11	L-2	Unknown
Shataar Chuluu	629981	5141321	NBP-015	11	25.4	N/A (Survey, Surface)	0.8	Complete	Secondary	Distal	Light Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Unknown	18.69	13.95	4.32	3.49				NBP-015-11	L-3	Unknown
Shataar Chuluu	630041	5140754	NBP-015	13	18.6	N/A (Survey, Surface)	18.6	Complete	Tertiary		Gray-Blue	Other	Compression	Flake Tool	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Flat	72.96	27.4	8.46	7.3	7.09	6.61	13.63	NBP-015-13	L-1	Unknown
Shataar Chuluu	630020	5140749	NBP-015	14	5	N/A (Survey, Surface)	5	Complete	Primary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	21.56	29.44	6	3.94	5.89	2.69	5.52	NBP-015-14	L-1	Unknown
Shataar Chuluu	630072	5141118	NBP-015	12	2.7	N/A (Survey, Surface)	2.7	Complete	Primary		Gray			Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.1	16.13	5.79	4.35	5.81	5.95	13.39	NBP-015-12	L-1	Unknown
Shataar Chuluu	629566	5141092	NBP-015	47	34.7	N/A (Survey, Surface)	9.6	Complete	Tertiary		Yellow-Brown	Rhyolite	N/A	Core	Fine	N/A, Other	Blade Core	Unidirectional	Core			Flat	30.55	17.72	10.97	10.35	10.02	9.63	18.61	NBP-015-47	L-1	Neolithic +
Shataar Chuluu	629566	5141092	NBP-015	47	34.7	N/A (Survey, Surface)	12.2	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	40.57	34.83	7.12	5.06	6.76	4.31	19.9	NBP-015-47	L-2	Unknown
Shataar Chuluu	629566	5141092	NBP-015	47	34.7	N/A (Survey, Surface)	13	Complete	Tertiary		Gray	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	41.62	33.85	8.98	4.68				NBP-015-47	L-3	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	113..8	Complete	Primary		Gray	Other		Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Chopper	Expedient		Cortical/Unmodified	59.99	77.58	22.38	12.35				NBP-015-15	L-1	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	9	Complete	Primary		Gray	Other	Compression	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	31.21	20.63	9.34	7.25				NBP-015-15	L-2	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	15	Complete	Tertiary		Gray	Andesite	N/A	Angular Shatter	Coarse	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	36.99	28.66	10.31	7.52				NBP-015-15	L-3	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	15.6	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.42	41.32	9.15	8.5	10.19	8.24	17.33	NBP-015-15	L-4	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	21.5	Complete	Secondary		Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Abraded	7.52	34.23	16.9	13.38	14.14	2.58	4.81	NBP-015-15	L-5	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	4.7	Complete	Tertiary		Gray	Andesite	Bending	Flake (Proximal, Whole)	Medium Coarse	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	35.18	20.75	7.95	4.94	6.51	3.2	7.66	NBP-015-15	L-6	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	3.2	Complete	Primary	Middle	Gray	Other		Flake Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	24.21	19.91	5.34	4.83				NBP-015-15	L-7	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	4	Broken	Primary	Distal	Gray	Andesite	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	27.26	18.03	7.89	4.45				NBP-015-15	L-8	Unknown
Shataar Chuluu	630174	5140576	NBP-15	15	203.9	N/A (Survey, Surface)	2.4	Complete	Primary		Gray	Other		Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.77	14.65	6.09	4.47	5.08	4.49	9.93	NBP-015-15	L-9	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	3.4	Complete	Tertiary		Gray	Chert	Compression	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	Unidirectional	N/A (if not a tool)			Flat	24.57	15.97	7.54	3.6	5.5	1.93	3.49	NBP-015-15	L-10	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	1.3	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	20.78	12.03	4.2	2.19	4.6	2.93	7.31	NBP-015-15	L-11	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	0.8	Complete	Secondary		Gray	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	13.34	12.88	3.78	2.31				NBP-015-15	L-12	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	1.9	Complete	Primary		Gray	Other	Compression	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	24.63	11.99	4.19	2.91				NBP-015-15	L-13	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	1.3	Complete	Primary		Gray	Other	N/A	Flake Shatter	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	20.45	12.07	4.62	2.86				NBP-015-15	L-14	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	0.5	Complete	Tertiary		Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	1.04	9.31	2.99	2.46				NBP-015-15	L-15	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	0.9	Complete	Tertiary		Gray		Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Abraded	13.24	14.95	3.39	2.47	3.42	3.12	9.54	NBP-015-15	L-16	Unknown
Shataar Chuluu	630174	5140576	NBP-015	15	203.9	N/A (Survey, Surface)	0.3	Complete	Primary		Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	10.19	6.48	2.77	1.58				NBP-015-15	L-17	Unknown
Shataar Chuluu	629608	5140852	NBP-015	48	18.9	N/A (Survey, Surface)	2.7	Complete	Primary		Gray	Other		Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.53	15.65	5.2	4.72	4.66	4.64	12.58	NBP-015-48	L-1	Unknown
Shataar Chuluu	629608	5140852	NBP-015	48	18.9	N/A (Survey, Surface)	16.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Point	Hafted	Bi-Marginal, Bi-Lateral	Complex	56.17	29.25	7.75	6.85	8.86	8.09	19.59	NBP-015-48	L-2	Mesolithic
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	3.3	Broken	Primary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	244.19	22.75	4.97	2.72				NBP-027-108	L-1	Unknown
Shataar Chuluu	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	2.5	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade			Flat	26.91	17.9	4.65	2.56	3.41	4.45	16.84	NBP-027-108	L-1	Unknown
Shataar Chuluu	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	1.1	Complete	Tertiary		Gray	Other	Compression	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	18.51	15.85	3.81	2.65				NBP027-108-	L-1	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	5	Complete	Tertiary		Gray	Other		Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.97	26.52	7.04	3.53	7.92	7.89	26.44	NBP-027-108	L-1	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	8.4	Complete	Tertiary		Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.17	34.22	10.75	7.14	10.3	4.54	12.83	NBP-027-108	L-2	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	4.5	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.04	30.56	6.06	4.42	6	5.46	14.82	NBP-027-108	L-2	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	4.9	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	31.18	18.83	8.98	5.03				NBP-027-108	L-22	
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	3.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.22	24.72	4.69	3.11	5.18	2.73	11.95	NBP-027-108	L-2	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	5.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	34.73	24.95	5.79	3.29	4.62	2.48	7.88	NBP-027-108	L-2	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	5.4	Complete	Tertiary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	28.02	21.97	9.63	3.55	5.77	2.66	5.05	NBP-027-108	L-2	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	5.6	Complete	Primary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	27.67	28.16	4.41	4.4	3.63	3.55	7.19	NBP-027-108	L-2	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	6.7	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.89	28.18	8.25	6	3.23	2.41	12.78	NBP-027-108	L-2	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	1.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	13.65	24.22	4.3	4.25	4.08	2.62	5.4	NBP-027-108	L-2	Unknown
Shataar Chuluu	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	0.8	Complete	Tertiary		Gray	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	15.53	12.85	4.26	3.48				NBP-027-108	L-2	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	9.1	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	28.77	28.9	12.17	6.24	6.79	5.48	28.96	NBP-027-108	L-3	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	5.5	Complete	Tertiary		Yellow-Brown	Chert	Bending	Flake (Proximal, Whole)	Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	25.79	24.05	7.65	6.21	6.36	5.77	12.81	NBP-027-108	L-3	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	1	Complete	Tertiary		Red-Purple	Chalcedony	Bending	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	14.78	16.19	3.24	2.43	2.95	2.83	6.69	NBP-027-108	L-3	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	12.7	Complete	Tertiary		Gray	Other	Bending	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Complex	45.36	25.03	9.37	8.15	8.92	8.77	14.89	NBP-027-108	L-3	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	6.7	Complete	Secondary		Black	Other		Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade	Expedient	Unimarginal, Uni-lateral	Abraded	39	17.25	6.54	4.27	6.35	2.49	5.59	NBP-027-108	L-3	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	3.1	Broken	Tertiary		Light Gray	Other	Compression	Flake Tool	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Unknown	21.48	15.58	5.69	5.14				NBP-027-108	L-3	Mesolithic
Shataar Chuluu	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	28.6	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	Blade	Hafted		Complex	79.3	32.46	10.49	6.82	7.77	4.55	13.99	NBP-027-108	L-3	Unknown
Bulgaan Uul	639627	5076286	NBP-027	108	1010.4	N/A (Survey, Surface)	20.1	Complete	Tertiary		Dark Gray	Other	N/A	Core	Medium Fine	N/A, Other	Blade Core Exhausted	Unidirectional	Core			Complex	48.88	24.18	12.2	10.35		10.52	22.72	NBP-027-108	L-3	Neolithic +
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	63.7	Complete	Secondary		Gray	Other		Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Uni-lateral	Flat	72.87	51.84	17.31	12.68	14.77	10.58	30.36	NBP-027-103	L-1	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	23.5	Complete	Tertiary		Yellow-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	43.46	52.07	10.48	6.16	9.63	2.62	11.73	NBP-027-103	L-2	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	19.2	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	48.61	34.16	10.02	5.88	10.15	9.87	13.51	NBP-027-103	L-3	Unknown
Shataar Chuluu	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	11.3	Complete	Secondary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	27.33	29.38	12.49	7.68	12.72	12.71	32.07	NBP-027-103	L-4	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	51.6	Complete	Tertiary		Yellow-Brown	Rhyolite	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Axe		Unimarginal, Uni-lateral	Complex	62.13	47.03	14.72	9.75	14.33	13.24	38.27	NBP-027-103	L-5	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	9.8	Complete	Secondary		Yellow	Chert	Conchoidal	Flake (Proximal, Whole)	Medium	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	28.15	31.26	12.26	545	12.25	12.56	30.94	NBP-027-103	L-6	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	27.9	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	46.58	54.76	9.66	5.66	8.22	7.5	19.91	NBP-027-103	L-7	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	29	Broken	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	56.47	40.5	9.63	7.24	7.27	7.28	30.82	NBP-027-103	L-8	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	12.7	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	32.28	37.33	10.09	6.84	9.84	12.93	35.35	NBP-027-103	L-9	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	5.8	Complete	Secondary		Gray	Andesite	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	26.7	26.66	8.36	3.92	8.76	8.01	24.37	NBP-027-103	L-1	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	10	Complete	Tertiary	Middle	Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	25.85	33.36	9.52	8.13				NBP-027-103	L-1	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	12.2	Complete	Tertiary		Gray	Other	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	40.82	26.74	9.45	6.91				NBP-027-103	L-1	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	4	Broken	Tertiary	Proximal	Light Gray-Blue	Other	N/A	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	26.59	31.42	3.65	3.36	3.53	3.43	7.36	NBP-027-103	L-1	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	Excavation	7.7	Complete	Tertiary		Red-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	28.69	21.8	11.28	7.39				NBP-027-103	L-1	Unknown
Bulgaan Uul	639360	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	1.1	Complete	Tertiary		White	Quartz	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Abraded	13.76	13.66	5.22	2.84	4.24	4.59	5.32	NBP-027-103	L-1	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	0.5	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	14.95	12.16	2.6	2.01				NBP-027-103	L-1	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	0.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	13.89	10.27	3.49	2.9	3.41	1.52	3.17	NBP-027-103	L-1	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	0.5	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	16.31	12.72	2.37	1.67	1.61	1.51	4.14	NBP-027-103	L-1	Neolithic +
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	0.6	Complete	Tertiary		White	Chalcedony	Bending	Flake (Proximal, Whole)	Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	17.69	7.04	4.12	1.8	3.06	2.04	3.98	NBP-027-103	L-1	Neolithic +

Table D.2 (continued). Lithic database list

Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	0.2	Complete	Tertiary		Orange	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Cortical/Unmodified	10.37	9.89	1.83	1.25	1.48	1.94	5.7	NBP-027-103	L-2	Neolithic +
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	0.4	Complete	Secondary		Red-Brown	Chert	Bi-Polar	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	14.79	8	2.41	1.57	2.02	1.43	4.6	NBP-027-103	L-2	Neolithic +
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	0.5	Complete	Tertiary		Red-Brown	Chert	N/A	Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	10.65	7.65	3.58	1.73				NBP-027-103	L-22	Neolithic +
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	0.3	Complete	Tertiary		Light Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	8.97	9.09	3.6	1.57	3.86	3.44	4.12	NBP-027-103	L-2	Neolithic +
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	0.1	Complete	Tertiary		Red-Brown	Chert	N/A	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Bladelet		Unimarginal, Unilateral	Flat	11.22	5.87	1.48	1.44	1.38	1.18	2.24	NBP-027-103	L-2	Neolithic +
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	0.1	Broken	Tertiary	Middle	Red-Brown	Chert	Compression	Flake Tool	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Bladelet			Unknown	6.91	5.85	1.67	1.67				NBP-027-103	L-2	Neolithic +
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	1	Complete	Tertiary		Red-Brown	Chalcedony	Conchoidal	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Bladelet		Unimarginal, Unilateral	Flat	20.32	9.54	44.45	3.79	4.13	3.62	6.13	NBP-027-103	L-2	Neolithic +
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	7.5	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	33.38	24.52	6.5	5.87	7.03	8.29	18.96	NBP-027-103	L-2	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	27	Complete	Primary		Gray	Other	N/A	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient			Unknown	60.06	32.73	12.53	6.83				NBP-027-103	L-2	Unknown
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	12.4	Complete	Tertiary		Gray	Chert	Conchoidal	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Scraper		Bi-Marginal, Uni-lateral	Flat	38.5	25.27	10.75	6.21	9.52	4.02	16.16	NBP-027-103	L-2	Mesolithic
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	5.5	Broken	Tertiary	Middle	Gray	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Unknown	30.18	22.72	6.25	4.8				NBP-027-103	L-3	Mesolithic
Bulgaan Uul	639630	5076641	NBP-027	103	365.7	N/A (Survey, Surface)	17.6	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.9	44.53	16.58	8.92	10.51	1.22	5.06	NBP-027-103	L-3	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	30.9	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	58.23	34.92	12.48	7.75	11.85	3.82	19.8	NBP-027-9	L-1	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	17.8	Complete	Primary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	47.33	37.73	8.52	4.38	8.8	7.55	16.64	NBP-027-9	L-2	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	25	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	54.43	39.23	8.33	8.03	8.25	3.29	18.57	NBP-027-9	L-3	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	24	Complete	Secondary		Gray-Blue	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	61.72	31.8	16.02	13.51	12.5	11.57	22.7	NBP-027-9	L-4	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	18	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Flat	40.68	49.36	14	13.09	12.32	11.68	22.43	NBP-027-9	L-5	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	9.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	32.68	27.38	14.98	13.5	14.5	10.95	22.17	NBP-027-9	L-6	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	27.8	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	47.03	54.33	17.29	17.04	15.42	7.5	8.87	NBP-027-9	L-7	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	98.9	Complete	Tertiary		Dark Gray	Other		Core	Medium	Feathered	Levallois Flaked?	Multidirectional	N/A (if not a tool)			Flat	91.18	54.26	23.77	21.14	17.05	12.65	16.68	NBP-027-9	L-8	Middle Paleolithic?
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	21.3	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	51.14	28.72	23.03	13.37				NBP-027-9	L-9	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	4.9	Complete	Tertiary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	25.63	29.66	11.25	8.96	11.19	10.9	22.22	NBP-027-9	L-10	Upper Paleolithic?
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	8	Complete	Tertiary		Black	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	30.64	41.94	13.16	10.55	11.98	11.23	18.16	NBP-027-9	L-11	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	21.8	Complete	Secondary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	38.63	57.65	16.34	15.23	17.09	8.26	19.07	NBP-027-9	L-12	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	3.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.3	27.4	10.81	9.54	10.62	8.92	14.49	NBP-027-9	L-13	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	7.1	Complete	Tertiary		Dark Gray	Other	N/A	Flake Shatter	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	34.92	29.37	15.09	9.95				NBP-027-9	L-14	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	4.1	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	35.61	23.54	11.17	7.82	11.58	11.06	12.57	NBP-027-9	L-15	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	16	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	45.98	40.09	16.94	13.76	15.61	15.2	40.76	NBP-027-9	L-16	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	46.5	Complete	Secondary		Gray	Other	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	60.61	35.62	27.17	18.77				NBP-027-9	L-17	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	7.9	Complete	Primary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	34.03	32.6	13.07	10.6	12.99	12.09	29.07	NBP-027-9	L-18	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	6.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	32.35	26.55	11.46	10.61	11.47	11.23	24.85	NBP-027-9	L-19	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	8.3	Complete	Tertiary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	41.81	32.63	12.27	9.72	12.41	11.7	17.75	NBP-027-9	L-20	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	8.3	Complete	Secondary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Flat	44	26.87	15.06	11.18	15.38	15.23	27.57	NBP-027-9	L-21	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	8.5	Complete	Tertiary		Light Green-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	41.69	36.1	13.47	10.21	11.17	9.43	16.53	NBP-027-9	L-22	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	4.2	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	27.11	25.11	10.83	10.38	10.82	9.75	20.6	NBP-027-9	L-23	Upper Paleolithic?
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	18.8	Complete	Secondary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	58.66	32.33	15.84	13.29	12.87	11.95	22.82	NBP-027-9	L-24	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	45.2	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Bi-Marginal, Uni-lateral	Flat	57.96	51.98	21.18	18.17	22.22	15.09	27.48	NBP-027-9	L-25	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	20.8	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	54.86	36.17	19.07	11.93	18.93	14.09	32.95	NBP-027-9	L-26	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	7.7	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	36.4	38.73	11.18	9.31	11.23	10.69	19.55	NBP-027-9	L-27	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	4.7	Complete	Primary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.44	23.66	11.74	10.11	11.86	11.67	24.66	NBP-027-9	L-28	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	399.91	29.71	12.57	12.07	12.72	11.84	22.37	NBP-027-9	L-29	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	3.7	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	28.97	26.06	12.2	10.44	10.19	8.85	16.83	NBP-027-9	L-30	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	13.2	Broken	Tertiary		Gray	Chert	N/A	Flake (Proximal, Whole)	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Unknown	48.57	20.18	20.19	16.52				NBP-027-9	L-31	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	9	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	34.66	27.58	17.07	13.03	17.05	11.37	17.49	NBP-027-9	L-32	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	4.9	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	32.87	25.54	11	9.41	10.94	8.92	17.43	NBP-027-9	L-33	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	4.2	Complete	Tertiary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	37.22	24.51	9.9	8.64	8.37	7.03	9.45	NBP-027-9	L-34	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	3.8	Complete	Tertiary		Light Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.29	28.3	9.65	8.64	8.92	7.89	12.12	NBP-027-9	L-35	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	1.1	Complete	Primary		Gray	Andesite	N/A	Flake Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	25.9	18.52	8.93	6.79				NBP-027-9	L-36	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	2.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	22.27	26.92	10.53	8.89	10.03	9.83	25.27	NBP-027-9	L-37	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	5.8	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	25.58	37.43	11.98	11.02	12.02	10.38	15.11	NBP-027-9	L-38	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	18.2	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	39.04	45.68	16.76	12.84	16.7	15.92	33.25	NBP- 027-9	L-39	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	22.3	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	46.34	39.54	17.2	14.04	17.11	18.5	20.53	NBP-027-9	L-40	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	5.1	Complete	Tertiary		Gray	Other	Compression	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	37.68	26.63	11.48	9.19	11.39	8.33	10.24	NBP-027-9	L-41	Upper Paleolithic?
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	2	Broken	Tertiary	Distal	Light Gray	Other	N/A	Flake Shatter	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	29.76	21.29	8.42	7.56				NBP-027-9	L-42	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	33.5	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	51.18	50.83	17.91	12.61	19.14	12.76	24.9	NBP-027-9	L-43	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	12.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	37.01	42.9	13.86	11.1	13.94	8.41	17.13	NBP-027-9	L-44	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	36.9	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	66.93	41.15	19.21	12.3	23.96	21.21	29	NBP-027-9	L-45	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	8	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	33.49	36.93	12.08	11.01	11.62	8.19	12.83	NBP-027-9	L-46	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	4	Broken	Tertiary	Middle	Gray	Other	Conchoidal	Flake Shatter	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	30.54	32.13	10.31	8.79	9.53			NBP-027-9	L-47	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	12.6	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	40.41	41.03	15.81	9.84	16.77	16.19	23.65	NBP-027-9	L-48	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	18.7	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	47.07	30.41	21.94	11.69	18.76	10.61	16.29	NBP-027-9	L-49	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	18.6	Complete	Tertiary		Gray-Blue	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Unimarginal, Unilateral	Flat	62.64	36.45	13.42	12.08	14.89	15.31	17.41	NBP-027-9	L-50	Upper Paleolithic?
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	28.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	51.11	74.57	13.04	10.64	11.1	10.1	22.61	NBP-027-9	L-51	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	9.3	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	32.88	37.13	16.14	13.03	16.01	14.95	19.21	NBP-027-9	L-52	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	6.4	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	34.86	33.96	10.84	9.69	11.39	11.12	27.21	NBP-027-9	L-53	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	26.6	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	64.49	42.63	14.6	11.43	14.48	13.65	19.39	NBP-027-9	L-54	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	5.5	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	31.15	29.23	12.19	11.63	11.84	8.57	11.47	NBP-027-9	L-55	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	9	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.91	38.21	12.15	10	11.91	8.39	15.15	NBP-027-9	L-56	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	4.9	Complete	Primary		Gray	Other	Compression	Flake Shatter	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	29.34	27.38	12.68	11.21				NBP-027-9	L-57	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	10.7	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	32.9	38.03	16.89	10.66	18.02	16.71	29.79	NBP-027-9	L-58	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	23.8	Complete	Tertiary		Gray	Other		Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	45.29	51.8	18.63	12.26	16.75	12.66	25.74	NBP-027-9	L-59	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	8.9	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	38.82	30.51	1327	12.51	13.23	10.6	17.82	NBP-027-9	L-60	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	21.6	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	51.17	36.31	21.53	16.443	18.11	12.77	16.71	NBP-027-9	L-61	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	0.32	Broken	Tertiary		Dark Gray	Other	N/A	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade			Flat	26.15	28.15	9.81	9.51	8.7	7.73	9.46	NBP-027-9	L-62	
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	5.5	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	32.32	29.67	11.12	11.09	11.08	10.99	20.71	NBP-027-9	L-63	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	4.8	Complete	Tertiary		Gray	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	31.81	22.7	13.01	11.75				NBP-027-9	L-64	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	Excavation	21.2	Complete	Tertiary		Gray	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	44.77	25.66	20.033	17.33				NBP-027-9	L-65	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	6	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	27.9	30.26	15.35	9.12	14.93	15.34	24.78	NBP-027-9	L-66	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	16.3	Complete	Tertiary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	39.07	45.55	19.87	13.3	16.66	10.35	15.99	NBP-027-9	L-67	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	2.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.72	26.33	10.51	10.31	10.48	9.86	8.37	NBP-027-9	L-68	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	1.2	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	23.01	18.9	10	8.59				NBP-027-9	L-69	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	0.8	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	16.65	16.63	9.63	8.85	8.86	6.62	7.07	NBP-027-9	L-70	Meso/Neolithic +
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	1.2	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	33.04	14.78	9.51	7.54	9.65	8.56	12.16	NBP-027-9	L-71	Meso/Neolithic +
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	27.1	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Flat	68.73	28.34	10.5	6.6	10.02	8.56	12.78	NBP-027-9	L-72	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	11.9	Complete	Tertiary		Gray	Other	Bending	Flake Tool	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Bi-Marginal, Bi-Lateral	Flat	42.25	29.02	10.4	8.58	7.98	8.18	10.84	NBP-027-9	L-73	Upper Paleolithic?
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	21.2	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	20	11.29	9.67	8.53	10.1	8.41	23.99	NBP-027-9	L-74	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	16.4	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Complex	40.79	40.71	9.31	5.93	9.66	10.32	19.9	NBP-027-9	L-75	Upper Paleolithic?
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	78.3	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Axe		Bi-Marginal, Uni-lateral	Abraded	91.8	50.37	14.31	9.56	13.33	4.58	12.43	NBP-027-9	L-76	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	21.8	Complete	Tertiary		Dark Gray	Other	Compression	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Scraper	Expedient	Unimarginal, Bi-lateral	Flat	48.61	33.5	10.61	6.61	10.97	9.59	20.09	NBP-027-9	L-77	Upper Paleolithic?
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	12.3	Complete	Tertiary		Dark Gray	Other	Compression	Flake Tool	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Complex	54.15	20.01	7.5	7.43	7.2	6.65	10.11	NBP-027-9	L-78	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	31.4	Complete	Tertiary		Black	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Complex	78.52	29.75	10.42	9.35	10.71	10.75	14.62	NBP-027-9	L-79	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	91	Complete	Secondary		Gray	Other		Core	Medium Fine	N/A, Other	Levallois Flaked?	Multidirectional	Core			Cortical/Unmodified	64.46	65.59	26.95	12.35	17.14			NBP-027-9	L-80	Middle Paleolithic?
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	31.5	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade-Point		Bi-Marginal, Bi-Lateral	Complex	67.07	31.22	18.07	10.91	18.49	12.81	20.83	NBP-027-9	L-81	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	21.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	50.65	26.02	11.38	10.84	11.11	9.79	19.31	NBP-027-9	L-82	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	25.2	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Complex	54.9	28.42	11.26	10.72	9.9	7.67	21.39	NBP-027-9	L-83	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	23.4	Complete	Tertiary		Black	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	End/Thumbnail Scraper		Unimarginal, Bi-lateral	Flat	38.22	47.47	13.41	5.12	12.92	12.65	39.86	NBP-027-9	L-84	
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	42.5	Complete	Tertiary		Gray	Other	N/A	Core	Medium Fine	N/A, Other	Levallois	Multidirectional	Core			Flat	44.23	42.87	16.72	13.38	15.78			NBP-027-9	L-85	Middle Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	5.8	Broken	Tertiary		Light Gray-Blue	Other	Conchoidal	Core	Medium Fine	Step	Blade Core Fragment	Multidirectional	Core			Complex	22.83	25.38	6.89	5.65	7.02	6.74	14.71	NBP-027-9	L-86	Meso/Neolithic +
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	6.5	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Complex	26.14	19.47	8.6	6.36	8.44	7.1	11.03	NBP-027-9	L-87	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	88.2	Complete	Tertiary		Gray	Other	Bending	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Denticulate	Expedient	Unimarginal, Unilateral	Complex	800.11	39.89	17.85	15.48	21.84	21.72	26.57	NBP-027-9	L-88	Upper Paleolithic?

Table D.2 (continued). Lithic database list

Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	26.6	Complete	Tertiary		Gray	Other	Compression	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Flat	65.54	26.93	12.14	8.4	11.16	10.19	19.47	NBP-027-9	L-89	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	14	Complete	Tertiary		Gray	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Flat	39.91	32.18	7.81	5.43	7.65	6.23	24.2	NBP-027-9	L-90	Upper Paleolithic?
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	18.8	Complete	Tertiary		Gray	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Flat	51.21	29.89	11.54	10.33	9.85	3.72	10.81	NBP-027-9	L-91	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	12.6	Complete	Tertiary		Dark Gray	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Flat	48.82	23.17	9.77	8.78	8.51	8.41	13.08	NBP-027-9	L-92	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	32.9	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Scraper		Unimarginal, Bi-lateral	Flat	34.81	56.91	18.7	10.1	18.9	15.67	33.33	NBP-027-9	L-93	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	18.6	Complete	Tertiary		Gray	Andesite	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Complex	50.55	25.49	13.45	7.76	13.94	12.18	24.09	NBP-027-9	L-94	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	24.5	Complete	Tertiary		Black	Other	Conchoidal	Flake Tool	Medium Fine	Step	Blade Core Exhausted	Multidirectional	End/Thumbnail Scraper		Bi-Marginal, Bi-Lateral	Complex	41.35	28.69	15.73	12.15	11.75	8.21	10.14	NBP-027-9	L-95	Meso/Neolithic +
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	62.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	Levallois Flaked?	Multidirectional	Scraper		Bi-Marginal, Bi-Lateral	Flat	57.57	52.49	19.13	15.13	15.07	14.08	32.04	NBP-027-9	L-96	Middle Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	18.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Denticulate		Bi-Marginal, Bi-Lateral	Flat	45.39	31.36	9.85	7.88	10.49	10.31	24.62	NBP-027-9	L-97	Upper Paleolithic?
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	23	Complete	Tertiary		Gray	Other		Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Flat	30.89	34.72	14.28	12.06	15.68	14.19	30.23	NBP-027-9	L-98	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	56.7	Complete	Tertiary		Gray	Other	Bi-Polar	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Denticulate			Flat	77.3	38.2	14.42	10.71	13.11	10.86	25.79	NBP-027-9	L-99	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	21.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Blade	Expedient	Unimarginal, Uni-lateral	Complex	63.78	23.66	10.5	8.71	11.26	6.37	7.45	NBP-027-9	L-100	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	11.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Step	Core Exhausted	Unidirectional	Flake Tool, Expedient		Unimarginal, Bi-lateral	Flat	33.96	33.95	8.12	5.71	8.51	7.38	12.97	NBP-027-9	L-101	Mesolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	6.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Uni-lateral	Flat	36.52	18.97	7.3	44.97	7.29	6.34	18.59	NBP-027-9	L-102	Upper Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	3.1	Broken	Tertiary	Proximal	Gray	Other	Conchoidal	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	23.36	20	6.4	4.97	5.04	3.5	5.28	NBP-027-9	L-103	Meso/Neolithic +
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	53.6	Complete	Tertiary		Gray	Other	Bending	Non-Flake Debitage	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	49.51	49.01	19.37	10.2	9.2	4.22	10.61	NBP-027-9	L-104	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	10.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	33.25	25.79	11.39	8.05	12.14	11.22	16.94	NBP-027-9	L-105	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	4	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.13	21.2	5.86	3.69	6.7	6.32	13.63	NBP-027-9	L-106	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	65.4	Complete	Tertiary		Dark Gray	Other	N/A	Core	Fine	N/A, Other	Levallois	Multidirectional	Core-Tool	Bi-Facial		Unknown	56.95	48.44	24	14				NBP-027-9	L-107	Middle Paleolithic?
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	14	Complete	Tertiary		Red-Orange	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	40.52	33.56	11.1	8.74	9.35	5.72	15.58	NBP-027-9	L-108	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	193.7	Complete	Secondary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Chopper		Bi-Marginal, Uni-lateral	Flat	73.06	82.67	40.06	22.01	40.59	30.34	29.59	NBP-027-9	L-109	Middle Paleolithic
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	21.3	Complete	Tertiary		Gray	Other	Bending	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Uni-lateral	Flat	37.94	34.62	19.5	9.1	18.62	10.53	22.7	NBP-027-9	L-110	Unknown
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	177.4	Complete	Primary		Black	Other	N/A	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Chopper		Bi-Marginal, Uni-lateral	Unknown	86.1	63.31	26.86	22.27				NBP-027-9	L-111	Middle Paleolithic?
Bulgaan Uul	639992	5077985	NBP-027	9	2865.6	N/A (Survey, Surface)	394.2	Complete	Secondary		Gray	Other	N/A	Core	Fine	N/A, Other	Core	Unidirectional	Core			Flat	96.89	57.01	54.42	36.96		39.4	58.48	NBP-027-9	L-112	Upper Paleolithic?
Bulgaan Uul	639972	5077015	NBP-027	DL1	21.4	Dogleash	12.3	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.06	41.05	7.71	5.77	5.5	5.26	9.52	NBP-027-DL1	L-1	Unknown
Bulgaan Uul	639972	5077015	NBP-027	DL1	21.4	Dogleash	6.6	Complete	Tertiary		Light Gray-Blue	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	39.92	19.17	7.81	6.75	6.8	3.48	3.76	NBP-027-DL1	L-2	Meso/Neolithic +
Bulgaan Uul	639972	5077015	NBP-027	DL1	21.4	Dogleash	1.7	Complete	Tertiary		Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.73	21.86	3.73	2.58	3.27	2.58	5.84	NBP-027-DL1	L-3	Neolithic +
Bulgaan Uul	639972	5077015	NBP-027	DL1	21.4	Dogleash	0.5	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	16.81	10.79	2.05	1.14	2.11	1.65	2.47	NBP-027-DL1	L-4	Neolithic +
Bulgaan Uul	639972	5077015	NBP-027	DL1	21.4	Dogleash	0.5	Complete	Tertiary		Red-Brown	Chert	N/A	Flake (Proximal, Whole)	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	12.1	7.73	3.66	3.21	3.18	2.1	6.87	NBP-027-DL1	L-5	Neolithic +
Bulgaan Uul	639972	5077015	NBP-027	DL1	21.4	Dogleash	0.1	Complete	Primary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	11.64	6.1	3.06	0.99				NBP-027-DL1	L-6	Unknown
Bulgaan Uul	639972	5077015	NBP-027	DL1	21.4	Dogleash	0.2	Complete	Tertiary		Red-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	7.98	5.97	2.19	2.1				NBP-027-DL1	L-7	Neolithic +
Bulgaan Uul	639972	5077015	NBP-027	DL1	21.4	Dogleash	0.1	Complete	Tertiary		Red-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	4.06	2.3	2.27	2.06				NBP-027-DL1	L-8	Neolithic +
Bulgaan Uul	639972	5077015	NBP-027	DL1	21.4	Dogleash	0.1	Complete	Tertiary		Yellow-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	3.93	3.81	4.62	3.74				NBP- 027-DL1	L-9	Neolithic +
Bulgaan Uul	639974	5077020	NBP-027	DL2	2.9	Dogleash	1.2	Complete	Primary		Yellow-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.09	12.15	8.2	3.78				NBP-027-DL2	L-1	Neolithic +
Bulgaan Uul	639974	5077020	NBP-027	DL2	2.9	Dogleash	1.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Bladelet			Flat	24.02	9.91	3.53	2.06	3.25	2.78	6.96	NBP-027-DL2	L-2	Neolithic +
Bulgaan Uul	639974	5077020	NBP-027	DL2	2.9	Dogleash	0.3	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Uni-lateral	Complex	15.61	9.42	2.25	1.08	2.35	2.09	3.48	NBP-027-DL2	L-3	Neolithic +
Bulgaan Uul	639974	5077020	NBP-027	DL2	2.9	Dogleash	0.3	Complete	Primary		Red-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	8.12	7.23	3.28	2.79				NBP-027-DL2	L-4	Neolithic +
Bulgaan Uul	639969	5077048	NBP-027	DL3	156.7	Dogleash	103.5	Complete	Primary		Light Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Chopper		Unimarginal, Uni-lateral	Flat	71.85	74.14	20.97	10.8	19.29	6.09	7.89	NBP-027-DL3	L-1	Middle Paleolithic?
Bulgaan Uul	639969	5077048	NBP-027	DL3	156.7	Dogleash	42.5	Complete	Primary		Black	Other		Flake Tool	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Bi-Marginal, Bi-Lateral	Unknown	45.26	61.46	11	7.77				NBP-027-DL3	L-2	Middle Paleolithic
Bulgaan Uul	639969	5077048	NBP-027	DL3	156.7	Dogleash	6.8	Complete	Tertiary		Black	Chert	Conchoidal	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Complex	42.42	17.72	7.37	6.17	7.01	4.92	11.4	NBP-027-DL3	L-3	Meso/Neolithic +
Bulgaan Uul	639969	5077048	NBP-027	DL3	156.7	Dogleash	1.9	Complete	Tertiary		Gray	Other	N/A	Flake Shatter	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	22.86	14.87	5.48	3.69				NBP-027-DL3	L-4	Meso/Neolithic +
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	Dogleash	17.2	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	37.69	34.04	11.85	9.42	11.75	10.1	26.2	NBP-027-DL4	L-1	Unknown
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	Dogleash	1.2	Complete	Tertiary		Red-Orange	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Complex	12.99	20.21	47.4	3.36	4.71	3.65	13.43	NBP-027-DL4	L-2	Neolithic +
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	Dogleash	0.8	Complete	Secondary		Red-Purple	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	12.51	16.15	3.57	2.32	4.65	4.52	15.51	NBP-027-DL4	L-3	Neolithic +
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	Dogleash	1.3	Complete	Tertiary		White	Flint	Conchoidal	Flake (Proximal, Whole)	Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	19.43	14.64	4.83	3.81	3.64	2.38	6.74	NBP-027-DL4	L-4	Neolithic +
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	Dogleash	0.8	Complete	Tertiary	Distal	Gray	Other		Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.35	9.2	3.65	2.93				NBP-027-DL4	L-5	Unknown
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	Dogleash	2	Complete	Tertiary		Gray-Blue	Chert	Bending	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	20.21	12.75	6.49	4.26	5.78	7.91	12.36	NBP-027-DL4	L-6	Neolithic +
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	Dogleash	2.1	Complete	Tertiary		White	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	15.12	17.85	6.77	4.7	5.8	4.44	11.45	NBP-027-DL4	L-7	Neolithic +
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	Dogleash	1.2	Broken	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	13.11	12.08	5.44	3.3	5.67	5.48	10.3	NBP-027-DL4	L-8	Unknown
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	Dogleash	0.5	Complete	Tertiary		Red-Brown	Chert	N/A	Flake Shatter	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Unknown	12.59	10.66	3.5	1.18				NBP-027-DL4	L-9	Neolithic +
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	N/A (Survey, Surface)	0.6	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	10.89	17.13	2.98	2.32	2.97	2.85	6.28	NBP-027-DL4	L-10	Neolithic +
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	Dogleash	0.3	Complete	Tertiary		Red-Brown	Chert	N/A	Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	15.66	7.74	1.97	1.1				NBP-027-DL4	L-1	Neolithic +
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	Dogleash	0.8	Complete	Tertiary		Red-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	9.53	10.63	4.82	4.53				NBP-027-DL4	L-1	Meso/Neolithic +
Bulgaan Uul	639960	5076669	NBP-027	DL4	35.7	Dogleash	0.4	Complete	Tertiary		Red-Brown	Chert	N/A	Non-Flake Debitage	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				11.04	6.32	3.63	2.5				NBP-027-DL4	L-1	Neolithic +
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	Dogleash	0.1	Complete	Tertiary		Red-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	5.96	4.52	1.27	0.61				NBP-027-DL4	L-1	Neolithic +
Bulgaan Uul	639690	5076669	NBP-027	DL4	35.7	Dogleash	1.1	Complete	Tertiary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	17.93	11.05	4.05	3.49	3.74	3.16	8.47	NBP-027-DL4	L-1	Unknown
Bulgaan Uul	640046	5077163	NBP-027	DL5	87.8	Dogleash	66.8	Complete	Primary		Black	Other	N/A	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Scraper	Expedient	Bi-Marginal, Bi-Lateral	[illegible]	63.31	50.6	19	14.06				NBP-027-DL5	L-1	Middle Paleolithic
Bulgaan Uul	640046	5077163	NBP-027	DL5	87.8	Dogleash	19.9	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Point	Hafted	Bi-Marginal, Bi-Lateral	Flat	35.08	50.11	11.36	7.42	11.06	8.41	19.19	NBP-027-DL5	L-2	Upper Paleolithic
Bulgaan Uul	640046	5077163	NBP-027	DL5	87.8	Dogleash	0.6	Complete	Tertiary		Yellow-Brown	Rhyolite	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17	10.31	3.33	3.29				NBP-027-DL5	L-3	Unknown
Bulgaan Uul	640046	5077163	NBP-027	DL5	87.8	Dogleash	0.5	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	8.53	6.01	2.61	2.58				NBP-027-DL5	L-4	Unknown
Bulgaan Uul	640046	5077163	NBP-027	DL5	87.8	Dogleash	0.2	Complete	Secondary		White	Chalcedony	N/A	Non-Flake Debitage	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	6.66	4.05	2.9	2.63				NBP-027-DL5	L-5	Neolithic +
Bulgaan Uul	639977	5076967	NBP-027	DL6	30.7	Dogleash	81	Complete	Primary		Red	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	46.84	24.25	6.62	4.16	4.58	4.45	8.28	NBP-027-DL6	L-1	Unknown
Bulgaan Uul	639977	5076967	NBP-027	DL6	30.7	Dogleash	13.2	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	33.5	43.86	7.75	4.84	7.85	6.62	13.2	NBP-027-DL6	L-2	Unknown
Bulgaan Uul	639977	5076967	NBP-027	DL6	30.7	Dogleash	7.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.92	35.34	5.46	3.9	5.11	3.04	10.81	NBP-027-DL6	L-3	Unknown
Bulgaan Uul	639977	5076967	NBP-027	DL6	30.7	Dogleash	2.1	Complete	Primary		Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	21.93	15.8	4.83	3.96				NBP-027-DL6	L-4	Unknown
Bulgaan Uul	639977	5076967	NBP-027	DL6	30.7	Dogleash	0.3	Complete	Tertiary		Light Green-Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	7.65	7.54	3.04	2.32				NBP-027-DL6	L-5	
Bulgaan Uul	639987	5077050	NBP-027	DL7	3.3	Dogleash	0.9	Complete	Tertiary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.71	14.84	2.83	2.5	2.65	0.8	4.07	NBP-027-DL7	L-1	Unknown
Bulgaan Uul	639987	5077050	NBP-027	DL7	3.3	Dogleash	1.4	Complete	Tertiary		Red	Chert	N/A	Non-Flake Debitage	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	21.34	13.63	4.06	2.28				NBP-027-DL7	L-2	Neolithic +
Bulgaan Uul	639987	5077050	NBP-027	DL7	3.3	Dogleash	0.1	Complete	Primary		Red-Brown	Chert	N/A	Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	7.93	4.73	1.87	1.72				NBP-027-DL7	L-3	Unknown
Bulgaan Uul	639987	5077050	NBP-027	DL7	3.3	Dogleash	0.2	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	11	6.53	2.05	1.56	2.25	2.13	2.73	NBP-027-DL7	L-4	Unknown
Bulgaan Uul	639987	5077050	NBP-027	DL7	3.3	Dogleash	0.2	Complete	Tertiary		Gray-Blue	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	9.89	7.77	2.68	1.89				NBP-027-DL7	L-5	Unknown
Bulgaan Uul	639993	5077050	NBP-027	DL8	12.1	Dogleash	6.7	Complete	Primary		Yellow-Brown	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	28.71	29.89	6.47	5.56	6.47	5.53	10.97	NBP-027-DL8	L-1	Unknown
Bulgaan Uul	639993	5077050	NBP-027	DL8	12.1	Dogleash	3.1	Complete	Primary		Red-Purple	Chert	Conchoidal	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Bladelet		Unimarginal, Bi-lateral	[illegible]	31.5	15.85	6.21	3.36	5.33	4.6	8.46	NBP-027-DL8	L-2	Neolithic +
Bulgaan Uul	639993	5077050	NBP-027	DL8	12.1	Dogleash	0.9	Complete	Tertiary		Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Unimarginal, Uni-lateral	Unknown	16.63	11.77	3.85	3.49	3.86	3.48	4.89	NBP-027-DL8	L-3	Neolithic +
Bulgaan Uul	639993	5077050	NBP-027	DL8	12.1	Dogleash	0.9	Complete	Tertiary		Yellow-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	14.12	13.44	5.02	2.32	2.8	2.48	3.44	NBP-027-DL8	L-4	Neolithic +
Bulgaan Uul	639993	5077050	NBP-027	DL8	12.1	Dogleash	0.7	Complete	Secondary		Red-Purple	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	15.13	10.36	3.83	3.36				NBP-027-DL8	L-5	Neolithic +
Bulgaan Uul	639993	5077050	NBP-027	DL8	12.1	Dogleash	0.1	Complete	Tertiary		Red-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	5.79	5.46	1.88	1.68				NBP-027-DL8	L-6	Neolithic +
Bulgaan Uul	639993	5077050	NBP-027	DL8	12.1	Dogleash	0.1	Complete	Tertiary		Yellow-Brown	Chert	N/A	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	9.11	6.78	1.43	0.96	1.53	1.08	6.66	NBP-027-DL8	L-7	Neolithic +
Bulgaan Uul	639963	5077043	NBP-027	DL9	22.8	Dogleash	22.8	Complete	Tertiary		Gray	Other	N/A	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Complex	61.28	29.86	12.75	9.52	12.81	12.75	23.54	NBP-027-DL9	L-1	Upper Paleolithic
Bulgaan Uul	640001	5076985	NBP-027	DL10	3.6	Dogleash	2.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	24.98	21.44	3.29	2.56	3.48	3.37	10.34	NBP-027-DL10	L-	Unknown
Bulgaan Uul	640001	5076985	NBP-027	DL10	3.6	Dogleash	1.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.13	21.31	3.09	2.52	3.02	1.82	3.95	NBP-027-DL10	L-	Unknown
Bulgaan Uul	638634	5090430	NBP-024	3	46.4	N/A (Survey, Surface)	7	Complete	Tertiary		Light Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	47.63	31.5	5.02	4.02	0.04	3.99	14.45	NBP-024-3-L1		Unknown
Bulgaan Uul	638634	5090430	NBP-024	3	46.4	N/A (Survey, Surface)	4.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.41	34.8	6.18	5.59	5.47	3.34	17.07	NBP-024-3	L-2	Unknown
Bulgaan Uul	639634	5090430	NBP-024	3	46.4	N/A (Survey, Surface)	2	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	20.71	19.59	4.99	1.91	4.71	3.84	10.9	NBP-024-3	L-3	Unknown
Bulgaan Uul	638634	5090430	NBP-024	3	46.4	N/A (Survey, Surface)	3.3	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	27.94	23.99		6.97	4.61	4.04	10.03	NBP-024-3	L-4	Unknown
Bulgaan Uul	638634	5090430	NBP-024	3	46.4	N/A (Survey, Surface)	2.5	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.19	23.61	3	2.06	2.58	2.41	8.32	NBP-024-3	L-5	Unknown
Bulgaan Uul	638634	5090430	NBP-024	3	46.4	N/A (Survey, Surface)	1	Complete	Tertiary		Black	Flint	N/A	Non-Flake Debitage	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.33	11.14	3.34	2.35				NBP-024-3	L-6	Neolithic +
Bulgaan Uul	638634	5090430	NBP-024	3	46.4	N/A (Survey, Surface)	6.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)		Blade		Unimarginal, Bi-lateral	Flat	5.47	19.12	5.51	4.29	6.26	2.96	6.67	NBP-024-3	L-7	Upper Paleolithic
Bulgaan Uul	638634	5090430	NBP-024	3	46.4	N/A (Survey, Surface)	7.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not core)	Blade			Complex	42.31	23.84	5.62	5.43	5.35	4.48	10.88	NBP-024-3	L-8	Upper Paleolithic
Bulgaan Uul	638634	5090430	NBP-024	3	46.4	N/A (Survey, Surface)	13.2	Complete	Tertiary		Gray	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Scraper		Unimarginal, Uni-lateral	Abraded	48.89	32.73	5.47	4.89	5.67	5.08	17.28	NBP-024-3	L-9	Meso/Neolithic +
Bulgaan Uul	638666	5090487	NBP-024	2	1.3	N/A (Survey, Surface)	1.3	Complete	Tertiary		Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	8.87	17.09	5.86	4.41	6.12	3.488	4.1	NBP-024-2	L-1	Neolithic +
Shataar Chuluu	640334	5118958	NBP-021	9	1.3	N/A (Survey, Surface)	1.4	Complete	Tertiary		Yellow-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	13.93	13.12	6.69	4.96				NBP-021-9	L-1	Neolithic +
Bulgaan Uul	640042	5119011	NBP-021	16	11.5	N/A (Survey, Surface)	11.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	34.48	32.99	7.74	5.93	5.68	3.2	10	NBP-021-16	L-16	Meso/Neolithic +
Shataar Chuluu	640492	5119465	NBP-021	3	51.9	N/A (Survey, Surface)	51.9	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	57.84	49.76	14.36	9.44	12.5	9.26	14.26	NBP-021-3	L-1	Middle Paleolithic?
Bulgaan Uul	642647	5080715	NBP-028	31	65.4	N/A (Survey, Surface)	40.6	Complete	Tertiary		Black	Other	N/A	Core	Medium Fine	N/A, Other	Core Fragment	Unidirectional	Core			Complex	46.3	38.26	19.5	12.88	15.94	16.68	38.87	NBP-28-31	L-1	Upper Paleolithic?
Bulgaan Uul	642647	5080715	NBP-028	31	65.4	N/A (Survey, Surface)	19.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	37.61	42.83	9.75	8.53	6.23	2.44	5.9	NBP-028-31	L-2	Upper Paleolithic?
Bulgaan Uul	642647	5080715	NBP-028	31	65.4	N/A (Survey, Surface)	5.6	Complete	Tertiary		Gray	Chert	Conchoidal	Flake Tool	Fine	Hinge	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Complex	24.52	22.75	8.68	7.29	8.87	7.4	22.38	NBP-028-3 1	L-3	Meso/Neolithic +
Bulgaan Uul	635012	5088672	NBP-026	27	79	N/A (Survey, Surface)	79	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	54.99	58.12	15.29	12.81	14.85	9.98	31.73	NBP-026-27	L-1	Unknown
Shataar Chuluu	640292	5119416	NBP-021	5	1.7	N/A (Survey, Surface)	1.7	Complete	Tertiary		Black	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	17.98	20.05	2.91	1.97	2.89	2.71	12.73	NBP- 021-5	L-1	Meso/Neolithic +
Bulgaan Uul	639743	5076540	NBP-027	101	114.1	N/A (Survey, Surface)	5.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	24.98	37.09	5.52	2.96	5.43	2.85	8.43	NBP-028-101	L-1	Unknown

Table D.2 (continued). Lithic database list

Bulgaan Uul	639743	5076540	NBP-027	101	114.1	N/A (Survey, Surface)	108.5	Complete	Tertiary		Gray	Other	Compression	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Denticulate		Bi-Marginal, Uni-lateral	Complex	76.07	51.63	22.81	10.16	22.42	20.41	28.75	NBP-027-101	L-2	Upper Paleolithic?
Bulgaan Uul	639884	5078348	NBP-027	116	18.6	N/A (Survey, Surface)	18.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade			Abraded	62.8	31.75	13.75	12.43	15.61	13.02	29.21	NBP-027-116	L-1	Meso/Neolithic -
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	25.8	Complete	Primary		Gray	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	49.03	37.86	20.93	12.1				NBP-013-G5-1	L-	Unknown
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	18.3	Complete	Primary		Black	Other	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	66.45	33.17	13.68	12.03	13.52	11.33	17.9	NBP-013-G5-1	L-	Unknown
Bulgaan Uul	644077	5090260	NBP-013	G5-1		N/A (Survey, Surface)	1803	Complete	Tertiary		Gray-Blue	Other	N/A	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Uni-lateral	Flat	31.94	33.11	10.78	9.54	10.8	10.84	27.45	NBP-013-G5-1	L-	Upper Paleolithic?
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	7.2	Broken	Tertiary	Middle	Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	Hinge	Blade Core Fragment	N/A (if not a core)	N/A (if not a tool)			Unknown	33.3	38.92	12.08	10.16				NBP-013-G5-1	L-	Meso/Neolithic -
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	19.7	Complete	Primary		Light Green-Blue	Other		Flake (Proximal, Whole)		Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	65.06	31.24	15.77	10.61	16.67	11.61	15.89	NBP-013-G5-1	L-	Unknown
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	16.3	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	33.94	43.05	18.37	14.42				NBP-013-G5-1	L-	Unknown
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	19.4	Complete	Secondary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	50.07	41.84	18.59	10.99	10.34	8.13	14.67	NBP-013-G5-1	L-	Unknown
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	6.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Uni-lateral	Flat	29.44	35.09	13.46	11.93	12.81	13.38	21.19	NBP-013-G5-1	L-	Upper Paleolithic?
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	14.6	Complete	Tertiary		Light Green-Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	41.11	38.64	24.41	16.44				NBP-013-G5-1	L-	Unknown
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	5.5	Complete	Secondary		Gray	Other	Bi-Polar	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	34.34	32.83	11.81	8.18	11.55	11.47	15.49	NBP-013-G5-1	L-	Unknown
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	1.4	Complete	Secondary		Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	27.51	23.43	8.54	6.84	8.91	8.6	19.93	NBP-013-G5-1	L-	Neolithic +
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	2.9	Broken	Tertiary	Lateral	Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.94	22.31	11.49	9.54	11.59	9.22	13.66	NBP-013-G5-1	L-	Unknown
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	4	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	40.68	22.85	11.1	9.04	8.87	6.91	12.61	NBP-013-G5-1	L-	Unknown
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	2.3	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	31.93	19.05	13.83	10.16				NBP-013-G5-1	L-	Unknown
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	2.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.57	23.29	9.2	8.73	8.27	7.86	19.35	NBP-013-G5-1	L-	Unknown
Bulgaan Uul	644077	5090260	NBP-013	G5-1		N/A (Survey, Surface)	1.2	Complete	Tertiary		Red-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				13.02	11.16	7.75	6.18				NBP-013-G5-1	L-	Neolithic +
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	6.5	Complete	Tertiary		Gray	Other	Bending	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade	Expedient	Unimarginal, Bi-lateral	Flat	35.63	20.93	10.2	7.04	6.05	3.85	13.64	NBP-013-G5-1	L-	Upper Paleolithic
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	25.4	Complete	Secondary		Light Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool/Flake Blank		Unimarginal, Bi-lateral	Flat	62.04	31.74	11.85	8.91	11.3	9.3	2883	NBP-013-GG5-1		Meso/Neolithic -
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	21.5	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade			Flat	59.41	33.24	7.58	6.5	8.33	738	14.26	NBP-013-G5-1	L-	Upper Paleolithic
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	118.9	Complete	Secondary		Light Gray-Blue	Other	N/A	Core	Medium Fine	N/A, Other	Levallois	Multidirectional	Core			Unknown	75.98	43.38	30.97	25.1				NBP-013-G5-1	L-	Middle Paleolithic?
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	195.1	Complete	Secondary		Gray	Other	N/A	Core	Medium	N/A, Other	Pebble Core	Multidirectional	Core			Cortical/Unmodified	65.75	64.94	36.26	32.14				NBP-013-G5-1	L-	Middle Paleolithic?
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	1175.3	Complete	Secondary		Gray	Other	N/A	Core	Medium	N/A, Other	Core	Multidirectional	Core			Unknown	1200.6	1000	93	50.94				NBP-013-G5-1	L-	Middle Paleolithic
Bulgaan Uul	644077	5090260	NBP-013	G5-1	1803	N/A (Survey, Surface)	108	Complete	Tertiary		Light Gray-Blue	Other	N/A	Core	Medium Fine	N/A, Other	Blade Core	Unidirectional	Core			Flat	45.14	53.88	37.29	36.35				NBP-013-G5-1	L-	Upper Paleolithic
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	31.2	Complete	Tertiary		Gray	Other	N/A	Non-Flake Debitage	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	72.52	40.66	11.39	5.82				NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	38.9	Complete	Secondary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	42.86	58.58	15.66	10.93	16.36	10.72	58.23	NBP-013-G4-1	L-2	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	21.3	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	41.8	46.59	12.26	8.46				NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	12.8	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	33.59	23.86	13.37	7.85	8.08	5.62	5.32	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	12.2	Complete	Secondary		Light Gray-Blue	Other	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	39.81	25.73	14.01	6.96				NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	10	Complete	Tertiary		Black	Other	Bending	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	44.21	25.51	8.33	6.81	8.25	4.82	10.36	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	22.3	Complete	Primary		Gray	Andesite	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	42.68	35.73	11.6	7.11	11.9	10.24	25.55	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	12.2	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	34.6	29.51	10.86	6.87	10.64	9.94	27.49	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	43.91	25.48	7.13	33.01	6.41	6.12	25.72	NBP-013-G4-1	L-	Meso/Neolithic -
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	6.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	37.47	20.16	6.91	3.15	6.72	4.68	19.08	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	19.2	Complete	Secondary		Gray	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	32.09	44.19	14.75	10.24	12.24	5.26	10.88	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	9.8	Complete	Primary		Black	Andesite	N/A	Flake Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	34.1	27.98	7.77	5.66	7.86			NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	21.7	Complete	Primary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	37.23	32.37	20.18	13.5	7.45	2.44	8.29	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	8.6	Complete	Tertiary		Gray	Other	Bi-Polar	Flake (Proximal, Whole)	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	45.6	26.94	7.93	6.45		2.22	10.48	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	8.7	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	31.7	32.64	9.2	5.63	8.04	7.66	14.96	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	7.6	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	22.81	34.3	9.21	5.54	10.44	9.49	17.84	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	4.8	Broken	Tertiary	Lateral	Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.61	23.79	6.8	4.48	3.78	2.07	7.08	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	6.6	Complete	Tertiary		Gray	Andesite	Bi-Polar	Flake (Proximal, Whole)	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.08	24.78	5.67	4.51		2.99	12.56	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	7.3	Complete	Secondary		Gray	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	33.6	18.05	10.71	8.92	6.64	9.8	21.8	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	3.8	Complete	Secondary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade	Expedient	Unimarginal, Uni-lateral	Flat	24.93	19.99	6.73	5.02	6.9	2.68	10.3	NBP-013-G4-1	L-	Meso/Neolithic -
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	4.2	Complete	Tertiary		Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	28.42	24.56	6.04	3.57	5.9	2.25	9.8	NBP-013-G4-1	L-	Neolithic +
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	4	Complete	Secondary		Black	Other	Bi-Polar	Flake (Proximal, Whole)	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	28.68	25.06	5.8	4.4	5.92	7.76	18.38	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	6.7	Complete	Primary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	32.03	23.12	6.55	5.53	6.62	3.78	11.85	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	1.4	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	20.15	15.03	3.4	2.61	3.56	2.79	8.7	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	3.5	Complete	Primary		Light Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	21.5	26.52	5.97	2.52	6.62	6.52	17.27	NBP-013-G4-1	L-24	
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	1.4	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.59	12.12	4.26	3.47	4.09	3.62	10.98	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	357.8	N/A (Survey, Surface)	3.5	Complete	Secondary		Gray	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				29.73	14.58	8.17	6.33	4.98	4.01	15.15	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	4.6	Complete	Primary		Red-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	30.9	19.76	8.9	5.9				NBP-013-G4-1	L-	Meso/Neolithic -
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	3	Complete	Tertiary		Red	Chert	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	19.38	14.44	6.42	5.93				NBP-013-G4-1	L-	Meso/Neolithic -
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	4.6	Complete	Tertiary		White	Chalcedony	Bending	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	25.27	20.38	6.38	6.03	5.12	1.19	5.77	NBP-013-G4-1	L-	Neolithic +
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	1.7	Complete	Tertiary		White	Chalcedony	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	20.19	15.2	5.15	2.67				NBP-013-G4-1	L-	Neolithic +
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.8	N/A (Survey, Surface)	2.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	18.75	13.93	6.34	3.73	4	1.43	4.29	NBP-013-G4-1	L-	Unknown
Bulgaan Uul	644180	5089714	NBP-013	G4-1	367.4	N/A (Survey, Surface)	4.9	Complete	Secondary		Red-Brown	Chert	Bi-Polar	Flake (Proximal, Whole)	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	41.03	12.57	8.29	5.2	5.04	4.62	8.56	NBP-013-G4-1	L-	Neolithic +
Bulgaan Uul	644188	5089714	NBP-013	G4-1	14.7	N/A (Survey, Surface)	14.7	Complete	Tertiary		Gray	Chert		Core	Fine	N/A, Other	Blade Core	Unidirectional	Core			Complex	30.61	19.33	14.85	12.58		1475	18.81	NBP-013-G4-1	L-	Neolithic +
Bulgaan Uul	639979	5077058	NBP-027	DI11	7.8	Dogleash	2.3	Complete	Secondary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	26.63	18.52	3.61	3.45	3.21	2.83	4.12	NBP-027-D11	L-1	Unknown
Bulgaan Uul	639979	5077058	NBP-027	DL11	7.8	Dogleash	1.2	Complete	Secondary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.99	16.37	3.9	1.83	4			NBP-027-DL11	L-	Unknown
Bulgaan Uul	639979	5077058	NBP-027	DL11	7.8	Dogleash	1.7	Complete	Tertiary		Brown-Yellow	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	20.48	13.87	5.16	4.88	4.91	3	6.31	NBP-027-DL11	L-	Meso/Neolithic -
Bulgaan Uul	639979	5077058	NBP-027	DL11	7.8	Dogleash	1.1	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	21.51	14.61	2.63	2.13	2.16	1.59	7.4	NBP-027-DL11	L-	Meso/Neolithic -
Bulgaan Uul	639979	5077058	NBP-027	DL11	7.8	Dogleash	0.4	Complete	Tertiary		Black	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	15.67	6.48	2.78	1.84				NBP-027-DL11	L-	Unknown
Bulgaan Uul	639979	5077058	NBP-027	DL11	7.8	Dogleash	0.5	Complete	Tertiary		Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	14.68	11.33	2.52	1.64	2.36	1.91	7.15	NBP-027-DL11	L-	Meso/Neolithic -
Bulgaan Uul	639979	5077058	NBP-027	DL11	7.8	Dogleash	0.8	Complete	Tertiary		Red-Purple	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	13.29	12.92	4.27	3.15	3.51	3.03	8.49	NBP-027-DL11	L-	Meso/Neolithic -
Bulgaan Uul	639979	5077058	NBP-027	DL11	7.8	Dogleash	0.1	Complete	Tertiary		Light Gray-Blue	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	8.95	7.05	1.4	1.24				NBP-027-DL11	L-	Unknown
Bulgaan Uul	640000	5077045	NBP-027	DL12	7.8	Dogleash	0.3	Complete	Tertiary		Brown-Yellow	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	14.46	8.35	1.95	1.7	1.7	1.58	4.06	NBP-027-DL12	L-	Neolithic +
Bulgaan Uul	639987	5077050	NBP-027	DL13	0.1	Dogleash	0.1	Complete	Tertiary		Red-Brown	Chert	N/A	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Bladelet		Unimarginal, Uni-lateral	Flat	10.96	5.4	1.65	1.24	1.68	1.67	5.44	NBP-027-DL13	L-	Neolithic +
Bulgaan Uul	639984	5077016	NBP-027	DL14	74	Dogleash	73.7	Complete	Secondary		Gray	Other	Bending	Flake (Proximal, Whole)	Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	57.79	55.8	26.58	10.94	10.62	11.28	33.68	NBP-027-DL14	L-1	
Bulgaan Uul	639984	5077016	NBP-027	DL14	74	Dogleash	0.4	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	13.28	10.64	2.98	1.63	2.75	1.48	6.16	NBP-027-DL14	L-	Neolithic +
Bulgaan Uul	639971	5077019	NBP-027	DL15	0.2	Dogleash	0.2	Complete	Tertiary		Red-Brown	Chert	Compression	Flake Tool	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Bladelet			Flat	13.09	5.06	1.4	1.19	1.45	1.41	4.88	NBP-027-DL15	L-	Neolithic +
Bulgaan Uul	639983	5077042	NBP-027	DL16	3.4	Dogleash	1	Complete	Primary		Light Gray-Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	14.96	1.33	5.99	4.46				NBP-027-DL16	L-	Unknown
Shataar Chuluu	639983	5077042	NBP-027	DL16	3.4	Dogleash	0.8	Complete	Primary		Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	11.64	14.54	3.04	2.64				NBP-027-DL16	L-	Unknown
Bulgaan Uul	639983	5077042	NBP-027	DL16	3.4	Dogleash	1.2	Complete	Primary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	15.32	14.39	3.66	3.41	3.6	2.71	11.1	NBP-027-DL16	L-	Unknown
Bulgaan Uul	639983	5077042	NBP-027	DL16	3.4	Dogleash	0.3	Complete	Primary		Gray	Other	N/A	Flake Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				10.57	8.34	1.6	1.61				NBP-027-DL16	L-	Unknown
Bulgaan Uul	639983	5077042	NBP-027	DL16	3.4	Dogleash	0.3	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	7.75	9.37	3.4	2.21	3.41	2.75	6.84	NBP-027-DL16	L-	Neolithic +
Bulgaan Uul	639990	5077032	NBP-027	DL17	11.7	Dogleash	7.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Abraded	32.01	25.54	7.11	6.12	6.12	4.23	13	NBP-027-DL17	L-	Upper Paleolithic?
Bulgaan Uul	639990	5077032	NBP-027	DL17	11.7	Dogleash	2.8	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.98	26.67	4.6	4.37	4.19	3.67	10.64	NBP-027-DL17	L-	Unknown
Bulgaan Uul	639990	5077032	NBP-027	DL17	11.7	N/A (Survey, Surface)	0.5	Complete	Primary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				11.61	10.54	2.79	2.36				NBP-027-DL17	L-	Unknown
Bulgaan Uul	639990	5077032	NBP-027	DL17	11.7	Dogleash	0.4	Complete	Secondary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	11.86	9.82	3.89	2.31				NBP-027-DL17	L-	Unknown
Bulgaan Uul	639990	5077032	NBP-027	DL17	11.7	Dogleash	0.4	Complete	Primary		Gray	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	11.51	8.84	2.46	2.16				NBP-027-DL17	L-	Unknown
Bulgaan Uul	639990	5077032	NBP-027	DL17	11.7	Dogleash	0.1	Complete	Tertiary		Red-Brown	Chert	N/A	Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	8.94	7.15	1.03	0.99				NBP-027-DL17	L-6	
Bulgaan Uul	639990	5077032	NBP-027	DL17	11.7	Dogleash	0.3	Complete	Tertiary		Orange	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	13.79	9.68	2.18	1.41	2.34	2.42	4.19	NBP-027-DL17	L-	Neolithic +
Bulgaan Uul	639990	5077032	NBP-027	DL17	11.7	Dogleash	0.3	Complete	Tertiary		Red-Brown	Chert	N/A	Flake Tool	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Bladelet		Unimarginal, Bi-lateral	Flat	12.67	6.67	1.68	1.68				NBP-027-DL17	L-	Neolithic +
Bulgaan Uul	639990	5077032	NBP-027	DL17	11.7	Dogleash	0.1	Broken	Tertiary	Middle	Yellow-Brown	Chert	N/A	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	5.87	4.49	1.28	1.15				NBP-027-DL17	L-	Neolithic +
Bulgaan Uul	639984	5077042	NBP-027	DL18	2.7	Dogleash	1.6	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.13	18.78	4.43	2.93	3.5	3.23	8.92	NBP-027-DL18	L-	Unknown
Bulgaan Uul	639984	5077042	NBP-027	DL18	2.7	Dogleash	0.3	Complete	Primary		Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	9.15	11.13	2.61	1.75				NBP-027-DL18	L-	Unknown
Bulgaan Uul	639984	5077042	NBP-027	DL18	2.7	Dogleash	0.5	Broken	Tertiary	Middle	Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	10.6	11.2	2.27	2.21	2.01			NBP-027-DL18	L-	Unknown
Bulgaan Uul	639984	5077042	NBP-027	DL18	2.7	Dogleash	0.1	Complete	Tertiary		Red-Brown	Chert	N/A	Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				9.65	7.38	1.5	0.86				NBP-027-DL18	L-	Neolithic +
Bulgaan Uul	639984	5077042	NBP-027	DL18	2.7	Dogleash	0.1	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	7.55	5.08	2.17	1.19				NBP-027-DL18	L-	Unknown
Bulgaan Uul	639984	5077042	NBP-027	DL18	2.7	Dogleash	0.1	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	6.94	5.26	1.12	1.04				NBP-027-DL18	L-	Unknown
Bulgaan Uul	639984	5077042	NBP-027	DL18	2.7	Dogleash	0.1	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	6.13	3.81	1.93	1.45				NBP-027-DL18	L-	Unknown
Bulgaan Uul	639701	5076932	NBP-027	DL19	9.3	Dogleash	5.5	Complete	Tertiary		Red-Brown	Chert	N/A	Non-Flake Debitage	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	28.09	22.77	8.85	5.87				NBP-027-DL19	L-	Meso/Neolithic -
Bulgaan Uul	639701	5076932	NBP-027	DL19	9.3	Dogleash	0.3	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	8.35	8.71	2.53	2.35	2.28	2	4.52	NBP-027-DL19	L-	Meso/Neolithic -
Bulgaan Uul	639701	5076932	NBP-027	DL19	99.3	Dogleash	1	Complete	Tertiary		Brown-Yellow	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	17.19	15.08	3.42	2.93	2.89	1.88	3.9	NBP-027-DL19	L-	Neolithic +
Bulgaan Uul	639701	5076932	NBP-027	DL19	9.3	Dogleash	0.1	Complete	Tertiary		White	Quartz	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	7.3	7.33	1.37	1.12				NBP-027-DL19	L-	Meso/Neolithic -
Bulgaan Uul	639682	5076675	NBP-027	DL20	0.8	Dogleash	0.4	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	13	8.16	2.19	1.72	3.13	1.7	4.41	NBP-027-D20	L-1	Meso/Neolithic -
Bulgaan Uul	639682	5076675	NBP-027	DL20	0.8	Dogleash	0.6	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Angular Shatter	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	10.79	12.74	3.56	2.88				NBP-027-D20	L-1	Meso/Neolithic -
Bulgaan Uul	639680	5076642	NBP-027	DL21	0.1	Dogleash	0.1	Broken	Tertiary		Yellow-Brown	Chert	N/A	Flake Tool	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Bladelet		Unimarginal, Bi-lateral	Unknown	3.77	3.89	1.05	1.05				NBP-027-DL21	L-1	

Table D.2 (continued). Lithic database list

Bulgaan Uul	639681	5076628	NBP-027	DL22	0.3	Dogleash	0.3	Complete	Tertiary		Brown	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	13.04	8.43	2.51	1.6	2	0.97	4.96	NBP-027-DL22	L-	Meso/Neolithic+
Bulgaan Uul	639690	5076669	NBP-027	DL23	0.4	Dogleash	0.3	Complete	Tertiary		Yellow	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	14.76	7.93	2.64	1.87	2.64	1.6	3.4	NBP-027-DL23	L-	Meso/Neolithic+
Bulgaan Uul	639690	5076669	NBP-027	DL23	0.4	Dogleash	0.1	Complete	Tertiary		Yellow	Chalcedony	N/A	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Bladelet		Unimarginal, Uni-lateral	Unknown	7.76	4.8	1.72	1.51				NBP-027-DL23	L-	Meso/Neolithic+
Bulgaan Uul	639981	5077029	NBP-027	DL24	23.5	Dogleash	7.4	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	23.95	25.59	7.45	6.94	7.64	6.18	11.63	NBP-027-DL24	L-	Unknown
Bulgaan Uul	639981	5077029	NBP-027	DL24	23.5	Dogleash	0.6	Complete	Primary		Light Green-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.53	7.67	3.59	2.54	3.69	2.67	3.46	NBP-027-DL24	L-	Unknown
Bulgaan Uul	639981	5077029	NBP-027	DL24	23.5	Dogleash	0.6	Complete	Primary		Light Green-Blue	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.16	10.66	3.35	1.96				NBP-027-DL24	L-	Unknown
Bulgaan Uul	639981	5077029	NBP-027	DL24	23.5	Dogleash	14.2	Complete	Secondary		Gray-Blue	Other	N/A	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Bi-Marginal, Uni-lateral	Cortical/Unmodified	39.42	27.77	10.94	6.15	12.3	11.46	23.38	NBP-027-DL24	L-	Unknown
Bulgaan Uul	639980	5077042	NBP-027	dl25	13.7	Dogleash	12	Complete	Secondary		Light Green-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Uni-lateral	Cortical/Unmodified	30.27	27.63	14.89	9.15	10.63	6.89	16.81	NBP-027-DL25	L-	Upper Paleolithic?
Bulgaan Uul	639980	5077042	NBP-027	DL25	13.7	Dogleash	0.6	Complete	Secondary		Light Gray-Blue	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.39	6.08	3.2	2.67				NBP-027-DL25	L-	Unknown
Bulgaan Uul	639980	5077042	NBP-027	DL25	13.7	Dogleash	1.4	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Scraper		Bi-Marginal, Bi-Lateral	Complex	13.77	17.94	4.69	3.07	4.83	3.59	4.89	NBP-027-DL25	L-	Neolithic+
Bulgaan Uul	639983	5077018	NBP-027	DL26	0.3	Dogleash	0.3	Complete	Tertiary		Brown-Yellow	Chert	N/A	Flake Tool	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Bladelet		Unimarginal, Uni-lateral	Unknown	18.03	6	1.61	1.59	1.83	1.35	1.09	NBP-027-DL26	L-	Neolithic+
Bulgaan Uul	699682	5076675	NBP-027	DL27	0.1	Dogleash	0.1	Complete	Tertiary		Red-Brown	Chert	N/A	Flake Tool	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Bladelet		Unimarginal, Bi-lateral	Flat	9.95	6.01	1.62	1.59	1.66	1.47	4.85	NBP-027-DL27	L-	Neolithic+
Bulgaan Uul	645804	5091252	NBP-013	DL28	30.6	Dogleash	30.6	Complete	Tertiary		Gray	Other	N/A	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Point	Hafted	Bi-Facial	Unknown	72.33	37.06	11.23	6.94				NBP-013-DL28	L-	Upper Paleolithic
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	69	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	65.14	48.32	17.21	11.46	17.58	16.44	28.8	NBP-013-G3-1	L-	Upper Paleolithic?
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	13.8	Complete	Primary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.53	37.53	8.77	5.88	8.88	10.74	29.19	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	2.4	Broken	Tertiary	Distal	Dark Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	24.4	21.28	3.32	2.6				NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	3.8	Broken	Tertiary	Middle	Gray	Other	N/A	Flake Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	23.16	28.36	4.95	3.34				NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	10.2	Complete	Secondary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	27.49	35.25	9.03	6.37	7.21	6.53	20.66	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	4	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	28.16	22.48	4.73	4.58	4.76	4.51	8.08	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	6.9	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered		N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Flat	32.61	26	6.57	4.34		6.22	25.13	NBP-013-G3-1	L-	Upper Paleolithic
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	7.3	Complete	Primary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	26.13	33.54	5.98	4.7	5.45	4.59	13.38	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	3.8	Complete	Secondary		Light Gray-Blue	Other	Conchoidal		Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.98	20.65	5.96	4.61	4.75	1.9	12.1	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	2.5	Complete	Tertiary		Light Gray-Blue	Other	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	20.3	19.08	4.98	3.46				NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	2.9	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	28.05	17.96	5.16	3.67	5.06	3.54	9.85	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	1.8	Complete	Tertiary			Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	21.32	17.54	3.6	3.48	3.76	2.89	9.44	NBP-013-G3-1	L-	Upper Paleolithic?
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	1.4	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.41	14.92	5	2.98	5.02	3	4.37	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	2.4	Complete	Tertiary		Yellow-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	18.72	17.62	9.22	2.94				NBP-013-G3-1	L-	Meso/Neolithic+
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	1	Complete	Tertiary		Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	20.24	10.07	4.46	3.76	3.87	4.02	6.87	NBP-013-G3-1	L-	Meso/Neolithic+
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	1	Complete	Tertiary		Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	19.18	14.93	3.21	2.11				NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	1.2	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.44	10.11	3.17	2.77	2.29	1.81	5.82	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	1.7	Complete	Primary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	21.15	13	3.8	3.49	3.65	2.75	6.05	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	1.4	Complete	Secondary		Black	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	14.98	20.87	4.23	2.52				NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643787	5090000	NBP-013	G3-1	139.3	N/A (Survey, Surface)	2.4	Complete	Tertiary		Gray-Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	26.51	16.42	8.86	5.74				NBP-013-G3-1	L-	Unknown
Bulgaan Uul	644177	5089374	NBP-013	G4-2	291.7	N/A (Survey, Surface)	88.1	Complete	Secondary		Dark Gray	Other	N/A	Core	Medium Fine	N/A, Other	Core Exhausted	Multidirectional	Core			Flat	39.13	49.15	37.09	35.42		33.83	49.75	NBP-013-G4-2	L-	Unknown
Bulgaan Uul	644177	5089374	NBP-013	G4-2	291.7	N/A (Survey, Surface)	17.8	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.77	36.66	11.1	5.09	11.65	9.65	23.89	NBP- 013-G4-2	L-	Unknown
Bulgaan Uul	644177	5089374	NBP-013	G4-2	291.7	N/A (Survey, Surface)	9.2	Complete	Primary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	31.19	24.99	9.56	5.8	4.92	4.47	14.08	NBP-013-G4-2	L-	Unknown
Bulgaan Uul	644177	5089374	NBP-013	G4-2	291.7	N/A (Survey, Surface)	6.4	Complete	Tertiary		Light Green	Other	Conchoidal	Flake Tool	Medium		N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Flat	31.98	23.04	8.6	7.57	8.83	9.82	22.97	NBP013-G4-2-	L-	Unknown
Bulgaan Uul	644177	5089374	NBP-013	G4-2	291.7	N/A (Survey, Surface)	11.7	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	32.22	24.41	10.45	8.29	10.31	9.1	22.43	NBP-013-G4-2	L-	Unknown
Bulgaan Uul	644177	5089374	NBP-013	G4-2	291.7	N/A (Survey, Surface)	18.6	Complete	Tertiary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	29.36	39	12.85	12.47	12.21	10.57	24.58	NBP-013-G4-2	L-	Unknown
Bulgaan Uul	644177	5089374	NBP-013	G4-2	291.7	N/A (Survey, Surface)	8.2	Complete	Secondary		Light Green	Other	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	37.82	30.71	7.22	5.03				NBP-013-G4-2	L-	Unknown
Bulgaan Uul	644177	5089374	NBP-013	G4-2	291.7	N/A (Survey, Surface)	4.6	Complete	Secondary		Gray	Other	N/A	Non-Flake Debitage	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	45.39	15.14	6.81	5.86				NBP-013-G4-2	L-8	
Bulgaan Uul	644177	5089374	NBP-013	G4-2	291.7	N/A (Survey, Surface)	7	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	31.97	26.92	5.59	4.85	6.08	5.68	12.07	NBP-013-G4-2	L-	Unknown
Bulgaan Uul	644177	5089374	NBP-013	G4-2	291.7	N/A (Survey, Surface)	7.8	Complete	Primary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	32.69	26	0.35	7.74	6.74	6.31	13.4	NBP-013-G4-2	L-	Unknown
Bulgaan Uul	644177	5089374	NBP-013	G4-2	291.7	N/A (Survey, Surface)	4.1	Complete	Secondary		Gray-Blue	Chert	N/A	Non-Flake Debitage	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	23	17.31	10.45	6.27				NBP-013-G4-2	L-	Meso/Neolithic+
Bulgaan Uul	644177	5089374	NBP-013	G4-2	291.7	N/A (Survey, Surface)	1.6	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	15.02	22.53	4.73	3.18	5.88	5.84	14	NBP-013-G4-2	L-	Unknown
Bulgaan Uul	644177	5089374	NBP-013	G4-2	291.7	N/A (Survey, Surface)	60.4	Complete	Secondary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	65.55	38.18	17.28	13.44	11.65	7.32	22.59	NBP-013-G4-2	L-	Unknown
Bulgaan Uul	644223	5089917	NBP-013	G3-3	113.6	N/A (Survey, Surface)	38.3	Complete	Secondary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	36.22	64.02	16	10.16	15.88	13.34	25.68	NBP-013-G3-3	L-	Unknown
Bulgaan Uul	644223	5089917	NBP-013	G3-3	113.6	N/A (Survey, Surface)	27.3	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	38.38	28.46	18	14.9	16.97	17.72	29.31	NBP-013-G3-3	L-2	Unknown
Bulgaan Uul	644223	5089917	NBP-013	G3-3	113.6	N/A (Survey, Surface)	48.2	Complete	Tertiary		Light Gray-Blue	Other	Compression	Core	Medium Fine	N/A, Other	Core Fragment	Multidirectional	Core			Complex	42.13	38.71	16.36	14.27	16.43	16.66	32.56	NBP-013-G3-3	L-	Upper Paleolithic
Bulgaan Uul	643786	5090001	NBP-013	G3-1	198.1	N/A (Survey, Surface)	34.4	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Uni-lateral	Flat	65.52	31.37	14.28	8.79	13.58	11.4	24.74	NBP-013-G3-1	L-	Upper Paleolithic?
Bulgaan Uul	643786	5090001	NBP-013	G3-1	198.1	N/A (Survey, Surface)	18.6	Complete	Primary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	43.28	31.1	15.3	7.27	15.55	8.91	30.28	NBP-013-G3-1	L-	Upper Paleolithic
Bulgaan Uul	643786	5090001	NBP-013	G3-1	198.1	N/A (Survey, Surface)	17.9	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	39.56	37.43	11.3	8.73	11.71	10.02	11.78	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643786	5090001	NBP-013	G3-1	198.1	N/A (Survey, Surface)	10.3	Complete	Primary		Yellow-Brown	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	28.37	30.54	9.71	6.1	9.66	10.7	21.79	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643786	5090001	NBP-013	G3-1	198.1	N/A (Survey, Surface)	4.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.2	22.94	7.59	3.09	7.65	2.32	8.25	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643786	5090001	NBP-013	G3-1	198.1	N/A (Survey, Surface)	3.5	Complete	Tertiary		Light Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	22.13	17.57	6.14	4.41	6.06	44.99	16.6	NBP013-G3-1-	L-	Upper Paleolithic?
Bulgaan Uul	643786	5090001	NBP-013	G3-1	198.1	N/A (Survey, Surface)	11.1	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	26.83	41.68	9.39	7.16	9.449	8.42	16.55	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643786	5090001	NBP-013	G3-1	198.1	N/A (Survey, Surface)	64.1	Complete	Tertiary		Gray	Other	Conchoidal	Core	Medium Fine	N/A, Other	Levallois	Multidirectional	Core			Unknown	66.85	39.56	17.85	14.82	14.95	10.74	16.19	NBP-013-G3-1	L-	Middle Paleolithic
Bulgaan Uul	643786	5090001	NBP-013	G3-1	198.1	N/A (Survey, Surface)	22.1	Complete	Tertiary		Black	Other		Flake Tool	Fine	Feathered	Blade Core Exhausted	N/A (if not a core)	Scraper		Unimarginal, Uni-lateral	Complex	27.33	45.23	14.6	11	15.64	11.19	20.88	NBP-013-G3-1	L-	Meso/Neolithic+
Bulgaan Uul	643786	5090001	NBP-013	G3-1	198.1	N/A (Survey, Surface)	7.6	Complete	Tertiary		Gray	Other	Bending	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Complex	29.52	30.94	7.3	4.82	6.99	7.06	12.07	NBP-013-G3-1	L-	Unknown
Bulgaan Uul	643808	5089844	NBP-013	G3-2	134.7	N/A (Survey, Surface)	20.7	Complete	Secondary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	35.45	39.72	19.89	11.86	11.3	5.96	18.32	NBP-013-G3-2	L-	Unknown
Bulgaan Uul	643808	5089844	NBP-013	G3-2	134.7	N/A (Survey, Surface)	13.1	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	34.19	27.52	11.89	5.37	11.17	9.26	14.63	NBP-013-G3-2	L-2	
Bulgaan Uul	643808	5089844	NBP-013	G3-2	134.7	N/A (Survey, Surface)	7.4	Complete	Tertiary		Black	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	34.42	23.82	6.22	5.37	6.83	6.29	12.14	NBP-013-G3-2	L-	Unknown
Bulgaan Uul	643808	5089844	NBP-013	G3-2	134.7	N/A (Survey, Surface)	3.2	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.09	16.09	6.21	3.92	6.63	6.14	14.4	NBP-013-G3-2	L-	Unknown
Bulgaan Uul	643808	5089844	NBP-013	G3-2	134.7	N/A (Survey, Surface)	31.1	Complete	Primary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	58.48	38.9	9.92	9.13	9.03	5.35	12.1	NBP-013-G3-2	L-	Upper Paleolithic?
Bulgaan Uul	643808	5089844	NBP-013	G3-2	134.7	N/A (Survey, Surface)	35	Complete	Secondary		Gray	Other	N/A	Flake Shatter	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	35.8	49.86	14.3	11.53				NBP-013-G3-2	L-	Unknown
Bulgaan Uul	643808	5089844	NBP-013	G3-2	134.7	N/A (Survey, Surface)	10.6	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.12	36.74	9.23	5.25	9.67	8.65	11.04	NBP-013-G3-2	L-	Unknown
Bulgaan Uul	643808	5089844	NBP-013	G3-2	134.7	N/A (Survey, Surface)	1.3	Complete	Tertiary		Light Green	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	14.03	16.37	4.42	2.95				NBP-013-G3-2	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	16.5	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36	57	9.07	4.86	5.74	1.83	12.49	NBP-013-G2-1	L-	Upper Paleolithic?
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	14.4	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.45	43.14	12.41	7.58	12.57	1088	19.82	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	5.2	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.31	24.16	5.55	3.34	5.51	4.7	14.21	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.5	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.41	21.95	6.22	3.34	6.5	6.43	14.15	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.5	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.92	23.08	4.82	3.13	4.43	3.94	4.91	NBP- 013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.1	Complete	Tertiary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	20.48	23.32	6.54	4.38	5.41	4.59	8.6	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	7.3	Complete	Tertiary		Black	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	33.35	16.24	12.56	7.03	5.45	2.88	7.36	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	10.1	Complete	Secondary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	26.08	37.04	9.65	6.65	8.65	6.49	14.72	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	11	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	Scraper	Expedient	Unimarginal, Bi-lateral	Flat	34.58	38.2	7.55	7.3	7.11	3.41	6.59	NBP-013-G2-1	L-	Upper Paleolithic?
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	4.3	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.61	35.59	4.06	3.98	2.95	2.6		NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.5	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	32.6	17.4	4.59	3.09	4.21	2.57	10.28	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	6.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	27.67	42.38	6.54	3.52	6.5	5.15	9.44	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	12.4	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	37.2	34.01	10.06	3.93	9.49	8.91	29.81	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	5.9	Complete	Tertiary		Yellow-Brown	Andesite	Compression	Flake (Proximal, Whole)	Medium Coarse	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.78	22.67	5.66	5.29	6.11	5.83	14.24	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.5	Complete	Primary		Light Gray	Chalcedony	N/A	Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	31.04	11.01	11.98	5.99				NBP-013-G2-1	L-	Meso/Neolithic+
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.08	17.53	5.13	3.23	5.16	4.64	11.82	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	13.5	Complete	Tertiary		White	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	42.38	26.29	8.94	7.41	9.65	11.56	23.68	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	6.3	Complete	Secondary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	28.37	27.9	9.65	4.87	9.44	6.7	17.79	NBP-13-G2-1	L-1	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	10.6	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	4.49	20.23	10.77	9.29				NBP-013-G2-1	L-	Meso/Neolithic+
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	6.1	Complete	Secondary		Yellow-Brown	Rhyolite	Compression	Flake (Proximal, Whole)	Medium Coarse	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	33.17	17.99	7.23	5.25	6.54	711	12.96	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	24.45	27.97	4.36	3.87		2.47	16.64	NBP-013-G2-1	L-21	
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.9	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.74	19.63	8.81	4.09	8.26	8.07	12.88	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732..3	N/A (Survey, Surface)	10.8	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	44.51	25.55	10.32	5.29	5.89	2.4	8.23	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	4.9	Complete	Secondary		Gray-Blue	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	20.37	32.08	10.77	4.36	3.44	2.66	3.99	NBP-013-G2-1	L-	Meso/Neolithic+
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2	Broken	Tertiary		Gray	Other	N/A	Flake Shatter	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.09	24.45	3.48	3.79				NBP-013-G2-1	L-25	
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	9.5	Complete	Tertiary		Light Gray-Blue	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.79	24.64	6.88	5.59	5.93	2.97	7.41	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	5.8	Complete	Secondary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	33.03	31.2	5.57	3.41	5.14	2.6	8.04	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.4	Complete	Tertiary		Gray	Andesite	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	28.6	11.49	3.78	2.48	3.22	3.18	4.78	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.1	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.69	21.89	5.09	2.33				NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	4	Complete	Secondary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	38.24	14.81	7.25	3.88	3.39	3.11	7.68	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	35.51	12.91	6.16	2.91	5.19	2.28	7.39	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	20.1	Complete	Tertiary		Light Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	Core Fragment	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Flat	40.59	32.7	11.91	10.85	8.71	7.97	15.35	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.8	Complete	Tertiary		Black	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.05	16.69	4.29	4.13	3.9	3.1	6.01	NBP-013-G2-1	L-	Upper Paleolithic?

Table D.2 (continued). Lithic database list

Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	4	Complete	Tertiary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	20.57	31.54	6.22	3.75	6.62	5.94	15.43	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.8	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	31.1	17.89	5.92	3.3	6.2	5.28	9.02	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644119	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	4	Complete	Secondary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	25.17	17.32	8.19	3.29	9.53	7.08	15.42	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.5	Complete	Secondary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.68	23.55	6.81	3.66	4.79	4.57	10.04	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.9	Complete	Tertiary		Light Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	17.88	19.44	5.86	2.72	7.17	7.67	10.61	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.8	Complete	Tertiary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.92	19.6	5.33	2.51	5.32	5.49	14.78	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.8	Broken	Tertiary	Middle	Black	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.94	20.1	3.2	2.68				NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	4.8	Complete	Primary		Light Gray	Andesite	Bending	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	25.36	30.67	4.99	4.63	5.13	6.29	12.83	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1	Complete	Tertiary		Light Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.44	15.87	4.18	2.2	3.2	2.74	10.08	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)		Broken	Tertiary		Black	Other	Compression	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	17.55	17.75	3.93	3.5	3.33	1.77	5.24	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.2	Complete	Tertiary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	14.45	24.21	4.4	3.48	4.45	3.8	9.6	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.1	Complete	Secondary		Light Green	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.59	16.21	4.62	3.38	4.05	2.79	6.35	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	13.15	20.74	4.97	4.77	5.46	4.49	12.8	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.8	Complete	Secondary		Light Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	26.38	19.15	5.37	2.56	4.79	7.33	11.88	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.2	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	21.52	15.23	8.54	4.77	6.86	3.73	9.76	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.00	Broken	Tertiary	Distal	Black	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	16.63	23.65	3.31	1.88				NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.8	Complete	Secondary		Gray-Blue	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.51	18.22	5.84	5.21	4.58	4	5.93	NBP-013-G2-1	L-	Meso/Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.4	Complete	Tertiary		Gray-Blue	Chalcedony	Conchoidal	Flake (Proximal, Whole)		Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	15.33	10.88	1.97	1.25	1.59	1.58	4.08	NBP-013-G2-1	L-51	
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.2	Complete	Tertiary		Black	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	16.45	16.71	4.24	1.85				NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.7	Complete	Tertiary		Light Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.98	13.52	2.36	1.44	3.52	1.75	3.29	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.2	Complete	Tertiary		Light Green	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.29	15.92	4.72	4.38	4.11	3.62	7.68	NBP-013-G2-1	L-5	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.5	Complete	Tertiary		Light Green	Other	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	22.47	1751	3.19	1.7	2.93	3.05	9.81	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.9	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.13	18.81	8.35	5.27	6.71	4.75	12.15	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.6	Complete	Tertiary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	14.39	15.53	3.3	2.55	2.63	2.53	3.32	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.1	Complete	Tertiary		Gray-Blue	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	14.43	20.62	3.44	2.57	3.26	2.31	6.1	NBP-013-G2-1	L-	Meso/Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.1	Complete	Tertiary		Gray-Blue	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	11.82	9.23	2.17	1.06	2.06	1.93	4.66	NBP-013-G2-1	L-	Meso/Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.2	Complete	Secondary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	15.51	18.01	3.8	2.17	4.07	4.55	15.52	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.7	Complete	Tertiary		Gray	Flint	Compression	Flake Shatter	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	16.92	11.96	2.24	2.2				NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.1	Complete	Tertiary		Black	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	15.28	16.43	2.88	2.62	3.07	3.12	6.19	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	4.1	Complete	Secondary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	25.59	15.89	7.88	5.63				NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.7	Complete	Tertiary		Gray-Blue	Chert	Bending	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.05	15.35	2.78	2.35	2.4	3.02	6.64	NBP-013-G2-1	L-	Meso/Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.6	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.37	8.27	371	2.97	2.89	1.82	3.5	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.5	Complete	Tertiary		Gray-Blue	Chalcedony	Bending	Flake (Proximal, Whole)	Fine	Hinge		N/A (if not a core)	N/A (if not a tool)			Complex	21.2	15.76	6.35	5.74	4.78	5.47	8.62	NBP-013-G2-1	L-	Meso/Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.2	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	22.21	13.31	4.54	3.02	4.73	5.43	11.2	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.6	Broken	Tertiary	Distal		Other	N/A	Flake Shatter	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	16.06	14.27	3.07	1.42				NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.6	Complete	Tertiary		Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	22.43	12.51	3.23	1.67				NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.9	Complete	Tertiary		Black	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	14.6	14.62	4.35	3.41				NBP- 013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.6	Complete	Primary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.93	21.24	8.81	3.71	3.67	3.11	6.88	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.7	Complete	Tertiary		Gray-Blue	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	9.18	17.98	3.2	2.69	2.78	1.79	2.7	NBP-013-G2-1	L-	Meso/Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1	Complete	Secondary		Blue-black	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	11.14	21.09	5.72	1.3	5.38	4.57	8.09	NBP-013-G2-1	L-	Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1	Complete	Tertiary		Yellow-Brown	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	17.36	13.21	3.4	3.13	3.53	2.8	8.86	NBP-013-G2-1	L-	Meso/Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.9	Broken	Tertiary		Gray	Other	N/A	Non-Flake Debitage	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	14.93	12.54	5.52	1.86				NBP- 013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.6	Complete	Tertiary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	13.21	10.08	3.67	3.23	3.51	2.08	3.69	NBP-013-G2-1	L-	Meso/Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.1	Complete	Tertiary		Light Green	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	20.56	14.25	3.66	2.71	3.28	2.13	4.65	NBP-013-G2-1	L-	Meso/Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.6	Complete	Tertiary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	11.51	17.29	2.49	2.02	2.27	1.56	3.8	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.3	Complete	Tertiary		Gray-Blue	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	40.48	12.8	5.79	4.15	6.65	7.81	8.64	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.4	Complete	Tertiary		Light Blue	Chalcedony	Conchoidal	Flake Shatter	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	11.16	12.37	2.14	1.09				NBP-013-G2-1	L-	Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.1	Complete	Tertiary		Light Blue	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	7.77	7.41	1.52	1.18	1.31	1.24	3.18	NBP-013-G2-1	L-	Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.3	Complete	Tertiary		White	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.5	8.9	2.28	1.56	2.01	1.02	1.85	NBP-013-G2-1	L-	Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.8	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	15.18	14.04	2.6	2.31	3.12	2.79	3.66	NBP-013-G2-1	L-	Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.6	Broken	Tertiary	Middle	Gray	Other	N/A	Flake Shatter	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	11.23	12.8	2.84	2.23				NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.4	Complete	Secondary		Light Gray	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.68	13.08	3.88	1.74	3.38	1.5	3.16	NBP-013-G2-1	L-	Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.3	Complete	Tertiary		Light Gray	Chalcedony	N/A	Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	12.25	8.88	2.51	1.45				NBP-013-G2-1	L-	Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.1	Complete	Tertiary		Gray	Other	N/A	Non-Flake Debitage	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	8.85	8.46	1.32	1.04				NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.1	Complete	Tertiary		Gray-Blue	Other	N/A	Non-Flake Debitage	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.15	11.35	4.13	2.07				NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	14.9	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.82	42.05	12.2	6.9	12.02	11.07	40.32	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	14.6	Complete	Secondary		Gray	Other	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	42.83	24	13.02	10.36				NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	31.4	Complete	Secondary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	35.71	32.86	17.17	11.63	16.87	14.67	35.74	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	6.5	Complete	Secondary		Red	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	46.51	20.06	6.44	4.94	5.29	2.81	6.34	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	21.1	Complete	Tertiary		Light Green	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	52.48	34.13	12.62	6.98	13.64	14.54	11.36	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.9	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.35	21.15	5.09	3.5	4.36	2.67	5.36	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	12.4	Complete	Primary		Gray	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	42.56	26.82	9.48	5.91	7.11	3.56	8.61	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	15.6	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.73	27.96	10.69	10.31	9.51	4.71	9.82	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	25.6	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	41.83	53.46	12	5.35	12.02	10.12	21.31	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	5.9	Complete	Tertiary		Gray	Other	Bi-Polar	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	41.23	15.6	7.07	6.02	3.91	1.91	7.01	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	4.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.56	29.4	5.69	3.69	5.28	2.47	13.1	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.3	Broken	Tertiary		Gray	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	22.37	21.83	3.41	2.07				NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	25.41	26.01	5.27	1.85	4.99	3.06	5.75	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	29.9	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	62.83	43.59	12.66	5.51	12.5	3.14	10.84	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	33.4	Complete	Primary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	56.65	40.73	11.36	9.26	11.32	9.71	26.01	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	18.9	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.89	48.6	12.17	7.29	9.9	8.34	28.88	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.8	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	32.39	20.52	4.26	4.03	4.93	4.28	20.33	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	5.2	Complete	Tertiary		Yellow-Brown	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	35.87	27.92	4.42	3.37	5.1	2.98	11.04	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	5.7	Complete	Secondary		Red	Rhyolite	Compression	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	33.85	23.12	7.45	5.79	5.19	3.69	11.81	NBP- 013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	18.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	34.32	48.54	9.76	9.35	9.61	8.22	26.1	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	4.1	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.86	17.59	5.47	4.12	5.95	2.74	7.06	NBP-013-G2-1	L-	Upper Paleolithic?
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	16.2	Complete	Tertiary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.19	39.9	9.14	6.61	9	9.79	17.18	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	8.6	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.53	35.66	7.6	6.57	7.94	7.19	21.29	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.1	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.29	17.65	5.3	2.86	4.93	3.41	3.62	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	4	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	35.5	16.8	6.87	3.87	4.05	1.91	6.1	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.8	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	20.27	30.26	5.59	4.84	5.71	1.96	10.3	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	4.7	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	20.31	25.7	6.47	3.81	7.45	6.97	25.1	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.89	27.15	2.92	2.38	2.83	1.66	10.49	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.9	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.3	26.12	3.58	3.2	3.67	3.39	11.25	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	11.4	Complete	Secondary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	35.24	34.05	10.02	7.44	8.81	3.87	13.97	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.6	Complete	Secondary		Light Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.19	28.15	5.1	2.82	4.33	2.64	7.52	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.3	Complete	Tertiary		Light Blue	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	17.64	15.34	5.35	2.14	4.87	3.88	9.78	NBP-013-G2-1	L-	Meso/Neolithic +
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.92	10.24	5.61	3.41	5.61	3.77	5.66	NBP-013-G2-1	L-	Upper Paleolithic?
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	3.2	Complete	Tertiary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	15.31	24.56	4.92	3.92	5.02	4.76	13.69	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	1.1	Complete	Tertiary		Light Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	21.56	11.52	4.97	2.93	3.55	3.48	5.64	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	0.6	Complete	Tertiary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	11.21	16.16	3.84	1.69	3.52	1.38	3.45	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	2.7	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	22.09	18.14	8.35	4.65	7.92	3.18	4.73	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	5.9	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	37.54	24.69	6.46	4.29	4.6	2.19	13.44	NBP-013-G2-1	L-	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	15.6	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	50.81	30.24	9.6	6.11	9.86	7.41	24.72	NBP-013-G2-1	L-	Upper Paleolithic?
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	23.9	Complete	Primary		Light Blue	Other	Bending	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Uni-lateral	Flat	50.97	34.89	11.71	8.04	9.43	5.75	11.68	NBP- 013-G2-1	L-	Upper Paleolithic?
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	14.7	Complete	Tertiary		Light Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Uni-lateral	Flat	36.16	35.8	8.73	5.85	8.5	3.97	11.46	NBP-013-G2-1	L-12	Unknown
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	7.3	Complete	Tertiary		Gray	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Cortical/Unmodified	40.37	27.02	6.19	4.07	4.41	2.93	6.93	NBP-013-G2-1	L-	Upper Paleolithic
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	15.4	Complete	Secondary		Gray	Other	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Burin			Flat	33.32	49.4	10.05	6.53	10.24	1.61	11.51	NBP-013-G2-1	L-	Upper Paleolithic
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	18.5	Complete	Secondary		Black	Other	Bending	Flake Tool	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Uni-lateral	Cortical/Unmodified	37.95	54.54	9.03	6.56	8.64	9.04	19.91	NBP-013-G2-1	L-	Upper Paleolithic?
Bulgaan Uul	644199	5090118	NBP-013	G2-1	732.3	N/A (Survey, Surface)	4.6	Complete	Tertiary		Light Gray-Blue	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	34.39	19.21	5.14	4.95	5.2	4.54	9.83	NBP-013-G2-1	L-	Upper Paleolithic

Table D.2 (continued). Lithic database list

Table D.2 (continued). Lithic database list

Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	5.7	Complete	Primary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	39.05	18.93	6.64	4.66	6.35	3.45	9.05	NBP-027-21	L-14	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	8.7	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	35.64	23.87	8.4	4.3	8.55	5.29	20.42	NBP-027-21	L-15	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	8.7	Complete	Primary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	37.96	32.95	7.47	5.31	7.85	6.21	10.97	NBP-027-21	L-16	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	8.1	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	35.67	24.04	9.05	8.68	9.46	8.81	22.19	NBP-027-21	L-17	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	4.5	Complete	Primary		Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	28.21	19.73	5.74	4.66				NBP-027-21	L-18	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	8.8	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.09	48.47	7.52	5.5	7.09	2.12	9.35	NBP-027-21	L-19	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	8.5	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	26.75	28.35	7.97	7.6	8.13	6.63	20.73	NBP-027-21	L-	
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	4.4	Complete	Secondary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	23.32	25.47	9.03	4.39	9.45	8.56	20.05	NBP-027-21	L-21	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	5.1	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	27.98	28.61	5.13	44.77	5.23	3.21	11.39	NBP-027-21	L-22	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	5.7	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.27	26.59	6.13	5.93	6.2	5.25	14.63	NBP-027-21	L-23	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	2.2	Complete	Tertiary		Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	20.18	21.24	3.78	3.14				NBP-027-21	L-24	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	3.6	Complete	Tertiary		Black	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	25.14	19.24	7.02	4.99	7.54	7.53	18.59	NBP-027-21	L-25	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	16.9	Complete	Secondary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	33.54	44.66	12.47	6.9	11.61	2.449	6.67	NBP-027-21	L-26	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	6.6	Complete	Secondary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	27	32.01	6.22	3.46	5.69	6.99	25.83	NBP-027-21	L-27	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	10.2	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	13.88	33.56	13.45	6.72	13.26	11.56	27.43	NBP-027-21	L-28	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	12.3	Complete	Primary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	40.99	36.41	9.19	4.62	9.49	12.24	12.72	NBP-027-21	L-29	
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	9	Complete	Secondary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	38.6	27.98	7.39	6.96	8.41	6.96	17.04	NBP-027-21	L-30	Upper Paleolithic?
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	5.9	Complete	Primary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	24.86	29.87	6.11	5.67	6.96	2.03	7.87	NBP-027-21	L-31	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	5.8	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	29.04	19.38	9.82	5	9.6	6.71	13.17	NBP-027-21	L-32	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	8	Complete	Tertiary		Light Gray	Andesite	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.31	32.86	8.43	5.06	7.35	4.32	11.96	NBP-027-21	L-33	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	3.7	Complete	Secondary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	28.68	19.61	4.9	3.78	5.77	4.73	13.93	NBP-027-21	L-34	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	2.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.94	23.88	5.38	3.25	5.22	4.42	10.88	NBP-027-21	L-35	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	3.6	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Complex	31.7	18.01	6.04	3	6.42	6.04	15.17	NBP-027-21	L-36	Upper Paleolithic?
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	6.9	Complete	Tertiary		Gray	Other	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	32.13	20.68	9.02	6.61				NBP-027-21	L-37	
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	7.2	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	39.24	24.33	6.79	5.63	5.16	3.85	9.96	NBP-027-21	L-38	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	5.2	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	29.8	17.41	10.15	6.93	6.73	5.09	10.32	NBP-027-21	L-39	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	2.6	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.46	19.56	5.05	2.72	4.73	4.6	11.91	NBP-027-21	L-40	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	2.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	29.46	13.13	4.95	3.73	4.61	2.35	5.63	NBP-027-21	L-41	Upper Paleolithic
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	5	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	21.97	23.71	9.226	7.64	8.82	4.4	10.78	NBP-027-21	L-42	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	2.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.43	18.07	3.85	2.68	3.3	2.9	10.46	NBP-027-21	L-43	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	2.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	21.42	24.22	3.91	2.83	4.22	3.37	6.68	NBP-027-21	L-44	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	1.8	Complete	Tertiary		Light Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	16.32	19.38	5.2	3.68	5.31	5.14	14.39	NBP-027-21	L-45	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	6.2	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Abraded	35.44	23.15	6.91	4.32	6.78	5.84	13.68	NBP-027-21	L-46	Upper Paleolithic
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	1.9	Complete	Tertiary		Light Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	14.34	21.31	5.3	2.98	5.5	5.48	18.15	NBP-027-21	L-47	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	2.6	Complete	Secondary		Light Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient			Cortical/Unmodified	24.98	18.01	4.61	2.86	4.54	3.89	9.82	NBP-027-21	L-48	Upper Paleolithic?
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	1	Complete	Tertiary		Gray-Blue	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	13.27	18.33	2.89	2.75	2.88	1.61	7.65	NBP-027-21	L-49	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	5	Complete	Tertiary		Black	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	34.17	17.06	8.1	4.28				NBP-027-21	L-50	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	3.7	Complete	Tertiary		Gray-Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	17.56	19.38	9.57	3.89				NBP-027-21	L-51	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	2.6	Complete	Tertiary		White	Chalcedony	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	18.97	149.1	7.51	5.79				NBP-027-21	L-52	Meso/Neolithic
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	1.3	Complete	Tertiary		Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	12.24	14.88	6.61	3.33	6.57	6.55	5.39	NBP-027-21	L-53	Meso/Neolithic
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	0.4	Complete	Tertiary		Yellow-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				9.92	5.65	3.05	2.69				NBP-027-21	L-54	Meso/Neolithic
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	0.2	Broken	Tertiary		Light Red (Pink)	Chalcedony	Conchoidal	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Bladelet			Flat	8.61	5.76	1.51	1.25	1.39	1.19	2.54	NBP-027-21	L-55	Meso/Neolithic
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	0.2	Complete	Tertiary		Yellow-Brown	Chert	Conchoidal	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Bladelet	Pressure Flaking	Unimarginal, Unilateral	Flat	14.04	6.41	1.7	1.24	1.63	0.4	4.05	NBP-027-21	L-56	Meso/Neolithic
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	14.9	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Complex	34.47	41.12	7.21	7.04	6.16	6.77	21.92	NBP-027-21	L-57	Unknown
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	12.9	Broken	Tertiary		Orange	Rhyolite	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	32.87	31.52	9.65	8.99	9.26	7.24	22.05	NBP-027-21	L-58	Upper Paleolithic
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	14.8	Complete	Tertiary		Gray-Blue	Other	Compression	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Scraper		Bi-Marginal, Bi-Lateral	Flat	36.44	31.99	10.92	5.44	1.035	5.92	19.57	NBP-027-21	L-59	Upper Paleolithic?
Bulgaan Uul	639647	5076826	NBP-027	21	578.5	N/A (Survey, Surface)	19.2	Complete	Tertiary		Gray-Blue	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Complex	4558	33.82	11.18	6.95	9.33	9	18.94	NBP-027-21	L-60	Upper Paleolithic?
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	12.8	Complete	Tertiary		Black	Other	N/A	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	45.3	24.4	13.26	8.59	8.78	8.5	7.02	NBP-027-92	L-1	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	73.8	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Flat	78.86	48.56	20.08	11.43	11.27	8.29	25.07	NBP-027-92	L-2	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	15.7	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	50.03	30.6	10.77	7.2	10.13	5.68	13.4	NBP-027-92	L-3	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	30.8	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	42.29	47.98	11I34	6.83	11.92	9.88	20.69	NBP-027-92	L-4	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	11.9	Complete	Tertiary		Gray	Other	Conchoidal		Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	44.45	35.27	8.02	6.24	5.05	3.27	6.16	NBP-027-92	L-5	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	13.2	Complete	Tertiary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	38.78	27.03	10.53	10.06	10.54	8.77	25.07	NBP-027-92	L-6	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	10.5	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Flat	35.76	28.71	6.9	5.67	5.89	4.53	12.89	NBP-027-92	L-7	Upper Paleolithic?
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	7.8	Complete	Tertiary		Light Green	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.04	29.34	7.99	4.75	7.87	5.51	10.14	NBP-027-92	L-8	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	24.5	Complete	Primary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	41.36	42.32	12.05	10.56	8.66	6.25	11.83	NBP-027-92	L-9	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	27.6	Complete	Primary		Gray-Blue	Other	N/A	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	45.83	14.16	13.81	10.93	9.17	8.18	29.3	NBP-027-92	L-10	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	22.4	Complete	Secondary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	58.45	27.02	9.65	6.37	7.91	5.78	8.44	NBP-027-92	L-11	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	14.7	Complete	Secondary		Gray-Blue	Other	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	30.91	31.73	11.3	6.43				NBP-027-92	L-12	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	5.1	Complete	Tertiary		Black	Andesite	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Flat	33.35	19.5	5.19	4.82	4.99	3.7	18.12	NBP-027-92	L-13	Upper Paleolithic
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	5.3	Complete	Secondary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	45.57	14.9	7.41	6.14	5.62	3.68	5.14	NBP-027-92	L-13	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	11.6	Complete	Tertiary		Black	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool/Flake Blank			Flat	55.78	18.71	8.5	6.65	8.77	6.92	13.09	NBP-027-92	L-14	Upper Paleolithic
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	7.2	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	40.38	144.97	8.31	6.26	8.64	5.97	13.35	NBP-027-92	L-15	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	3.9	Complete	Tertiary		Black	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	20.05	26.02	6.63	4.3	6.08	5.59	19.19	NBP-027-92	L-16	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	2.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	20.97	24.08	4.22	2.62	4.42	3.48	10.84	NBP-027-92	L-17	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	3	Complete	Primary		Gray	Other	N/A	Flake Shatter	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	22.54	25.72	5.4	2.97				NBP-027-92	L-18	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	2.2	Complete	Tertiary		Light Green	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.65	21.63	5.78	2.93	5.5	3.07	6.83	NBP-027-92	L-19	Meso/Neolithic
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	1.2	Broken	Tertiary	Distal	Black	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	12.65	16.84	3.21	2.26				NBP-027-92	L-20	Unknown
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	0.6	Complete	Secondary		Red-Brown	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	14.8	7.3	4.17	3.81				NBP-027-92	L-21	Meso/Neolithic
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	0.5	Complete	Tertiary		Red-Purple	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	9.43	9.26	2.97	2.91				NBP-027-92	L-22	Meso/Neolithic
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	0.4	Complete	Tertiary		Red-Purple	Chert	Compression	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Bladelet	Pressure Flaking	Unimarginal, Unilateral		15.61	8.35	3.35	2.23	2.9	1.48	2.86	NBP-027-92	L-23	Meso/Neolithic
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	0.1	Complete	Tertiary		White	Chalcedony	N/A	Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	11.33	5.77	1.55	1.21				NBP-027-92	L-24	Meso/Neolithic
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	50.3	Complete	Tertiary		Gray	Other	Bi-Polar	Flake Tool	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Bi-Marginal, Bi-Lateral	Flat	94.57	35.07	16	8.49	13.29	10.56	174	NBP-027-92	L-25	Upper Paleolithic
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	23.7	Complete	Tertiary		Black	Other	Bi-Polar	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Flat	63.55	27.9	14.48	8.47	14	5.88	17.71	NBP-027-92	L-26	Upper Paleolithic
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	30.7	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Denticulate		Bi-Marginal, Bi-Lateral	Abraded	53.61	37.23	15.73	10.35	12.82	6.83	11.74	NBP-027-92	L-27	Upper Paleolithic?
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	52	Complete	Secondary		Light Green-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	End/Thumbnail Scraper		Unimarginal, Unilateral	Cortical/Unmodified	74.53	37.59	18.99	11.74	19.34	12.09	16.09	NBP-	L-28	Upper Paleolithic?
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	17.3	Complete	Tertiary		Black	Other	Conchoidal	Flake Tool	Medium	Hinge	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Abraded	51.01	30.63	9.14	7.31	7.31	4.08	13.33	NBP-027-92	L-29	Upper Paleolithic
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	20	Broken	Tertiary		Black	Other	Conchoidal	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Complex	36.9	36.88	11.91	9.18	11.77	10.49	20.83	NBP-027-92	L-30	Upper Paleolithic
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	13.5	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Complex	50.15	25.39	8.88	5.06	7.93	5.76	15.69	NBP-027-92	L-31	Upper Paleolithic
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	33.9	Complete	Primary		Gray-Blue	Other	Bending	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient			Flat	49.6	44.81	11.86	8.23	8.95	4.5	12.2	NBP-027-92	L-32	Upper Paleolithic?
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	21	Complete	Secondary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	Scraper			Flat	33.42	45.05	13.27	10.49	14.34	9.36	18.68	NBP-027-92	L-33	Upper Paleolithic?
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	10.4	Complete	Tertiary		Gray-Blue	Other	N/A	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	End/Thumbnail Scraper		Unimarginal, Unilateral	Unknown	35.09	24.27	10.12	5.8	10.19			NBP-027-92	L-34	Meso/Neolithic
Bulgaan Uul	640276	5079102	NBP-027	92	645	N/A (Survey, Surface)	46.3	Complete	Secondary		Gray-Blue	Other	N/A	Core	Medium Fine	N/A, Other	Core Exhausted	Multidirectional	Core			Cortical/Unmodified	46.57	44.28	23.41	15.9		11.36	19.7	NBP-027-92	L-35	Upper Paleolithic?
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	76.9	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	73.6	67.07	12.96	11.54	12.35	11.48	31.49	NBP-027-7	L-1	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	76.6	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	63.27	37.07	23.34	18.39	23.03	20.46	19.22	NBP-027-7	L-2	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	9.1	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	38.36	27.58	7.58	6.06	8.75	8.5	12.3	NBP-027-7	L-3	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	31.9	Complete	Tertiary		Yellow-Brown	Andesite	Bending	Flake (Proximal, Whole)	Medium	Step	Levallois Flaked?	N/A (if not a core)	N/A (if not a tool)			Flat	46.09	50.89	12.32	8.36	12.74	7.72	14.98	NBP-027-7	L-4	Middle Paleolithic?
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	18	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	41.62	36.41	12.05	9.24	12.4	9.48	25.84	NBP-027-7	L-5	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	14.3	Complete	Primary		Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	47.44	27.6	8.51	7.42				NBP-027-7	L-6	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	7.4	Complete	Primary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	31.26	26.3	8.54	6.64	6.45	2.66	15.75	NBP-027-7	L-7	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	2.6	Broken	Tertiary	Distal	Black	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	23.7	16.6	5.77	3				NBP-027-7	L-8	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	10	Complete	Primary		Black	Other	Compression	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.54	34.21	10.12	5.22	10.32	7.2	15.91	NBP-027-7	L-9	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	5.6	Complete	Secondary		Light Gray-Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	35.24	17.06	9.5	6.32				NBP-027-7	L-10	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	53.9	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	44.23	53.73	30.6	22.1	24.71	20.22	32.87	NBP-027-7	L-11	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	1.5	Complete	Primary		Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	24.93	14.47	4.07	3.93				NBP-027-7	L-12	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	19.9	Complete	Secondary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	29.84	51.92	12.45	7.42	9.12	6.46	13.15	NBP-027-7	L-13	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	18.6	Complete	Primary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	46.31	30.8	9.09	7.5	9.98	7.87	18.1	NBP-027-7	L-14	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	37.6	Complete	Secondary		Gray-Blue	Other	Bi-Polar	Flake (Proximal, Whole)	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	40.98	43.47	16.11	13.46	14.39	12.9	39.47	NBP-027-7	L-15	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	24.9	Complete	Secondary		Gray	Other	N/A	Flake Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	46.02	40.32	11.55	9.63				NBP-027-7	L-16	Unknown
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	12.2	Complete	Tertiary		Gray	Other	Bending	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Complex	45.62	23.92	9.82	8.09	7.7	5.56	12.04	NBP-027-7	L-17	Upper Paleolithic

Table D.2 (continued). Lithic database list

Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	17.5	Complete	Primary		Red-Brown	Chert	Conchoidal	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Scraper		Unimarginal, Bi-lateral	Complex	37.66	35.69	11.25	10.72	11.13	8.37	29.31	NBP-027-7	L-18	Meso/Neolithic -
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	47.4	Complete	Tertiary		Gray-Brown	Andesite	Conchoidal	Flake Tool	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	End/Thumbnail Scraper		Unimarginal, Unilateral	Abraded	60.67	45.38	13.73	8.57	10.77	7.51	12.78	NBP-027-7	L-19	Upper Paleolithic?
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	29.8	Complete	Primary		Gray	Other	Conchoidal	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	End/Thumbnail Scraper		Unimarginal, Bi-lateral	Abraded	36.76	45.01	15.7	11.64	16.26	6.99	14.91	NBP-027-7	L-20	Meso/Neolithic -
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	36.7	Complete	Tertiary		Gray-Blue	Other	Bending	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Abraded	63.5	28.38	20.87	14.45	19.36	18.15	26.09	NBP-027-7	L-21	Upper Paleolithic
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	68.2	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake Tool	Medium	Hinge	N/A (not a core)	N/A (if not a core)	Denticulate		Bi-Marginal, Bi-Lateral	Flat	73.52	46.26	18.11	13.05	18.37	17.46	23.71	NBP-027-7	L-22	Upper Paleolithic?
Bulgaan Uul	640042	5077731	NBP-027	7	1200.3	N/A (Survey, Surface)	577.2	Complete	Secondary		Gray	Other	N/A	Core	Fine	N/A, Other	Core	Multidirectional	Core			Unknown	130.7	74.4	63.74	47.89				NBP-027-7	L-23	Middle Paleolithic?
Bulgaan Uul	639939	5078277	NBP-027	85	49.1	N/A (Survey, Surface)	49.1	Complete	Tertiary		Black	Other	Conchoidal	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Flat	98.6	33.48	12.1	7.7	10.79	8.94	20.07	NBP- 027-85	L-1	Upper Paleolithic
Bulgaan Uul	640314	5079338	NBP-027	93	707.6	N/A (Survey, Surface)	36.3	Complete	Primary		Gray-Blue	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	53.74	51.07	11.68	6.91				NBP- 027-93	L-1	Unknown
Bulgaan Uul	640314	5079338	NBP-027	93	707.6	N/A (Survey, Surface)	47.6	Complete	Secondary		Black	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Denticulate		Bi-Marginal, Uni-lateral	Flat	55.4	45.4	12.98	10.95	13.25	13.15	24.62	NBP-027-93	L-2	Upper Paleolithic
Bulgaan Uul	640314	5079338	NBP-027	93	707.6	N/A (Survey, Surface)	623.5	Complete	Tertiary		Gray	Andesite	N/A	Flake Tool	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	Axe	Bi-Polar Technology		Unknown	131.2	84.29	53.2	37.01				NBP- 027-93	L-3	Middle Paleolithic
Bulgaan Uul	639589	5076926	NBP-013	75	8.6	N/A (Survey, Surface)	8.6	Complete	Tertiary		Gray	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.81	24.47	8.84	6.9		6.04	20.37	NBP-027-75	L-1	Unknown
Bulgaan Uul	639931	5077091	NBP-027	30	53.9	N/A (Survey, Surface)	9.5	Complete	Tertiary		Black	Chert	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	35.19	21.44	15.13	13.49				NBP-027-30	L-1	Meso/Neolithic -
Bulgaan Uul	639931	5077091	NBP-027	30	53.9	N/A (Survey, Surface)	15.8	Complete	Primary		Gray	Rhyolite	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Bi-Marginal, Uni-lateral	[illegible]	31.45	39.82	11.72	7.59	10.54	9.441	22.08	NBP-027-30	L-2	Upper Paleolithic?
Bulgaan Uul	639931	5077091	NBP-027	30	53.9	N/A (Survey, Surface)	0.3	Complete	Tertiary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	14.43	9.69	4.45	3.97	4.24	3.24	4.35	NBP-027-30	L-3	Meso/Neolithic -
Bulgaan Uul	639931	5077091	NBP-027	30	53.9	N/A (Survey, Surface)	21.7	Complete	Tertiary		Black	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Abraded	50.43	29.49	13.61	6.85	13.63	8.29	19.14	NBP-027-30	L-4	Upper Paleolithic
Bulgaan Uul	639931	5077091	NBP-027	30	53.9	N/A (Survey, Surface)	4.3	Complete	Secondary		Black	Other	Conchoidal	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	End/Thumbnail Scraper		Bi-Marginal, Bi-Lateral	Flat	27.06	20.27	6.34	4.74	4.65	4.36	12.79	NBP-027-30	L-5	Meso/Neolithic -
Bulgaan Uul	640064	5078399	NBP-027	86	153.3	N/A (Survey, Surface)	37.7	Complete	Secondary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	43.41	66.24	12.41	8.28	8.29	3.26	15.9	NBP- 027-86	L-	Upper Paleolithic?
Bulgaan Uul	640064	5078399	NBP-027	86	153.3	N/A (Survey, Surface)	115.7	Complete	Secondary		Black	Other	Conchoidal	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Axe			Flat	88.27	52.02	24.49	17.53	15.56	11	21.09	NBP- 027-86	L-2	Upper Paleolithic?
Bulgaan Uul	640117	5078438	NBP-027	87	57.6	N/A (Survey, Surface)	22.7	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Abraded	38.09	58.72	9.27	4.55	8.33	7.72	17.49	NBP-027-87	L-1	Unknown
Bulgaan Uul	640117	5078438	NBP-027	87	57.6	N/A (Survey, Surface)	16.6	Complete	Primary		Dark Gray	Andesite	Compression	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	35.88	22.51	14.38	11.02	10.88	7.88	12.68	NBP-027-87	L-2	Unknown
Bulgaan Uul	640117	5078438	NBP-027	87	57.6	N/A (Survey, Surface)	17.3	Complete	Secondary		Gray	Other	Compression	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	26.23	400.09	16.32	8.61	12.49	11.02	17.72	NBP-027-87	L-3	Unknown
Bulgaan Uul	639582	5076885	NBP-027	22	132.9	N/A (Survey, Surface)	132.9	Complete	Tertiary		Gray	Other	N/A	Core	Medium Fine	N/A, Other	Levallois Flaked?	Multidirectional	Core			Unknown	69.51	50.81	30.9	22.4				NBP- 027-22	L-1	Middle Paleolithic?
Bulgaan Uul	639622	5076852	NBP-027	23	443.4	N/A (Survey, Surface)	443.4	Complete	Primary		Gray	Andesite	N/A	Core	Medium Coarse	N/A, Other	Core	Multidirectional	Core			Unknown	110	79.93	50.85	27.11				NBP- 027-23	L-1	Upper Paleolithic?
Bulgaan Uul	643975	5088064	NBP-013	26		N/A (Survey, Surface)	39.9	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	52.42	41.31	16.91	4.54	12.43	7.38	22.33	NBP-013-26	L-1	Unknown
Shataar Chuluu	629874	5140750	NBP-015	Horse Mound 2	23.9	Excavation	23.9	Complete	Primary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	51.27	34.16	12.53	7.89	7.45	4.99	14.78	NBP-013-HM2	L-	Neolithic +
Bulgaan Uul	639641	5076780	NBP-027	xx-Khar Sair	5.6	N/A (Survey, Surface)	5.6	Complete	Core		Red-Brown	Chert	N/A	Core	Fine	N/A, Other	Blade Core	Unidirectional	Core			Complex	26.02	18.25	11.41	8.73		17.69	10.94	NBP-027-Khar Sair		Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	87	Complete	Primary		Gray-Brown	Other	N/A	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	67.07	56.52	25.6	11.94	27.25	28.1	47.69	NBP-001-15	L-1	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	61.10	Complete	Secondary		Gray-Brown	Rhyolite	Compression	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	60.21	48.12	20.76	12.13	14.71	13.47	23.92	NBP-001-15	L-2	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	13.1	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	42.74	33.71	10.18	7.67	8.23	7.98	23.03	NBP-001-15	L-3	Upper Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	15.6	Complete	Primary		Black	Other	Compression	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.31	38.17	7.67	7.26	7.8	7.52	34.5	NBP-001-15	L-4	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	35.3	Complete	Primary		Light Brown	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				36.84	46.33	18.42	14.79	18.16	11.09	19.54	NBP-001-15	L-5	Upper Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	33.8	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	55.02	39.89	15.07	9.94	15.83	11.98	30.73	NBP-001-15	L-6	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	12.9	Complete	Primary		Gray-Blue	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.94	30.28	9	5.77	8.77	8.69	22.36	NBP-001-15	L-7	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	28.9	Complete	Secondary		Yellow-Brown	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	49.99	35.46	12.91	9.62	11.79	7.42	19.89	NBP-001-15	L-8	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	15.1	Complete	Secondary		Light Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	32.57	43.89	10.99	8.71	8.47	8.39	20.96	NBP-001-15	L-9	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	14.8	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	28.93	38.9	10.24	8.74	11.1	6.21	18.95	NBP-001-15	L-10	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	31.2	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	40.06	57	14.02	10.48	6.99	5.47	10.9	NBP-001-15	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	19.9	Complete	Primary		Light Brown	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	30.35	54.07	7.28	6.85	7.36	2.71	19.14	NBP-001-15	L-12	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	10.1	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				39.3	19.31	12.46	7.92	8.28	5	5.62	NBP-001-15	L-13	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	20.6	Complete	Primary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Core Trimming Element (CTE)			64.32	19.89	112.64	9.37	12.79	7.35	12.36	NBP-001-15	L-14	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	15.3	Complete	Tertiary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.24	45.19	8.15	8.03	7.7	7.38	16.97	NBP-001-15	L-15	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	12.3	Complete	Tertiary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	54.79	22.8	9.54	6.28	9.54	3.62	6.23	NBP-001-15	L-16	Upper Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	14.2	Complete	Secondary		Yellow-Brown	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	43.53	24.64	11.32	9.27	11.6	9.79	16.65	NBP-001-15	L-17	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	13.4	Complete	Secondary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	20.62	43.2	10.7	8.12	10.84	9.71	18.53	NBP-001-15	L-18	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	26.1	Complete	Primary		Gray-Brown	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	61.42	30.64	12.85	10.01	16.66	21.28	30.19	NBP-001-15	L-19	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	21.6	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	24.69	56.94	13.69	10.61	13.45	9.26	24.29	NBP-001-15	L-20	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	8.2	Complete	Secondary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	22.25	36.23	88.27	4.74	6.48	8.6	13.36	NBP-001-15	L-21	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	15.3	Complete	Secondary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	33.82	31.99	12.47	12.11	9.55	8.95	25.78	NBP-001-15	L-22	Upper Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	22.9	Complete	Primary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	41.03	17.39	18.12	11.27				NBP-001-15	L-23	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	13.7	Complete	Primary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.81	38.99	11.61	6.74	11.37	5.13	23.37	NBP-001-15	L-24	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	8.3	Broken	Tertiary	Distal	Black	Andesite	N/A	Flake Shatter	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	22.36	44.66	6.79	7.13				NBP-001-15	L-25	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4.8	Complete	Tertiary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.46	30.59	4.88	4.8	4.45	2.22	11.26	NBP-001-15	L-26	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4	Complete	Secondary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	[illegible]	25.37	19.16	7.73	4.53	4.98	3.32	8.42	NBP-001-15	L-27	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	11.3	Complete	Secondary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	28.13	40.58	9.84	5.24	10.26	9.31	19.99	NBP-001-15	L-28	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4.8	Complete	Tertiary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.03	43.11	5.45	5.09	4.03	2.59	16.32	NBP-001-15	L-29	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	9.8	Complete	Secondary		Light Green	Other	Conchoidal	Flake Tool	Medium	Hinge	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	26.2	49.13	5.84	2.58	4.52	2.97	12.84	NBP-001-15	L-30	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	14.2	Complete	Secondary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	41.13	28.03	10	8.11	9.78	11.17	24.6	NBP-001-15	L-31	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	13.7	Complete	Secondary		Yellow-Brown	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	39.16	29.67	12.36	6.96	9.22	8.81	21.7	NBP-001-15	L-32	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	17.4	Complete	Secondary		Gray-Brown	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	33.4	29.42	9.1	9.02	9.22	9.91	29.06	NBP-001-15	L-33	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	8.2	Complete	Secondary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	26.93	28.49	7.03	5.54	5.79	6.18	11.65	NBP-001-15	L-34	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	11.2	Complete	Secondary		Light Brown	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	33.05	34.03	7.74	7.14	7.37	2.96	7.24	NBP-001-15	L-35	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	10.8	Complete	Secondary		Gray-Blue	Other	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	33.23	16.8	14.9	0.49				NBP-001-15	L-36	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	17.9	Complete	Secondary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	35.04	40.97	11.09	7.8	7.34	6.62	18.53	NBP-001-15	L-37	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	13.9	Complete	Secondary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	35.2	33.69	11.01	6.31	11.93	11.59	26.26	NBP-001-15	L-38	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	9.7	Complete	Secondary		Yellow-Brown	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	33.9	35.26	9.87	5.2	10.77	11.3	16.58	NBP-001-15	L-39	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	7.7	Complete	Tertiary		Black	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Complex	336.66	29.75	6.47	4.1	6.51	3.37	19.21	NBP-001-15	L-40	Upper Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	3.4	Broken	Tertiary		Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	18.37	31.52	4.4	3.7				NBP-001-15	L-41	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	11.7	Complete	Primary		Light Green-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.23	31.01	8.74	8.71	8.85	7.41	15.01	NBP-001-15	L-42	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	8.9	Complete	Tertiary		Gray-Brown	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	33.92	30.24	6.56	5.44	7.27	6.27	24.27	NBP-001-15	L-43	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	5.9	Complete	Secondary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.74	23.63	7.24	6.4	5.75	3.63	14.66	NBP-001-15	L-44	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4.8	Complete	Tertiary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	17.13	30.94	7.23	6.42	6.03	4.52	14.48	NBP-001-15	L-45	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	7.6	Complete	Tertiary		Blue-black	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	38.56	22.3	7.98	4.92	8.7	7.77	17.14	NBP-001-15	L-46	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	10.3	Complete	Secondary		Black	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	35.89	30.95	6.49	5.75	5.54	3.7	10.55	NBP-001-15	L-47	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1.60	Complete	Tertiary		Light Green-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	37.58	24.59	14.47	6	13.4	4	14.74	NBP-001-15	L-48	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4.2	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	25.08	21.19	6.16	4.25	6.02	5.17	15.39	NBP-001-15	L-49	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	3.6	Complete	Tertiary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	39.35	15.03	5.51	6.23	5.69	4.28	10.47	NBP-001-15	L-50	Upper Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4.3	Complete	Tertiary		Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	32.63	15.3	6.96	4.88				NBP-001-15	L-51	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	13.8	Complete	Secondary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	34.7	27.83	11.32	10.42				NBP-001-15	L-52	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	3.2	Complete	Tertiary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	29	18.69	6.66	3.09	6.7	6.34	12.3	NBP-001-15	L-53	Meso/Neolithic -
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4.2	Complete	Tertiary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	22.76	22.3	6.67	5.12	4.41	3.15	8.11	NBP-001-15	L-54	Meso/Neolithic -
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	5.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	25.61	23.63	8.51	3	8.15	2.81	7.38	NBP-001-15	L-55	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4.8	Complete	Secondary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	22.8	27.17	7.72	4.57	7.77	6.63	12.36	NBP-001-15	L-56	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4.4	Complete	Tertiary		Gray-Blue	Andesite	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	35.81	22.37	6.05	3.75				NBP-001-15	L-57	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	2.5	Complete	Secondary		Light Green-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.7	21.05	3.89	2.33	3.64	2.22	6.29	NBP-001-15	L-58	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	2.2	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	22.8	19.65	3.96	3.41	3.87	3.63	14.2	NBP-001-15	L-59	Upper Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	2.8	Broken	Tertiary	Distal	Gray-Brown	Andesite	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	24.22	21.3	5.15	3.96				NBP-001-15	L-60	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	3.5	Complete	Tertiary		Light Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.04	13.1	7.1	3.71	6.09	3.2	4.62	NBP-001-15	L-61	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	3.9	Complete	Secondary		Gray-Brown	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.17	35.36	4.69	2.97	4.03	3.12	14.61	NBP-001-15	L-62	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	8.4	Broken	Secondary	Distal	Yellow-Brown	Other	Bi-Polar	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	37.56	21.44	8.77	6.03	7.63	6.17	22.53	NBP-001-15	L-63	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	11.1	Complete	Tertiary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	40.65	24.66	9	5.66	7.74	4.82	24.03	NBP-001-15	L-64	Upper Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	7.2	Complete	Tertiary		Yellow-Brown	Rhyolite	Conchoidal	Flake Shatter	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	24.84	35.55	7.24	4	7.21			NBP-001-15	L-65	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	5.7	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	26.99	23.04	7.26	4.46	7.02	6.82	12.77	NBP-001-15	L-66	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	3.4	Complete	Secondary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	34.03	19.96	4.52	3.27	5	3.96	8.8	NBP-001-15	L-67	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4	Complete	Tertiary		Gray-Blue	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.52	21.72	4.13	3.28	4.8	3.19	11.19	NBP-001-15	L-68	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1.3	Complete	Tertiary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	15.06	19.5	3.96	2.43	4.06	3.1	9.02	NBP-001-15	L-69	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1.8	Broken	Tertiary	Middle	Gray	Other	N/A	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.42	18.73	4.15	3.92				NBP-001-15	L-70	Upper Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	15	Complete	Secondary		Gray	Other	Bi-Polar	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	30.82	29.66	12.26	9.08	9.06	8.63	26.33	NBP-001-15	L-71	Upper Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	15	Complete	Primary		Black	Other	Conchoidal	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	[illegible]	29.94	44	15.46	7.59	14.77	17.03	21.13	NBP-001-15	L-72	Upper Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	3.8	Complete	Tertiary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	35.27	19.17	5.18	4.77	5.04	2.95	8.99	NBP-001-15	L-73	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	2.9	Complete	Secondary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.36	13.56	6.47	3.93	6.1	6.08	12.23	NBP-001-15	L-74	Unknown

Table D.2 (continued). Lithic database list

Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	9	Complete	Tertiary		Yellow-Brown	Rhyolite	Bending	Flake (Proximal, Whole)	Medium	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.18	32.25	9.34	7.55	6.52	5.15	12.72	NBP-001-15	L-75	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	2	Complete	Tertiary		Light Blue	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	14.85	23.57	5.3	2.56	3.68	1.99	1079	NBP-001-15	L-76	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.33	18.03	8.72	8.03	7.91	4.3	17.34	NBP-001-15	L-77	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	2	Broken	Tertiary	Distal	Gray	Other	Compression	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	17.42	19.82	5.33	4.04				NBP-001-15	L-78	Meso/Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1.4	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	15.95	16.51	5.82	2.43	5.58	7.11	11.85	NBP-001-15	L-79	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4	Complete	Tertiary		Yellow-Brown	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.79	22.86	6.54	5.04	6	4.37	14.39	NBP-001-15	L-80	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1.2	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	14.78	22.49	2.89	2.08	2.72	2.47	8.53	NBP-001-15	L-81	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	16.09	18.37	3.71	2.13				NBP-001-15	L-82	Meso/Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1.7	Complete	Secondary		Gray	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	19.42	17.9	4.93	3.74				NBP-001-15	L-83	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.75	9.42	4.92	3.11	2.49	1.36	4.81	NBP-001-15	L-84	Meso/Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1.9	Complete	Tertiary		Gray	Andesite	Bending	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	17.38	23.67	3.6	3.58	4.21	3.84	12.28	NBP-001-15	L-85	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	25.55	9.49	4.89	2.84	3.95	6.69	9.35	NBP-001-15	L-86	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	0.7	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	11.67	16.74	2.61	1.84				NBP-001-15	L-87	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	10.6	Broken	Tertiary	Distal	Gray-Brown	Other	N/A	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Unknown	29.99	37.41	6.35	5.26				NBP-001-15	L-88	Upper Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1.1	Complete	Primary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	20.31	12.35	3.58	2.52				NBP-001-15	L-89	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1.2	Broken	Tertiary		Black	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	18.21	14.45	4.49	3.26				NBP-001-15	L-90	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	2.1	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.26	18.11	3.81	3.19	4.18	2.07	5.81	NBP-001-15	L-92	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1.6	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	25.78	13.3	4.16	3.95	3.77	1.95	7.44	NBP-001-15	L-93	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4.6	Complete	Primary		Yellow-Brown	Rhyolite	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	35.57	18.45	6.77	5.04	5.79	7.46	14.64	NBP-001-15	L-94	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	6.3	Complete	Secondary		Gray-Blue	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	28.2	21.57	10.78	8.29				NBP-001-15	L-91	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	2.4	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	14.36	25.32	7.45	4.84	7.07	6.63	21.73	NBP-001-15	L-95	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	3.5	Complete	Tertiary		Gray-Brown	Other	N/A	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	23.72	20.21	6.13	5.85	6.77	6.56	16.37	NBP-001-15	L-96	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	7.1	Complete	Secondary		Light Green	Other		Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	31.3	22.16	7.29	6.52	7.29	7.94	13.89	NBP-001-15	L-97	Upper Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	2.2	Complete	Tertiary		Light Green	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	19.32	12.18	6.06	5.45				NBP-001-15	L-98	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1.7	Complete	Secondary		Black	Other	N/A	Non-Flake Debitage	Medium	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	18.63	14.15	6.16	4.36				NBP-001-15	L-99	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4.5	Complete	Tertiary		Gray	Chert	Bending	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.21	20.54	7.68	6.58	5.58	5.388	13.23	NBP-001-15	L-10	Meso/Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	0.3	Complete	Tertiary		Light Gray	Other	Bending	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	15.06	10.72	1.64	1.5	1.4	0.73	3.25	NBP-001-15	L-10	Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	0.6	Complete	Tertiary		Gray-Blue	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	16.3	9.04	3.61	3.02				NBP-001-15	L-10	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	10.8	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Scraper		Bi-Marginal, Bi-Lateral	Flat	27.97	34.6	9.81	6.32	9.87	4.56	15.84	NBP-001-15	L-10	Middle Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	39.7	Complete	Secondary		Black	Other	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Scraper		Bi-Marginal, Bi-Lateral	Flat	46	55.97	12.54	9.8	11.3	6.58	15.63	NBP-001-15	L-10	Middle Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	17.9	Complete	Primary		Gray-Blue	Other	Compression	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Denticulate		Bi-Marginal, Unilateral	Flat	56.04	22.71	12.58	9.34	12.55	11.91	7.38	NBP-001-15	L-105	
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	17.9	Complete	Secondary		Light Green	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Flat	56.37	26.89	8.37	7.81	9.14	3.16	23.54	NBP-001-15	L-10	Upper Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	15.4	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	52.86	23.65	12.07	10.3	11.32	10.75	10.34	NBP-001-15	L-10	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	9.4	Complete	Tertiary		Gray-Brown	Andesite	Conchoidal	Flake Tool	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	35.83	27.29	6.47	5.1	7.9	9.37	17.3	NBP-001-15	L-10	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	1.6	Complete	Tertiary		Black	Other	Bending	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Bladelet	Hafted	Unimarginal, Unilateral	Flat	31.6	13.2	3.21	3.01	2.9	2.04	6.4	NBP-001-15	L-10	Upper Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4	Complete	Tertiary		Light Green	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Complex	35.44	20.51	4.81	4	5.56	4.41	15.76	NBP-001-15	L-11	Upper Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	5.2	Broken	Tertiary	Distal	Gray	Other	Compression	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	40.89	16.09	6.19	4.97	6.8			NBP-001-15	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	10.3	Complete	Secondary		Black	Rhyolite	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	34.14	28.76	12.88	10.21	10.67	10.37	21.01	NBP-001-15	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	12.4	Broken	Primary	Distal	Gray-Blue	Other	N/A	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient			Flat	38.62	29.47	8.49	6.89	8.99	8.17	22.03	NBP-001-15	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	3.3	Complete	Tertiary		Gray-Brown	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool/Flake Blank			Flat	34.01	16.66	5.84	4.65	3.96	1.8	5.81	NBP-001-15	L-11	Upper Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	4.3	Complete	Tertiary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	34.98	19.03	5.93	5.28	7.24	6.03	17.29	NBP-001-15	L-11	Upper Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	2.8	Complete	Tertiary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.99	12.31	8.08	5.07	5.22	4.2	6.24	NBP-001-15	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	15	Complete	Tertiary		Gray	Rhyolite	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	46.1	29.54	12.53	9.13	8.41	4.28	11.7	NBP-001-15	L-11	Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	16.8	Complete	Tertiary		Gray-Blue	Other	Bending	Flake T\	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Complex	51.87	31.54	8.61	6.6	9.87	5.96	27.21	NBP-001-15	L-11	Upper Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	14.5	Complete	Tertiary		Light Gray	Other	N/A	Core	Medium Fine	N/A, Other	Blade Core Fragment	Unidirectional	Core			Complex	31.73	26.38	16.95	12.75		17.39	24.16	NBP-001-15	L-11	Meso/Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	6.3	Complete	Tertiary		Light Green-Blue	Other	Bending	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Point	Hafted	Unimarginal, Bi-lateral	Flat	31.66	31.61	5.88	4.07	5.22	4.41	22.63	NBP-001-15	L-12	Meso/Neolithic +
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	3.2	Complete	Tertiary		Light Blue	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	33.97	15.74	4.24	4.04	4.04	3.41	9.51	NBP-001-15	L-12	Upper Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	7.7	Complete	Tertiary		Gray-Blue	Other	Bi-Polar	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Blade-Point		Bi-Marginal, Bi-Lateral	Flat	42.83	24	7.33	6.89	3.98	1.6	4.66	NBP-001-15	L-12	Upper Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	5.9	Complete	Tertiary		Light Blue	Other	Bi-Polar	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Complex	2.58	20.62	6.29	4.3	5.81	5.99	11.97	NBP-001-15	L-12	Upper Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	3.2	Complete	Tertiary		Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29	21.26	3.55	3.06	3.27	2.66	6.19	NBP-001-15	L-12	Middle Paleolithic?
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	77.1	Complete	Secondary		Light Gray-Blue	Other	N/A	Core	Medium Fine	N/A, Other	Levallois	Multidirectional	Core			Unknown	49.56	53.3	26.64	18.08				NBP-001-15	L-12	Middle Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	N/A (Survey, Surface)	5.4	Complete	Tertiary		Gray-Brown	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	34.87	18.67	7.02	5.74	4.046.58	5.56	14.24	NBP-001-15	L-12	Upper Paleolithic
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	Dogleash	11.6	Complete	Primary		Yellow-Brown	Rhyolite	N/A	Core	Medium Coarse	N/A, Other	Blade Core Fragment	Unidirectional	Core			Flat	32.21	24.97	10.81	5.07	10.86	10.57	20.5	NBP-001-15-DL1		Unknown
Shataar Chuluu	637791	5138226	NBP-001	15	1438.2	Dogleash	0.5	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	16.42	10.24	1.91	1.36	2.29	1.55	5.21	NBP-001-15-DL1		Upper Paleolithic?
Shataar Chuluu	633249	5139705	NBP-006	ISO1	26.2	N/A (Survey, Surface)	26.2	Complete	Secondary		Gray-Blue	Other	N/A	Core	Medium Fine	N/A, Other	Core Fragment	Unidirectional	Core			Flat	38.04	4.63	18.26	12.36		19.32	43.39	NBP-006-ISO1	L-1	Upper Paleolithic?
Shataar Chuluu	637612	5138060	NBP-001	15	33.6	N/A (Survey, Surface)	33.6	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Denticulate		Bi-Marginal, Unilateral	Complex	65.78	39.46	12.22	7.87	12.68	8.45	19.01	NBP-001-15	L-12	Upper Paleolithic
Shataar Chuluu	638483	5132115	NBP-010	50	6.6	N/A (Survey, Surface)	6.6	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	34.98	31.02	5.13	3.56	5.22	4.45	23.09	NBP-010-50	L-1	Unknown
Shataar Chuluu	633381	5140737	NBP-008	ISO-2	3.5	N/A (Survey, Surface)	3.5	Complete	Tertiary		Dark Gray	Other	Bi-Polar	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Flat	31.28	14.83	5.6	4.5	4.08	3.05	8.89	NBP-008-ISO-2	L-1	
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)		Complete	Primary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	29.73	44.37	5.87	5.12	6.61	6.39	17.98	NBP-012-25	L-1	Unknown
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)		Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	39.58	37.13	10.79	6.51	11.03	10.42	24.49	NBP-012-25	L-2	Unknown
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	15.8	Complete	Secondary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.61	46.91	12.73	6.85	11	3.29	13.46	NBP-012-25	L-3	Unknown
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	21.6	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	37.75	42.85	9.76	9.26	10.65	10.25	40.82	NBP-012-25	L-4	Unknown
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	4.7	Complete	Tertiary		Blue-black	Other	Conchoidal	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	28.4	2.61	4.57	3.47	5.17	2.55	1.069	NBP-012-25	L-5	Upper Paleolithic
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	7	Complete	Tertiary		Blue-black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.17	35.11	8.04	6.36	8.57	2.66	11.96	NBP-012-25	L-6	Unknown
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	6.3	Complete	Tertiary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.94	26.8	7.17	4.29	6.14	3.5	20.06	NBP-012-25	L-7	Unknown
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	5.9	Complete	Secondary		Black	Other		Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Cortical/Unmodified	39.34	15.08	8.18	4.69	8.73	8.72	14.28	NBP-012-25	L-8	Upper Paleolithic?
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	5.7	Complete	Secondary		Gray-Blue	Other	Bending	Flake Tool	Medium	Plunging	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	31.33	34.33	5.36	2.53	5.46	3.13	11.71	NBP-012-25	L-9	Unknown
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	6.3	Complete	Secondary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	30.59	15.52	10.21	9.12				NBP-012-25	L-10	Unknown
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	3.5	Complete	Tertiary		Light Gray	Other	Conchoidal	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Complex	36.39	20.97	4.53	3.45	1.96	0.9	11.04	NBP-012-25	L-11	Upper Paleolithic
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	4.3	Complete	Secondary		Black	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Cortical/Unmodified	34.16	21.18	6.39	5.03	4.29	3.22	8.89	NBP-012-25	L-12	Meso/Neolithic +
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	2.6	Complete	Tertiary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	11.18	22.94	5.45	3.87	5.53	5.39	15.28	NBP-012-25	L-13	Unknown
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	1.1	Broken	Tertiary		Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	20.05	12.17	4.17	2.8				NBP-012-25	L-14	Unknown
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	0.6	Broken	Tertiary	Distal	Black	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	12.88	14.79	2.52	1.74				NBP-012-25	L-15	Unknown
Shataar Chuluu	639290	5144720	NBP-012	25	116.3	N/A (Survey, Surface)	0.9	Complete	Secondary		Gray-Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	10.8	16.22	4.63	3.17				NBP-012-25	L-16	Unknown
Bulgaan Uul	643229	5090450	NBP-013	ISOs	181.5	N/A (Survey, Surface)	11.6	Complete	Tertiary		Black	Other	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Blade			Complex	48.07	25.08	7.17	7.02	9.06	8.58	19.81	NBP- 013-ISO	L-1	Upper Paleolithic?
Bulgaan Uul	643229	5090450	NBP-013	ISOs	181.5	N/A (Survey, Surface)	16.4	Complete	Secondary		Gray	Other	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Burin			Flat	35.51	43.55	10.1	6.55	10.32	5.09	18.87	NBP- 013-ISO	L-2	Upper Paleolithic?
Bulgaan Uul	643229	5090450	NBP-013	ISOs	181.5	N/A (Survey, Surface)	18.4	Complete	Tertiary		Gray-Brown	Other	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient			Flat	41.87	32.03	11.53	10.39	11.13	3.26	10.2	NBP- 013-ISO	L-3	Unknown
Bulgaan Uul	643229	5090450	NBP-013	ISOs	181.5	N/A (Survey, Surface)	4.2	Complete	Primary		Gray	Chert	N/A	Flake (Proximal, Whole)	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	19.38	20.25	7.92	7.82	8.02	5.6	8.41	NBP- 013-ISO	L-4	Meso/Neolithic +
Bulgaan Uul	643229	5090450	NBP-013	ISOs	181.5	N/A (Survey, Surface)	1	Complete	Tertiary		Light Green	Other	N/A	Non-Flake Debitage	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	20.09	13.01	4.24	2.54				NBP- 013-ISO	L-5	Unknown
Bulgaan Uul	643229	5090450	NBP-013	ISOs	181.5	N/A (Survey, Surface)	28.5	Complete	Tertiary		Dark Gray	Other	Conchoidal	Core	Medium	Feathered	Core Fragment	Unidirectional	Core			Flat	38.41	30.88	15.9	7.54	16.98	16.88	29.18	NBP- 013-ISO	L-6	Unknown
Bulgaan Uul	643229	5090450	NBP-013	ISOs	181.5	N/A (Survey, Surface)	2.4	Broken	Tertiary		Black	Other	N/A	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Unknown	17.83	21.68	5.42	4.11				NBP- 013-ISO	L-7	Unknown
Bulgaan Uul	643229	5090450	NBP-013	ISOs	181.5	N/A (Survey, Surface)	1.5	Broken	Tertiary	Middle	Gray-Brown	Andesite	N/A	Flake Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	13.11	21.53	3.89	3.27				NBP- 013-ISO	L-8	Unknown
Bulgaan Uul	643229	5090450	NBP-013	ISOs	181.5	N/A (Survey, Surface)	97.9	Complete	Secondary		Light Blue	Other	N/A	Flake Tool	Fine	N/A, Other	Pebble Core	N/A (if not a core)	Chopper			Cortical/Unmodified	63.41	52.04	31.45	23.67				NBP- 013-ISO	L-9	Upper Paleolithic?
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	30.00	Complete	Tertiary		Light Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	69.77	49.63	24.17	16.82	14.77	12.32	25.98	NBP-013-31	L-1	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	73.7	Complete	Primary		Light Gray	Other	Compression	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	66.6	55.05	17.66	12.19	17.94	16.86	53.61	NBP-013-31	L-2	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	123	Complete	Primary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	77.74	55.52	24.58	17.5	18.73	13.8	31.57	NBP-013-31	L-3	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	79.5	Complete	Secondary		Gray	Rhyolite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	Multidirectional	N/A (if not a tool)			Flat	70.62	51.39	16.85	16.65	15.01	16.53	37.64	NBP-013-31	L-4	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	58.5	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	Flake Tool/Flake Blank		Unimarginal, Unilateral	Flat	73.44	57.76	14.52	12.23	10.37	6.48	12.8	NBP-013-31	L-5	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	22.1	Complete	Secondary		Gray-Blue	Other	Bending	Flake Tool	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Complex	46.29	37.12	14.9	8.46	11.92	11.57	29.24	NBP-013-31	L-6	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	17.7	Complete	Secondary		Gray	Andesite	N/A	Flake Tool	Medium Coarse	N/A, Other	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Unknown	52.07	30.15	11.19	5.53				NBP-013-31	L-7	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	36.6	Complete	Tertiary		Gray-Blue	Other	Bi-Polar	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Flat	82.11	22.25	19.25	17.36	21.73	4.08	13.8	NBP-013-31	L-8	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	19.7	Complete	Secondary		Gray-Blue	Other	N/A	Flake Tool	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Bi-Marginal, Unilateral	Unknown	35.63	42.39	8.22	7.02				NBP-013-31	L-9	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	13.9	Complete	Secondary		Light Gray-Blue	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	39.85	25.75	16.13	6.88				NBP-013-31	L-10	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	5.7	Complete	Primary		Black	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	34.39	26.27	4.58	4.14	3.95	2.86	11.45	NBP-013-31	L-11	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	23.7	Complete	Secondary		Gray	Other	Bending	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	38.84	47.99	12.83	8.73	12.72	7.54	20.86	NBP-013-31	L-12	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	8	Complete	Primary		Gray-Blue	Andesite	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	29.25	34.27	7.68	5.59	7.69	7.42	12.48	NBP-013-31	L-13	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	15.9	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	28.95	47.86	10.85	8.88	11.67	10.32	32.55	NBP-013-31	L-14	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	7.7	Complete	Tertiary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	44.43	23.79	9.92	6.4	4.87	4.82	10.96	NBP-013-31	L-15	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	26.8	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	Levallois Flaked?	N/A (if not a core)	N/A (if not a tool)			Flat	44.47	48.8	14.17	8.69	13.84	10.23	40.42	NBP-013-31	L-16	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	11.5	Complete	Tertiary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	25.29	36.78	8.42	8.84	8.51	7.9	21.43	NBP-013-31	L-17	Unknown

Table D.2 (continued). Lithic database list

Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	38	Complete	Secondary		Gray-Blue	Other	Compression	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Burin				Cortical/Unmodified	52.19	37.8	18.64	11.67	14.54	5.35	13.35	NBP-013-31	L-18	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	5.2	Complete	Secondary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	25.45	34.82	4.78	4.54	5.37	5	13.16	NBP-013-31	L-18	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	3.7	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	22.41	26.87	4.68	3.41	3.49	2.41	7.58	NBP-013-31	L-19	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	8.1	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	36.64	26.77	8.48	6.71	5.06	3.51	9.48	NBP-013-31	L-20	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	5.5	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade-Point	Hafted		Bi-Marginal, Uni-lateral	Flat	33.93	31.39	5.02	3.6	3.39	2.74	12.97	NBP-013-31	L-21	Upper Paleolithic?
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	4.2	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Cortical/Unmodified	31.19	16.15	7.56	7.45	7.41	7.64	7.64	NBP-013-31	L-22	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	5.7	Complete	Tertiary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Complex	25.97	22.01	8.48	5.37	7.08	8.61	23.4	NBP-013-31	L-23	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	4.6	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Cortical/Unmodified	32.33	21.78	6.99	5.99	5.72	4.87	4.62	NBP-013-31	L-24	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	1.5	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	11.04	23.07	5.45	3.11	4.54	3.07	7.62	NBP-013-31	L-25	Upper Paleolithic?
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	3.1	Complete	Tertiary		Dark Gray	Andesite	Compression	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	24.144	22.83	4.87	4.66	4.29	4.23	16.53	NBP-013-31	L-26	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	27.61	15.8	8.09	6.42	4.22	3.19	7.75	NBP-013-31	L-27	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	1.6	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	23.44	20.85	4.3	2.29	4.62	3.31	6.2	NBP-013-31	L-28	Meso/Neolithic -
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	9.3	Complete	Tertiary		Gray-Blue	Other		Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	26.28	31.23	16.27	7.91				NBP-013-31	L-29	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	6.3	Complete	Secondary		Gray	Other	Compression	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient			Unimarginal, Unilateral	Flat	21.99	36.67	6.16	3.96	6.17	6.05	21.51	NBP-013-31	L-30	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	3	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	29.45	16.28	5	3.61				NBP-013-31	L-31	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	12.4	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	33.06	40.31	9.8	44.97	8.82	6.48	15.36	NBP-013-31	L-32	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	4.5	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	30.63	18.21	8.23	3.71				NBP-013-31	L-33	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	6	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	34.52	23.09	7.24	5.63	6.24	3.9	11.56	NBP-013-31	L-34	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	2.4	Complete	Tertiary		Gray	Other	N/A	Non-Flake Debitage	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	29.33	12.38	6.1	3.82				NBP-013-31	L-35	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	8.2	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Cortical/Unmodified	26.67	36.36	7.57	4.91	7.96	7.54	20.33	NBP-013-31	L-36	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	4.2	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	28.11	23.36	5.7	4.65	5.94	3.04	14.27	NBP-013-31	L-37	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	14.9	Complete	Tertiary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	36.06	35.53	9.55	8.07	9.89	8.23	17.29	NBP-013-31	L-38	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	2.9	Complete	Tertiary		Black	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	14.92	21.73	5.84	4.41				NBP-013-31	L-39	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	6.5	Complete	Secondary		Gray-Blue	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	25.16	22.94	9.39	4.72				NBP-013-31	L-40	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	8.1	Complete	Tertiary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	24.88	29.71	10.18	6.58	7.56	3.92	14.74	NBP-013-31	L-41	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	33.5	Complete	Secondary		Gray-Brown	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	33.01	40.76	16.98	13.08				NBP-013-31	L-42	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	7.4	Complete	Primary		Gray	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	35.87	24.15	9.99	6.85				NBP-013-31	L-43	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	6.5	Complete	Tertiary		Gray	Other	Conchoidal	Non-Flake Debitage	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	36.51	20.49	8.11	4.64				NBP-013-31	L-44	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	27.6	Complete	Secondary		Light Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Scraper			Unimarginal, Unilateral	Flat	49.97	34.59	14.48	9.99	11.11	5.99	28.38	NBP-013-31	L-45	Upper Paleolithic?
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	5.5	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)					19.09	30.76	6.65	5.39	6.11	5.55	19.3	NBP-013-31	L-46	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	3.5	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Complex	23.41	22.74	7.6	4.3	7.3	6.72	14.67	NBP-013-31	L-47	
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	2.9	Complete	Tertiary	Distal	Gray-Blue	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	16.9	29.65	4.98	4.56				NBP-013-31	L-48	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	32.7	Complete	Tertiary		Light Green	Other	N/A	Angular Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)					58.66	33.31	16.84	13.07				NBP-013-31	L-49	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	3.2	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	25.66	19.1	6.02	4.59	5.6	4.94	17.01	NBP-013-31	L-50	Upper Paleolithic?
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	1.7	Complete	Secondary		Gray	Other	N/A	Non-Flake Debitage	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	21.93	12.59	4.78	3.33				NBP-013-31	L-51	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	3.3	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Complex	22.54	17.74	7.55	5.83	7.38	7.04	19.21	NBP-013-31	L-52	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	2.4	Broken	Tertiary	Middle	Black	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	14.35	26.03	4.09	4.55				NBP-013-31	L-53	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	2.3	Complete	Secondary		Gray	Chalcedony	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	19.29	23.98	5.22	2.05	5.16	3.44	14.89	NBP-013-31	L-54	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	1.5	Complete	Tertiary		Light Green	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	11.3	19.95	4.51	2.93	5.11	5.17	14.96	NBP-013-31	L-55	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	2.4	Broken	Tertiary	Middle	Light Gray	Other	N/A	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Blade				Unknown	17.71	22.37	5.36	4.47				NBP-013-31	L-56	Upper Paleolithic?
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	2.7	Complete	Secondary		Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	24.37	16.26	7.05	4.87				NBP-013-31	L-57	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	1.3	Broken	Tertiary		Gray	Other	N/A	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade			Unimarginal, Unilateral	Unknown	12.56	20.83	3.01	2.73				NBP-013-31	L-58	Upper Paleolithic?
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	0.9	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	14.7	15.82	2.5	2.17	2.39	2.55	4.88	NBP-013-31	L-59	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	2	Complete	Tertiary		Light Green	Andesite	Bending	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Complex	23.09	14.6	5.67	5.27	5.69	5.52	7.71	NBP-013-31	L-60	Meso/Neolithic -
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	0.9	Complete	Secondary		Gray-Blue	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	14.51	11.49	5.01	3.38	3.53	2.17	3.18	NBP-013-31	L-61	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	0.8	Complete	Tertiary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Pressure Flaking		Flat	13.48	13.85	3.03	2.98	3.19	1.8	5.72	NBP-013-31	L-62	Meso/Neolithic -
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	2.1	Complete	Secondary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Cortical/Unmodified	20.43	17.57	6.16	4.49	6.47	4.7	14.3	NBP-013-31	L-63	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	0.8	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	10.59	20.54	2.98	2.19	2.85	2.71	6.09	NBP-013-31	L-64	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	0.3	Complete	Tertiary		Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)					10.27	10.6	1.69	1.67				NBP-013-31	L-65	Meso/Neolithic -
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	0.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Pressure Flaking		Flat	12.96	11.77	1.72	1.05	1.83	1.54	6.88	NBP-013-31	L-66	Meso/Neolithic -
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	0.9	Complete	Secondary		Red-Brown	Chert	Conchoidal	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient			Unimarginal, Unilateral	Cortical/Unmodified	18.46	13.72	3.16	2.88	3.79	2.42	3.14	NBP-013-31	L-67	Meso/Neolithic -
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	0.4	Complete	Tertiary		Black	Chert	N/A	Flake Shatter	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	7.77	14.97	2.05	1.48				NBP-013-31	L-68	Meso/Neolithic -
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	4.5	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Abraded	22.6	21.28	10.5	5.3	6.38	5.07	7.29	NBP-013-31	L-69	Meso/Neolithic -
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	0.6	Complete	Tertiary		Black	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	6.62	14.81	2.68	2.48				NBP-013-31	L-70	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	3.3	Complete	Tertiary		Gray-Blue	Other	Compression	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Blade-Point			Unimarginal, Unilateral	Flat	19.47	21.39	9.2	3.8	9.01	9	20.29	NBP-013-31	L-71	Unknown
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	3.7	Complete	Tertiary		Gray-Blue	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade			Unimarginal, Bi-lateral	Flat	30.02	15.01	5.98	5.41	4.52	4.6	8.9	NBP-013-31	L-72	Upper Paleolithic
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	2.9	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade				Flat	27.39	21.95	3.72	3.67	3.72	2.5	8.56	NBP-013-31	L-73	Upper Paleolithic
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	1.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade			Unimarginal, Bi-lateral	Flat	28.26	14.85	3.97	3.69	3.98	2.67	4.39	NBP-013-31	L-74	Upper Paleolithic
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	2.9	Broken	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade			Unimarginal, Bi-lateral	Flat	21.3	23.14	4.99	4.91	4.91	2.89	5.99	NBP-013-31	L-75	Upper Paleolithic
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	5.5	Broken	Tertiary	Distal	Light Gray-Blue	Other	N/A	Flake Tool	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Point	Hafted		Notching	Unknown	26.47	32.66	5.61	4.64				NBP-013-31	L-76	Meso/Neolithic -
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	49.4	Broken	Tertiary	Distal	Dark Gray	Other	N/A	Flake Shatter	Fine	Feathered	Core Fragment	N/A (if not a core)	Scraper			Unimarginal, Bi-lateral	Flat	51.94	47.67	16.47	9.43	15.64	9.92	39.21	77NBP-013-31	L-	Upper Paleolithic?
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	20.6	Complete	Tertiary		Light Green-Blue	Other	Conchoidal	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Scraper			Unimarginal, Bi-lateral	Complex	35.79	36.19	10.84	9.77	10.16	9.29	18.32	NBP-013-31	L-78	Upper Paleolithic?
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	79.6	Complete	Secondary		Light Gray-Blue	Other	N/A	Core	Fine	N/A, Other	Core	Unidirectional	Core				Cortical/Unmodified	44.61	44.92	25.8	21.66		20.76	46.75	NBP-013-31	L-79	Upper Paleolithic?
Bulgaan Uul	644176	5090272	NBP-013	31	1159	N/A (Survey, Surface)	12.6	Complete	Tertiary		White	Chalcedony	N/A	Core	Fine	N/A, Other	Blade Core	Unidirectional	Core				Complex	29.42	23.13	17.41	12.26		16.02	22.62	NBP-013-31	L-80	Neolithic +
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	113.3	Complete	Primary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	86.8	60.59	17.36	13.61	18.53	11.43	35.73	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	25.4	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	64.41	30.23	15.1	8.01	6.67	3.98	27.59	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	8.4	Complete	Secondary		Dark Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Cortical/Unmodified	33.12	46.59	5.67	4.23	4.5	4.07	17.31	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	5.1	Complete	Tertiary		Black	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	42.84	19.86	5.93	3.71	5.31	5.85	8.22	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	10.4	Complete	Tertiary		Light Green-Blue	Other	Compression	Flake (Proximal, Whole)	Medium	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	3475	26.09	10.25	3.38	10.82	10.8	30.42	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	3.2	Complete	Tertiary		Black	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	24.24	16.05	5.44	4.87	3.29	3	7.7	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	6.5	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	22.53	28.6	6.53	5.33	5.47	2.71	3.96	NBP-013-31-G2	L	Meso/Neolithic -
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2.7	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	25.29	18.74	4.09	3.18	4.2	2.77	7.36	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	13	Complete	Primary		Gray-Blue	Other	N/A	Non-Flake Debitage	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Cortical/Unmodified	39.02	27.64	9.38	7.1	9.22	9.07	21.37	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	6.4	Complete	Tertiary		Gray	Other	Bending	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade			Unimarginal, Unilateral	Flat	36.45	18.7	6.62	6.82	6.96	6.25	18.96	NBP-013-31-G2	L	Upper Paleolithic
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	8.8	Complete	Secondary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	39.71	17.63	11.97	8.53				NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	3	Complete	Secondary		Gray-Blue	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Cortical/Unmodified	22.9	19.43	4.22	3.77	4.59	3.17	16.25	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	47.7	Complete	Tertiary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Cortical/Unmodified	60.77	51.41	14.48	13.13	12.2	11.19	26.3	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	4	Complete	Secondary		Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Complex	26.43	23.44	6.54	3.48	6.02	7.52	19.52	NBP-013-31-G2	L	Meso/Neolithic -
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	14.5	Complete	Secondary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Cortical/Unmodified	36.9	22.22	15.88	11.91				NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2.5	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	15.07	34.85	2.83	2.14	3.29	2.25	11.37	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	20	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Complex	38.11	45.28	9.15	7.14	9.39	7.31	23.26	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	4.4	Complete	Tertiary		Light Brown	Other	Conchoidal	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade	Hafted			Complex	33.87	20.27	7	2.94	6.77	4.47	8.08	NBP-013-31-G2	L	Meso/Neolithic -
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2.3	Complete	Secondary		Gray-Brown	Other	Bending	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	24.15	20.17	4.88	4.2	5.38	5.17	10.68	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2.8	Complete	Secondary		Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	26.99	23.2	5.53	3.79				NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	33.5	Complete	Secondary		Gray-Brown	Andesite	Conchoidal	Flake Tool	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient			Unimarginal, Unilateral	Complex	57.89	28.8	16.7	10.17	16.58	15.56	29.36	NBP-013-31-G2	L	Middle Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	12.7	Complete	Tertiary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Complex	39.4	29.41	8.07	6.69	7.63	5.97	16.69	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2.7	Complete	Secondary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Cortical/Unmodified	21	25.5	4.54	3.05	4.18	3.88	11.91	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	3.1	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	18.33	29.66	4.8	3.66	4.9	2.25	10.33	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2.8	Complete	Tertiary		Gray-Blue	Andesite	Compression	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Flake Tool/[illegible]				Flat	32.25	17.35	4.38	3.17	3.95	2.08	4.87	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	9.6	Complete	Tertiary		Gray-Brown	Other	Bending	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient			Unimarginal, Unilateral	Flat	38.89	30.7	5.67	4.35	5.95	5.26	16.2	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	1.1	Broken	Tertiary	Middle	Gray	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade				Unknown	14.77	17.32	3.02	2.91				NBP-013-31-G2	L	Upper Paleolithic
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	1.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Complex	23.55	14.55	3.85	2.84	4.14	3.57	9.11	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2	Complete	Secondary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Cortical/Unmodified	17.37	14.76	8.58	3.89	8.64	8.61	14.6	NBP-013-31-G2	L	Meso/Neolithic -
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2.8	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Complex	20.2	21.65	5.46	4.61	5.84	5.42	19.9	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	8.8	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Complex	28.75	28.12	8.58	6	8.03	5.37	15.86	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2.4	Broken	Tertiary	Middle	Black	Other	N/A	Flake (Proximal, Whole)	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	18.47	24.57	3.39	2.61				NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	10	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Complex	27.83	29.37	11	6.7	11.18	12.19	29.96	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	4.8	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	22.79	21.82	9.4	8.61	8.07	4.13	8.49	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	1.5	Broken	Tertiary	Distal	Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Unknown	14.8	22.58	4.53	3.74				NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	1.1	Complete	Tertiary		Light Green	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				Flat	18.43	18.445	3.43	2.32	3.4	2.14	6.68	NBP-013-31-G2	L	Unknown

Table D.2 (continued). Lithic database list

Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2.6	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	18.15	22.56	4.69	4.01	4.02	2.89	9.55	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2.5	Complete	Tertiary		Gray-Blue	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	27.24	10.12	9.74	5.31				NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	3.1	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.01	23.64	7.58	3.66	7.66	7.63	19.06	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2.2	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	14.23	21.11	5.65	4.27	5.14	5.04	9.61	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	5.7	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	21.11	28.98	9.2	6.59	7.69	4.86	0.26	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	1.1	Complete	Secondary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	13.73	18.68	3.1	2.88	2.93	2.64	7.99	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	1.9	Broken	Tertiary	Proximal	Gray	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade			Flat	17.37	17.15	3.83	3.75	3.96	2.23	6.47	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	0.6	Broken	Tertiary		Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	14.21	10.91	2.61	2.03				NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	1.2	Complete	Secondary		Gray	Other	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	18.11	16.9	5.54	1.57				NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	1.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	23.78	14.31	4.22	2.72	4.32	3.94	10.73	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	1.9	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	20.25	18.32	5.05	3.02				NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2.4	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	24.43	13.49	6.82	6.08				NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	0.7	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	14.22	13.11	3.94	2.25				NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	0.5	Complete	Tertiary		Light Gray	Chert	Conchoidal	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Cortical/Unmodified	11.78	12.02	2.44	1.64	2.48	2.44	8.42	NBP-013-31-G2	L	Neolithic +
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	0.7	Complete	Tertiary		Dark Gray	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	20.54	10.45	2.13	1.19	3.12	1.69	4.18	NBP-013-31-G2	L	Neolithic +
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	0.7	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	12.12	14.43	3.48	2.76	3.64	3.75	6.97	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	0.7	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	21.31	7.71	2.49	2.72	2.15	1.87	3.92	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	1.1	Complete	Tertiary		Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	16.93	13.48	3.84	2.44				NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	2.5	Complete	Tertiary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.73	16.3	5.61	4.1	6	4.87	14.67	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	0.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	10.75	10.05	2.7	1.61	2.7	2.22	6.53	NBP-013-31-G2	L	Meso/Neolithic -
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	0.3	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	13.79	8.26	1.55	1.12	1.4	1.3	4.02	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	0.4	Complete	Secondary		Gray	Chert	Bending	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	8.83	12.1	2.03	1.88	2.19	2.12	8	NBP-013-31-G2	L	Meso/Neolithic -
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	3.5	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	25.17	22.47	5.84	3.98	6.28	6.29	16.76	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	1.3	Broken	Tertiary		White	Chalcedony	N/A	Flake Tool	Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	17.65	17.31	2.63	2.42	2.89	2.67	11.9	NBP-013-31-G2	L	Neolithic +
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	87.7	Complete	Secondary		Gray	Other	Conchoidal	Core	Medium Fine	Step	Core Fragment	Multidirectional	Core				56.63	64.48	21.67	18.05	21.49	12.69	13.17	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	66.2	Complete	Primary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade			Flat	90.6	35.49	18.29	10.83	19.21	9.06	37.4	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	3.7	Complete	Secondary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Cortical/Unmodified	33.2	17.38	5.95	2.9	4.12	3.49	8.97	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	3.8	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient			Flat	28.42	22.92	6.01	4.08	5.19	5.15	22.52	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	6.2	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	39.73	21.77	7.09	4.64	7.62	7.36	12.37	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	3.4	Complete	Secondary		Gray-Blue	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Cortical/Unmodified	23.55	20.23	7.7	6.41	7.09	6.47	14.04	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	1.9	Complete	Tertiary		Black	Flint	N/A	Flake Tool	Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Unknown	32.27	11.51	3.75	3.51				NBP-013-31-G2	L	Neolithic +
Bulgaan Uul	644198	5090118	NBP-013	31-G2	628.5	N/A (Survey, Surface)	5.3	Broken	Tertiary	Distal	Gray	Other	Compression	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient			Flat	29.92	30.45	5	4.7				NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	G2-31	187.7	N/A (Survey, Surface)	144.3	Complete	Tertiary		Gray	Other	N/A	Core	Medium Fine	N/A, Other	Core	Multidirectional	Core			Unknown	7887	46.98	30.43	27.9				NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	G2-31	187.7	N/A (Survey, Surface)	22	Complete	Tertiary		Black	Other	Conchoidal	Flake Tool	Coarse	Feathered	N/A (not a core)	N/A (if not a core)	Blade-Point		Unimarginal, Bi-lateral	Complex	55.13	29.43	12.64	9.88	9.72	8.08	18.75	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	G2-31	187.7	N/A (Survey, Surface)	15.3	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool/Flank Blank			Flat	67.83	18.5	7.43	7.03	6.37	6.4	11.31	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	G2-31	187.7	N/A (Survey, Surface)	6	Complete	Secondary		Gray-Blue	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	35.05	21.88	6.48	4.64	6.6	6.55	18.93	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	290.7	N/A (Survey, Surface)	106.3	Complete	Secondary		Gray	Other	N/A	Core	Medium Fine	N/A, Other	Core	Multidirectional	Core			Abraded	48.23	52.99	37.23	26.3				NBP-013-31-G2	L	Middle Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	290.7	N/A (Survey, Surface)	73.6	Broken	Primary		Gray	Other	N/A	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Chopper			Unknown	49.71	67.72	17.75	13.04				NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	290.7	N/A (Survey, Surface)	48.8	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Core Trimming Element (CTE)	Abraded	101	24	14.48	13.46				NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	290.7	N/A (Survey, Surface)	1.6	Complete	Tertiary		Light Green	Other	N/A	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Bladelet			Unknown	26.91	12.91	3.92	1.88				NBP-013-31-G2	L	Meso/Neolithic -
Bulgaan Uul	644198	5090118	NBP-013	31-G2	290.7	N/A (Survey, Surface)	3.3	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Flat	31.52	21.59	4.42	3.17	2.94	1.29	5.3	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	290.7	N/A (Survey, Surface)	47.5	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Scraper			Flat	51.85	48.13	15.27	12.34	13	6.58	29.2	NBP-013-31-G2	L	Upper Paleolithic?
Bulgaan Uul	644198	5090118	NBP-013	31-G2	290.7	N/A (Survey, Surface)	3.3	Complete	Secondary		Gray	Other	Bi-Polar	Flake (Proximal, Whole)	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	33.45	8.19	7.18	5.47	6.27	4.2	6.67	NBP-013-31-G2	L	Unknown
Bulgaan Uul	644198	5090118	NBP-013	31-G2	290.7	N/A (Survey, Surface)	7	Complete	Tertiary		Gray	Other	N/A	Core	Medium Fine	N/A, Other	Blade Core Exhausted	Unidirectional	Core			Complex	27.9	19.75	9.94	7.79		17.8	8.89	NBP-013-31-G2	L	Meso/Neolithic -
Bulgaan Uul	639637	5076828	NBP-027	XX	277.7	N/A (Survey, Surface)	277.7	Complete	Secondary		Gray	Andesite	Conchoidal	Flake Tool	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	Chopper		Unimarginal, Unilateral	Flat	95.83	69.88	48.22	24.88	39.88	18.07	36.24	NBP-027-XX	L-1	Middle Paleolithic?
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	65.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	Levallois Flaked?	Multidirectional	N/A (if not a tool)	Bi-Facial		Flat	59.05	16.75	16.87	12.59	15.58	6.29	24.69	NBP-019-3	L-1	Middle Paleolithic?
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	13.4	Complete	Secondary		Gray-Brown	Other	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	36.89	34.51	8.73	7.43	8.84	10.71	24.78	NBP-019-3	L-2	Unknown
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	15.8	Complete	Secondary		Gray-Blue	Other	Bending	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Flat	448.04	31.83	7.3	6.88	7.91	7.8	23.49	NBP-019-3	L-3	Unknown
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	7.4	Complete	Tertiary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	21.8	28.95	8.92	7.18	8.61	9.45	28.13	NBP-019-3	L-4	Unknown
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	12.9	Complete	Tertiary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	39.27	31.67	9.05	6.56	9.27	6.52	14.75	NBP-019-3	L-5	Unknown
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	7.4	Complete	Tertiary		Gray	Other	Bending	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.35	23.58	6.05	5.5	5.51	5.4	15.84	NBP-019-3	L-6	Unknown
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	5.8	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.71	29.73	6.91	5.3	7.03	6.93	23.13	NBP-019-3	L-7	Unknown
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	16.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	37.76	37.64	11.31	7.26	11.2	11.06	32.32	NBP-019-3	L-8	Upper Paleolithic?
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	2.9	Complete	Secondary		Light Gray-Blue	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.01	23.16	4.84	4.43	4.77	3.98	13.88	NBP-019-3	L-9	Meso/Neolithic -
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	3.2	Complete	Tertiary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.85	21.41	5.71	4.31	5.18	3.01	14.81	NBP-019-3	L-10	Upper Paleolithic?
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	2.8	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.32	29.76	5.97	2.6	6.01	5.71	9.9	NBP-019-3	L-11	Unknown
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	3.2	Complete	Tertiary		Light Green	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	21.89	23.31	6.43	3.24	3.51	3.41	6.72	NBP-019-3	L-12	Unknown
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	1	Broken	Tertiary	Distal	Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	13.43	20.62	4.77	1.38				NBP-019-3	L-13	Unknown
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	1.3	Complete	Tertiary		Dark Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	21.8	14.03	3.57	3.93	4.08	1.92	4.42	NBP-019-3	L-14	Unknown
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	1.9	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	17.18	25.92	4.45	3.53	3.59	2.5	7.17	NBP-019-3	L-15	Unknown
Shataar Chuluu	623350	5140710	NBP-019	3	159.7	N/A (Survey, Surface)	0.4	Complete	Secondary		Red-Brown	Chert	N/A	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	14.59	8.26	3.3	1.87	3.64	2.15	5.2	NBP-019-3	L-16	Meso/Neolithic -
Shataar Chuluu	623447	5140720	NBP-019	4	16.8	N/A (Survey, Surface)	7.3	Complete	Tertiary		Red-Brown	Chert	N/A	Core	Fine	Feathered	Blade Core	Unidirectional	Core			Complex	28.22	17.98	12.56	8.8		16.68	11.12	NBP-019-4	L-1	Meso/Neolithic -
Shataar Chuluu	623447	5140720	NBP-019	4	16.8	N/A (Survey, Surface)	3.7	Complete	Tertiary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	29.84	26.3	3.533	3.25	3.82	2.66	7.34	NBP-019-4	L-2	Upper Paleolithic?
Shataar Chuluu	623447	5140720	NBP-019	4	16.8	N/A (Survey, Surface)	5.9	Complete	Tertiary		Gray-Blue	Chalcedony	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	30.2	21.48	6.67	6.33	5.86	5.31	14.9	NBP-019-4	L-3	Meso/Neolithic -
Shataar Chuluu	637612	5138106	NBP-001	36	47.2	N/A (Survey, Surface)	47.2	Complete	Primary		Light Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Scraper		Unimarginal, Unilateral	Cortical/Unmodified	45.27	62.17	15.77	10.52	16.87	8.97	24.34	NBP-001-36	L-1	Upper Paleolithic?
Shataar Chuluu	627703	5141288	NBP-017	XX	9.8	N/A (Survey, Surface)	9.8	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	45.33	24.75	9.47	7.08	9.14	10.15	17.69	NBP-017-xx	L-1	Upper Paleolithic?
Shataar Chuluu	627703	5141411	NBP-017	XX	105	N/A (Survey, Surface)	105	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Scraper		Bi-Marginal, Bi-Lateral	Flat	79.69	64.11	22.79	12.88	22.9	4.19	22.42	NBP-017-xx	L-2	Upper Paleolithic?
Shataar Chuluu	627729	5141293	NBP-017	1	41.6	N/A (Survey, Surface)	28.9	Complete	Secondary		Gray	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	58.29	45.64	948	6.73	9.04	5.13	13.33	NBP-017-1	L-1	Unknown
Shataar Chuluu	627729	5141293	NBP-017	1	41.6	N/A (Survey, Surface)	7.8	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	27.46	29.8	8.63	4.19	7.64	3.44	16.6	NBP-017-1	L-2	Unknown
Shataar Chuluu	627729	5141293	NBP-017	1	41.6	N/A (Survey, Surface)	5.3	Complete	Secondary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	28.07	24.55	5.02	3.47	4.81	2.53	7.62	NBP-017-1	L-3	Unknown
Shataar Chuluu	627729	5141293	NBP-017	1	147	N/A (Survey, Surface)	55.8	Complete	Primary		Black	Other		Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Scraper			Abraded	75.26	44.34	14.29	10.34	9.29	8.43	22.41	NBP-017-1	L-4	Middle Paleolithic?
Shataar Chuluu	627729	5141293	NBP-017	1	147	N/A (Survey, Surface)	23.8	Complete	Tertiary		Black	Other	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	59.42	34.11	11.66	6.42	11.87	9.15	14.34	NBP-017-1	L-5	Upper Paleolithic?
Shataar Chuluu	627729	5141293	NBP-017	1	147	N/A (Survey, Surface)	14.4	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	33.2	37.76	9.01	8.75	8.44	6.39	13.18	NBP-017-1	L-6	Unknown
Shataar Chuluu	627729	5141293	NBP-017	1	147	N/A (Survey, Surface)	4.6	Complete	Tertiary		Gray-Blue	Other	Bending	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Bi-lateral	Flat	24.4	29.09	6.04	2.91	5.9	7.97	26.1	NBP-017-1	L-7	Unknown
Shataar Chuluu	627729	5141293	NBP-017	1	147	N/A (Survey, Surface)	15.4	Complete	Tertiary		Black	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	End/Thumbnail Scraper		Unimarginal, Bi-lateral	Flat	35.06	32.4	11.74	8.46	12.41	6.66	15.68	NBP-017-1	L-8	Unknown
Shataar Chuluu	627729	5141293	NBP-017	1	147	N/A (Survey, Surface)	10.2	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	35.02	28	10.16	5.88	10.1	7.28	13.52	NBP-017-1	L-9	Unknown
Shataar Chuluu	627729	5141293	NBP-017	1	147	N/A (Survey, Surface)	3.6	Complete	Tertiary		Gray-Blue	Other		Flake Shatter	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	23.03	25.37	5.26	3.71	5.45	4.23	18.73	NBP-017-1	L-10	Unknown
Shataar Chuluu	627729	5141293	NBP-017	1	147	N/A (Survey, Surface)	5.9	Complete	Secondary		Gray-Blue	Other		Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				32.65	19.98	10.07	5.94				NBP-017-1	L-11	Unknown
Shataar Chuluu	627729	5141293	NBP-017	1	147	N/A (Survey, Surface)	10	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	24.72	43.81	8.46	6.35	8.81	6.69	14.93	NBP-017-1	L-12	Unknown
Shataar Chuluu	627729	5141293	NBP-017	1	147	N/A (Survey, Surface)	3.3	Complete	Tertiary		Gray	Other		Flake (Proximal, Whole)	Medium Coarse	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.37	27.25	5.45	4.18	5.31	3.1	7.96	NBP-017-1	L-13	Unknown
Shataar Chuluu	627729	5141293	NBP-017	1	147	N/A (Survey, Surface)	1	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)	Pressure Flaking		Flat	15.25	14.35	3.09	2.21	2.81	2.64	7.14	NBP-017-1	L-14	Meso/Neolithic -
Shataar Chuluu	630753	5142384	NBP-018	71a	5.4	N/A (Survey, Surface)	5.4	Complete	Secondary		Black	Chert	Conchoidal	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Complex	34.33	25.81	6.1	2.05	5.96	5.33	21.17	NBP-018-71a	L-1	Meso/Neolithic -
Shataar Chuluu	630726	5142258	NBP-018	74	178.7	N/A (Survey, Surface)	35	Complete	Secondary		Gray-Brown	Andesite	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	46.3	65.27	10.45	6.76	8.48	6.88	442.06	NBP-018-74	L-1	Unknown
Shataar Chuluu	630726	5142258	NBP-018	74	178.7	N/A (Survey, Surface)	143.8	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral		55.89	91	19.2	14.95	20.08	16	58.73	NBP-018-74	L-2	Middle Paleolithic?
Shataar Chuluu	631128	5140823	NBP-018	22	15.1	N/A (Survey, Surface)	15.1	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	49.53	31.97	8.27	5.58	7.1	5.1	17.32	NBP-018-22	L-1	Unknown
Shataar Chuluu	630693	5142254	NBP-018	74	5.2	N/A (Survey, Surface)	5.2	Complete	Secondary		Gray-Blue	Other	Bi-Polar	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Unimarginal, Unilateral	Flat	29.1	23.06	5.79	4.3	5.5	5.36	17.72	NBP-018-74	L-3	Upper Paleolithic?
Bulgaan Uul	644060	5088840	NBP-014	2	4.5	N/A (Survey, Surface)	4.5	Complete	Primary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.95	21.13	6.15	5.92	5.35	2.14	5.57	NBP-014-2	L-1	Unknown
Shataar Chuluu	630700	5141665	NBP-018	56	4.5	N/A (Survey, Surface)	4.5	Complete	Tertiary		Yellow-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	22.33	21.3	7	6.54	7.52	7.36	16.46	NBP-018-56	L-1	Meso/Neolithic -
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	24.5	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	49.45	36.35	10.84	9	11.34	11.26	28.42	NBP-013-G5-2	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	10.6	Broken	Tertiary	Distal	Light Gray	Other	N/A	Flake Shatter	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	26.03	37.78	7.69	5.28	7.81			NBP-013-G5-2	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	18	Complete	Secondary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Cortical/Unmodified	53.3	28.71	12.18	9.09	11.16	8.61	9.2	NBP-013-G5-2	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	31.5	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	34.55	53.36	12.09	11.28	9.88	9.33	29.18	NBP-013-G5-2	L-4	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	26.7	Broken	Primary		Gray	Other	N/A	Flake Shatter	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	39.27	58.22	11.85	8.31				NBP-013-G5-2	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	58.1	Broken	Secondary		Gray-Blue	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	7.2	50.24	20.12	15.08				NBP-013-G5-2	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	5	Complete	Tertiary		Light Green	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)		Unimarginal, Bi-lateral	Flat	36.05	23.16	5.81	3.22	4.52	2.72	5.7	NBP-013-G5-2	L-	Upper Paleolithic?
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	5	Complete	Tertiary		Gray-Brown	Other	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	25.15	22.57	7.16	6.18	4.6	2.78	15.82	NBP-013-G5-2	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	9.3	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	27.91	30.36	8.98	8.56				NBP-013-G5-2	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	1.6	Broken	Tertiary	Distal	Light Green-Blue	Other	N/A	Flake Shatter	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	12.57	28.86	3.21	2.26				NBP-013-G5-2	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	4.8	Complete	Primary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	24.68	24.7	6.43	5.21	5.85	4.04	12.59	NBP-013-G5-2	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	3.2	Complete	Tertiary		Black	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	23.92	7.98	7.51	5.31				NBP-013-G5-2	L-	Unknown

Table D.2 (continued). Lithic database list

Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	1.8	Broken	Tertiary	Distal	Black	Other	N/A	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Unknown	15.41	22.52	5.14	2.69	4.76			NBP-013-G5-2	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	1	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.92	11	4.7	1.94	4.91	4.55	10.08	NBP-013-G5-2	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	20.9	Complete	Tertiary		Black	Other	Conchoidal	Flake Tool	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	Blade-Point		Unimarginal, Bi-lateral	Flat	54.73	27.83	12.19	11.23	13.55	10.93	24.04	NBP-013-G5-2	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	1324.3	Complete	Secondary		Yellow-Brown	Other	N/A	Flake Tool	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	Chopper	Bi-Facial		Unknown	165	103	59.09	34.93				NBP-013-G5-2	L-	Lower Paleolithic?
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	32.6	Complete	Tertiary		Gray	Other	N/A	Core	Medium Fine	N/A, Other	Core Fragment	Unidirectional	Core			Unknown	40.62	50.6	15.96	11.36		24.25	22.12	NBP-013-G5-2	L-	Upper Paleolithic?
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	139.3	Complete	Secondary		Black	Other	Compression	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Burin			Flat	89.02	69.5	21.35	12.89	22.66			NBP-013-G5-2	L-	Upper Paleolithic?
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	380.9	Complete	Secondary		Gray-Brown	Other	N/A	Core	Medium	N/A, Other	Core	Multidirectional	Core			Unknown	94.97	70.15	47.34	42.68				NBP-013-G5-2	L-	Upper Paleolithic?
Bulgaan Uul	643520	5090982	NBP-013	G5-2	2428.1	N/A (Survey, Surface)	237	Complete	Secondary		Black	Other	N/A	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Chopper	Bi-Facial		Unknown	90.66	68.2	34.9	20.82				NBP-013-G5-2	L-	Middle Paleolithic?
Bulgaan Uul	643520	5090982	NBP-013	G5-3	215.1	N/A (Survey, Surface)	11.4	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	27.56	42.3	7	6.4	6.55	3.6	11.29	NBP-013-G5-3	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-3	215.1	N/A (Survey, Surface)	4.9	Complete	Tertiary		Black	Other		Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	22.89	34.93	5.75	4.86	2.18	1.5	4.83	NBP-013-G5-3	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-3	215.1	N/A (Survey, Surface)	5	Complete	Secondary		Gray	Other	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)				27.68	17.27	10.71	6.75				NBP-013-G5-3	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-3	215.1	N/A (Survey, Surface)	6.5	Complete	Tertiary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	33.84	24.57	7.45	6.41	6.94	4.57	11.24	NBP-013-G5-3	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-3	215.1	N/A (Survey, Surface)	58.3	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Plunging	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	61.23	59.16	27.13	9.22	27.43	11.12	25.72	NBP-013-G5-3	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-3	215.1	N/A (Survey, Surface)	24.1	Broken	Tertiary	Middle	Gray	Other	N/A	Flake Tool	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Blade		Bi-Marginal, Bi-Lateral	Unknown	53.89	40.25	10.12	8.55				NBP-013-G5-3	L-	Upper Paleolithic?
Bulgaan Uul	643520	5090982	NBP-013	G5-3	215.1	N/A (Survey, Surface)	6.7	Complete	Primary		Yellow-Brown	Other	N/A	Flake Tool	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient			Unknown	42.43	21.31	8.23	5.63				NBP-013-G5-3	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-3	215.1	N/A (Survey, Surface)	3.5	Complete	Tertiary		Light Green-Blue	Chert	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.45	28.64	5.09	3.78	5.19	4.98	11.3	NBP-013-G5-3	L-	Unknown
Bulgaan Uul	643520	5090982	NBP-013	G5-3	215.1	N/A (Survey, Surface)	0.9	Complete	Secondary		Yellow-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	14.06	13.14	3.49	3.16	2.78	1.7	7.01	NBP-013-G5-3	L-	Meso/Neolithic
Bulgaan Uul	643520	5090982	NBP-013	G5-3	215.1	N/A (Survey, Surface)	20.3	Complete	Tertiary		Light Gray	Other	N/A	Core	Medium Fine	N/A, Other	Blade Core Exhausted	Unidirectional	Core			Complex	29.45	39.44	13.04	10.26		37.49	11.6	NBP-013-G5-3	L-	Meso/Neolithic
Bulgaan Uul	643301	5091472	NBP-013	G5-4	109.3	N/A (Survey, Surface)	15.3	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	33.48	27.82	12.36	11.21				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	109.3	N/A (Survey, Surface)	21.3	Complete	Primary		Gray	Other	Conchoidal	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Complex	49.32	29.76	12.98	7.7	14.25	12.29	23.09	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	109.3	N/A (Survey, Surface)	11.4	Complete	Primary		Yellow-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	49.37	21.74	9.26	6.62	9.24	7.57	12.92	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	109.3	N/A (Survey, Surface)	6.3	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	28.76	33.53	5.61	4.84	5.7	3.95	7.72	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	109.3	N/A (Survey, Surface)	6.8	Complete	Secondary		Gray-Blue	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	22.73	20.7	11.63	10.65				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	109.3	N/A (Survey, Surface)	5.5	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18.43	31.28	7.43	6.25	6.75	4.11	16.87	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	109.3	N/A (Survey, Surface)	12.3	Complete	Secondary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.92	46	12.76	10.64	11.26	4.04	9.54	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	109.3	N/A (Survey, Surface)	19	Complete	Tertiary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	42.86	29.67	16.92	9.33	16.75	9.94	6.09	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	109.3	N/A (Survey, Surface)	4.6	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.48	27.24	5.16	5.02	4.24	3.83	18.01	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	109.3	N/A (Survey, Surface)	5.1	Broken	Tertiary	Distal	Black	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	27.1	28.09	5.86	4.64				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	109.3	N/A (Survey, Surface)	2.4	Complete	Tertiary		Red	Chert	N/A	Core	Fine	N/A, Other	Blade Core Exhausted	Unidirectional	Core			Complex	20.62	11.38	7.02	6.76		7.98	4.44	NBP-013-G5-4	L-	Meso/Neolithic
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	31	Complete	Secondary		Gray	Andesite	Bending	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	59.09	38.15	14.155	10.64	12.09	11.58	22.43	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	24.7	Complete	Secondary		Gray-Brown	Other	Conchoidal	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	[illegible]	Bi-Facial		[illegible]	30.19	61.33	10.5	10.29	9.89	7.38	11.26	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	42.6	Complete	Primary		Light Green-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	85.09	42.12	9.79	9.36	7.51	3.08	6.57	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	17.6	Complete	Tertiary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	38.2	36.22	9.12	7.33	9.19	5.93	40.61	NBP-013-G5-4	L-	Upper Paleolithic?
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	10.4	Complete	Secondary		Gray-Blue	Other	Compression	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	32.54	26.72	8.1	7.15	7.12	7.06	23.3	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	19.9	Complete	Secondary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	50.32	27.37	12.94	7.8	7.98	8.33	20.89	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	54.4	Complete	Secondary		Gray-Brown	Other	Bending	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	44.44	67.91	23.33	12.51	12.16	12.33	16.88	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	10.3	Complete	Secondary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.36	28.11	7.96	6.26	7.47	4.02	15.35	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	14.7	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	29.54	45.88	11.12	8.86	8.74	7.67	17.6	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	5.7	Complete	Tertiary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.44	20.92	6.41	3.29	6.32	5.36	10.42	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	8.6	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	32.92	32.46	9.17	6.26	6.7	3.86	11.59	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	7.1	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	25.46	31.07	5.72	5.31				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	7.4	Broken	Secondary	Distal	Light Gray	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	47.11	23.18	6.81	5.47				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	4.6	Broken	Tertiary	Middle	Gray	Other	N/A	Flake Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	16.66	22.46	7.17	7.63				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	11.2	Complete	Secondary		Light Gray-Blue	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	32.19	23.68	14.21	9.74				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	5.4	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	29.08	35.31	4.08	3.53				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	6.8	Complete	Primary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.29	31.83	7.49	5.9	5.72	3.9	14.32	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	4.1	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30	25.55	3.94	2.55	3.74	2.43	6.06	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	3.1	Complete	Tertiary		Dark Gray	Other	Bending	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.28	22.93	5.07	4.52	3.474.12	4.12	15.75	NBP-013-G5-4	L-	Upper Paleolithic?
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	7.7	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	29.66	30.16	8.72	6.74	8.86	8.11	18.1	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	9.5	Broken	Secondary	Distal	Gray-Brown	Other		Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	26.55	35.72	9.85	7.71				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	7.7	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	27.38	30.67	7.49	5.2	7.55	9.3	23.08	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	10.9	Broken	Primary	Middle	Gray-Blue	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	19.06	50.5	8.6	4.08				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	3.4	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	26.62	25.51	5.73	3.62				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	10.3	Complete	Secondary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	37.11	33.1	7.25	6.28	6.68	3.85	17.65	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	7.4	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.15	22.91	10.41	8.85	10.46	9.2	22.69	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	9.5	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	34.47	25.9	14.43	8.46				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	3.1	Complete	Tertiary		Gray	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	[illegible]			Flat	44.33	12.96	5.1	3.48	4.92	4.33	7.89	NBP-013-G5-4	L-	Upper Paleolithic?
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	2.2	Complete	Secondary		Gray	Other	N/A	Flake Shatter	Medium Coarse	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	25.33	17.13	4.71	3.58				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	8.3	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	25.43	39.19	8.6	5.63				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	5.6	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	31.01	26.26	7.33	4.74	6.49	2.92	9.03	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	7	Complete	Tertiary		Gray	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	26.02	21.26	10.8	9.65		9.99	19.44	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	5.4	Broken	Tertiary	Distal	Black	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	36.44	19.85	6.97	4.78				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	7.2	Complete	Secondary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.76	19.32	9.09	8.71	10.71	9.44	15.08	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	7.3	Complete	Primary		Light Green-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	30.82	22.56	8.52	7.93	9.43	4.66	10.44	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	5.3	Broken	Secondary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	27.03	19.82	11.24	4.85	10.01	12.93	20.56	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	3.2	Complete	Secondary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	22.67	19.23	6.87	5.76	6.41	2	5.7	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	3.5	Complete	Secondary		Light Green	Other	N/A	Angular Shatter	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	24.7	17.47	7.78	5.87				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	4.3	Complete	Secondary		Gray	Other	N/A	Non-Flake Debitage	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	43.46	14.5	7.1	5.31				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	1.8	Broken	Tertiary	Middle	Gray	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	11.59	27.74	6.16	4.26				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	5.8	Complete	Tertiary		Gray	Other	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	40.27	12.88	9.1	8.47	8.24	8.16	14.27	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	3.2	Broken	Tertiary	Middle	Gray-Brown	Other	N/A	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Blade			Unknown	21.8	22.06	4.41	4				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	2	Complete	Secondary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	15.89	23.47	5.23	4.78	5.38	4.33	9.44	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	2.3	Broken	Tertiary	Distal	Black	Other	N/A	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	15.19	20.68	4.23	4.14				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	2.3	Complete	Secondary		Light Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			[illegible]	16.07	18.22	6.87	4.42	6.99	7	18.48	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	1.5	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.38	15.99	4.87	3.06	4.43	2.77	6.52	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	1.3	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.13	14.33	5.35	3.49	5.19	5.17	115.3	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	1.1	Broken	Secondary	Middle	Gray		N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	12.43	15.64	3.55	3.06				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	1.5	Complete	Secondary		Gray-Blue	Other	Conchoidal	Flake (Proximal, Whole)	Medium Coarse	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	18	18.39	3.23	2.56	3.89	3.93	11.2	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	0.5	Complete	Secondary		Light Green	Chert	N/A	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.2	7.76	3.95	4.33	4.1	3.88	7.25	NBP-013-G5-4	L-	Meso/Neolithic
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	0.2	Broken	Tertiary	Lateral	Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	20.24	17.83	3.25	3.2	3.45	3.36	5.7	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	1.4	Complete	Tertiary		White	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	16.91	14	5.08	4.2	5.3	3.04	4.86	NBP-013-G5-4	L-	Meso/Neolithic
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	0.9	Complete	Tertiary		White	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	15.45	15.64	3.65	2.06	2.84	2.54	5.41	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	1.3	Complete	Tertiary		White	Chert	Compression	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Complex	19.03	10.95	5.48	3.35	6.11	6.37	9.84	NBP-013-G5-4	L-	Meso/Neolithic
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	16.5	Complete	Primary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium	Step	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	56.6	26.63	6.95	6.56	6.61	5.24	6.86	NBP-013-G5-4	L-	Upper Paleolithic?
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	6.4	Complete	Tertiary		Gray-Blue	Other	Bi-Polar	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Unknown	41.76	18.28	6.6	4.48	7.08	7.06	15.06	NBP-013-G5-4	L-	Upper Paleolithic?
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	3.1	Broken	Primary		Gray	Other	Compression	Flake Tool	Medium Coarse	N/A, Other	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Unknown	29.2	18.77	3.2	3.14				NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	5.2	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	23.93	24.37	7.09	6.2	6.05	4.72	18.31	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	5.3	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	21.18	37.8	4.46	3.41	5.29	5.02	14.74	NBP-013-G5-4	L-	Unknown
Bulgaan Uul	643301	5091472	NBP-013	G5-4	522.3	N/A (Survey, Surface)	6.2	Complete	Tertiary		Black	Other	Compression	Flake Tool	Medium Fine	N/A, Other	Blade Core Fragment	Unidirectional	Core			Complex	34.17	15.41	7.44	6.66		16.49	6.66	NBP-013-G5-4	L-	Meso/Neolithic
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	46.7	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	38.97	77.81	14.13	5.9				NBP-013-G5-5	L-	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	37.1	Complete	Tertiary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	58.87	47.87	12.7	11.15	10.68	8.23	26.38	NBP-013-G5-5	L-	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	27.2	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	40.55	44.17	12.94	6.89	13.08	11.22	35.35	NBP-013-G5-5	L-	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	43.2	Complete	Tertiary		Gray	Other	N/A	Non-Flake Debitage	Medium	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	61.8	42.02	12.47	10.08				NBP-013-G5-5	L-	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	45	Complete	Secondary		Gray	Other	N/A	Angular Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	34.78	64.33	23.58	18.75				NBP-013-G5-5	L-	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	12.3	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	47.69	38.26	9.12	3.18	8.4	3.17	13.47	NBP-013-G5-5	L-	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	17.3	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	44.31	35.61	9.29	7.9	9.38	7.41	13.23	NBP-013-G5-5	L-	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	21.6	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	43.81	52.25	7.05	6.69	6.16	4.82	14.96	NBP-013-G5-5	L-	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	13.7	Complete	Tertiary		Gray	Other	Compression	Flake Tool	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	51.77	24.66	9.34	8.04	8	6.54	19.94	NBP-013-G5-5	L-	Upper Paleolithic?
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	9.2	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	35.97	24.56	11.94	7.2	8.7	2.5	13.95	NBP-013-G5-5	L-	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	8.5	Complete	Secondary		Black	Other	Compression	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bi-lateral	Flat	37.26	21.09	9.84	9.13	9.36	8.05	14.88	NBP-013-G5-5	L-	Upper Paleolithic?

Table D.2 (continued). Lithic database list

Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	5.6	Broken	Primary		Gray	Other	N/A	Flake Shatter	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	26.72	26.33	5.61	5.1				NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	6.2	Complete	Secondary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unidirectional	24.98	29.23	6.63	4.7	7.66	8.08	22.46	NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	12.7	Complete	Primary		Yellow-Brown	Other	N/A	Non-Flake Debitage	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	41.75	24.54	11.51	7.87				NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	6.6	Broken	Tertiary	Distal	Black	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	30.03	22.1	10.15	7.3				NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	10.7	Complete	Secondary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	36.78	39.65	6.54	3.08	6.88	2.24	10.22	NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	6.2	Complete	Tertiary		Gray-Blue	Other	N/A	Non-Flake Debitage	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	42.66	18.58	5.46	4.76				NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	5.6	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	23.77	35.91	6.82	3.96				NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	3.8	Complete	Tertiary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	21.73	23.63	6.08	5.38	4.76	3.64	7.4	NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	5	Complete	Secondary		Gray-Blue	Other	Bending	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unidirectional	31.02	26.76	6.6	5.43	6.16	3.27	12.07	NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	10.5	Complete	Primary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unidirectional	33.47	28.58	9.12	7.19	9.4	8.47	18.5	NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	3.9	Complete	Tertiary		Light Blue	Other	Compression	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	39.06	16.86	6.11	4.04	6.63	4.58	13.64	NBP-013-G5-5	L-1	Upper Paleolithic
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	11.7	Broken	Tertiary	Distal	Gray	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	30.72	46.13	10.05	3.41				NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	9.3	Complete	Secondary		Gray-Brown	Other	Conchoidal	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	33.91	22.58	11.77	7.4	12.69	12.23	16.03	NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	5.7	Broken	Secondary		Black	Other	N/A	Flake Shatter	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	26.67	26.64	6.06	5.94				NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	11	Complete	Tertiary		Gray-Brown	Other	Compression	Flake (Proximal, Whole)	Medium	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	42.98	27.83	9.05	6.07	9.1	5.89	20.11	NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	3.2	Complete	Primary		Gray	Chert	N/A	Flake Shatter	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	25.53	17.26	5.89	4.26				NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	5.2	Complete	Primary		Gray	Other	Conchoidal	Flake Tool	Medium	Feathered	N/A (not a core)	N/A (if not a core)	Flake Tool, Expedient		Unimarginal, Unilateral	Flat	33.36	27.25	4.4	3.85	3.93	2.47	10.14	NBP-013-G5-5	L-1	Upper Paleolithic
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	2.1	Complete	Primary		Black	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	19.42	18.89	5.51	3.5	5.64	2.87	5.68	NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	2.3	Complete	Primary		Gray	Chert	Conchoidal	Flake Tool	Fine	Feathered	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Unilateral	Flat	27.63	13.24	5.57	3.6	4.02	3.91	6.19	NBP-013-G5-5	L-1	Mesa Real Etc.+
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	4.6	Complete	Secondary		Gray-Brown	Other	N/A	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unidirectional	22.81	26.95	6.38	4.4	6.38	6.32	11.11	NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	4.6	Broken	Tertiary		Gray	Other	N/A	Flake Shatter	Medium Fine	Hinge	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unknown	23.66	28.62	5.69	3.73				NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	8.2	Complete	Tertiary		Gray		Compression	Flake (Proximal, Whole)	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	22.61	25.92	11.79	9.94	9.77	9.43	13.58	NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	7.1	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Abraded	31.71	26.6	6.77	4.99	6.85	2.09	19.08	NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	2.7	Complete	Tertiary		Gray	Other	Conchoidal	Flake (Proximal, Whole)	Medium Fine	Feathered	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Flat	33.04	15.79	4.73	4.1	5.21	4.42	9.22	NBP-013-G5-5	L-1	Unknown
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	17.3	Complete	Tertiary		Gray-Blue	Other	Conchoidal	Flake Tool	Medium Fine	Step	N/A (not a core)	N/A (if not a core)	Blade		Unimarginal, Bilateral	Flat	56.74	23.07	10.16	6.62	10.44	8.74	21.44	NBP-013-G5-5	L-1	Upper Paleolithic
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	7.8	Complete	Tertiary		Gray	Other	Compression	Core	Medium Fine	Feathered	Blade Core Fragment	Unidirectional	Core			Complex	35.91	19.18	7.43	5.53	7.54	7.34	18.27	NBP-013-G5-5	L-1	Mesa Real Etc.+
Bulgaan Uul	643782	5091227	NBP-013	G5-5	468.7	N/A (Survey, Surface)	4.6	Complete	Tertiary		Gray	Other	N/A	Core	Medium Fine	N/A, Other	Blade Core Exhausted	Unidirectional	Core			Complex	23.18	19.95	7.64	5.7		16.58	7.75	NBP-013-G5-5	L-1	Mesa Real Etc.+
Bulgaan Uul	644060	5088840	NBP-014	2	2.4	N/A (Survey, Surface)	2.4	Complete	Secondary		Red-Brown	Chert	Conchoidal	Flake (Proximal, Whole)	Fine	Step	N/A (not a core)	N/A (if not a core)	N/A (if not a tool)			Unidirectional	19.57	15.55	6.5	4.99	4.72	3.34	9.7	NBP-014-2	L-1	Mesa Real Etc.+
Bulgaan Uul	640280	5079316	NBP-027	63	700	Excavation	700	Complete	Primary		Yellow-Brown	Other	N/A	Other	Medium Fine	N/A, Other	N/A (not a core)	N/A (if not a core)	Ground Stone			Unknown	152	58.56	51.9	31.49				NBP-027-63	L-1	Neolithic +
Bulgaan Uul	639673	5076849	NBP-027	xx	833.7	N/A (Survey, Surface)	833.7	Broken	Primary		Black	Other	N/A	Other	Coarse	N/A, Other	N/A (not a core)	N/A (if not a core)	Axe			Unknown	153	60	62.35	40.56				NBP-027-xx	L-1	Unknown

APPENDIX E: CERAMIC GROUPINGS, CATALOGING, DRAWINGS, AND DATABASE

Table E.1. Ceramic groupings and descriptions.

Group	Era	Description	Images
Group 1	Late Bronze Age	Light brown-beige/reddish brown; brown exterior, often smoothed or sometimes slightly burnished; interior very dark grey to black; temper is friable; paste is often dual-colored, matching the exterior's color and then shifting to black, thus partially oxidized	
Group 2	Late Bronze Age	Similar to group 1 except surfaces are not smoothed; some are fully oxidized with interior and exterior being the same color; colors range from yellows, beiges, reds, browns, and red-browns	

Table E.1 (continued). Ceramic groupings and descriptions

Group	Era	Description	Images
Group 3	Late Bronze Age	Exteriors range from light brown to medium brown-red; nearly fully oxidized, if not fully oxidized in a few cases; coherent group variable is VERY coarse temper; pastes range from very black and friable to red-gray-red sandwiched colors, but majority are gray.	
Group 4	Late Bronze Age	This group is gray, and fully reduced; however the pastes are chunky and quite coarse; sometimes the exteriors are smoothed, other times, the inclusions leak out onto surface.	

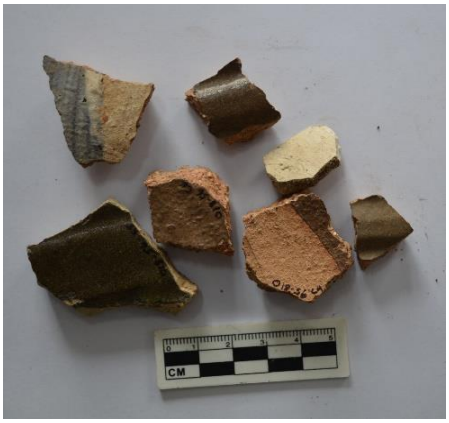
Table E.1 (continued). Ceramic groupings and descriptions

Group	Era	Description	Images
Group 5	Late Bronze Age	A mixture of the LBA characteristics (Groups 1-3); colors vary, but a majority have black friable pastes making the group coherent (although a few have oxidized pastes).	
Group 6	Early Iron Age	Orange and porous exteriors, sometimes with inclusions showing on the surface. Texture is mostly rough, not smoothed. They have a brighter orange color with pastes from gray to dark gray. Interiors can be bright orange, orangish-red, or light brown-beige and are sometimes fully oxidized, but it is variable.	
Group 7	Iron Age/ Xiongnu	Exterior colors are bright oranges, muddy oranges, and light browns, however the exteriors are finely bunished or slipped. The interior colors range from light browns to brown grays with pastes that are still friable and run from very dark gray to gray into muddy reds. Not as friable and black as the LBA Group 1.	

Table E.1 (continued). Ceramic groupings and descriptions

Group	Era	Description	Images
Group 8	Xiongnu	Here I rely on Julia Clark's (2014) analysis of sherds: "Orange, reddish-orange, brown, gray/dark grey exteriors, sometimes burnished or slipped pastes are still fairly friable ranging from black, but mostly a brownish gray; tempers range from medium to fine; interiors are various colors of reds, light browns, and slightly mottled grays."	
Group 9	Turk	As Josh Wright (2008) notes, the stamps help identify Turk ceramic. There is wide variety in decoration with variable colorings. In my present sample: exteriors are yellow-beige with curved stamp patterns, others have crosshatch-chevron stamps. Paste color can range from very dark gray to medium gray-browns with smooth exteriors if not stamped. This group is sometimes hard to differentiate from earlier prehistoric sherds as they can be quite coarse too.	

Table E.1 (continued). Ceramic groupings and descriptions

Group	Era	Description	Images
Group 10	Uyghur/ Khitan	Exteriors are gray and light brown beige, most smoothed or highy burnished in appearance. The paste colors can be black, but are mostly gray (fully reduced ceramic) and are quite fine. Interiors are mottled grey, or light gray, or beige.	
Group 11	Late Historic	Glazed pottery with molded forms. Mass produced.	

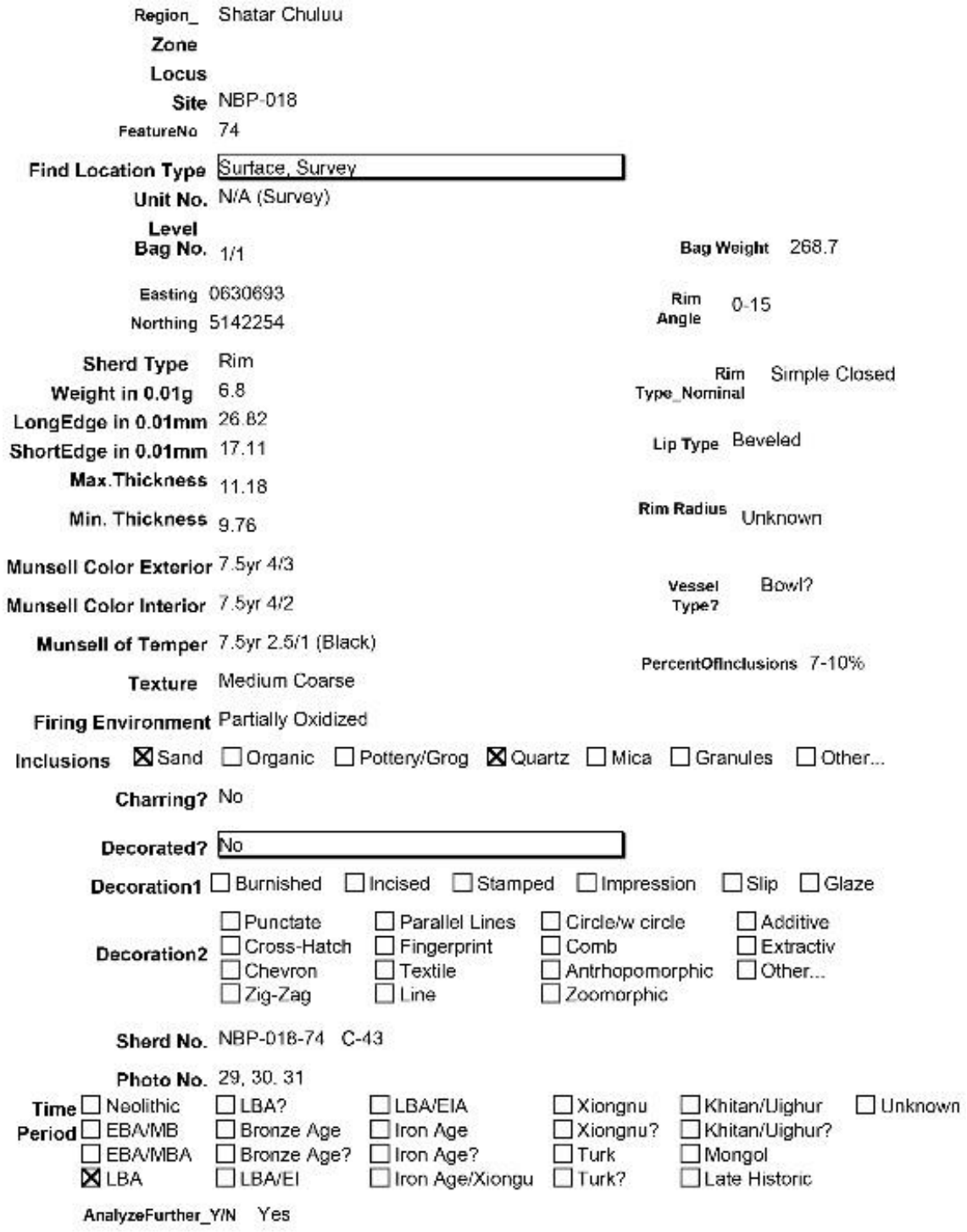


Figure E.1. Ceramic catalog example.

Notes

closed only slightly; slightly darker brown/gray towards the lip; group 3

Picture1



Picture2



Picture3



Figure E.1 Ceramic catalog example (continued).

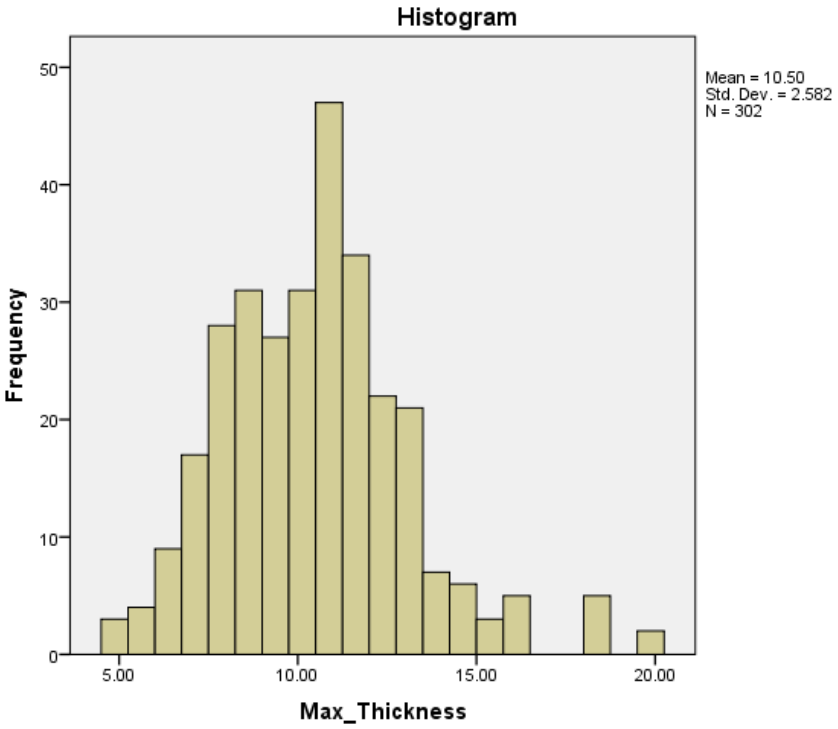


Figure E.2. Distribution of Late Bronze Age vessel thickness.

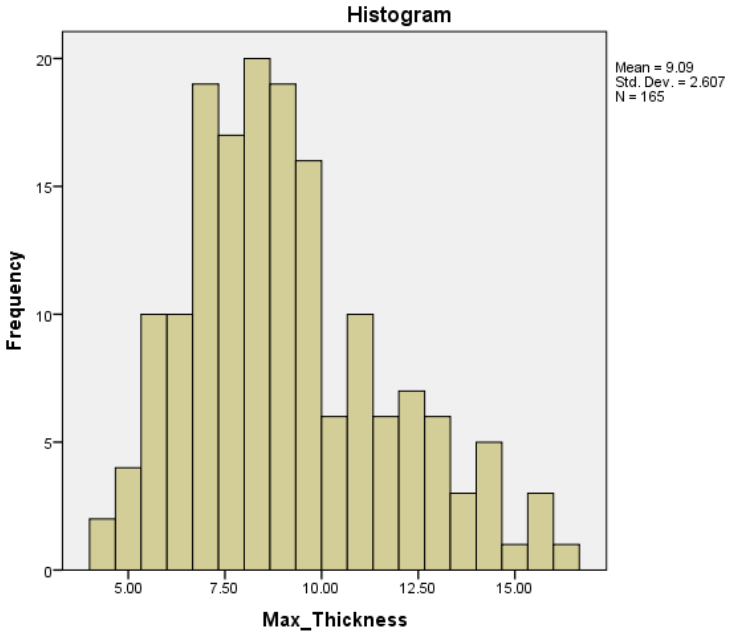


Figure E.3. Distribution of Early Iron Age vessel thickness.

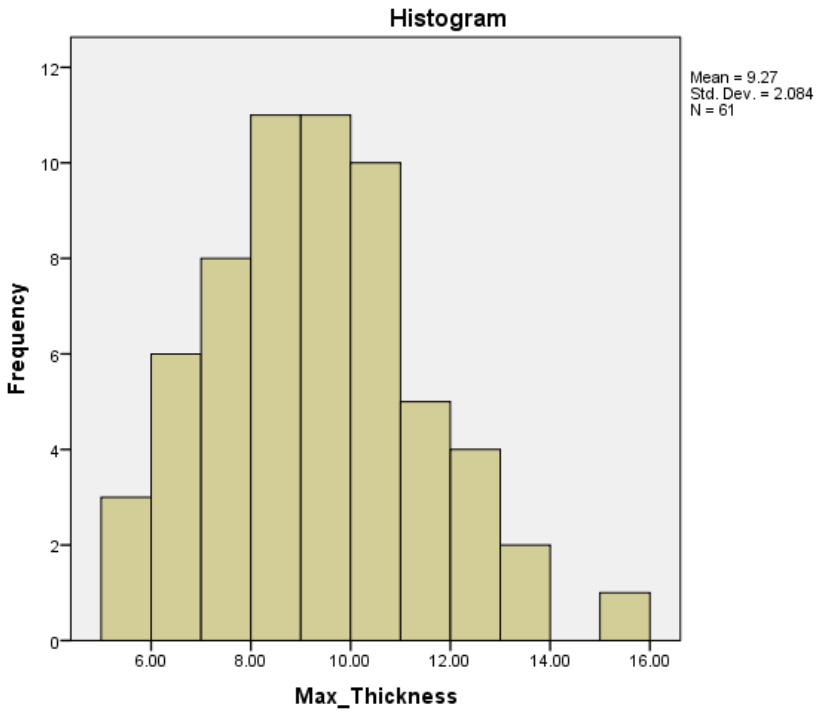


Figure E.4. Distribution of Iron Age vessel thickness.

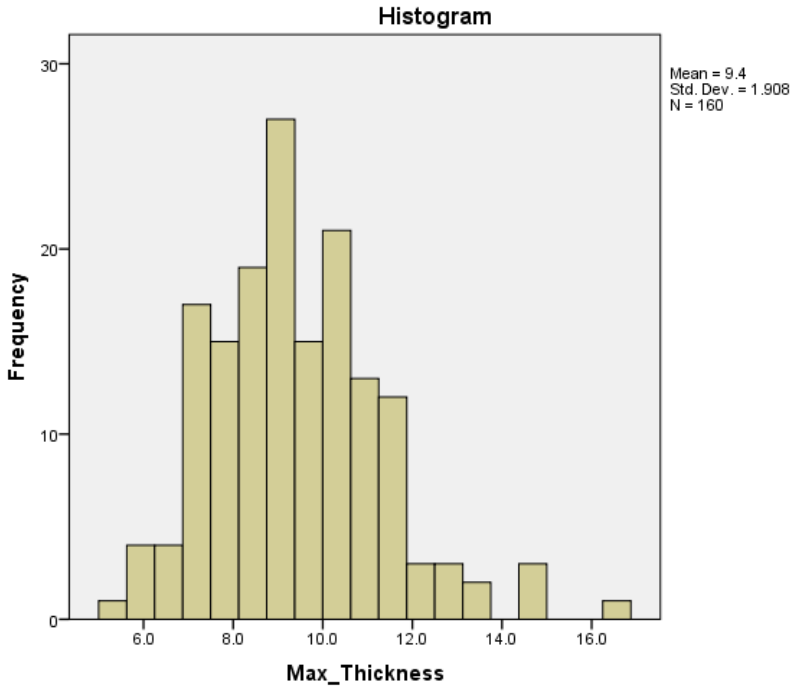


Figure E.5. Distribution of Late Iron Age vessel thickness.

Table E.2. T-Test LBA vs. IA

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
S	Equal variances assumed	6.673	.015	1.197	30	.241	205.49748	171.67850	-145.11679	556.11175
	Equal variances not assumed			1.292	26.314	.208	205.49748	159.04721	-121.23917	532.23413
Ca	Equal variances assumed	5.912	.021	1.510	30	.142	4886.98167989	3237.35742156	-1724.58421336	11498.54757315

Table E.2 (continued). T-Test LBA vs. IA

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Cu	Equal variances not assumed			1.621	27.046	.117	4886.98167989	3013.94773903	-1296.63167450	11070.59503429
	Equal variances assumed	4.017	.054	-1.172	30	.250	-23.6528519	20.1773856	-64.8605707	17.5548670
	Equal variances not assumed			-1.032	13.232	.321	-23.6528519	22.9199026	-73.0802460	25.7745423

Table E.3. T-test LBA vs. LIA

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
S	Equal variances assumed	5.696	.026	-.068	21	.946	-18.34733	267.91945	-575.51633	538.82167
	Equal variances not assumed			-.121	20.928	.905	-18.34733	151.16799	-332.78442	296.08977

Table E.3 (continued). T-test LBA vs. LIA

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
K	Equal variances assumed	5.635	.027	.109	21	.914	204.364162037041720	1868.237092650816000	-3680.847561073199000	4089.575885147282400
	Equal variances not assumed			.180	19.591	.859	204.364162037041720	1138.172570269875700	-2173.006222558653500	2581.734546632737000

Table E.3 (continued). T-test LBA vs. LIA

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Fe	Equal variances assumed	8.241	.009	-.653	21	.521	-3008.701740740731000	4607.342312760392000	-12590.194601756431000	6572.791120274970000
	Equal variances not assumed			-1.061	19.183	.302	-3008.701740740731000	2835.487701837989300	-8939.616594262503000	2922.213112781040000

Table E.3 (continued). T-test LBA vs. LIA

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Sr	Equal variances assumed	3.249	.086	-3.325	21	.003	-116.180485	34.943627	-188.849736	-43.511235
	Equal variances not assumed			-4.578	12.161	.001	-116.180485	25.379077	-171.395448	-60.965523

Table E.3 (continued). T-test LBA vs. LIA

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
BA	Equal variances assumed	3.781	.065	-3.191	21	.004	-287.225001	90.024338	-474.440861	-100.009141
	Equal variances not assumed			-2.097	4.468	.097	-287.225001	136.948608	-652.240864	77.790862

Table E.4.T-test IA vs. LIA

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Cl	Equal variances assumed	13.306	.001	-2.447	24	.022	-421.674009	172.347413	-777.381588	-65.966431
	Equal variances not assumed			-1.895	8.509	.092	-421.674009	222.497028	-929.463886	86.115867
Rb	Equal variances assumed	6.452	.018	.466	24	.646	2.793148	5.999496	-9.589204	15.175500
	Equal variances not assumed			.690	18.926	.499	2.793148	4.048397	-5.682487	11.268784

Table E.5.T-test EIA vs. LIA

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
	Equal variances assumed	5.650	.037	-1.340	11	.207	-1922.553104166667700	1434.586948989340300	-5080.057689753346000	1234.951481420010400
K	Equal variances not assumed			-1.575	10.486	.145	-1922.553104166667700	1220.739170227224300	-4625.537013673060000	780.430805339724500
	Equal variances assumed	9.608	.010	-.258	11	.801	-4.95858	19.22278	-47.26765	37.35048
Cr	Equal variances not assumed			-.307	10.135	.765	-4.95858	16.14709	-40.87167	30.95450
	Equal variances assumed	10.588	.008	.894	11	.390	4.6946333	5.2495750	-6.8596033	16.2488699
Cu										

Table E.5 (continued). T-test EIA vs. LIA

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
	Equal variances not assumed			.743	4.829	.492	4.6946333	6.3225436	-11.7324080	21.1216747
	Equal variances assumed	5.775	.035	-1.139	11	.279	-2.930725	2.573046	-8.593962	2.732512
Rb	Equal variances not assumed			-.949	4.871	.387	-2.930725	3.089098	-10.935338	5.073888
	Equal variances assumed	4.953	.048	-1.314	11	.216	-5780.567854166677000	4400.820917260787000	-15466.709385278540000	3905.573676945187000
Fe	Equal variances not assumed			-1.584	9.706	.145	-5780.567854166677000	3648.916360160972500	-13944.360936668336000	2383.225228334982600

Table E.5 (continued). T-test EIA vs. LIA

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
S	Equal variances assumed	4.449	.059	-1.744	11	.109	-811.36544	465.29280	-1835.46798	212.73711
	Equal variances not assumed			-2.222	7.408	.060	-811.36544	365.11559	-1665.17092	42.44004
V	Equal variances assumed	4.674	.054	-1.910	11	.083	-30.142138	15.782873	-64.880007	4.595732
	Equal variances not assumed			-2.144	10.997	.055	-30.142138	14.061467	-61.092128	.807853
Ba	Equal variances assumed	4.441	.059	1.572	11	.144	172.981263	110.033306	-69.200410	415.162935

Table E.5 (continued). T-test EIA vs. LIA

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances not assumed			1.264	4.448	.268	172.981263	136.823049	-192.285881	538.248406

Table E.6. ANOVA test for pXRF grouping and plotting

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
S	Between Groups	5770465.961	3	1923488.654	5.518	.003
	Within Groups	14290720.092	41	348554.149		
	Total	20061186.053	44			
Sr	Between Groups	73735.190	3	24578.397	3.898	.015
	Within Groups	258547.195	41	6306.029		
	Total	332282.385	44			
Ba	Between Groups	344276.970	3	114758.990	4.290	.010
	Within Groups	1096677.028	41	26748.220		
	Total	1440953.998	44			
Cl	Between Groups	1009894.504	3	336631.501	2.530	.070
	Within Groups	5455162.735	41	133052.750		
	Total	6465057.240	44			

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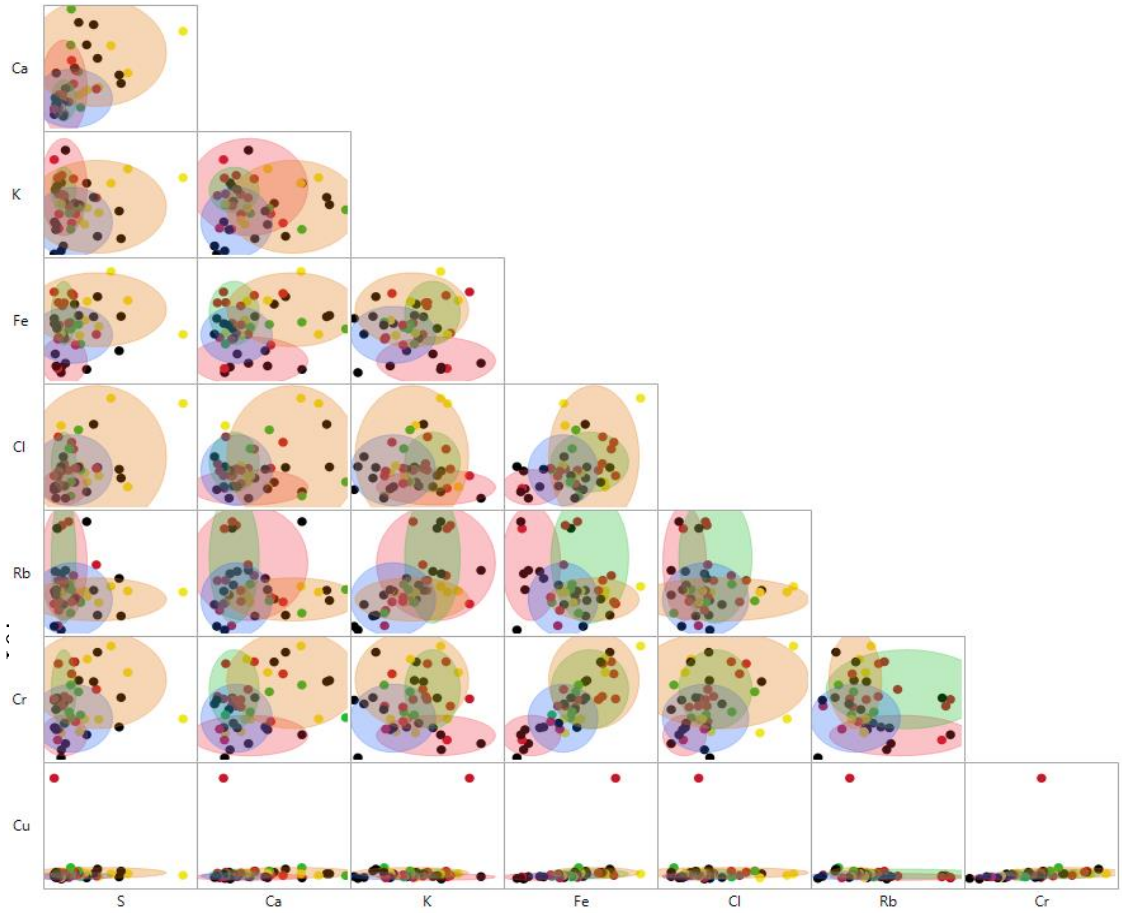


Figure E.6. Bivariate plot for all statistically significant elements, showing the grouped four taxa and time periods. Black is LBA, Red is EIA, Green is IA, and Yellow is LIA.

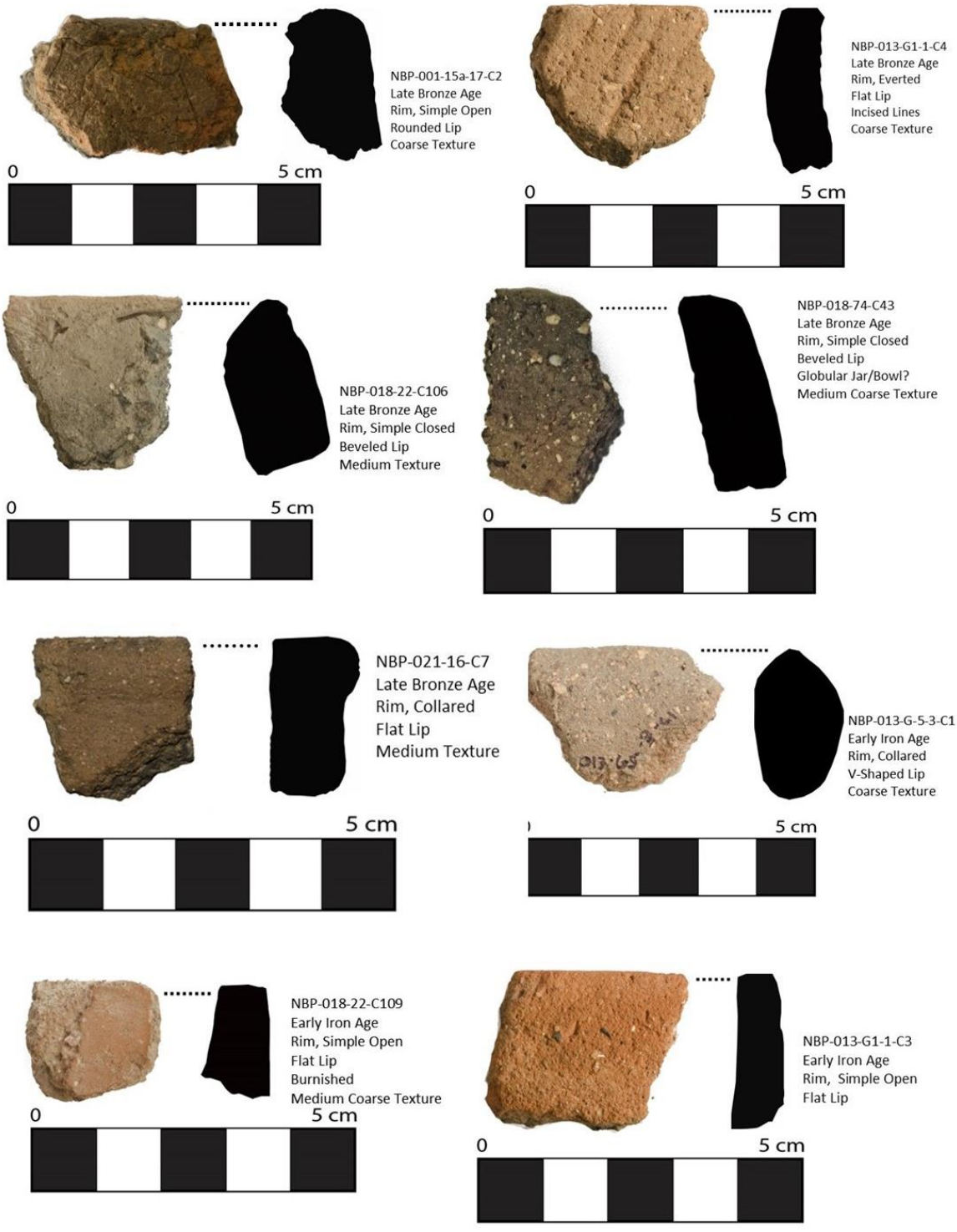


Figure E.7. A selection of diagnostic ceramic photos and cross-sections.



Figure E.7 (continued). A selection of diagnostic ceramic photos and cross-sections.

Table E.7. Ceramic catalog

Region	Site	Feature No	Unit	Easting	Northing	Level	Bag Weight	Rim Angle	Shard Type	Rim Type	Weight	Length	Lip Type	Width	Max Thick	Rim Diam	Min. Thick	Color Ext	Color Int	Color Temper	Vessel Type	Per_Inclusions	Texture	Firing	Inclusions	Charring?	Decoration1	Decoration2	Shard No.	Time Period
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637733	5138353		3.7		Body		3.7	21.65		19.23	9.74		9.16	5yr5/6	5yr 5/3			2-5%	Medium Fine	Partially Oxidized	Sand	No	Burnished		NBP- 001-15a-5 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637747	5138182		17.9		Body		17.9	41.433		39.65	11.99		9.1	5yr 4/3	5yr 4/3	5yr 4/8, 10yr 2/1 (Black)		5-7%	Medium	Fully Oxidized	Sand	No	Burnished		NBP-001-15a-12 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	STU-3	637723	5138229	1, 10-15cm	21		Body		21	56.31		27.66	9.13		8.92	10yr 5/4	10yr 5/4	10yr 6/3		7-10%	Medium	Fully Oxidized	Sand	No			NBP-001-15a-STU3 C-2	LH
Shatz/Chalcu	NBP-001	F15a	STU-3	637723	5138229	2, 30cm	19.1		Body		19.1	31.6		28.89	14.62		14.26	7.5yr 6/3	10yr 6/3	2.5yr 4/6		10-15%	Medium Coarse	Fully Oxidized	Sand Granules	No			NBP-001-15a-STU3-L2 C-1	LBA/EIA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637735	5138231		4.7		Body		4.7	24.26		24.19	5.56		5.47	10yr 5/1	10yr 7/1	10yr 5/1		0-2%	Fine	Fully Reduced	Sand	No			NBP-001-15a-11 C-1	LH
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637728	5138223		22.2		Body		5.1	20.62		20.32	9.32		8.6	10yr 6/2	5yr 6/3	2.5yr 4/6, 10yr 2/1 (Black)		7-10%	Medium	Fully Reduced	Sand	No			NBP-001-15a-18 C-3	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	644060	5088840		208		Body		4.4	26.34		20.04	7.6		6.91	10yr 5/2	10yr 5/2	10yr5/1		7-10%	Medium	Fully Reduced	Sand	No			NBP-014-2 C-4	Turk
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637729	5138264		9		Body		9	28.02		27	9.85		9.2	10yr 6/6	10yr 5/3	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized		No			NBP-001-15a-6 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637714	5138209		3.8		Body		3.8	20.58		16.64	8.28		8.18	7.5yr 6/6	10yr 4/1	10yr 6/4, 10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP-001-15a-8 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637730	5138250		4.9		Body		4.9	24.16		21.23	11.76		10.36	2.5yr 5/6	5yr 25/1 (Black)	5yr 3/3		7-10%	Medium	Partially Oxidized	Sand	No			NBP-001-15a-9 C-1	LBA/EIA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637718	5138239		33.9		Body		3.8	19.48		15.99	9.46		8.69	5yr5/6	10yr 6/3	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Quartz Mica	No			NBP-001-15a-9 C-2	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637734	5138278		3.4		Body		3.4	27.53		15.16	6.33		6.02	10yr 6/4	10yr 3/1	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Cross-Hatch	NBP-001-15a-10 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637745	5138287		2.7		Shoulder		2.7	16.32		15.21	7.92		7.58	10yr 5/2	10yr 6/2	10yr 5/1		0-2%	Fine	Partially Oxidized	Sand	No			NBP01-15a-13- C-1	IA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637725	5138230		3.6		Body		3.6	24.34		14.64	9.77		9.08	2.5yr 5/6	5yr 5/4	10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Quartz	No			NBP-001-15a-14 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637733	5138247		5.1		Body		5.1	25.33		20.13	8.5		8.19	7.5yr 5/4	7.5yr 4/4	10yr 2/1 (Black)			Medium	Partially Oxidized	Sand Granules Organic	No			NBP-001-15a-15 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637746	5138247		9.7		Body		7	22.99		20.09	9.3		9.07	7.5yr 6/4	7.5yr 4/1			10-15%	Medium Coarse	Partially Oxidized		No	Burnished		NBP-001-15a-16 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637746	5138247		9.7		Body		2.8	17.63		15.52	9.34		9.26	5yr5/6	5yr 5/6	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand	No	Burnished		NBP001-15-16- C-2	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637730	5138227		33.8		Body		17.8	39.03		35.48	11.28		10.75	7.5yr 4/2	2.5yr 4/6	10yr 2/1 (Black)			Medium	Partially Oxidized	Sand	No	Burnished		NBP-001-15a-17 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637730	5138227		33.8	0-15	Rim	Simple Open	14.4	35.54	Flat	23.56	19.61	22	17.44	10yr 5/3	Unknown	10yr 2/1 (Black)	Bowl?	>15%	Coarse	Partially Oxidized	Sand Quartz	No	Incised	Line	NBP-001-15a-17 C-2	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637728	5138223		22.2		Body		14.2	38		33.85	9.2		8.51	10yr 4/3	7.5yr5/4	7.5yr 4/1, 10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand	No	Burnished	Line	NBP- 001-15a-18 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637728	5138223		22.2		Shoulder		3.3	20.2		16.16	8.39		7.19	7.5yr 5/4	7.5yr 4/1	10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Granules Quartz	No			NBP-001-15a-18 C-2	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637739	5138238		3.3		Body		3.3	23.21		1.15	8.12		7.85	5yr5/6	10yr 6/3	10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand	No			NBP-001-15a-19- C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637728	5138236		11.6		Body		7.7	29.66		25.33	10.38		10.17	7.5yr 5/4	10yr 6/6	10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand	No	Burnished		NBP-001-15a-20 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637728	5138236		11.6		Body		4	17.32		14.99	10.18		9.96	7.5yr 5/6	10yr 2/1 (Black)	5yr5/6, 10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand	No			NBP-001-15a-20 C-2	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637721	5136232		2.9		Body		2.9	20.68		18.29	8.74		6.31	10yr 5/3	7.5yr5/4	10yr 4/1, 2.5yr 4/6		0-2%	Fine	Partially Oxidized	Sand	No			NBP001-15a-21- C-1	IA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	636733	5138234		200.5		Body		19.6	39.3		32.81	12.44		11.52	5yr5/6	7.5yr 4/1	7.5yr 4/3			Medium	Partially Oxidized	Sand Quartz	No	Burnished		NBP-001-15a-22 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637723	5138223		10.8		Body		10.8	35.77		27.11	9.82		9.62	2.5yr 5/6	2.5yr5/6	5yr 4/2, 7.5yr 3/1		10-15%	Medium Coarse	Partially Oxidized		No			NBP-001-15a-24 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637723	5138222		9.3		Body		9.3	30.55		29.02	11.59		11.09	5yr5/6	7.5yr 4/2	5yr 4/6, 5yr 4/1		5-7%	Medium	Partially Oxidized	Sand	No			NBP-001-15a-25 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637716	5138230		20.5		Neck		14.7	40.9		33.98	11.02		10.83	10yr 5/4	7.5yr5/4	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Quartz Granules	No			NBP-001-15a-26 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637716	5138238		20.9		Body		5.9	25.11		18.1	12.4		11.28	10yr 6/6	10yr 6/6	7.5yr 4/6, 10yr 2/1 (Black), 7.5yr 4/6		10-15%	Medium	Partially Oxidized	Sand	No	Burnished		NBP-001-15a-26 C-2	LBA/EIA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637723	5138224		11.9		Body		7.9	28.9		22.25	8.62		8.25	10yr 4/3	10yr 5/3	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No	Burnished		NBP-001-15a-29 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637723	5138224		11.9		Body		4.1	20.84		14.64	10.72		9.13	10yr 7/1	10yr 4/1	10yr 2/1		2-5%	Medium Fine	Partially Oxidized	Sand	No		Perforated	NBP-001-15a-29 C-2	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637718	5138239		33.9		Body		30.1	49.06		33.88	12.44		10.99	5yr6/4	5yr 5/6	10yr 2/1 (Black)		10-15%	Medium	Partially Oxidized	Sand	No			NBP- 001- F15a-9 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	636713	5138205		10.8		Body		10.8	31.46		27.69	11.98		11.04	5yr6/6	5yr 5/6	10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Mica	No			NBP-001-15a-31 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637737	5138241		7.4		Body		7.4	32.08		7.03	10.85		10.77	10yr 6/3	5yr 5/4	5yr 3/1		10-15%	Medium Coarse	Partially Oxidized	Sand Quartz	No			NBP-001-15a-32 C-1	IA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637612	5138106		54		Body		19.6	39.91		27.39	10.55		10.33	10yr 6/3	10yr 3/1	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	Yes			NBP-001-15a-36 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637612	5138106		54		Shoulder		10.2	23.76		22.38	12.98		10.82	2.5yr 5/6	2.5yr5/6	2.5yr 3/1		7-10%	Medium	Partially Oxidized		No			NBP-001-15a-36 C-2	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637612	5138106		54		Body		7.8	27.92		16.02	13.46		12.46	7.5yr 5/4	10yr 5/3	10yr 2/1 (Black), 7.5yr 5/6		7-10%	Medium	Partially Oxidized	Sand Quartz Granules	No			NBP-001-15a C-3	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637612	5138106		54		Shoulder		4.8	21.11		19.58	9.39		7.98	2.5yr 5/6	2.5yr5/6	5yr 2.5/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Quartz	No			NBP-001-15a C-4	LBA
Shatz/Chalcu	NBP-001	F15a	STU-1	637720	5138210	2, 12cm	14.3	15-30	Neck	Everted	14.3	40.61	Unknown	32.89	7.76	Unknown	7.04	7.5yr 4/2	10yr 4/2		Unknown	7-10%	Medium	Partially Oxidized	Sand	Yes	Incised	Parallel Lines	NBP-001-15a-STU1-L2 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	STU-4	637730	5138226	1, screen	4.6		Body		4.6	21.03		19.05	12.08		11.65	10yr 5/3	10yr 6/3	10yr 2/1			Medium Fine	Partially Oxidized	Sand	Yes	Incised	Parallel Lines	NBP-001-15a-STU4-L1 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	STU-2	637719	5138215	1, 5cm	6.8		Body		6.8	29.58		19.01	10		9.87	7.5yr 5/4	7.5yr5/3	5yr 4/6, 10yr 2/1		2-5%	Medium Fine	Partially Oxidized	Sand	Yes			NBP-001-15a-STU2-L1 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	STU-3	637723	5138229	1, 22cm	5.1		Body		5.1	21.17		18.14	9.64		9.32	7.5yr 6/4	7.5yr6/3	10yr 3/2		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-001-15a-STU3-L1 C-1	LBA/EIA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637715	5138200		12.4		Body		12.4	35.63		23.83	13.73		12.3	10yr 5/2	5yr 6/6	10yr 2/1 (Black), 5yr 5/6		5-7%	Medium	Partially Reduced	Sand Granules	No			NBP-001-15a-28 C-1	LBA
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637612	5138106		54		Body		4.6	23.44		23.12	5.82		5.72	10yr 6/1	10yr 2/1	5yr5/8			Medium	Partially Reduced	Sand	Yes	Impression	Textile Cross-Hatch	NBP-001-15a C-6	Turk
Shatz/Chalcu	NBP-001	F15a	N/A (Survey)	637612	5138106		54		Body		7.2	25.3		21.87	10.13		9.79	10yr 6/2	10yr 5/1	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Granules	No			NBP-001-15a C-5	LBA
Shatz/Chalcu	NBP-010	50	N/A (Survey)	638483	5132115		154.6		Neck		34.8	43.46		32.76	20.43		15.22	Light Brown	Light Brown	Gray		10-15%	Medium Coarse	Fully Oxidized	Sand Mica Granules Quartz	No	Impression		NBP-0101-50-C-2	Turk
Shatz/Chalcu	NBP-010	50	N/A (Survey)	638483	5132115		154.6	30-45	Body	Simple Open	12	35.48		29.15	12.03		10.59	Light Brown O	Light Brown Oran	Light Brown Orange		5-7%	Medium Fine	Fully Oxidized	Sand Mica Quartz	No			NBP-0101-50-C-4	Turk
Shatz/Chalcu	NBP-010	50	N/A (Survey)	638483	5132115		154.6	15-30	Rim	Simple Closed	7.6	23.34	Flat	21.83	13.64	Unknown	11.04	Light Brown	Light Brown	Light Orange Brown	Unknown	5-7%	Medium	Fully Oxidized		No			NBP-0101-50-C-5	Turk
Shatz/Chalcu	NBP-010	50	N/A (Survey)	638483	5132115		154.6		Shoulder		9.9	30.03		20.91	13.53		13.21	Light Orange	Light Orange	Light Orange		5-7%	Medium	Fully Oxidized	Sand	No	Impression	Textile	NBP-0101-50-C-7	Turk
Shatz/Chalcu	NBP-010	50	N/A (Survey)	638483	5132115		154.6		Body		5	26.1		19.68	11.4		8.92	Eroded	Light Orange	Light Orange			Medium Fine	Fully Oxidized	Sand	No	Impression	Textile	NBP-0101-50-C-8	Turk
Shatz/Chalcu	NBP-010	50	N/A (Survey)	638483	5132115		154.6		Body		3.5	19.07		19.94	8.54		7.39	Light Brown	Light Orange	Light Orange		5-7%	Medium	Fully Oxidized		No	Impression	Textile	NBP-0101-50-C-9	Turk
Shatz/Chalcu	NBP-010	50	N/A (Survey)	638483	5132115		154.6		Shoulder		33.3	37.79		40.13	16.82		15.66	Light Brown	Light Brown	Orange-Red		7-10%	Medium Coarse	Partially Oxidized	Sand Granules Quartz	No	Impression	Textile	NBP-0101-50-C-1	Turk
Shatz/Chalcu	NBP-010	50	N/A (Survey)	638483	5132115		154.6		Rim		28.8	43.64	Flat	35.35	14.85	16	13.5	Light Brown	Light Brown	Gray/Orange	Bowl	5-7%	Medium	Partially Oxidized	Sand Quartz Granules	No	Impression	Textile Additive	NBP-0101-50-C-3	Turk
Shatz/Chalcu	NBP-010	50	N/A (Survey)	638483	5132115		154.6		Body		9.5	29.81		23.86	14.22		13.18	Light Gray Bro	Light Bray Brown	Light Gray Brown		10-15%	Medium Coarse	Partially Oxidized	Sand Granules Organic	No			NBP-0101-50-C-6	Turk
Shatz/Chalcu	NBP-010	50	N/A (Survey)	638483	5132115		154.6		Foot		3.9	20.61		22.46	9.33		7	Light Brown	Light Brown	Light Brown	Bowl?	5-7%	Medium	Partially Oxidized		No	Impression	Textile	NBP-0101-50-C-10	Turk
Shatz/Chalcu	NBP-010	50	N/A (Survey)	638483	5132115		154.6		Rim	Simple Closed	7.2	28.44	Flat	28.41	9.41		7.44	Light Brown G	Light Brown Gray	Light Bray	Jar	5-7%	Medium	Partially Reduced	Sand	No			NBP-0101-50-C	Turk
Bulgan Uul	NBP-013	G2-1	N/A (Survey)	644199	5090118		11.9		Body		2.6	22.7		13.45	8.91		8.49	Light orange	Light Orange	Gray		2-5%	Medium Fine	Fully Oxidized	Sand	No	Slip		NBP-013-G2-1 C-2	Turk
Bulgan Uul	NBP-013	G2-1	N/A (Survey)	644199	5090118		11.9		Body		6.7	28.27		19.78	11.5		11.35	Light orange	Light Gray	Dark Gray		2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Parallel Lines	NBP-013-G2-1 C-1	Turk
Bulgan Uul	NBP-013	G2-1	N/A (Survey)	644199	5090118		11.9		Body		2.5	24.41		18.07	5.37		5.35	Light Orange	Light Orange	Gray		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-013-G2-1 C-3	Turk
Bulgan Uul	NBP-013	G3-3	N/A (Survey)	644223	5089917		26.5		Body		8.3	35.5		23.87	8.1		8.02	Orange	Orange	Orange		2-5%	Medium Fine	Fully Oxidized	Sand	No	Incised		NBP-013-G3-3 C-7	Turk
Bulgan Uul	NBP-013	G3-3	N/A (Survey)	644223	5089917		26.5		Body		4.8	25		20.11	7.78		7.49	Orange	Orange	Orange		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-013-G3-3 C-8	Turk
Bulgan Uul	NBP-013	G3-3	N/A (Survey)	644223	5089917		26.5		Body		1.7	15.46		13.36	8.14		6.94	Orange	Orange	Orange		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-013-G3-3 C-9	Turk
Bulgan Uul	NBP-013	G3-3	N/A (Survey)	644223	5089917		26.5		Body		1.3	14.27		8.88	8.49		8.12	Orange	Orange	Orange		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-013-G3-3 C-11	Turk
Bulgan Uul	NBP-013	G3-3	N/A (Survey)	644223	5089917		26.5		Body		9.4	26.83		26.93	18.43		15.19	Light gray	Light gray	light gray		10-15%	Medium Coarse	Fully Reduced	Sand Quartz Granules	No			NBP-013-G3-3 C-6	LBA
Bulgan Uul	NBP-013	G4-2	N/A (Survey)	644177	5089374		5.6		Body		5.6	23.66		22.7	6.92		6.88	Light Brown	Light Brown	Light gray		5-7%	Medium Fine	Fully Oxidized	Sand Quartz	No			NBP-013-G4-2 C-1	LIA_X
Bulgan Uul	NBP-013	Group 1-1	N/A (Survey)	644189	5090238		43.3		Body		4.1	26.01		15.3	10.52		10.4	7.5yr 6/6	7.5yr 6/2	75yr 6/6		7-10%	Medium	Fully Oxidized	Sand	No			NBP-013-G1-1 C-2	Turk?

Table E.7 (continued). Ceramic catalog

Bulgan Uul NBP-013	Group 1-1	N/A (Survey)	644189	5090238		43.3	15-30	Rim	Everted	7.5	25.78	Simple	25.36	10.06	30	7.78	5yr6/6	2.5yr5/6	2.5yr 5/6		Everted Jar?	5-7%	Medium	Fully Oxidized	Sand Granules Pottery/Grog	Yes	Impression	Fingerprint	NBP-013-G1-1	C-5			
Bulgan Uul NBP-013	Group 1-1	N/A (Survey)	644189	5090238		43.3		Body		5.5	23.04		17.02	10.1		9.53	2.5yr 5/6	5yr 5/6	10yr 4/1, 10yr 2/1 (Black)			2-5%	Medium	Partially Oxidized	Granules Sand Quartz	No	Slip		NBP-013-G1-1	C-1			IA LIA
Bulgan Uul NBP-013	Group 1-1	N/A (Survey)	644189	5090238		43.3	0-15	Rim	Simple Open	8.9	26.8	Flat	24.02	10.34	29	9.31	2.5yr 5/6	2.5yr5/6	5yr6/6, 10yr 4/1,5yr6/6		Bowl	2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-013-G1-1	C-3			LBA/EIA
Bulgan Uul NBP-013	Group 1-1	N/A (Survey)	644189	5090238		43.3	0-15	Rim	Everted	10.4	26.24	Flat	25.87	11.17	27	8.68	7.5yr 5/3	7.5yr5/6	10yr 4/1		Everted Jar?	>15%	Coarse	Partially Oxidized	Sand Granules Quartz	No	Impression	Parallel Lines	NBP-013-G1-1	C-4			LBA
Bulgan Uul NBP-013	Group 1-1	N/A (Survey)	644189	5090238		43.3		Foot		7.5	19.84		18.73	15.34		15.06	10yr 5/2	7.5yr6/6	GLEY1 4/N		Unknown	5-7%	Medium	Partially Reduced	Sand	Yes			NBP-013-G1-1	C-6			LBA/EIA
Bulgan Uul NBP-013	Group 2-	N/A (Survey)	644199	5090118		366.6		Rim		4.8	28.69		19.21	4.49		4.45	2.5y 8/2 (Glaze)	2.5y 8/2 (Glaze)	2.5yr 8/1 (Glaze)			0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP-013-G2-1	C-2			LH
Bulgan Uul NBP-013	Group 2-	N/A (Survey)	644199	5090118		366.6		Body		38.8	55.34		51.94	10.97		7.76	10yr 2/2 (Glaze)	10yr 2/2 (Glaze)	10yr 7/2			0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP-013-G2-1	C-5			LH
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Foot		76.2	74.01		36.8	10.74		9.68	10yr 4/3	10yr 3/3	10yr 6/2			0-2%	Fine	Fully Oxidized	Sand	No	Glaze		NBP-013-G2-1	C-1			LH
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		2.8	16.29		15.44	11.67		9.4	2.5yr 6/8	2.5yr5/6	2.5yr 5/8			5-7%	Medium	Fully Oxidized	Sand	No			NBP-013-G2-1	C-12			LBA/EIA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		3.6	21.99		17.99	7.31		7.28	2.5yr 5/8	2.5yr5/6	2.5yr 5/6			5-7%	Medium	Fully Oxidized	Sand Quartz	No	Burnished		NBP-013-G2-1	C-13			Turk
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		3.5	20.79		16.45	10.76		9.95	2.5yr 5/6	7.5yr6/2	2.5yr 4/6			2-5%	Medium Fine	Fully Oxidized	Sand Quartz	No			NBP-013-G2-1	C-16			LBA/EIA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		2.2	17.95		16.61	7.82		7.19	5yyr 4/6	5yr 4/6	5yr5/8			7-10%	Medium	Fully Oxidized	Sand	No			NBP-013-G2-1	C-35			LBA/EIA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		1.9	14.69		13.08	7		6.74	7.5yr 5/3	2.5yr 4/4	2.5yr 4/6			5-7%	Medium	Fully Oxidized	Sand	No			NBP-013-G2-1	C-38			IA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		2.3	18.52		12.49	6.67		6.67	7.5yr 5/3	5yr 4/3	5yr 3/5			2-5%	Medium Fine	Fully Oxidized	Sand Granules	No	Burnished		NBP-013-G2-1	C-39			LBA/EIA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		2.8	18.56		18.03	8.67		8.59	10yr 5/2	5yr 5/4	7.5yr 5/3			10-15%	Medium Coarse	Fully Oxidized	Sand	No			NBP-013-G2-1	C-41			IA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		1.9	15.12		14.67	6.42		6.35	7.5yr 4/4	7.5yr5/3	7.5yr 5/4			0-2%	Fine	Fully Oxidized	Sand	No	Burnished		NBP-013-G2-1	C-42			Turk
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6	0-15	Rim	Simple Open	7.2	26.43	Flat	21.03	11.79	Unknown	10.31	7.5yr 5/4/	5yr 5/4	5yr5/6		Bowl	7-10%	Medium	Fully Oxidized	Sand Quartz	Yes			NBP-013-G2-1	C-48			LBA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Foot		4.28	74.44		35.84	10.86		8.73	10yr 7/6	2.5y 7/3 (Glaze)	10yr 7/6			0-2%	Fine	Fully Oxidized	Sand	No	Glaze		NBP-013-G2-1	C-51			LH
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Shoulder		8.2	27.64		24.94	7.42		6.78	10yr 2/1 (Black)	10yr 4/6	10yr 7/1			0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP-013-G2-1	C-3			LH
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		8.4	36.21		30.52	8.07		5.18	10yr 2/1 (Black)	10yr 4/6	10yr 7/1			0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP-013-G2-1	C-4			LH
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		4.9	27.88		22.38	6.63		5.76	10yr 5/1	10yr 5/1	10yr 4/1			2-5%	Medium Fine	Fully Reduced	Sand	No			NBP-013-G2-1	C-6			Turk
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		5.3	32.62		14.57	7.68		7.29	10yr 4/1	GLEY1 4/N	GLEY1 3/N			0-2%	Fine	Fully Reduced	Sand	No	Burnished		NBP-013-G2-1	C-7			LH
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		11.9	37.61		30.45	9.54		8.25	GLEY1 4/N	GLEY1 4/N	GLEY1 4/N			2-5%	Medium Fine	Fully Reduced	Sand	No	Burnished		NBP-013-G2-1	C-8			Turk
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		8.9	30.43		22.48	11.36		10.57	10yr 5/2	10yr 5/3	10yr 5/2			2-5%	Medium Fine	Fully Reduced	Sand Mica	No	Burnished		NBP-013-G2-1	C-9			IA?
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		4	25.57		22.96	8.19		6.8	10yr 5/1	10yr 5/1	10yr 3/1			5-7%	Medium	Fully Reduced	Sand Granules	No			NBP-013-G2-1	C-20			LIA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		8.3	35.33		21.44	9.96		9.79	10yr 5/2	7.5yr 4/2	10yr 2/1 (Black)			>15%	Coarse	Fully Reduced	Sand Granules Quartz	No			NBP-013-G2-1	C-23			LIA_X
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		4.3	20.12		17.54	10.64		9.66	10yr 5/2	7.5yr 4/2	10yr 2/1 (Black)			10-15%	Medium Coarse	Fully Reduced	Sand Granules Quartz	No			NBP-013-G2-1	C-24			LIA_X
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		21.8	48.08		32.28	10.15		9.52	10yr 5/2	7.5yr 4/2	10yr 2/1 (Black)			>15%	Coarse	Fully Reduced	Sand Granules Quartz	No			NBP-013-G2-1	C-25			LIA_X
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644119	5090118		366.6		Body		2.8	17.63		17.61	7.7		7.66	GLEY1 4/N	GLEY1 6/N	10yr 2/1 (Black)			2-5%	Medium Fine	Fully Reduced	Sand Mica	No			NBP-013-G2-2	C-31			LIA_X
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		3.5	23.12		16.46	7.83		7.21	GLEY1 3/N	GLEY1 3/N	GLEY1 3/N			10-15%	Medium Coarse	Fully Reduced	Sand	No	Impression	Parallel Lines	NBP-013-G2-1	C-46	LIA_X		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		1			10.1	10.33		7.52	10yr 6/2	10yr 5/	10yr 4/1			0-2%	Fine	Fully Reduced	Sand	No	Stamped		NBP-013-G2-1	C-47	LH		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		6.6	36.5		27.89	5.94		4.29	10yr 2/1 (Black)	10yr 5/3	10yr 6/1			0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP-013-G2-1	C-52	LH		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		9.3	40.42		32.76	6.18		5.32	10yr 2/1 (Black)	10yr5/6 (Glaze)	10yr 7/1			2-5%	Medium Fine	Fully Reduced	Sand	No	Glaze		NBP-013-G2-1	C-53	LH		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		6.8	33.47		17.82	7.16		6.83	10yr 2/1 (Black)	10yr5/6 (Glaze)	10yr 7/1			2-5%	Medium Fine	Fully Reduced	Sand	No	Glaze		NBP-013-G2-1	C-54	LH		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		19.2	55.35		31.48	9.88		5.83	10yr 3/1 (Glaze)	10yr 3/2 (Glaze)	10yr 5/2			0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP-013-G2-1	C-55	LH		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		6.9	33.19		21.95	9.511		8.51	5yr6/8	5yr 6/6	5yr 3/1			5-7%	Medium	Partially Oxidized	Sand	No	Burnished		NBP-013-G2-1	C-10	LIA		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		7.5	31.06		22.28	12.56		11.18	5yr5/6	5yr 5/6	5yr5/8, 6yr 6/1, 5yr 5/8			7-10%	Medium	Partially Oxidized	Sand Mica Quartz	No			NBP-013-G2-1	C-11			LBA/EIA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		3.5	26.72		17.82	9.23		8.91	2.5yr 5/8	7.5yr6/4	10yr 4/1			5-7%	Medium	Partially Oxidized	Sand	No			NBP-013-G2-1	C-14			LBA/EIA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		4.9	26.94		19.05	8.07		7.95	2.5yr 6/6	7.5yr5/1	7.5yr 5/3, 10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Mica Sand	No			NBP-013-G2-1	C-15			LBA/EIA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644198	5090118		366.6		Body		3.6	22.07		18.61	8.13		7.86	2.5yr 6/8	2.5yr6/8	2.5yr 5/8			0-2%	Fine	Partially Oxidized	Sand	No			NBP-013-G2-1	C-17			IA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		2.1	16.77		15.64	9		8.76	2.5yr 5/8	10yr 5/3	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-013-G2-1	C-18			LBA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		1	17.79		13.27	6.78		6.45	2.5yr 4/4	2.5yr 4/4	7.5yr 4/4			10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP-013-G2-1	C-19	EBA/MBA		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		15.9	40.76		31.84	10.08		9.33	2.5yr 5/6	10yr 4/1	10yr 4/1			7-10%	Medium	Partially Oxidized	Sand	Yes	Burnished		NBP-013-G2-1	C-26	IA		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		6.82	24.7		20.45	13.4		13.19	5yr5/3	2.5yr 4/8	10yr 2/1 (Black)			10-15%	Medium Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-013-G2-1	C-27			LBA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		5.5	26.67		17.64	12.09		11.78	2.5yr 3/4	5yr 5/4	10yr 2/1 (Black)			10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP-013-G2-1	C-28	LBA		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		4.5	24.51		14.43	9.59		9.18	7.5yr 5/4	7.5yr5/4	10yr 2/1 (Black)			>15%	Coarse	Partially Oxidized	Sand Quartz	No			NBP-013-G2-1	C-29			LBA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		10.8	27.53		25.05	10.68		9.56	10yr 5/3	10yr 4/1	10yr 3/1			5-7%	Medium	Partially Oxidized	Sand Mica	No			NBP-013-G2-1	C-30			LBA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		1.6	17.52		10.7	7.59		7.23	5yr 4/6	GLEY1 3/N	10yr 2/1 (Black), 75yr 4/1			0-2%	Fine	Partially Oxidized	Sand Mica	No			NBP-013-G2-1	C-32			LBA/EIA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		3.6	19.92		18.94	6.57		6.47	7.5yr 5/3	7.5yr 4/3	10yr 2/1			>15%	Coarse	Partially Oxidized	Sand	No			NBP-013-G2-1	C-34	LBA		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		3	20.76		15.85	7.19		6.86	7.5yr 5/6	GLEY1 3/N	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No	Burnished		NBP-013-G2-1	C-36	LBA		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		6.3	29.24		19.07	8.29		7.81	2.5yr 5/6	7.5yr5/3	10yr 2/1 (Black)			10-15%	Medium Coarse	Partially Oxidized	Sand Mica	No			NBP-013-G2-1	C-37			LBA/EIA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		3	24.86		19.35	5.99		5.56	7.5yr 5/4	5yr 5/4	10yr 2/1 (Black)			5-7%	Medium Fine	Partially Oxidized	Sand Granules Quartz	No			NBP-013-G2-1	C-43			IA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		1.5	15.91		14.43	6.23		5.95	7.5yr 7/6	10yr 2/1 (Black)	7.5yr 3/1			2-5%	Medium	Partially Oxidized	Sand	No			NBP-013-G2-1	C-45	LBA		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6	0-15	Rim	Simple Closed	5.5	22.17	Flat	16.86	11.75	Unknown	11.65	10yr 5/3	10yr5/2	10yr 2/1 (Black)		Globular Jar?	5-7%	Medium	Partially Oxidized		Yes			NBP-013-G2-1	C-49	LBA		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644264	5090139		366.6		Body		17.2	37.3		26.38	12.15		11.94	7.5yr 6/2	10yr 6/6	10yr 2/1 (Black)			7-10%	Medium	Partially Oxidized	Sand	Yes	Stamped	Circle/w circle	NBP-013-G2-1	C-50	LBA		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		2.7	20.52		14.43	7.62		7.56	10yr 4/2	5yr 5/4	GLEY1 5/N			2-5%	Medium Fine	Partially Reduced	Sand	No			NBP-013-G2-1	C-21	LIA		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		3	22.19		17.09	7.05		6.82	7.5yr 4/1	25yr 4/6	10yr 2/1			7-10%	Medium	Partially Reduced	Sand Mica	Yes			NBP-013-G2-1	C-22			LIA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Body		5.4	25.82		21.48	9.27		9.12	10yr 6/2	10yr 6/3	10yr 2/1 (Black)			7-10%	Medium	Partially Reduced	Sand Granules	No			NBP-013-G2-1	C-33			EBA/MBA
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090118		366.6		Neck		3.3	17.57		16.53	8.39		7.15	10yr 5/3	10yr 5/2	10yr6/2			0-2%	Fine	Partially Reduced	Sand	No			NBP-013-G2-1	C-40	LIA_X		
Bulgan Uul NBP-013	Group 2-1	N/A (Survey)	644199	5090188		366.6		Body		1.4	14.54		12.39	6.56		6.37	7.5yr 6/1	2.5y 5/6	7.5yr 3/2			2-5%	Medium	Partially Reduced	Sand	No			NBP-013-G2-1	C-44	IA		
Bulgan Uul NBP-013	Group 2-2	N/A (Survey)	644274	5090117		7.1		Body		5.17	27.4		21.27	7.93		7.62	7.5yr 5/3	10yr6/3	10yr 4/4			10-15%	Medium Coarse	Fully Oxidized	Sand Granules	No	Impression	Parallel Lines	NBP-013-G5-2	C-1			Turk
Bulgan Uul NBP-013	Group 2-2	N/A (Survey)	644274	5090117		7.1		Body		2.1	17.48		13.04	7.01		6.9	5yr 4/4	10yr 6/3	7.5yr 5/3			2-5%	Medium Fine	Fully Oxidized	Sand	No	Burnished		NBP-013-G2-2	C-2	LIA		
Bulgan Uul NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body		4.4	31.81		15.8	8.47		6.89	5yr 4/4	10yr 6/3	5yr 4/6			2-5%	Medium	Fully Oxidized	Sand Granules	No	Burnished		NBP-013-G3-1	C-18			IA
Bulgan Uul NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body		1.5	16.89		14.64	7.4		6.86	2.5yr 6/6	2.5yr 6/4	2.5yr 5/8			2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-013-G3-1	C-19	LBA/EIA		
Bulgan Uul NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body		8.7	39.17		24.89	9.24		8.32	10yr 5/2	10yr 3/1	10yr5/1			10-15%	Medium Coarse	Fully Reduced	Sand Granules	No	Burnished		NBP-013-G3-1	C-2			LIA_X
Bulgan Uul NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body		4.9	25.27		17.3	10.68		10.21	10yr 4/1	10yr 5/1	GLEY1 4/N			5-7%	Medium	Fully Reduced	Sand	No	Burnished	Slip	NBP-013-G3-1	C-15	LIA		
Bulgan Uul NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body		5.8	30.67		21.57	6.59		6.48	GLEY1 4/N	10yr 6/2	GLEY1 4/N			5-7%	Medium	Fully Reduced	Sand	No	Incised	Parallel Lines	NBP-013-G3-1	C-20	LIA_X		
Bulgan Uul NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body		9.5	26.25		21.95	14		12.01	5yr5/6	2.5yr 4/1	10yr 4/1			7-10%	Medium Coarse	Partially Oxidized	Sand	No	Burnished		NBP-013-G3-1	C-1	LBA/EIA		

Table E.7 (continued). Ceramic catalog

Bulgan Uul	NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body			8.5	27.81		26.36	14.1		13.57	2.5yr 4/6	10yr 5/3	10yr 3/1		5-7%	Medium Fine	Partially Oxidized	Sand	No	Burnished		NBP- 013-G3-1	C-3	LBA/EIA
Bulgan Uul	NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body			6.4	35.48		23.65	9.66		8.26	2.5yr 5/8	2.5yr 5/8	GLEY1 4/N		7-10%	Medium	Partially Oxidized	Sand	No			NBP-013-G3-1	C-4	LBA/EIA
Bulgan Uul	NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body			11.6	31.56		29.68	11.73		11.61	2.5yr 5/6	7.5yr 5/1	10yr 4/1		7-10%	Medium	Partially Oxidized	Sand Mica	No	Burnished	Slip	NBP-013-G3-1	C-5	LIA
Bulgan Uul	NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body			5.1	27.15		19.7	10.78		10.1	10yr 6/4	10yr 4/1	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Quartz	No			NBP-013-G3-1	C-6	LBA
Bulgan Uul	NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body			5.1	22.37		15.62	11.77		11.48	2.5yr 4/4	10yr 5/2	10yr 4/1		5-7%	Medium	Partially Oxidized	Sand Mica Quartz	No	Burnished		NBP-013-G3-1	C-7	LIA
Bulgan Uul	NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body			3.8	22.43		15.82	11.3		11.27	5yr 5/4	7.5yr 4/1	GLEY1 4/N		7-10%	Medium	Partially Oxidized	Sand	No			NBP-013-G3-1	C-9	IA
Bulgan Uul	NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body			11.3	28.1		27.62	16.49		14.79	5yr 5/4	5yr 5/4	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-013-G3-1	C-12	LBA
Bulgan Uul	NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body			2.9	23.66		16.82	6.83		6.09	10yr 2/1 (Blac	10yr 2/1 (Black)	(<10yr 7/6		0-2%	Fine	Partially Oxidized	Sand	No	Glaze		NBP-013-G3-1	C-14	LH
Bulgan Uul	NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body			4	18.35		13.99	10.51		10.18	2.5yr 4/4	2.5y 4/1	10yr 2/1 (Black), 7.5yr 5/4		7-10%	Medium	Partially Oxidized	Sand Granules Quartz	No	Slip		NBP-013-G3-1	C-17	LBA/EIA
Bulgan Uul	NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body			3.9	22.51		15.97	7.11		6.71	10yr 4/1	2.5yr 4/4	5yr 5/4		2-5%	Medium Fine	Partially Reduced	Sand	No	Burnished		NBP-013-G3-1	C-10	LIA
Bulgan Uul	NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body			3.8	23.08		20.14	7.36		6.55	10yr 4/1	2.5yr 4/4	5yr 5/4		2-5%	Medium Fine	Partially Reduced	Sand	No	Burnished		NBP-013-G3-1	C-11	LIA
Bulgan Uul	NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body			2.2	14.99		13.71	6.68		6.61	10yr 5/2	10yr 5/2	2.5yr 4/6		5-7%	Medium	Partially Reduced	Sand	No			NBP- 013-G3-1	C-13	EBA/MBA
Bulgan Uul	NBP-013	Group 3-1	N/A (Survey)	643786	5090001		115.3		Body			4.7	22.27		16.86	11.31		11.19	7.5yr 5/3	10yr 5/2	10yr 3/1		7-10%	Medium	Partially Oxidized	Sand Granules	No	Burnished	Slip	NBP-013-G3-1	C-16	LIA
Bulgan Uul	NBP-013	Group 3-2	N/A (Survey)	643808	5089844		32.2		Body			10.6	31.4		28.18	9.81		9.09	10yr 5/2	10yr 7/2	10yr 5/1		7-10%	Medium	Fully Reduced	Sand Granules Mica	No			NBP-013-G3-2	C-2	LIA_X
Bulgan Uul	NBP-013	Group 3-2	N/A (Survey)	643808	5089844		32.3		Body			9.2	33.11		29.52	9.71		8.4	10yr 5/3	10yr 6/3	10yr 5/1		10-15%	Medium Coarse	Fully Reduced	Sand Granules Mica	No			NBP-013-G3-2	C-3	LIA_X
Bulgan Uul	NBP-013	Group 3-2	N/A (Survey)	643808	5089844		32.3		Body			4.8	20.95		16.89	11.44		11.19	10yr 4/1	10yr 6/2	10yr 2/1 (Black)		>15%	Coarse	Fully Reduced	Sand Granules Quartz	No			NBP-013-G3-2	C-4	LBA
Bulgan Uul	NBP-013	Group 3-2	N/A (Survey)	643808	5089844		32.3		Body			3.8	21.15		18.65	9.44		8.61	5yr 6/4	2.5yr 5/8	2.5yr 4/1		5-7%	Medium	Partially Oxidized	Sand Granules	No			NBP- 013-G3-2	C-1	IA
Bulgan Uul	NBP-013	Group 3-2	N/A (Survey)	643808	5089844		32.3		Body			4.2	25.81		16.17	8.54		7.38	7.5yr 6/3	10yr 6/4	10yr 5/1		5-7%	Medium	Partially Oxidized	Sand Quartz	No	Burnished		NBP-013-G3-2	C-5	Turk
Bulgan Uul	NBP-013	Group 3-3	N/A (Survey)	644038	5089907		62.2		Body			1.1	16.27		14.7	5.56		5.42	2.5yr 5/6	2.5yr 6/6	2.5yr 5/6		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-013-G3-3	C-1	Turk
Bulgan Uul	NBP-013	Group 3-3	N/A (Survey)	644038	5089907		62.2		Body			6.9	31.21		22.09	10.76		9.04	2.5yr 4/8	2.5yr 4/8	2.5yr 5/6		5-7%	Medium	Fully Oxidized	Sand	No	Burnished		NBP-013-G3-3	C-2	LIA
Bulgan Uul	NBP-013	Group 3-3	N/A (Survey)	644038	5089907		62.2		Body			3.6	26.611		16.34	6.01		5.97	10yr 5/1	10yr 5/1	GLEY1 5/N		2-5%	Medium Fine	Fully Reduced	Sand	No			NBP-013-G3-3	C-3	LIA_X
Bulgan Uul	NBP-013	Group 3-3	N/A (Survey)	644038	5089907		62.2		Body			3	21.1		17.11	5.6		5.49	10yr 5/2	10yr 5/1	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No			NBP-013-G3-3	C-4	LIA_X
Bulgan Uul	NBP-013	Group 3-3	N/A (Survey)	644038	5089907		62.2		Foot			47.6	56.56		32	16.33		14.35	10yr 5/1	10yr 5/1	10yr 5/1		10-15%	Medium Coarse	Fully Reduced	Sand Quartz	No			NBP-013-G3-3	C-5	LIA_X
Bulgan Uul	NBP-013	Group 4-1	N/A (Survey)	644232	5089708		77.9		Foot			42.6	53.22		48.13	14.28		8.84	10yr 7/4	7.5yr 4/4	10yr 7/4		0-2%	Fine	Fully Oxidized	Sand	No	Slip		NBP-013-G4-1	C-1	LH
Bulgan Uul	NBP-013	Group 4-1	N/A (Survey)	644232	5089708		77.9		Shoulder			3.9	19.16		16.2	8.15		7.14	5yr 5/4	7.5yr 5/3	7.5yr 4/2		7-10%	Medium	Fully Oxidized	Sand	No			NBP- 013-G4-1	C-6	IA
Bulgan Uul	NBP-013	Group 4-1	N/A (Survey)	644232	5089708		77.9		Body			5.8	24.68		22.19	7.89		7.54	7.5yr 6/3	10yr 6/2	10yr 4/3		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-013-G4-1	C-7	IA
Bulgan Uul	NBP-013	Group 4-1	N/A (Survey)	644232	5089708		77.9		Body			0.7	13.14		11.8	4.61		4.54	2.5yr 6/8	7.5yr 6/4	2.5yr 4/8		0-2%	Medium Fine	Fully Oxidized	Sand	No			NBP- 013-G4-1	C-10	LBA/EIA
Bulgan Uul	NBP-013	Group 4-1	N/A (Survey)	644232	5089708		77.9		Body			3.5	20.66		17.933	8.39		8.06	7.5yr 5/4	10yr 6/1	10yr 4/3		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-013-G4-1	C-11	IA
Bulgan Uul	NBP-013	Group 4-1	N/A (Survey)	644232	5089708		77.9		Body			2.5	18.1		16.88	8.43		7.71	2.5yr 5/6	2.5yr 4/6	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 013-G4-1	C-2	IA
Bulgan Uul	NBP-013	Group 4-1	N/A (Survey)	644232	5089708		77.9		Body			3.9	22.69		19.8	7.92		7.83	5yr 6/6	7.5yr 5/4	10yr 2/1 (Black)			Medium Fine	Partially Oxidized	Sand	No			NBP-013-G4-1	C-3	LBA/EIA
Bulgan Uul	NBP-013	Group 4-1	N/A (Survey)	644232	5089708		77.9		Body			7.5	30.38		24.34	9.3		8.89	5yr 5/4	2.5yr 3/4	10yr 3/1		5-7%	Medium	Partially Oxidized	Sand	Yes			NBP-013-G4-1	C-4	LBA/EIA
Bulgan Uul	NBP-013	Group 4-1	N/A (Survey)	644232	5089708		77.9		Body			2.2	15.49		15.16	8.86		8.74	5yr 4/6	2.5yr 4/8	10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand	No			NBP-013-G4-1	C-5	LBA/EIA
Bulgan Uul	NBP-013	Group 4-1	N/A (Survey)	644232	5089708		77.9		Body			1.2	13.75		12.26	7.18		6.82	7.5yr 5/4	2.5yr 5/6	7.5yr 3/2		7-10%	Medium	Partially Oxidized	Sand Granules Quartz	Yes			NBP-013-G4-1	C-9	IA
Bulgan Uul	NBP-013	Group 4-1	N/A (Survey)	644232	5089708		77.9		Body			4.1	23.37		14.92	9.32		8.68	10yr 4/1	7.5yr 6/6	7.5yr 5/2		10-15%	Medium Coarse	Partially Reduced	Sand Quartz	No	Burnished	Slip	NBP- 013-G4-1	C-8	LIA_X
Bulgan Uul	NBP-013	Group 4-2	N/A (Survey)	644177	5089374		27.2		Body			7.3	29.54		21.46	10.67		9.71	5yr 6/6	10r 4/8	10r 4/6		10-15%	Medium Coarse	Fully Oxidized	Sand Quartz Mica	No			NBP- 013-G4-2	C-3	LBA/EIA
Bulgan Uul	NBP-013	Group 4-2	N/A (Survey)	644177	5089374		27.2		Body			6.9	27.75		23.42	8.96		8.14	10yr 6/2	10yr 5/1	10yr 5/1		2-5%	Medium Fine	Fully Reduced	Sand Granules	No			NBP-013-G4-2	C-2	LH
Bulgan Uul	NBP-013	Group 4-2	N/A (Survey)	644177	5089374		27.2		Body			4.1	20.74		18.64	8.27		7.99	10yr 6/3	10yr 5/1	2.5yr 5/2		0-2%	Fine	Fully Reduced	Sand Granules	No			NBP-013-G4-2	C-4	LH
Bulgan Uul	NBP-013	Group 4-2	N/A (Survey)	644177	5089374		27.2		Body			9.1	28.57		23.78	9.26		8.6	10yr 5/2	10yr 5/2	5yr 4/6		10-15%	Medium	Partially Reduced	Sand Quartz	No			NBP- 013-G4-2	C-1	LIA_X
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8		Neck			25.8	40.88		34.55	16.2		12.34	10yr 5/4	10yr 4/3	10yr 4/2		10-15%	Medium Coarse	Fully Oxidized	Sand	No	Burnished		NBP-013-G5-1	C-1	EBA/MBA
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8		Body			14.2	35.28		25.46	15.17		13	2.5yr 5/6	7.5yr 4/3	7.5yr 5/3		10-15%	Medium Coarse	Fully Oxidized	Sand Granules	No			NBP- 013- 05-1	C-2	EBA/MBA
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8		Body			3.6	21.96		15.68	8.97		8.87	10r 5/6	5yr 5/3	2.5yr 4/8		2-5%	Medium Fine	Fully Oxidized	Sand	No	Burnished		NBP-013-G5-1	C-4	LIA
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8		Body			8	27.95		23.27	11.44		11.12	2.5yr 4/6	2.5yr 4/4	2.5yr 5/8		5-7%	Medium	Fully Oxidized	Sand Granules	No	Burnished		NBP- 013- 05-1	C-5	LIA
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8		Body			3.6	24.59		15.48	9.77		9.34	10yr 7/4	10yr 7/4	10yr 6/2		5-7%	Medium	Fully Oxidized	Sand Granules	No			NBP-013-G5-1	C-7	EBA/MBA?
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8	0-15	Rim	Simple Open		3.3	17.74	Tapered	15.001	10.29	Unknown	6.15	10yr 5/3	10yr 6/4	7.5yr 5/6	Unknown	5-7%	Medium	Fully Oxidized	Sand	No	Burnished		NBP-013-G5-1	C-13	IA
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8		Body			9.7	30.69		30.06	10.35		7.86	10yr 4/1	10yr 6/3	10yr 5/1		2-5%	Medium Fine	Fully Reduced	Sand	No	Burnished		NBP- 013- 05-1	C-6	LIA_X
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8		Body			4.5	28.8		19.64	8.43		7.55	10yr 4/1	10yr 5/3	10yr 5/1		5-7%	Medium	Fully Reduced	Sand Granules	No	Burnished	Slip	NBP-013-G5-1	C-8	LIA_X
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8		Body			4.8	29.63		17.18	7.54		6.84	GLEY1 4/N	GLEY1 4/N	GLEY1 3/N		7-10%	Medium	Fully Reduced	Sand Quartz Mica	No	Burnished		NBP- 013- 05-1	C-9	LIA_X
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8		Body			2.7	23.21		16.53	6.06		4.86	GLEY1 4/N	GLEY1 3/N	GLEY1 2.5/N		7-10%	Medium	Fully Reduced	Sand	No	Burnished		NBP-013-G5-1	C-10	LIA_X
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8		Body			3.2	24.08		15.88	5.79		5.78	GLEY1 4/N	GLEY1 5/N	GLEY1 3/N		7-10%	Medium	Fully Reduced	Sand Quartz	No	Burnished Impression	Line	NBP-013-G5-1	C-11	LIA_X
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8	15-30	Rim	Everted		9.5	33.21	Unknown	25.65	10.61	12	9.55	GLEY1 4/N	10yr 4/1	10yr 4/1	Everted Jar?	0-2%	Fine	Fully Reduced	Sand Quartz	No	Burnished Impression	Punctate	NBP- 013- 05-1	C-12	LH
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8		Body			11.8	36.2		22.17	10.34		10.17	GLEY1 3/N	10yr 4/2	7.5yr 5/1		0-2%	Fine	Fully Reduced	Sand Quartz	No	Incised	Zig-Zag	NBP-013-G5-1	C-14	LIA_X
Bulgan Uul	NBP-013	Group 5-1	N/A (Survey)	643772	5091262		119.8		Body			2.5	18.27		16.3	7.15		7.12	7.5yr 6/2	10yr 2/1 (Black)	10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Mica	No			NBP- 013- 05-1	C-3	LBA
Bulgan Uul	NBP-013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			6.1	23.31		21.39	12.33		10.82	2.5yr 5/6	5yr 5/6	2.5yr 4/8		10-15%	Medium Coarse	Fully Oxidized	Sand Quartz Granules	No			NBP-013-G5-1	C-3	LBA/EIA
Bulgan Uul	NBP-013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			1.7	15.46		12.56	9.43		9.21	7.5yr 5/4	2.5yr 6/2	5yr 6/8		5-7%	Medium	Fully Oxidized	Sand	No			NBP-013-G5-2	C-15	LBA/EIA
Bulgan Uul	NBP-013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			26.6	47.3		43.94	10.93		10.43	10yr 4/1	GLEY1 3/N	10yr 4/3, 10yr 4/1		5-7%	Medium	Fully Reduced	Sand	No			NBP-013-G5-2	C-18	LIA
Bulgan Uul	NBP-013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			24.6	50.87		42.74	9.49		9.37	10yr 4/1	10yr 6/1	GLEY1 4/N		7-10%	Medium	Fully Reduced	Sand Granules	No	Burnished		NBP-013-G5-2	C-19	LH
Bulgan Uul	NBP-013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Neck			38.4	50.92		43.35	10.86		9.21	7.5yr 5/4	10yr 2/1 (Black)	10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Granules Quartz	No	Incised	Parallel Lines	NBP-013-G5-2	C-1	LBA
Bulgan Uul	NBP-013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Neck			17.6	35.96		28.75	11.58		10.88	2.5yr 5/6	7.5yr 5/4	10yr 5/2 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-013-G5-2	C-2	LBA
Bulgan Uul	NBP-013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			2.7	17.71		16.47	9.18		8.86	5yr 5/6	2.5yr 5/6	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-013-G5-2	C-4	LBA

Table E.7 (continued). Ceramic catalog

Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			11.4	32.06		27		9.79		9.74	7.5yr 6/4	7.5yr 5/4	10yr 2/1 (Black)			10-15%	Medium Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-013-G5-2	C-6		LBA
Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			4.7	24.86		15.7		9.72		9.51	10yr 6/4	7.5yr 6/4	10yr 2/1 (Black)			10-15%	Medium Coarse	Partially Oxidized	Sand Quartz Granules	No	Burnished		NBP- 013-G5-2	C-7		LBA
Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			4.1	25.96		14.49		9.62		9.4	7.5yr 5/4	7.5yr 6/4	10yr 2/1 (Black)			10-15%	Medium Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP- 013-G5-2	C-8		LBA
Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			3.5	18.07		13.71		9.73		9.62	10yr 6/3	7.5yr 6/4	10yr 4/1			10-15%	Medium Coarse	Partially Oxidized	Sand Granules Quartz Mica	No			NBP-013-G5-2	C-9		LBA
Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			2.6	19.44		16.36		Unknown		Unknown	7.5yr 6/3	10r 5/8	10r 5/8			5-7%	Medium	Partially Oxidized	Sand	No			NBP-013-G5-2	C-10		LBA/BA
Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			1.3	15.74		12.71		6.82		6.78	5yr 6/4	10r 5/6	10yr 4/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-013-G5-2	C-11		LBA/EIA
Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			2.1	19.85		13.85		7.95		7.89	7.5r 6/4	10r 6/6	7.5yr 3/1			7-10%	Medium	Partially Oxidized	Quartz Sand	No			NBP- 013-G5-2	C-12		LBA/BA
Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			5.1	23.14		22.37		8.67		8.61	7.5yr 5/2	7.5yr 6/3	7.5yr 3/2			7-10%	Medium	Partially Oxidized		No	Burnished		NBP-013-G5-2	C-13		LIA
Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			1.9	15.54		11.06		8.15		7.64	5yr 5/3	7.5yr 5/4	7.5yr 4/1			5-7%	Medium	Partially Oxidized	Sand	No			NBP-013-G5-2	C-14		LIA
Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			2.3	15.81		12.91		8.74		8.7	7.5yr 6/6	5yr 6/4	10yr 2/1 (Black)			7-10%	Medium	Partially Oxidized	Sand Granules	No			NBP-013-G5-2	C-16		LBA
Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			1.7	13.69		12.28		8.16		8.14	7.5yr 6/6	7.5yr 5/4	10yr 2/1 (Black)			5-7%	Medium	Partially Oxidized	Sand	No			NBP-013-G5-2	C-17		LBA
Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			2.4	19.74		13.36		7.59		6.92	7.5yr 6/4	7.5yr 5/6	10yr 2/1 (Black)			5-7%	Medium	Partially Oxidized	Sand	No			NBP-013-G5-2	C-20		LBA
Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Neck			7.8	26.56		24.95		9.48		8.26	10yr 5/4	10yr 5/3	10yr 2/1 (Black)			10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP-013-G5-2	C-21		LBA/EIA
Bulgan Uul	NBP013	Group 5-2	N/A (Survey)	644072	5090260		176.1		Body			8.3	31.86		26.53		7.95		7.43	7.5yr 4/4	10yr 5/2	10yr 3/1			10-15%	Medium Coarse	Partially Reduced	Sand Quartz	No	Stamped	Chevron	NBP-013-G5-2	C-5		Turk
Bulgan Uul	NBP013	Group 5-3	N/A (Survey)	6435220	5090982		25.9	0-15	Rim	Collared		14.8	32.59	V-Shaped	25.57		16.4	20	13.24	10yr 4/2	10yr 5/3	2.5yr 4/4	Unknown		>15%	Coarse	Fully Oxidized	Sand Granules	No			NBP- 013-G5-3	C-1		LBA/EIA
Bulgan Uul	NBP013	Group 5-3	N/A (Survey)	6435220	5090982		25.9		Body			4.6	19.89		17.78		10.19		10.09	5yr 4/4	7.5yr 5/3	7.5yr 3/2			5-7%	Medium	Fully Oxidized	Sand	No			NBP-013-G5-3	C-2		LIA_X
Bulgan Uul	NBP013	Group 5-3	N/A (Survey)	6435220	5090982		25.9		Body			3	14.93		14.31		11.3		11.09	10yr 5/3	10yr 5/3	5yr 4/6			7-10%	Medium	Fully Oxidized	Sand	No	Incised	Line	NBP-013-G5-3	C-3		IIA
Bulgan Uul	NBP013	Group 5-3	N/A (Survey)	6435220	5090982		25.9		Body			2	11.77		10.56		9.82		9.8	Unknown	7.5yr 5/3	7.5yr 4/6			5-7%	Medium	Fully Oxidized	Sand	No			NBP-013-G5-3	C-5		IIA
Bulgan Uul	NBP013	Group 5-3	N/A (Survey)	6435220	5090982		25.9		Body			1.8	16.84		14.14		7.65		7.24	5yr 5/6	10yr 5/1	10yr 4/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-013-G5-1	C-4		Turk
Bulgan Uul	NBP014	2	N/A (Survey)	6440360	5088840		20.8		Body			4.1	22.56		17.65		8.88		8.71	5yr 6/8	5yr 6/6	5yr 5/8			5-7%	Medium	Fully Oxidized	Sand	No			NBP- 014-2	C-1		Turk
Bulgan Uul	NBP014	2	N/A (Survey)	6440360	5088840		20.8		Body			2.8	16.9		15.27		7.94		7.79	10r 4/6	10yr 5/2	2.5yr 3/2			7-10%	Medium	Fully Reduced	Sand Granules	No	SlipBurnished		NBP- 014-2	C-5		LIA_X
Bulgan Uul	NBP014	2	N/A (Survey)	6440360	5088840		20.8		Body			3.5	22.62		16.24		8.26		8	5yr 5/8	2.5yr 5/8	5yr 5/8, 5yr 6/1, 5yr 5/8			7-10%	Medium	Partially Oxidized	Sand	No			NBP- 014-2	C-2		Turk
Bulgan Uul	NBP014	2	N/A (Survey)	6440360	5088840		20.8		Body			6.2	26.04		20.05		8.91		8.73	7.5yr 5/4	10yr 6/2	10yr 5/2			7-10%	Medium	Partially Oxidized	Sand Granules	No	Burnished		NBP-014-2	C-3		Turk
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	40-50 cm	90.3		Body			4.9	28.68		23.45		7.29		6.93	5yr 4/4	7.5yr 4/4	7.5yr 3/2			2-5%	Medium Fine	Fully Oxidized	Sand Granules	No			NBP-015-EXU-SG1-C-1			LBA/BA
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	361.2		Body			3	17.24		13.24		7.64		7.21	7.5yr 4/4	7.5yr 5.3	7.5yr 3/1			2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP- 015-SG1-8-1/12	C-1		LBA/BA
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	84.5	15-30	Rim	T-Rim (Open, Sla	35.5	56.32	Beveled	40.81		10.25	18	9.61	10yr 4/2	7.5yr 4/3	7.5yr 3/1	Conical?		10-15%	Medium Coarse	Fully Oxidized	Sand Granules	No		Punctate	NBP- 015-SG1-8-1/12	C-		LBA/BA
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	84.5		Body			26.3	57.45		55.78		7.66		7.17	10yr 5/3	10yr 5/4	10yr 2/1 (Black)			10-15%	Medium Coarse	Fully Oxidized	Sand Granules	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-		LBA/EIA
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			7.6	31.44		21.73		Unknown		Unknown	7.5yr 5/3	Unknown	5yr 4/3			7-10%	Medium	Fully Oxidized	Sand	No	Incised	CombAdditivePa	NBP- 015-SG1-8-1/12	C-		LBA/BA
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			6.1	22.55		20.6		10.22		8.98	7.5yr 5/3	7.5yr 5/4	5yr 4/3			5-7%	Medium	Fully Oxidized	Sand Granules	No	Impression	AdditivePunctate	NBP- 015-SG1-8-1/12	C-		LBA/BA
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			12.6	38.93		31.95		7.72		7.32	7.5yr 5/3	7.5yr 5/4	5yr 4/3			5-7%	Medium	Fully Oxidized	Sand Granules	No	Impression	AdditivePunctate	NBP- 015-SG1-8-1/12	C-		LBA/BA
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	84.5		Body			9.2	36.95		24.21		7.56		7.5	10yr 5/3	10yr 5/4	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	84.5		Body			4.6	24.26		21.22		7.23		7.16	5yr 4/4	10yr 4/1	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	84.5		Body			2	22.23		14.3		Unknown		Unknown	Unknown	10yr 4/1	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	84.5		Body			1.9	19.8		19.66		Unknown		Unknown	5yr 5/4	Unknown	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	84.5		Body			3.1	22.53		15.63		9.07		8.71	5yr 5/6	7.5yr 5/4	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	84.5		Body			2.4	18.18		14.05		7.19		7	7.5yr 5/3	7.5yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	30.5		Body			7.5	40.5		21.17		6.26		6.03	10yr 6/4	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand Granules	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-		LBA/BA
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	30.5		Body			7.6	38.14		23.43		8.15		6.99	7.5yr 5/3	7.5yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	30.5		Body			11	36.49		30.23		Unknown		Unknown	7.5yr 4/3	Unknown	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	30.5		Body			3.2	22.38		18.29		6.68		6.04	7.5yr 5/3	7.5yr 4/1	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Impression	Parallel Lines	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	30.5		Body			1.7	20.43		14.81		Unknown		Unknown	Unknown	7.5yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	24		Body			5.7	28.58		24.4		Unknown		Unknown	Unknown	10yr 5/3	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	24		Body			18.4	46.73		40.49		7.72		7.38	7.5yr 5/3	10yr 5/3	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			28.7	43.66		43.44		11.22		8.52	7.5yr 5/4	10yr 6/3	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No	Impression	Punctate	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1	15-30	Rim	Simple Open	33.8	52.87	Beveled	45.89		10.86	18	9.02	7.5yr 5/3	7.5yr 5/3	10yr 2/1 (Black)	Jar		2-5%	Medium Fine	Partially Oxidized	Sand	No	Impression	Punctate	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Neck			40.4	71.3		41.38		9.49		7.59	5yr 5/3	5yr 4/2	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No	Impression/In	PunctateCombP	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			34.5	69.05		54.52		9.65		7.09	7.5yr 5/3	7.5yr 5/3	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			18.8	45.8		38.58		8.39		7.56	7.5yr 5/3	7.5yr 5/3	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			34.3	65.14		53.12		7.05		7.03	7.5yr 5/3	7.5yr 5/3	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			14.9	41.38		34.33		7.26		6.59	7.5yr 5/3	7.5yr 5/3	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			15.7	43.36		34.49		7		6.51	7.5yr 5/3	7.5yr 5/3	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			13.8	36.79		33.94		7.48		6.97	7.5yr 5/3	7.5yr 5/3	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			5.3	25.92		21.4		7.48		7.01	7.5yr 5/3	7.5yr 5/3	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			5	27.14		21.79		6.56		6.51	7.5yr 5/3	7.5yr 5/3	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			6.3	30.82		24.67		7.23		6.6	7.5yr 5/3	7.5yr 5/3	10yr 2/1 (Black)			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-1/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			30	54.98		41.94		9.89		7.61	7.5yr 5/3	7.5yr 5/3	10yr 2/1 (Black)			7-10%	Medium Coarse	Partially Oxidized	Sand	No	Incised	CombAdditivePa	NBP- 015-SG1-8-1/12	C-	LBA/BA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			19.6	54.41		36.35		9.86		7.74	7.5yr 5/3	7.5yr 5/3	10yr 2/1 (Black)			7-10%	Medium Coarse	Partially Oxidized	Sand	No	Incised	CombAdditivePa	NBP- 015-SG1-8-1/12	C-	LBA/BA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Body			13.6	33.26		28.73		10.06		7.75	7.5yr 5/3	7.5yr 5/3	10yr 2/1 (Black)			7-10%	Medium	Partially Oxidized	Sand	No	Incised	CombAdditivePa	NBP- 015-SG1-8-1/12	C-	LBA/BA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	358.1		Foot			17	51.13		29.43		15.93		5.75	7.5yr 5/3	7.5yr 5/4	10yr 3/1			5-7%	Medium	Partially Oxidized	Sand Granules	No			NBP- 015-SG1-8-1/12	C-		LBA/EIA
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	35 cm	131.6	0-15	Rim	T-Rim (Open, Sla	105.5	93.88	Beveled	81.47		11.38	18	8.58	10yr 5/3	10yr 5/3	10yr 3/1	Conical?		2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised/impre	AdditivePunctate	NBP- 015-SG1-8-2/12	C-	LBA/BA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	35 cm	131.6	0-15	Rim	T-Rim (Open, Sla	26.2	55.4	Beveled	29.52		12.22	18	7.45	10yr 5/3	10yr 5/3	10yr 3/1	Conical?		2-5%	Medium Fine	Partially Oxidized	Sand	No	Impression	PunctateComb	NBP- 015-SG1-8-2/12	C-	LBA/BA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			24.5	60.99		43.42		8.03		7.96	10yr 5/3	10yr 5/3	7.5yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			11.2	43.47		27.92		7.62		7.29	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			14	44.5		35.59		8.18		7.87	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			7.7	42.73		25.02		8.82		8.62	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			4.4	28.26		17.7		7.09		8.95	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			6.7	29.57		23.01		7.77		7.19	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			6.1	35.54		24.77		7.56		6.82	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			7.2	34.26		26.77		7.08		6.62	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			4.4	25.73		20.13		8.03		7.36	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			2.4	22.25		16.05		7.32		6.6	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			6	30.75		21.74		6.96		6.78	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			9.4	41.4		28.9		9.06		Unknown	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			11.1	41.91		35.4		8.82		8.73	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			6.2	29.11		24.01		7		6.8	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			8	32.17		23		8.22		6.98	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			3.8	26.44		18.51		Unknown		Unknown	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			2.2	27.5		12.36		Unknown		Unknown	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			2.1	21.4		15.75		Unknown		Unknown	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Body			1.6	19.92		18.22		Unknown		Unknown	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Foot			7.4	31.03		25.06		Unknown		Unknown	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-6/12	C-	LBA/EIA	
Shatar Chuluu	NBP015	0	EXU-SG1	629895	5140782	10-30 cm	158		Foot			3.1	21.32		15.69		Unknown		Unknown	10yr 5/3	10yr 5/3	10yr 3/1			2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-8-6/12	C-	LBA/EIA	

Table E.7 (continued). Ceramic catalog

Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	10-30 cm	158		Foot		7.3	29.33		22.11	12.91		8.61	10yr 5/3	10yr 5/3	10yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B-6/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	10-30 cm	158		Foot		6	24.82		22.48	8.21		Unknown	10yr 5/3	10yr5/3	10yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B-6/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	40-50 cm	85		Body		38	61.12		53.5	8		7.18	10yr5/3	10yr5/3	10yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-B-7/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	40-50 cm	85		Body		5.4	33.98		18.99	6.2		6.14	10yr 5/3	10yr5/3	10yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-B-7/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	40-50 cm	85		Body		7.3	39.36		30.05	Unknown		Unknown	Unknown	10yr5/3	10yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B-7/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	40-50 cm	85		Body		2.3	27.07		17.77	Unknown		Unknown	Unknown	10yr5/3	10yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B-7/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	40-50 cm	85		Body		2.1	24.22		12.63	Unknown		Unknown	Unknown	10yr5/3	10yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B-7/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	40-50 cm	85		Body		2.4	22.07		17.46	Unknown		Unknown	Unknown	10yr5/3	10yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B-7/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	40-50 cm	85		Body		2.4	19.43		15.47	6.87		6.72	7.5yr 5/4	10yr5/3	10yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B-7/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	40-50 cm	85		Foot		13.2	45.43		30.08	11.55		6.06	5yr5/6	7.5yr 4/3	10yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B-7/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	10-30cm	23.8		Body		11.2	47.31		35.69	6.94		6.14	7.5yr 5/4	7.5yr5.3	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-B8/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	10-30cm	23.8		Body		12.7	44.13		29.16	7.09		6.82	7.5yr 5/4	7.5yr5.3	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-B8/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	10-30cm	15.2		Rim		6.6	30.75		2.84	Unknown		Unknown	7.5yr 5/4	Unknown	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No	Impression	Punctate	NBP- 015-SG1-B9/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	10-30cm	15.2		Foot		8.5	27.78		22.4	Unknown		Unknown	5yr5.6	Unknown	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B9/12 C-	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	Unknown	11.2		Body		7.9	38.09		19.15	7.83		7.15	7.5yr 5/3	7.5yr 4/1	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B11/12 C	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	Unknown	11.2		Body		1	13.57		11.58	Unknown		Unknown	Unknown	7.5yr 4/1	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B11/12 C	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	Unknown	11.2		Body		1.1	16.22		13.35	Unknown		Unknown	Unknown	7.5yr 4/1	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B11/12 C	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	Unknown	11.2		Body		1.2	16.14		11.43	Unknown		Unknown	Unknown	7.5yr 4/1	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B11/12 C	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	70cm	6.8		Foot		6.8	33.94		26.47	7.44		6.83	5yr5/6	7.5yr 4/1	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B12/12 C	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	Unknown	21.3		Body		3.9	23.91		18.02	7.22		7.02	7.5yr 5/3	7.5yr 4/1	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-B10/12 C	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	Unknown	21.3		Body		4.4	27.56		15.88	Unknown		Unknown	7.5yr 5/3	Unknown	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No	Incised	Comb	NBP- 015-SG1-B10/12 C	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	Unknown	21.3		Body		2.8	19.1		18.84	Unknown		Unknown	Unknown	7.5yr 4/2	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B10/12 C	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	Unknown	21.3		Body		2.3	18.11		15.85	Unknown		Unknown	Unknown	7.5yr 4/2	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B10/12 C	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	Unknown	21.3		Body		1.6	17.13		12.38	Unknown		Unknown	Unknown	7.5yr 4/2	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B10/12 C	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	Unknown	21.3		Body		1.6	17.13		12.38	Unknown		Unknown	7.5yr 5/3	Unknown	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B10/12 C	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	Unknown	21.3		Body		1.8	17.69		11.81	Unknown		Unknown	7.5yr 5/3	Unknown	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B10/12 C	LBA/EIA
Shatar Chuluu	NBP-015	0	EXU-SG1	629895	5140782	Unknown	21.3		Body		1.2	18.28		9.48	Unknown		Unknown	Unknown	7.5yr 4/3	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 015-SG1-B10/12 C	LBA/EIA
Shatar Chuluu	NBP-015	68	N/A (Survey)	629875	5140945		10		Body		10	30.88		25.96	10.92		10.78	Light Brown	Black	Black		10-15%	Medium Coarse	Partially Oxidized	Sand Granules	No			NBP-015-68 C-1	LBA
Shatar Chuluu	NBP-015	STU	STU-13	629968	5140937	1	3.2		Body		3.2	22.67		16.04	10.5		8.89	10yr 5/4	10yr 3/3	10yr 2/1 (Black)		2-5%	Medium	Partially Oxidized	Sand	No			NBP-015-STU-13 C-1	LBA
Shatar Chuluu	NBP-015	X	N/A (Survey)	629887	5140596		19.4		Neck		19.4	35.39		33.88	10.46		10.27	10yr 4/2	5yr 5/6	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Quartz Granules	No	Impression	AdditivePerforat	NBP-015-X C-1	LBA
Shatar Chuluu	NBP-017	2	N/A (Survey)	627729	5141264		132.9		Body		15.4	37.09		29.84	10.11		9.4	10yr 5/1	10yr 4/1	10yr 5/1		2-5%	Medium Fine	Fully Reduced	Sand	No			NBP-017-2 C-1	LIA_X
Shatar Chuluu	NBP-017	3	N/A (Survey)	627735	5141288		132.9		Body		3.2	18.36		12.81	10.6		9.53	5yr5/4	2.5yr 5/6	7.5yr 5/1		7-10%	Medium	Partially Oxidized	Sand	No	Slip		NBP-017-3 C-1	LIA
Shatar Chuluu	NBP-017	4	N/A (Survey)	617728	5141287		132.9		Body		7.6	28.1		21.37	11.87		10.09	5yr5/6	5yr 4/6	5yr5/4, 7.5yr 5/4		0-2%	Medium Fine	Fully Oxidized	Sand	No			NBP- 017-4 C-1	LIA
Shatar Chuluu	NBP-017	5	N/A (Survey)	627727	5141293		132.9		Body		13.4	34.29		31.31	13.01		12.92	7.5yr 6/6	10yr 4/1	10yr 5/1		0-2%	Fine	Partially Oxidized	Sand	No			NBP-017-5 C-1	LIA_X
Shatar Chuluu	NBP-017	6	N/A (Survey)	627691	5141326		132.9		Body		34.9	46.06		37.05	16.45		15.51	10yr 5/2	10yr 3/1	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Granules	No			NBP-017-6 C-1	LBA
Shatar Chuluu	NBP-017	7	N/A (Survey)	627689	5141310		132.9		Body		4.1	21.9		17.75	7.28		7.6	10yr 5/3	10yr 2/1 (Black)	10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand	No			NBP-017-7 C-1	LBA
Shatar Chuluu	NBP-017	9	N/A (Survey)	627680	5141319		132.9		Body		8.7	32.73		21.11	10.44		10.41	5yr5/6	7.5yr5/3	10yr 3/1		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP- 017-9 C-1	LIA
Shatar Chuluu	NBP-017	10	N/A (Survey)	627667	5141317		132.9		Body		7.8	24.69		22.68	11.58		11.29	10yr 5/2	10yr 5/1	10yr 2/1 (Black)			Coarse	Fully Reduced	Sand Granules Quartz	No			NBP-017-10 C-1	LBA
Shatar Chuluu	NBP-017	94	N/A (Survey)	640421	5079540		327.4	0-15	Rim	Everted	36	55.04	Beveled	40.06	12.74	13	8.9	10yr 4/1	10yr 4/1		Everted Jar?	5-7%	Medium	Fully Reduced	Sand	No			NBP-027-94 C-1	LIA_X
Shatar Chuluu	NBP-017	None	N/A (Survey)	627730	5141316		132.9		Body		4.5	22.83		17.84	8.68		8.59	7.5yr 6/6	10yr 6/2	10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand Quartz	No			NBP-017 C-1	LBA
Shatar Chuluu	NBP-017		STU-6	627658	5141317	1, 17cm	29.4		Body		29.4	45.88		36.05	14.94		14.26	7.5yr 4/2	7.5yr 3/2	10yr 5/1		7-10%	Medium	Fully Oxidized	Sand	No			NBP-017-STU-8? C-1	LIA
Shatar Chuluu	NBP-017		N/A (Survey)	627671	5141262		94.3		Other		94.3	56.76		53.05	40.45		28.9	7.5yr 6/6	7.5yr6/6	7.5yr 6/6			Fine	Fully Oxidized		No			None	LH
Shatar Chuluu	NBP-017		N/A (Survey)	627669	5141264		34.8		Other		34.8	41.29		34.87	33.72		27.11	7.5yr 6/6	7.5yr6/6	7.5yr 6/6		0-2%	Fine	Fully Oxidized	Sand	No			None	LH
Shatar Chuluu	NBP-017		N/A (Survey)	627645	5141256		238.5		Other		238.5	Unknown		Unknown	Unknown		Unknwon	7.5yr 6/6	7.5yr6/6	7.5yr 6/6		0-2%	Fine	Fully Oxidized	Sand	No			None	LH
Shatar Chuluu	NBP-017		N/A (Survey)	627643	5141299		132.9		Body		7.1	33.43		25	7.66		7.04	10yr 4/1	GLEY1 3/N	10yr 2/1 (Black)			Medium	Fully Reduced	Sand Mica	Yes			NBP-017 C-7	LIA_X
Shatar Chuluu	NBP-017		N/A (Survey)	627689	5141255		132.9		Body		5.7	27.36		18.14	10.26		10.14	2.5yr 5/6	5yr 5/6	7.5yr 6/1		5-7%	Medium	Partially Oxidized	Sand	No	Burnished		NBP-017 C-3	LIA
Shatar Chuluu	NBP-017		N/A (Survey)	627726	5141333		132.9		Body		8.1	25.27		21.63	11.12		11.1	7.5yr 5/4	2.5yr5/6	7.5yr 2.5/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Quartz	No			NBP-017 C-3	LBA
Shatar Chuluu	NBP-017		N/A (Survey)	627689	5141255		132.9		Body		5.3	26.9		17.91	10.45		10.41	2.5yr 4/6	7.5yr6/4	75.yr 5/1		5-7%	Medium	Partially Oxidized	Sand	No			NBP-017 C-4	Unknown
Shatar Chuluu	NBP-017		N/A (Survey)	627714	5141303		132.9		Body		4.9	22.52		18.72	7.56		7.53	5yr5/3	7.5yr5/3	7.yr5/1		5-7%	Medium	Partially Oxidized	Sand	No	Burnished		NBP-017 C-5	LIA
Shatar Chuluu	NBP-017		N/A (Survey)	627741	5141345		132.9		Body		1.2	16.72		9.77	7.87		6.27	2.5yr 5/6	2.5yr5/6	10yr 6/1		2-5%	Medium	Partially Oxidized	Sand	No			NBP-017 C-6	LBA/EIA
Shatar Chuluu	NBP-017		N/A (Survey)	627716	5141303		132.9		Body		3.8	22.89		19.65	8.98		8.41	GLEY1 3/N	2.5yr5/8	2.5yr 4/6		7-10%	Medium	Partially Reduced	Sand	No	Slip		NBP-017 C-2	LIA
Shatar Chuluu	NBP-017		N/A (Survey)	627679	5141308		132.9		Body		2.9	18.67		18.4	7.72		7.58	10yr 5/3	10yr 2/1 (Black)	10yr 2/1 (Black)		5-7%	Medium	Partially Reduced	Sand	No			NBP-017-9 C-1	LBA
Shatar Chuluu	NBP-018	22	N/A (Survey)	621115	5140879		590		Body		7.6	23.45		20.04	10.42		10.16	2.5yr 5/6	2.5yr5/4	2.5yr 5/8		>15%	Coarse	Fully Oxidized	Sand Granules	No			NBP-018-22 C-4	LBA
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		7.6	29.86		18.33	12.77		12.49	7.5yr 5/4	7.5yr 3/1	7.5yr 4/6, 10yr 2/1 (Black)		10-15%	Medium Coarse	Fully Oxidized	Sand Mica	No	Burnished		NBP-018-22 C-13	LBA
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		4.4	28.39		20.1	7.9		4.15	10yr 5/8 (Glaz	10yr 3/1 (Glaze)	10yr 8/6		0-2%	Fine	Fully Oxidized	Sand	No	Glaze		NBP-018-22 C-38	LH
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		2	14.84		9.18	12.41		11.66	2.5yr 5/6	2.5yr6/6	5yr 4/6		5-7%	Medium Fine	Fully Oxidized	Sand	No			NBP-018-22 C-61	LBA/EIA
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		2	18.32		9.91	7.26		6.71	10yr 6/3	2.5yr5/6	5yr 4/6		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-018-22 C-62	LBA
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590	0-15	Rim	Simple Closed	1.1	13.83	Simple	12.55	5.12	Unknown	3.72	10r 6/6	10r 6/6	2.5yr 4/1	Unknown	2-5%	Medium	Fully Oxidized	Sand Mica	No			NBP-018-22 C-67	LBA/EAI
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		490		Body		1	13.91		7.61	7.77		7.56	2.5yr 5/4	2.5yr5/6	5yr 4/6			Medium Fine	Fully Oxidized	Sand Quartz	No			NBP-018-22 C-75	LBA/EIA
Shatar Chuluu	NBP-018	22	N/A (Survey)	631121	5140839		590	0-15	Rim	Simple Open	1.8	16.76	Simple	13.8	8.33	Unknown	4.63	2.5yr 5/8	10r5/6	2.5yr 4/4	Cup?		Medium Fine	Fully Oxidized	Sand	No			NBP-018-22 C-97	LBA/EIA
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Shoulder		7.7	26.8		32.23	8.3		7.9	2.5y 2.51	10yr 5/1	10yr 5/1			Fine	Fully Oxidized		No	Burnished Slip Impression	Punctate	NBP- 18-22 C-108	Unknown
Shatar Chuluu	NBP-018	22	N/A (Survey)	631114	5140827		590		Body		3	24.53		15.42	7.49		7.01	7.5yr 5/1	7.5yr5/1	7.5yr 4/1		0-2%	Fine	Fully Reduced		No			NBP-018-22 C-7	LH
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		8.1	30.19		23.21	14.19		14.01	10yr 5/3	10yr 5/2	10yr 4/2		>15%	Coarse	Fully Reduced	Sand Quartz	No			NBP-018-22 C-15	Unknown
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		3.3	32.1		15.13	6.64		4.3	10yr 4/1	10yr 4/1	10yr 2/1 (Black)		>15%	Coarse	Fully Reduced		Yes			NBP-018-22 C-25	LBA
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		26.7	43.33		26.88	21.85		19.31	5yr 6/8 (slip?)	10yr6/3	10yr 2/2		10-15%	Medium Coarse	Fully Reduced	Sand Granules	No	Slip		NBP-018-22 C-35	IA
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		4.8	21.54		19.99	10.12		9.48	10yr 4/3	5yr 6/6	10yr 2/1 (Black)		0-2%	Medium Fine	Fully Reduced		No			NBP-018-22 C-37	LBA
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		3.6	19.18		17.17	6.49		6.35	10yr 5/2	Unknown	10yr 4/1		2-5%	Fine	Fully Reduced		No	Burnished		NBP- 018-22 C-51	LH
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		3.3	23.18		15.79	4.45		3.86	2.5y 8/2 (Whit	10yr6/4	10yr 8/1 (White)		0-2%	Fine	Fully Reduced		No	Glaze		NBP-018-22 C-54	LH
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		4.1	22.39		18.72	8.29		5.79	10yr 5/3, 10yr	10yr 6/4	10yr 2/1		>15%	Coarse	Fully Reduced	Sand Quartz Mica Granules	No			NBP- 018-22 C-58	LIA_X?
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		3.1	22.11		17.48	5.66		5	10yr 6/2	10yr 2/1 (Black)	10yr 5/2, 10yr 2/1 (Black)			Medium Fine	Fully Reduced	Sand	No			NBP-018-22 C-59	LBA
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Other		2.4	27.25		20.22	5.71		2.51	10yr 3/1	10yr 4/1	10yr 2/1 (Black)		>15%	Coarse	Fully Reduced	Sand	No			NBP-018-22 C-65	LBA?
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		1.2	14.49		11.09	6.79		6.7	7.5yr 4/2	7.5yr 3/1	7.5yr 2.5/1 (Black)		5-7%	Medium	Fully Reduced	Sand	No			NBP-018-22 C-73	LBA
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		6.3	24.47		21.42	8.02		7.99	10yr 4/1	2.5y 4/1	10yr 5/1		0-2%	Fine	Fully Reduced	Sand	No			NBP-018-22 C-79	LH
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		6.3	23.88		22.86	8.33		6.83	10yr 5/2	10yr 4/1	10yr 2/1 (Black)		0-2%	Fine	Fully Reduced	Mica	No			NBP-018-22 C-80	LH
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		3	20.87		19.72	7.09		6.54	10yr 6/2	10yr 4/2	10yr 4/2, 10yr 3/1		2-5%	Fine	Fully Reduced	Sand	No			NBP-018-22 C-81	LBA?
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		4.9	23.21		19.96	8.61		7.84	10yr 5/2	10yr 5/3	10yr 3/1			Medium Fine	Fully Reduced	Sand	No	Burnished		NBP-018-22 C-83	Turk
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		2.8	21.64		14.87	8.33		7.62	10yr 5/1	10yr 5/4	10yr 3/1		0-2%	Fine	Fully Reduced	Mica Sand	No			NBP-018-22 C-85	LH
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		2.8	28.75		17.82	6.32		5.55	10yr 5/2	10yr 5/1	10yr 3/4			Medium Fine	Fully Reduced	Sand	No			NBP-018-22 C-87	LH
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		5.8	25.33		15.833	12.37		12.2	10yr 6/1	10yr 6/2	10yr5/1, 10yr 2/1 (Black)		2-5%	Medium Fine	Fully Reduced	Sand	No			NBP- 018-22 C-88	LBA?
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		4.8	22.71		17.94	7.75		7.03	10r 4/1	10yr 3/1	10yr 5/1		0-2%	Fine	Fully Reduced		No	Burnished		NBP-018-22 C-89	LH
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		4.5	21.35		21.35	7.01		6.99	10yr 6/1	10yr 5/1	10yr 4/1		0-2%	Fine	Fully Reduced		No			NBP- 018-22 C-91	LH
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		3.51	19.44		18.85	7.73		5.72	Unknown	10yr 4/1	10yr 2/1 (Black)		10-15%	Medium Coarse	Fully Reduced	Sand	No			NBP-018-22 C-92	Unknown
Shatar Chuluu	NBP-018	22	N/A (Survey)	631128	5140823		590		Body		5	25.32		20.43	8.61		7.78	10yr 7/1	10yr 3/1	10yr 4/1		5-7%	Medium Fine	Fully Reduced	Sand	No			NBP018-22- C-93	LBA?

Table E.7 (continued). Ceramic catalog

Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			5.83	31.57		16.33	8.03		7.8	10yr 6/2	10yr 5/1	10yr 4/1		5-7%	Medium Fine	Fully Reduced		No			NBP-018-22- C-94	LH
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Shoulder			6.8	33.61		30.21	6.02		5.39	10yr 5/1	10yr 6/1	10yr 4/1		0-2%	Fine	Fully Reduced		Yes			NBP018-22- C-96	LIA_X
Shuta Chelsea	NBP-018	22	N/A (Survey)	631127	5140851		590	30-45	Rim	Collared		4.5	22.19	Beveled	15.89	11.52	18	9.32	10yr 6/1	10yr 5/2	5yr 6/1	Globular Jar?	25%	Medium Fine	Fully Reduced	Sand	No			NBP-018-22- C-98	LH
Shuta Chelsea	NBP-018	22	N/A (Survey)	631122	5140834		590	15-30	Rim	Vertical		5.7	18.92	Flat	22.07	8.63	14	8.47	10yr 5/2	10yr 5/2	10yr 2/1 (Black)	Globular Jar?		Medium Fine	Fully Reduced	Sand Granules	Yes			NBP-018-22- C-100	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631117	5140832		590		Body			2.9	22.76		16.57	8.32		7.67	2.5yr 6/8	2.5yr 5/6	5yr 3/1		0-2%	Fine	Partially Oxidized	Sand	No	Burnished		NBP-018-22- C-2	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631138	5140871		590		Body			14.5	38.6		28.79	11.822		11.27	2.5yr 5/8	7.5yr 5/2	10yr 4/1		25%	Medium Fine	Partially Oxidized	Sand Quartz Granules	No	Burnished Slip		NBP-018-22- C-3	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631136	5140862		590		Body			8.8	28.17		27.08	10.26		10.06	7.5yr 6/4	7. 5yr 5/3	5yr 2.5/1 (Black)		7-10%	Medium Coarse	Partially Oxidized	Sand	No	Burnished Slip		NBP- 018-22- C-5	LIA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631118	5140857		590		Body			3.5	18.51		17.76	12.48		12.26	2.5yr 4/8	10yr 5/1	2.5yr 5/8		5-7%	Medium Fine	Partially Oxidized	Sand	No			NBP-018-22- C-6	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140861		590		Body			2.6	20.79		14.12	6.67		6.59	5yr 6/6	7.5yr 6/2	7.5yr 5/1		0-2%	Medium Fine	Partially Oxidized	Sand	No			NBP-018-22- C-8	LBA/EIA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631136	5140865		590		Body			2.2	18.41		13.95	10.65		10.18	2.5yr 5/8	2.5yr 5/1	5yr 3/1 (Black)		5-7%	Medium	Partially Oxidized	Sand	No			NBP-018-22- C-9	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631117	5140843		590		Body			3.6	21.11		14.91	9.77		9.71	5yr 5/4	7.5yr 6/3	7.5yr 3/2		5-7%	Medium	Partially Oxidized	Sand	No	Burnished		NBP- 018-22- C-10	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			5.8	23.74		21.5	10.78		10.75	10yr 4/3	2.5yr 6/8	5yr 2.5/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Mica	Yes			NBP-018-22- C-12	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			9.1	26.89		22.91	12.03		10.13	2.5yr 4/6	7.5yr 4/1	7.5yr 2.5/1 (Black)			Coarse	Partially Oxidized	Sand Mica Quartz	No			NBP- 018-22- C-14	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			13.6	38.23		28.73	14.24		11.74	7.5yr 6/3	7.5yr 5/2	7.5yr 2.5/1		5-7%	Medium	Partially Oxidized	Sand Mica Granules	No			NBP-018-22- C-16	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			6.7	30.01		19.83	10.01		9.82	5yr 6/4	5yr 6/3	5yr 3/1		7-10%	Medium	Partially Oxidized	Sand Granules	No	Burnished		NBP-018-22- C-17	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			5.1	25.41		21.14	8.26		4.65	5yr 6/6	Unknown	5yr 3/1		5-7%	Medium	Partially Oxidized	Sand Quartz	No	Burnished		NBP- 018-22- C-18	LIA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			11.4	35.94		24.49	11.89		11.75	7.5yr 5/6	10 yr 3/1	7.5yr 3/4, 10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Mica	No			NBP-018-22- C-19	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			4	21.66		14.53	11.54		10.44	2.5yr 5/6	2.5yr 4/6	7.5yr 3/2		10-15%	Medium Coarse	Partially Oxidized	Sand Mica	No			NBP-018-22- C-20	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			5	25.43		19.56	9.27		8.66	10YR 5/8	7.5yr 5/2	7.5yr 2.5/1		2-5%	Medium	Partially Oxidized	Sand	No			NBP-018-22- C-21	LBA/EIA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			4.6	18.49		17.58	11.5		11.38	5yr 5/4	10yr 4/1	7.5yr 5/8, 7.5yr 2.5/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Quartz	No			NBP-018-22- C-22	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			3.8	20.56		14.74	12.04		10.82	5yr 6/8	10yr 3/1	5yr 5/8		7-10%	Medium	Partially Oxidized	Sand Potteny/Grog Quartz	No			NBP-018-22- C-23	IIA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			3.8	23.97		14.81	8.9		8.83	2.5yr 5/6	2.5yr 6/8	10yr 4/1		5-7%	Medium	Partially Oxidized	Sand Quartz	No			NBP-018-22- C-26	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			6.5	25.64		13.58	12.72		12.26	7.5yr 6/4	10yr 4/1	7.5yr 5/8, 7.5yr 2.5/1 (Black)		7-10%	Medium	Partially Oxidized	Sand	No	Burnished		NBP-018-22- C-27	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			2.9	23.94		11.9	9.46		7.88	2.5yr 5/6	2.5yr 5/6	7.5yr 4/3		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-018-22- C-28	LBA/EIA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			2.2	14.54		13.42	7.46		7.37	5yr 5/4	7.5yr 4/2	7.5yr 2.5/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand Quartz	No			NBP-018-22- C-29	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			5.8	24.13		20.2	9.93		9.02	7.5yr 6/6	GLEY 2 2.5/5PB	7.5yr 2.5/1 (Black)		5-7%	Medium Fine	Partially Oxidized	Sand Quartz	No			NBP-018-22- C-30	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			3.7	21.93		15.18	9.49		8.58	2.5yr 5/6	10yr 3/1	10yr 2/1 (Black)			Medium Fine	Partially Oxidized		No			NBP-018-22- C-31	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Shoulder			4.9	25.14		18.7	9.9		9.18	5yr 6/6	10yr 6/2	10yr 4/2		0-2%	Fine	Partially Oxidized	Sand	No	Burnished Slip		NBP-018-22- C-32	LIA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			5.5	24.1		19.6	12.79		12.57	2.5yr 5/6	2.5yr 3/1	5yr 2.5/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No	Burnished		NBP-018-22- C-33	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			11.9	32.9		25.58	11.52		10.78	7.5yr 6/4	5yr 2.5/1 (blue_bl	7.5yr 2.5/1 (Black)		10-15%	Medium	Partially Oxidized	Sand Quartz Mica	No	Burnished		NBP-018-22- C-34	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			6.8	26.68		24.69	8.94		8.44	7.5yr 6/6	10yr 6/4	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-018-22- C-36	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			2.2	16.4		15.07	9.07		9.01	2.5yr 6/8	2.5yr 6/6	10yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-018-22- C-39	LBA/EIA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590	0-15	Rim	Simple Open		16.3	37.93	Flat	29.2	11.55	Unknown	11	10yr 4/2	7.5yr 5/4	10yr 2/1 (Black)	Unknown	10-15%	Medium Coarse	Partially Oxidized	Sand Quartz Granules	Yes			NBP-018-22- C-40	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			6	23.84		20.39	13.25		13.15	7.5yr 6/4	10yr 5/1	7.5yr 5/8, 7.5yr 2.5/1 (Black)			Medium Coarse	Partially Oxidized	Sand Quartz	No	Burnished		NBP-018-22- C-41	Unknown
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			17.5	38.48		28.51	13.61		12.83	7.5yr 6/8	2.5y 3/1	7.5yr 5/8, 7.5yr 2.5/1 (Black)			Medium Fine	Partially Oxidized	Sand	No			NBP-018-22- C-42	Turk?
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			7.2	24.41		20.9	8.25		7.74	5yr 5/6	5yr 5/3	5yr 2.5/1 (Black)		5-7%	Medium Fine	Partially Oxidized	Sand	No			NBP-018-22- C-43	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			4.5	23.92		17.65	7.93		7.2	5yr 5/4	7.5yr 5/3	7.5yr 2.5/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Quartz Mica	No			NBP-018-22- C-44	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			2.7	16.93		13.59	7.73		7.07	2.5yr 3/3	7.5yr 5/2	7.5yr 3/1		5-7%	Medium	Partially Oxidized	Sand	No			NBP- 018-22- C-45	EBA/MBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			4.3	19.38		17.37	10.36		9.77	7.5yr 6/6	2.5y 4/1	7.5yr 5/8		10-15%	Medium	Partially Oxidized	Sand	No	Burnished		NBP-018-22- C-46	IIA?
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			8.4	26.26		18.25	11.76		11.68	2.5yr 5/8	10yr 3/1	10yr 2/1 (Black)		10-15%	Medium	Partially Oxidized	Sand Mica Granules	No			NBP-018-22- C-47	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			2.5	16.96		11.88	8.38		8.34	2.5yr 5/8	10yr 4/1	2.5yr 4/8, 10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand Mica	No			NBP- 018-22- C-49	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			6.2	24		16.92	10.14		9.44	7.5yr 5/3	10yr 4/1	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Granules Quartz	No	Burnished		NBP-018-22- C-50	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			3.4	22.44		15.48	9.71		8.31	7.5yr 5/3	7.5yr 6/4	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP-018-22- C-52	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			5	21.81		18.65	11.18		11.15	7.5yr 5/2	7.5yr 5/4	7.5yr 2.5/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Quartz Granules	No			NBP- 018-22- C-53	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Shoulder			5.2	22.37		19.08	8.26		7.18	2.5yr 6/6	2.5yr 5/4	5yr 2.5/1 (Black)		10-15%	Medium	Partially Oxidized	Sand Granules Quartz	No			NBP- 18-22- C-55	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			5.4	19.81		18.73	10.54		9.71	10yr 5/3	10yr 5/3	10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand	No			NBP- 018-22- C-56	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			4.6	17.49		15.02	11.42		11.25	7.5yr 6/3	10yr 3/1	10yr 6 3, 10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No	Burnished		NBP-018-22- C-57	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			1.8	18.05		13.75	6.6		4.38	5yr 6/6	10yr 4/1	7.5y 4/6, 7.5yr 2.5/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand Quartz	No			NBP-018-22- C-60	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			4.4	20.77		20.32	7.41		6.56	5yr 6/6	10yr 5/2	10yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No	Slip		NBP-018-22- C-63	LIA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			5.9	24.13		17.24	10.73		9.33	7.5yr 6/6	10yr 4/2	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No	Slip		NBP-018-22- C-64	LIA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			2.3	18.15		10.59	8.1		7.92	2.5yr 4/6	7.5yr 3/1	7.5yr 2.5/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Potteny/Grog	No	Burnished		NBP-018-22- C-66	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			0.8	14.04		10.38	5.04		4.23	2.5yr 4/8	7.5yr 5/1	7.5yr 5/1		2-5%	Medium	Partially Oxidized		No			NBP-018-22- C-68	LBA/EAI
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			1.1	15.1		4.91	9.61		8.24	Unknown	10yr 2/1 (Black)	10yr 2/1 (Black)		2-5%	Fine	Partially Oxidized	Sand	No			NBP-018-22- C-72	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			0.8	12.31		9.97	6.35		4.61	5yr 6/8	10yr 6/2	7.5yr 4/6		5-7%	Medium Fine	Partially Oxidized	Sand Quartz	No	Burnished		NBP-018-22- C-74	LIA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			2	19.43		11.45	9.6		8.42	5yr 6/8	10yr 6/1	5yr 4/6, 5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-018-22- C-76	LIA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			0.7	11.55		9.73	6.73		6.35	2.5y 6/8	10yr 6/3	10yr 3/1			Medium	Partially Oxidized	Sand Quartz	No			NBP-018-22- C-77	LBA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			1.6	18.32		12.34	7.35		7.2	5yr 6/6	2.5yr 5/6	5yr 4/1		2-5%	Fine	Partially Oxidized	Sand	No	Burnished		NBP-018-22- C-78	LIA
Shuta Chelsea	NBP-018	22	N/A (Survey)	631128	5140823		590		Body			4	19.67		18.35	9.45		8.17	10yr 5/3	10yr 4/1	10yr 2/2, 10yr 2/1 (Black)			Medium	Partially Oxidized	Sand Quartz Mica	No			NBP-018-22- C-82	LBA

Table E.7 (continued). Ceramic catalog

Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590			Body			2	16.39		12.71	8.96		6.85	5yr6/6	10yr 3/1	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No				NBP-018-22	C-84	LBA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590			Body			4.1	22.18		18.58	8.72		7.51	7.5yr 6/4	10yr 6/3	10yr 2/1 (Black)			Medium Coarse	Partially Oxidized	Sand	No	Burnished			NBP-018-22	C-86	LBA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590			Body			2.1	14.86		14.71	8.26		7.74	2.5yr 5/6	7.5yr 4/1	7.5yr 2.5/1 (Black)		5-7%	Medium Fine	Partially Oxidized	Sand Pottery/G rog	No				NBP-018-22	C-90	LBA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590			Body			18.8	39.56		27.64	11.94		11.19	7.5yr 6/6	10yr 5/2	10yr 5/1, 7.5yr 5/6, 7.5yr 4/2		7-10%	Medium	Partially Oxidized	Sand Granules	No				NBP-018-22	C-95	LBA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311121	5140838		590	30-45	Rim	Simple Closed	1.8	17.49	Tapered	11.17	8.15	12	7.88	10-5/6	10r6/6	5yr 3/1	Unknown	0-2%	Medium Fine	Partially Oxidized	Sand	No				NBP-018-22	C-99	LBA/EIA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590		Neck		2.9	19.08		13.98	13.72		11.28	10yr 6/3	5yr 5/8	5yr 2.5/1 (Black)		7-10%	Medium	Partially Oxidized		Yes	Impression	Punctate		NBP-018-22	C-101	LBA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590	15-30	Rim	Collared	1.6	11.76	Tapered	17.04	7.48	Unknown	16.91	5yr5/8	2.5yr 4/8	2.5yr 5/4, 7.5yr 5/1, 10r 5/8	Cup?		Medium Fine	Partially Oxidized	Sand	No				NBP-018-22	C-102	LBA/EIA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590	15-30	Rim	Simple Closed	0.9	12.9	Beveled	9.6	7.29	Unkown	6.57	7.5yr 6/4	Unknown	7.5yr 2.5/1 (Black)	Unknown		Medium Fine	Partially Oxidized	Sand	No				NBP-018-22	C-103	LBA/EIA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590			Body			21	31.78		35.82	12.53		12.09	10yr 5/3	5yr 5/4			>15%	Coarse	Partially Oxidized	Sand Quartz Mica	No	Incised Impression	Punctate Line Additive		NBP-018-22	C-105	LBA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590			Body			10.6	31.65		26.09	10.42		8.31	2.5y 5/1, 7.5yr	10yr 2/1 (Black)	5yr 5/6, 5yr 2.5/1 (Black)		0-2%	Fine	Partially Oxidized	Sand	Yes	Stamped	Square stamp de		NBP-018-22	C-107	Turk
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590	0-15	Rim	Simple Open	5.5	18.69	Flat	18.03	11.07	20	10.7	7.5yr 6/4	2.5yr 5/6	7.5yr 2.5/1 (Black)	Bowl	10-15%	Medium Coarse	Partially Oxidized	Sand	No	Slip			NBP-018-22	C-109	LBA/EIA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311135	5140837		596			Body			9	29.9		35.53	11.18		9.78	7.5yr 4/1	2.5yr 5/6	5yr 4/1		5-7%	Medium Fine	Partially Reduced	Sand Granules Quartz Mica	No				NBP-018-22	C-1	LBA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590			Body			5.5	24.32		20.8	8.7		8.48	2.5yr 4/8, 7.5y	2.5yr 4/6	5yr 2.5/1 (Black)		0-2%	Fine	Partially Reduced		Yes				NBP-018-22	C-24	LBA/EIA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590			Body			3	23.15		17.58	6.77		6.48	10yr 6/2	5yr 5/2	10yr6/2, 2.5yr 5/8		0-2%	Fine	Partially Reduced	Sand	No	Incised	Parallel Lines		NBP-018-22	C-48	LH
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590			Body			2.3	13.16		11.17	13.08		12.89	10yr 8/2	10yr 4/1	10yr 4/1			Medium Fine	Partially Reduced	Sand	No				NBP-018-22	C-69	Turk
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590			Body			3.2	20.99		15.89	9.49		6.85	10yr 6/3	Unknown	7.5yr 6/4			Medium	Partially Reduced		No	Incised	Cross-Hatch Chevron		NBP-018-22	C-104	LH
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590	0-15	Rim	Simple Closed	8	24.32	Beveled	24.31	14.33	10	11.88	10yr 5/2	7.5yr 6/4		Globular Jar?	7-10%	Medium	Partially Reduced	Sand	Yes				NBP- 018-22	C-106	LBA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590			Body			1.2	8.24		7.81	13.38		11.42	Unknown	Unknon	10yr 3/1		2-5%	Medium Fine	Unidentified	Sand	No				NBP-018-22	C-70	LIA_X?
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590			Body			5.8	27.61		24.04	9.83		9.74	2.5yr 5/6	2.5yr 5/1	7.5yr 3/3		2-5%	Medium Fine	Partially Oxidized	Sand Mica	No	Burnished	Slip		NBP-018-22	C-11	LIA
Shatz-Chalus	NBP-018	22	N/A (Survey)	6311128	5140823		590			Body			1.5	9.66		8.37	12.96		12.26	Unknown	10yr 3/1	10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Mica	No				NBP-018-22	C-71	LBA
Shatz-Chalus	NBP-018	52	N/A (Survey)	6308865	5141159		37.9	0-15	Rim	Simple Open	2.3	17.49	Flat	13.35	8.83	Unknown	8.47	2.5yr 3/2	2.5yr 4/9	2.5yr 3/4	Unknown	5-7%	Medium	Fully Oxidized	Sand	No				NBP-018-52	C-2	EBA/MBA
Shatz-Chalus	NBP-018	52	N/A (Survey)	6308893	5141147		37.9			Body			8.7	37.49		28.94	8.93		7.96	5yr6/8	5yr 5/6	5yr5/6		>15%	Coarse	Fully Oxidized	Sand Granules Quartz	No				NBP-018-52	C-4	LBA/BIA
Shatz-Chalus	NBP-018	52	N/A (Survey)	6308858	5141167		37.9			Body			11.5	29.28		25.38	12.12		9.78	2.5yr 5/6	2.5yr 6/6	7.5yr 5/2		10-15%	Medium Coarse	Partially Oxidized	Quartz	No				NBP-018-52	C-1	LIA_X
Shatz-Chalus	NBP-018	52	N/A (Survey)	6308841	5141177		37.9			Body			1.7	13.39		10.86	8.64		8.17	5yr 5/4	2.5yr 5/6	10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand	No				NBP-018-52	C-3	LBA
Shatz-Chalus	NBP-018	52	N/A (Survey)	6308853	5141213		37.9			Body			6.1	22.56		18.06	11.71		11.4	5yr 6/8	10yr 5/2	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Quartz	No				NBP-018-52	C-5	LBA
Shatz-Chalus	NBP-018	52	N/A (Survey)	6308848	5141222		37.9			Body			3.3	22.47		14.91	7.95		6.52	7.5yr 5/4	7.5yr 3/1	7.5yr 2.5/1 (Black), 7.5yr 5/8		2-5%	Medium	Partially Oxidized	Sand Mica	No	Burnished			NBP-018-52	C-6	LBA
Shatz-Chalus	NBP-018	52	N/A (Survey)	6308894	5141139		37.9			Body			2.9	22.08		12.82	7.01		6.76	GLEY1 3/N (Sli	10yr5/2	10yr6/1		0-2%	Fine	Partially Oxidized	Sand	No	Burnished	Slip		NBP-018-52	C-7	LIH
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			24.5	52.79		34.11	11.62		10.74	7.5yr 4/3 (Glaz	7.5yr 7/6, 7.5yr 3/	7.5yr 6/6	Bowl?	10-15%	Medium Coarse	Fully Oxidized	Sand	No	Glaze			NBP-018-56	C-4	LH
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Neck			9	26.06		22.28	10.65		9.97	10yr 3/4 (Glaz	10yr 3/4 (Glaze)	2.5yr 6/8		7-10%	Medium	Fully Oxidized	Sand	No	Glaze			NBP- 018-56	C-6	LH
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Neck			5.6	22.41		19	9.41		9.05	10yr 3/4 (Glaz	10yr 3/4 (Glaze)	5yr 6/6	Bowl?		Medium Fine	Fully Oxidized	Sand	No	Glaze			NBP-018-56	C-7	LH
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			3.5	18.78		16.31	9.12		7.42	10yr 5/3 (Glaz	10yr 4/3 (Glaze)	5yr 7/6			Medium	Fully Oxidized	Sand	No	Glaze			NBP-018-56	C-17	LH
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9	15-30	Rim	Simple Closed	5.2	25.13	Beveled	17.78	12.99	Unknown	12.49	2.5yr 4/6	2.5yr 4/6	2.5yr 3/6	Globular Jar?	5-7%	Medium	Fully Oxidized	Sand Granules	No				NBP-018-56-	C-24	LBA
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			10.3	28.5		26.05	12.42		11.81	10yr 4/1	10yr 4/1	10yr 3/1		5-7%	Medium	Fully Reduced	Sand	Yes				NBP-018-56	C-1	LBA?
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			7.3	29.45		17.82	10.67		9.21	10yr 4/1	10yr 4/1	10yr 3/1		5-7%	Medium	Fully Reduced	Sand Granules	No	Incised			NBP-018-56	C-2	LIA_X
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			11.9	33.74		32.12	11.15		10.25	10yr 5/1	10yr 5/1	10yr 2/1 (Black)		5-7%	Medium	Fully Reduced	Sand Granules	No				NBP-018-56	C-3	LIA_X
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			17.3	49.76		32.98	8.73		6.62	2.5y 3/2 (Glaz	2.5y 3/2 (Glaze)	2.5y 7/3	Bowl?	7-10%	Medium	Fully Reduced	Sand	No				NBP-018-56	C-5	LH
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			4.4	25.29		17.31	8.61		8.51	10yr 6/3	10yr 6/1	10yr5/1		0-2%	Medium Fine	Fully Reduced	Sand Granules	No				NBP- 018-56	C-8	Unknown
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			4.6	30.32		19.25	7.44		7.08	10yr 6/2	10yr 7/1	10yr5/1		0-2%	Fine	Fully Reduced		No	Burnished			NBP-018-56	C-9	LH
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			2.5	19.11		17.34	7.63		7.47	10yr 3/1	10yr 3/1	10yr 2/1 (Black)		10-15%	Medium Coarse	Fully Reduced	Sand	No				NBP-018-56	C-21	LBA
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			0.5	14		8.89	4.91		3.82	2.5yr 5/8	N/A	2.5yr 5/6		2-5%	Medium Fine	Partially Oxidized		No				NBP-018-56	C-10	BA?
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			1	14.08		11.54	16.88		16.83	2.5yr 4/8	7.5yr 5/1	7.5yr 3/1		2-5%	Medium Fine	Partially Oxidized	Sand	No	Burnished			NBP-018-56	C-11	BA
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			2.3	15.59		13.7	9.22		8.7	5yr 5/8	5yr 6/6	5yr 2.5/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No				NBP-018-56-	C-12	LBA/BIA
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			5.1	25.38		16.97	11.08		10.61	2.5yr 4/6	5yr 2.5/1 (Black)	5yr 2.5/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Mica Quartz	No				NBP-018-56	C-13	LBA
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			10.4	29.33		22.94	11.04		11	5yr6/6	10yr 4/1	10yr 2/1 (Black)		10-15%	Medium	Partially Oxidized	Sand Mica	No				NBP-018-56	C-14	LBA
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			6.5	21.98		20.48	9.9		9.16	2.5yr 5/8	5yr 5/3	5yr 3/1		0-2%	Medium Fine	Partially Oxidized	Sand	No				NBP- 018-56	C-15	LBA/EIA
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			2.1	16.07		16	7.55		6.84	5yr 5/8	5yr 6/6	5yr 3/2		0-2%	Medium Fine	Partially Oxidized	Sand	No				NBP-018-56	C-16	LIA
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			4.1	23.67		20.88	8.45		8.33	2.5yr 5/8	5yr 4/1	5yr 3/1			Coarse	Partially Oxidized	Sand Granules	No				NBP-018-56	C-19	LBA/BIA
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Neck			23.7	46.45		36.83	11.43		10.27	7.5yr 6/4	10yr 4/1	7.5yr 3/4, 7.5yr 2.5/1 (Black)	Everted Jar?	5-7%	Medium Coarse	Partially Oxidized	Granules Sand Organic Quartz	No				NBP-018-56	C-20	LBA
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9	45-60	Rim	Everted	35.1	53.57	Simple	29.41	15.32	20	12.82	7.5yr 5/4	7.5yr 6/6	10yr 3/3	Everted Jar?	7-10%	Medium Coarse	Partially Oxidized	Sand Granules Pottery/G rog Quartz	Yes				NBP-018-56	C-22	LBA
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			2.5	17.72		11.67	11.14		11.08	2.5yr 5/8	2.5yr 5/8	10yr 2/1 (Black), 5yr 5/6		5-7%	Medium Fine	Partially Oxidized	Sand	No	Incised	Chevron		NBP-018-56	C-25	LBA/EIA?
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			9.5	33.95		27.5	11.31		10.94	5yr6/8	10yr 4/1	10yr 2/1 (Black)		7-10%	Medium Coarse	Partially Reduced	Sand	No				NBP-018-56	C-18	LBA
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9	0-15	Rim	Simple Open	12.8	38.11	Flat	27.35	7.95	8	6.64	7.5yr 5/2	7.5yr 6/6	5yr 4/6	Jar	2-5%	Medium Fine	Partially Reduced	Sand	No				NBP-013-56	C-23	LH
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Body			9.3	29.6		22.17	13.28		10.13	5yr 5/4	7.5yr 5/3				Medium Coarse	Partially Oxidized	Sand Mica	No	Incised	Zig-Zag		NBP-018-56	C-25a	LBA
Shatz-Chalus	NBP-018	56	N/A (Survey)	6307700	5141665		231.9			Rim			6.2	25.92		23.64	12.46		10.29	10yr 5/1	10yr 5/1	10yr 5/1			Coarse	Partially Oxidized	Sand Granules	No				NBP-018-56	C-26-	LBA? Bronze Age?
Shatz-Chalus	NBP-018	57	N/A (Survey)	6310136	5140748		7			Body			3.8	20.29		14.66	11.64		11.13	10yr 6/3	5yr 6/4	7.5yr 4/4		5-7%	Medium	Fully Oxidized	Sand	No				NBP-018-57	C-1	LBA
Shatz-Chalus	NBP-018	57	N/A (Survey)	6310136	5140748		7			Body			3.2	16.42		14.6	11.08		10.57	2.5yr 5/6	7.5yr 5/4	5yr 4/6, 5yr 2.5/1 (Black)		5-7%	Medium	Partially Oxidized		No				NBP-018-57	C-2	LBA
Shatz-Chalus	NBP-018	59	N/A (Survey)	6310871	5141835		24.6			Shoulder			4.1	27.48		17.39	7.55		7.48	10r 5/6	7.5yr 5/3	7.5yr 2.5/1 (Black)		0-2%	Medium Fine	Partially Oxidized	Sand Mica Quartz	No				NBP-018-59	C-1	LBA
Shatz-Chalus	NBP-018	59	N/A (Survey)	6310871	5141835		24.6			Body			8.9	30.47		27.13	8.98		7.62	7.5yr 5/4	10r6/8	7.5yr 2.5/1		5-7%	Medium	Partially Oxidized	Sand Quartz	No	Incised			NBP-018-59-	C-2	LBA
Shatz-Chalus	NBP-018	59	N/A (Survey)	6310871	5141835		24.6			Body			2.9	20.45		14.89	7.45		6.88	5yr 5/6	5yr 6/8	10yr 2/1 (Black)		0-2%	Fine	Partially Oxidized	Sand Mica	No	Burnished	Chevron		NBP- 018-59	C-3	LBA/EIA
Shatz-Chalus	NBP-018	59	N/A (Survey)	6310871	5141835		24.6			Body			2.8	18.78		15.59	8.98		8.48	10r 5/8	7.5yr 4/1	10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand	No				NBP-018-59	C-4	LBA/BIA?
Shatz-Chalus	NBP-018	59	N/A (Survey)	6310871	5141835		24.6			Body			1.5	16.41		14.02	8.34		8.27	2.5yr 6/8	5yr 6/6	5yr5/1		0-2%	Medium Fine	Partially Oxidized	Quartz Pottery/G rog	No				NBP- 018-59	C-5	Turk?
Shatz-Chalus	NBP-018	59	N/A (Survey)	6310871	5141835		24.6			Body			1	13.13		11.27	7.69		7.04	7.5yr 6/4	10yr 4/1	10yr 2/1 (Black)			Medium Fine	Partially Oxidized	Sand	No				NBP-018-59	C-6	LBA
Shatz-Chalus	NBP-018	59	N/A (Survey)	6310871	5141835		24.6			Body			2.3	21.02		13.51	8.01		7.78	7.5yr 6/8	7.5yr 6/6	7.5yr 6/8, 7.yr 6/6		0-2%	Fine	Partially Oxidized	Sand	No	Burnished			NBP-018-59	C-7	LIA
Shatz-Chalus	NBP-018	59	N/A (Survey)	6310871	5141835		24.6			Body			1.1	12.26		12.19	6.5		6.28	7.5yr 6/4	2.5yr 6/8	10yr 2/1 (Black)		0-2%	Medium Fine	Partially Oxidized	Sand	No	Burnished			NBP-018-59	C-8	Unknown
Shatz-Chalus	NBP-018	60	N/A (Survey)	6309932	5141861		250			Body				18.4		12.28	11.13		11.06	7.5yr 5/2	7.5yr 5/3	7.5yr 4/4		2-5%	Medium Fine	Fully Oxidized	Sand	No				NBP-018-60	C-16	LBA

Table E.7 (continued). Ceramic catalog

Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		2.6	20.15		12.4	11.04		10.79	7.5yr 4/4	7.5yr5/2	7.5yr 4/3		2-5%	Medium	Fully Oxidized	Sand	No			NBP-018-60 C-17	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		2.3	16.29		14.77	8.13		8.02	5yr5/3	2.5yr5/6	2.5yr 4/4			Medium Fine	Fully Oxidized	Sand	No			NBP-018-60 C-18	LBA/EIA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250	45-60	Rim	Carinated, Open	34.6	76.62	Simple	25.39	14.95	14	10.31	10yr 6/3, 2.5y	10yr 6/3, 2.5y 3/1	10yr 2/1 (Black)	Jar	10-15%	Medium Coarse	Fully Reduced	Sand Mica	No			NBP-018-60-C33	LIA_X
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Shoulder		19.1	37.65		35.8	14.84		13.87	7.5yr 6/6	7.5yr 2.5/1 (Black	7.5yr 2.5/1 (Black)		5-7%	Medium	Partially Oxidized	Sand	No			NBP- 018-60-C-1	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		10.8	26.15		24.54	12.09		11.78	7.5yr 6/4	10yr 3/1 (Gray)	10yr 2/1, 7.5yr 5/4		7-10%	Medium Coarse	Partially Oxidized	Sand	No	Burnished		NBP-018-60-C-2	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		4.94	27.96		17.52	10.82		10.3	7.5yr 6/4	10yr 4/1	10yr 2/1, 7.5yr 5/4		7-10%	Medium Coarse	Partially Oxidized	Sand	No	Burnished		NBP-018-60-C-3	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		7.7	27.29		24.99	13.3		11.2	7.5yr 6/4	7.5yr 2/1 (Black)	5yr5/8, 5yr 2.5/1 (Black)			Medium	Partially Oxidized	Sand	No	Burnished		NBP-018-60-C-4	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		40.4	45.44		42.31	15		12.45	7.5yr 5/4	5yr 4/6	5yr 2.5/1 (Black		>15%	Coarse	Partially Oxidized	Sand Pottery/G rog Granules	Yes			NBP-018-60-C-5	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		14.4	32.22		24.98	11.2		10.21	10yr 5/3	10r5/6	y.5yr 6/1 (Gray)		>15%	Coarse	Partially Oxidized	Sand Granules	No			NBP-018-60-C-6	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141681		250		Body		15.4	35.25		30.11	15.75		14.73	5yr5/6	10yr 5/3	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Pottery/G rog	No	Burnished		NBP-018-60-C-7	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		14.8	33.7		26.16	14.01		13.62	7.5yr 6/6	7.5yr 2.5/1 (Black	7.5yr 2.5/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Organic Pottery/G rog	No			NBP-018-60 C-9	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		5.7	25.63		19.06	11.82		11.17	2.5yr 5/6	7.5yr5//1	7.5yr 4/1 (Gray)		7-10%	Medium Coarse	Partially Oxidized	Sand	No			NBP-018-60 C-10	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		4.3	22.32		17.77	10.29		9.23	7.5yr /1	10r5/8 (Eroded)	2.5yr 5/6		10-15%	Medium	Partially Oxidized	Sand Mica	No			NBP-018-60 C-11	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		5.5	27.2		23.02	11.12		10.86	7.5yr 5/4	2.5yr5/6	5yr 2.51 (Black)			Medium	Partially Oxidized	Sand	No			NBP-018-60 C-12	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		4.6	24.11		18.39	9.76		8.71	5yr5/6	7.5yr 3/1	7.5yr 2.5/1 (Black)			Medium Fine	Partially Oxidized	Quartz	No			NBP-018-60 C-13	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		3	17.95		14.13	10.03		9.67	7.5yr 5/4	7.5yr 4/1	7.5yr 2.5/1 (Black)		5-7%	Medium	Partially Oxidized	Sand Mica	No			NBP-018-60 C-19	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		1.4	15.14		12.21	8.01		7.75	7.5yr 5/4	10yr 4/1	10yr 3/1		2-5%	Medium	Partially Oxidized	Sand	No			NBP-018-60- C-20	BA?
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		2.7	21.22		11.66	9.77		7.2	7.5yr 5/2	10yr 5/3	10yr 2/1 (Black)		2-5%	Medium	Partially Oxidized	Sand Quartz	No			NBP-018-60 C-24	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		1.5	14.65		12.2	8.95		7.85	10yr 6/4	7.5yr5/6	7.5yr 3/1		5-7%	Medium	Partially Oxidized	Sand	No			NBP-018-60- C-26	LH
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		1	13.23		8	8.26		7.3	5yr6/8	5yr 4/1	7.5yr 6/6		5-7%	Medium	Partially Oxidized	Sand	No	Burnished		NBP-018-60 C-28	Turk
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		1	13.21		9.03	7.89		6.97	2.5yr 5/8	5yr 5/8	5yr 2.5/1 (Black)		2-5%	Medium Fine	Partially Oxidized		No			NBP-018-60 C-29	Unknown
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250	15-30	Rim	Simple Open	1.2	16.81	V-Shaped	13.11	7.31	13	4.89	7.5yr 6/4	7.5yr6/4	5yr5/8	Unknown	2-5%	Medium Fine	Partially Oxidized	Sand	Yes			NBP-018-60 C-30	Unknown
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250	45-60	Rim	Open, Unidentifi	4.7	35.8	V-Shaped	16.03	10.4	20	7.03	7.5yr 5/4	7.5yr 4/4	7.5yr 3/1	Everted Jar?	5-7%	Medium	Partially Oxidized	Sand	Yes			NBP-018-60-C31	LH
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250	15-30	Rim	Everted	4.4	16.67	Flat	17.93	11.73	16	10.88	5yr5/4	5yr 4/1	5yr 3/1	Everted Jar?	7-10%	Medium	Partially Oxidized	Sand	No			NBP-018-60 C-32	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		4.5	22.02		15.93	12.12		11.41	5yr6/1	5yr 5/1	5yr 2.5/1 (Black)		2-5%	Medium Fine	Partially Reduced	Mica Sand	No			NBP-018-60 C-14	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		2.1	15.08		12.67	8.49		8.44	5yr 4/1	5yr 5/4	7.5yr 4/3		2-5%	Medium	Partially Reduced	Sand	No			NBP-018-60 C-22	LBA/EIA?
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		2.7	14.96		13.52	9.33		9.19	10yr 5/1	5yr 5/4	7.5yr 4/2		2-5%	Medium	Partially Reduced	Sand Granules	No			NBP-018-60 C-23	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		1.6	14.53		11.13	7.93		7.77	7.5yr 4/1	2.5yr5/6	7.5yr 4/2		7-10%	Medium	Partially Reduced	Sand Quartz	No			NBP-018-60 C-25	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		1.9	14.23		11.38	9.85		9.7	7.5yr 4/1	5yr 5/4	7.5yr 4/2			Medium	Partially Reduced	Sand	No			NBP-018-60 C-27	LBA/EIA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		18.1	42.35		26.71	14.3		13.6	7.5yr 6/6	7.5yr 2.5/1 (Black	7.5yr 2.5/1 (Black)			Medium Coarse	Partially Oxidized	Sand Pottery/G rog	No			NBP-018-60-C-8	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		4.6	22.22		13.63	12.5		11.99	5yr6/6	5yr 5/2 (Red-Gray	5yr 2.5/1 (Black)			Medium	Partially Oxidized	Sand	No	Burnished		NBP- 018-60 C-15	LBA
Shatar Chuluu	NBP-018	60	N/A (Survey)	630932	5141861		250		Body		1.8	14.77		13.06	8.81		8.04	2.5yr 5/6	5yr 5/3	5yr 4/1		0-2%	Medium Fine	Partially Oxidized	Sand	No			NBP-018-60 C-21	LBA/EIA
Shatar Chuluu	NBP-018	62	N/A (Survey)	631005	5141880		365.8		Other		365.8	77.46		70.62	45.74		41.39	10yr 5/2	10yr 3/1	10yr 3/1		>15%	Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-018-62 C-1	LH
Shatar Chuluu	NBP-018	63	N/A (Survey)	631131	5141924		38.1		Shoulder		14	43.04		27.36	13.44		12.89	5yr6/6	5yr 25/1 (Black)	5yr 2.5/1 (black/orange split)		7-10%	Medium Coarse	Partially Oxidized	Sand Granules	No			NBP-018-63-C-1	LBA
Shatar Chuluu	NBP-018	63	N/A (Survey)	631131	5141924		38.1		Body		4.9	23.86		19.33	8.73		8.54	5yr 4/6	5yr 25/1	5yr 2.51/1 (Black), 5yr 6/6			Medium	Partially Oxidized	Sand	No	Burnished		NBP-018-63-C-2	LBA
Shatar Chuluu	NBP-018	63	N/A (Survey)	631131	5141924		 38.1		Body		3.6	19.93		15.98	11		10.84	5yr5/4	5yr 6/8	5yr 2.5/1 (Black)		10-15%	Coarse	Partially Oxidized	Sand Granules	No	 Burnished	Incised Parallel L	NBP-018-63-C-3	LBA
Shatar Chuluu	NBP-018	63	N/A (Survey)	631131	5141924		38.1		Body		3.2	18.75		15.77	7.43		7.35	10yr 5/1	10yr 5/4	10yr 2.5/1 (Black)		2-5%	Medium Fine	Partially Oxidized		No			NBP018-63-C-5	LBA
Shatar Chuluu	NBP-018	63	N/A (Survey)	631131	5141924		38.1		Body		2.7	21.81		11.11	8.17		8.05	7.5yr 5/4	7.5yr6/6	7.5yr 2.5/1 (Black), 7.5yr 5/4		7-10%	Medium	Partially Oxidized	Sand	No			NBP-018-63-C-6	LBA
Shatar Chuluu	NBP-018	63	N/A (Survey)	631131	5141924		38.1	0-15	Rim	Simple Closed	5.1	23.62	Flat	18.27	10.03	18	8.57	5yr6/8	5yr 5/8	7.5yr 5/1	Globular Jar?	2-5%	Medium Fine	Partially Oxidized	Sand Quartz	Yes			NBP-018-63-C-7	IA/Xiongnu
Shatar Chuluu	NBP-018	63	N/A (Survey)	631131	5141924		38.1		Body		4.8	21.74		17.81	10.39		9.61	10yr 4/2	10yr 4/1	10yr 2/1		2-5%	Medium Fine	Partially Reduced	Sand	No	Burnished		NBP-018-63-C-4	LBA
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Body		4	19.21		16.5	9.21		9.1	10yr 5/3	10yr 5/3	10yr 4/3			Medium Fine	Fully Oxidized	Sand Mica Quartz	No	Burnished		NBP- 018-74 C-15	IA
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Body		0.2	7.51		4.87	4.86		4.5	5yr 7/6	2.5yr6/6	2.5yr 6/6			Medium Fine	Fully Oxidized	Sand	No			NBP-018-74 C-33	BA
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7	0-15	Rim	Simple Open	2.7	18.46	Flat	12.41	12.1	Unknown	8.14	Unkown	5yr 7/6	5yr6/8	Unknown	0-2%	Fine	Fully Oxidized	Sand	No			NBP-018-74 C-44	LIA
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7	0-15	Rim	Simple Closed	12.1	34.49	Beveled	21.18	11.22	19	9.05	10yr 5/4	10yr 5/4		Jar?	10-15%	Medium Coarse	Fully Oxidized	Sand	Yes		Additive Anvil	NBP-018-74 C-47	LBA
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Body		4.4	19.81		19.01	8.03		7.61	10yr 5/3	10yr 4/1	7..5yr 4/6 (at Ext), 7.5yr 2.5/1 (Black), 7..5yr 4/4 (at Int)			Fine	Fully Reduced	Sand Quartz	No			NBP- 018-74 C-3	LBA/EIA
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Body		6.1	25.36		19.8	10.44		10.08	10yr 6/2	10yr 4/2	10yr 2/1 (Black)			Fine	Fully Reduced		No			NBP-018-74 C-5	LH
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Body		3.2	20.41		15.27	7.81		7.4	10yr 6/2	2.5y 8/1	10yr 7/2			Fine	Fully Reduced		No			NBP- 018-74 C-17	LH
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Shoulder		12.7	33.13		27.59	11.8		10.98	10yr 6/3	7.5yr6/6	10yr 3/2, 10yr 4/1 (interior/exterior)			Medium Coarse	Fully Reduced	Sand Granules Quartz	No			NBP-018-74 C-22	LBA/EIA
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Shoulder		3.2	31.2		20.02	6.72		6.48	10yr 5/2	10yr 5/2	10yr 5/1			Fine	Fully Reduced		No	Incised	Punctate	NBP-018-74 C-24	LH
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Body		1.7	15.71		14.79	5.55		5.06	10yr 4/1	10yr 6/3	10yr5/1		0-2%	Fine	Fully Reduced		No			NBP-018-74 C-27	LH
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Shoulder		6.2	27.86		22.07	10.16		9.09	Gley1 3/N	10yr 6/2	10yr 3/2		10-15%	Medium Coarse	Fully Reduced	Sand Quartz	No	Incised	Line	NBP-018-74 C-36	LH
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Body		10.2	31.62		22.68	8.6		8.09	10yr 7/2	10yr 5/2	10yr 4/1		0-2%	Fine	Fully Reduced	Sand	No			NBP-018-74 C-37	LH
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7	15-30	Rim	Everted	2.4	18.82	Flat	14.17	8.74	Unknown	7.77	10yr 5/1	10yr 6/1	10yr 5/1	Everted Jar?	0-2%	Fine	Fully Reduced	Sand	No			NBP-018-74 C-39	LH
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Rim		3.2	17.74		16.7	10.03		8.76	Unknown	10yr 5/1	2.5y 5/1		0-2%	Fine	Fully Reduced	Sand	No			NBP-018-74 C-40	LH
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7	30-45	Rim	Everted	3.1	31.07	Simple	10.92	7.46	10	4.59	10yr 5/1	10yr5/1	10yr 4/1	Cup?	0-2%	Fine	Fully Reduced	Sand	No			NBP-018-74 C-41	LH
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7	0-15	Rim	Simple Open	8.5	28.57	Simple	20.67	10.29	10	8.05	2.5y 5/1	GLEY2 3/10B	5yr 4/1	Bowl	0-2%	Fine	Fully Reduced	Sand	No	Burnished		NBP-018-74 C-42	LIA_X?
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Rim		2.5	17.07		14.38	8.52		8.27	10yr 5/2	5yr 6/8	5yr5/8		2-5%	Medium Fine	Fully Reduced	Sand	Yes			NBP-018-74 C-46	LIA
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Body		29.7	39.48		36.51	14.32		14.05	5yr 4/4	7.5yr5/3	7.5yr 2.5/1 (Black)			Coarse	Partially Oxidized	Sand Granules Mica Quartz	No	Burnished		NBP- 018-74 C-1	LBA
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Body		14.4	35.28		31.82	10.98		10.09	10yr 5/3	2.5yr5/4	7.5yr 2.5/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Granules Quartz Mica	No			NBP-018-74 C-2	LBA
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Body		12.6	32.91		31.23	11.92		11.43	10yr 6/6	7.5yr6/4	7.5yr 2.5/1 (Black)			Medium	Partially Oxidized	Sand	No			NBP-018-74 C-4	LBA
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Body		2.8	15.93		14.21	8.56		8.27	10yr 5/4	10yr 5/3	10yr 2/1 (Black)			Medium Coarse	Partially Oxidized	Sand Granules Mica	No			NBP-018-74 C-6	LBA
Shatar Chuluu	NBP-018	74	N/A (Survey)	630693	5142254		268.7		Body		1	17.39		10.13	5.16		3.84	5yr5/6	5yr 5/8	5yr 4/1			Medium	Partially Oxidized	Sand	No			NBP-018-74 C-7	Turk

Table E.7 (continued). Ceramic catalog

Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			14.1	34.3		30.71	11.16		9.92	7.5yr 5/4	10yr 5/3	10yr 2/1 (Black)	7.5yr 6/4			Medium Coarse	Partially Oxidized	Sand Quartz Mica Granules	No			NBP-018-74 C-8	LBA
Shasta Chelsea	NBP-018	74			630693	5142254		268.7		Body			4	18.74		17.72	9.51		8.26	5yr 5/6	10yr 4/4	10yr 3/2				Medium	Partially Oxidized	Sand Quartz	No			NBP-018-74 C-9	IA
Shasta Chelsea	NBP-018	74			630693	5142254		268.7		Body			5.1	26.87		17.78	8.42		7.93	5yr 5/6	10yr 3/1	10yr 2/1 (Black)				Medium	Partially Oxidized	Sand Granules Quartz	No			NBP-018-74 C-10	LBA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			2.3	19.31		11.37	9.69		8.68	2.5yr 6/8	10yr 5/3	10yr 5/2		2-5%		Medium	Partially Oxidized	Sand	No			NBP-018-74 C-12	IA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			2.6	19.63		12.84	10.56		10.24	10yr 7/6	7.5yr 6/4	5yr 5/6, 5yr 3/1				Medium	Partially Oxidized		No			NBP-018-74 C-13	LBA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			3.1	18.43		14.66	9.85		9.12	5yr 6/6	2.5yr 5/6	10yr 2/1 (Black)				Medium Fine	Partially Oxidized	Sand	No			NBP-018-74 C-14	LBA/EIA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			3.1	22.76		17.76	8.82		8.16	5yr 5/6	10yr 4/1	10yr 2/1 (Black)				Medium	Partially Oxidized		No			NBP-018-74 C-16	IA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			16.8	36.22		35.88	11.22		10.64	5yr 5/6	10yr 5/3	7.5yr 4/6, 7.5yr 2.5/1 (Black)				Medium Coarse	Partially Oxidized	Sand Quartz Granules Mica	No			NBP018-74- C-18	LIA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			5.2	21.77		17.78	12.82		12.55	7.5yr 5/6	10yr 5/3	10yr 2/1 (Black)				Medium Fine	Partially Oxidized	Sand	No			NBP-018-74 C-19	LBA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			1.6	16.69		11.44	9.23		9.18	2.5yr 5/6	10yr 6/3	10yr 2/1 (Black)				Medium	Partially Oxidized	Sand Granules	No			NBP-018-74 C-20	LBA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			6.4	28.85		24.88	8.11		8.02	7.5yr 6/6	10yr 3/1	7.5yr 6/6, 7.5yr 2.5/1 (Black)				Medium	Partially Oxidized	Sand Granules Mica Quartz	No			NBP-018-74 C-21	LBA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			4	20.8		14.38	10.54		9.76	10yr 5/4	2.5y 3/1	10yr 2/1 (Black)				Medium	Partially Oxidized	Sand Quartz Granules	No			NBP-018-74 C-23	LBA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			3.7	16.1		14.98	11.511		10.97	Unknown	10yr 5/3	10yr 3/1				Medium	Partially Oxidized	Sand Granules Quartz	No			NBP018-74- C-25	LBA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			1.7	18.6		14.9	5.18		4.74	10yr 6/4	10yr 2/1 (Black)	10yr 2/1 (Black)				Medium	Partially Oxidized	Sand Quartz	No			NBP-018-74 C-28	LBA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			3.2	16.37		3.7	10.39		9.86	2.5yr 6.6	7.5yr 5/4	5yr 5/8, 5yr 4/1, 5yr 5/6		7-10%		Medium	Partially Oxidized	Sand Granules	No			NBP-018-74 C-29	LBA/EIA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Shoulder			6.2	25.03		21.56	10.41		9.38	7.5yr 6/6	10yr 5/4	10yr 2/1 (Black)				Fine	Partially Oxidized	Granules	No			NBP-018-74 C-30	LBA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			1.2	14.02		13.31	5.27		5.09	5yr 6/6	10yr 3/1	10yr 2/1 (Black)				Medium	Partially Oxidized	Sand Mica Quartz	No			NBP-018-74 C-31	Unknown
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			1.4	14.83		11.14	8.6		8.12	2.5yr 5/6	Unknown	7.5yr 6/1				Medium Fine	Partially Oxidized	Sand	No			NBP-018-74 C-32	LBA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			1	9.12		9.02	9.73		9.22	Unknown	10yr 4/1	2.5yr 6/6				Medium	Partially Oxidized	Sand Granules Quartz	No			NBP-018-74 C-34	BA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			3	19.66		17.32	6		5.52	7.5yr 5/4	10yr 3/1	10yr 2/1 (Black)		7-10%		Medium	Partially Oxidized		No			NBP-018-74 C-35	BA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Neck			8.4	26.75		19.66	16.02		14.86	2.5yr 5/4	2.5yr 5/6	5yr 2.5/1 (Black)		>15%		Coarse	Partially Oxidized	Sand	No			NBP-018-74 C-38	LBA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7	0-15	Rim	Simple Closed		6.8	25.82	Beveled	17.11	11.18	Unknown	9.76	7.5yr 4/3	7.5yr 4/2	7.5yr 2.5/1 (Black)	Bowl?	7-10%		Medium Coarse	Partially Oxidized	Quartz Sand	No			NBP-018-74 C-43	LBA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			5.9	24.93		17.27	8.95		8.67	10yr 5/1	10yr 4/1	10yr 4/2				Medium	Partially Reduced	Sand Quartz	No			NBP-018-74 C-11	LH
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7		Body			8.7	30.67		26.26	10.28		9.49	10yr 5/2	5yr 6/8	5yr 5/8				Medium Fine	Partially Reduced	Sand	No			NBP-018-74 C-26	IA
Shasta Chelsea	NBP-018	74		RUA Survey	630693	5142254		268.7	0-15	Rim	Simple Open		3	18.09	Tapered	15.22	8.49	Unknown	5.75	10yr 5/1	2.5y 4/1	2.5y 6/1	Unknown	0-2%		Fine	Partially Reduced	Sand	No	Incised	Parallel Lines	NBP-018-74 C-45	LIA
Shasta Chelsea	NBP-018	75		RUA Survey	630717	5142372		11.9		Body			11.9	27.37		24.76	13.03		11.83	2.5yr 5/8	10yr 5/3	10yr 2/1 (Black)		10-15%		Medium Coarse	Partially Oxidized	Sand Granules Mica	No			NBP-018-75 C-1	LBA
Shasta Chelsea	NBP-018	76		RUA Survey	630539	5142516		4.8		Body			4.8	24.75		17.43	9.25		8.15	10yr 5/2	10yr 2/1 (Black)	10yr 2/1 (Black)				Medium	Partially Oxidized	Sand	No			NBP-018-76 C-1	LBA
Shasta Chelsea	NBP-018	77		RUA Survey	630482	5142525		57.2		Body			1.5	17.25		12.6	8.4		6.3	5yr 5/8	5yr 6/8	5yr 5/8		2-5%		Medium Fine	Fully Oxidized	Sand	No			NBP-018-77-C7	LBA/EIA
Shasta Chelsea	NBP-018	77		RUA Survey	630482	5142525		57.2		Body			1.6	15.39		12.09	9.2		8.72	5yr 6/8	5yr 5/6	5yr 6/6				Medium Fine	Fully Oxidized	Sand	No			NBP-018-77-C8	Turk
Shasta Chelsea	NBP-018	77		RUA Survey	630482	5142525		57.2		Body			12.7	32.6		26.63	12.4		12.25	7.5yr 5/4	5yr 4/6	10yr /1		>15%		Coarse	Partially Oxidized	Quartz Gravel Granules Sand	No			NBP-018-77-C2	LBA
Shasta Chelsea	NBP-018	77		RUA Survey	630482	5142525		57.2		Shoulder			5	22.45		18.73	8.23		7.82	7.5yr 5/4	10yr 2/1 (Black)	10yr 2/1 Black		5-7%		Medium	Partially Oxidized	Sand Quartz Mica	No			NBP-018-77-C6	LBA
Shasta Chelsea	NBP-018	77		RUA Survey	630482	5142525		57.2		Body			9.1	34.8		25.29	7.49		7.45	10yr 4/1	10yr 5/1			2-5%		Medium Fine	Partially Reduced	Sand Quartz	No	Burnished	Betractive	NBP-018-77-C-1	LH
Shasta Chelsea	NBP-018	77		RUA Survey	630482	5142525		57.2		Body			10.2	37.3		26.97	11.05		9.57	10yr 5/3	10yr 3/1	5yr 2.5/1 (Black)		0-2%		Fine	Partially Reduced	Sand Quartz Mica	No			NBP- 018-77-C-3	Turk
Shasta Chelsea	NBP-018	77		RUA Survey	630482	5142525		57.2		Body			5.1	2.48		2.44	10.44		8.82	10yr 6/3	10yr 2/1 (Black)	10yr 2/1 (Black)		0-2%		Fine	Partially Reduced	Quartz Mica Sand	Yes		Betractive	NBP-018-77-C4	Turk
Shasta Chelsea	NBP-018	77		RUA Survey	630482	5142525		57.2		Body			8.4	38.93		22.04	10.09		9.05	7.5yr 6/4	10yr 3/1	10yr 2/1 (nearly black)		0-2%		Fine	Partially Reduced	Quartz Pottery/G rog Mica	No			NBP-018-77-C5	Turk
Shasta Chelsea	NBP-018	77		RUA Survey	630482	5142525		57.2		Body			1.9	16.15		12.93	7.07		7	10yr 6/4	10?r 5/1	10yr 3/1		0-2%		Fine	Partially Reduced	Sand	No			NBP-018-77-C9	LBA
Shasta Chelsea	NBP-018	77		RUA Survey	630482	5142525		57.2		Body			2.1	16.64		13.63	7.48		7.33	10yr 6/4	2.5y 3/1	10yr 2/1 Black		0-2%		Fine	Partially Reduced	Sand	No			NBP-018-77- C10	BA?
Shasta Chelsea	NBP-018	78		RUA Survey	630098	5142758		18.9		Body			13.6	41.25		41.12	9.06		6.71	10yr 4/2	10yr 4/4	10yr 7/4		0-2%		Fine	Fully Oxidized	Sand	No	Incised Glaze	Line	NBP-018-78 C-1	LH
Shasta Chelsea	NBP-018	78			630098	5142758		18.9		Body			5.2	32.3		25.13	6.74		6.54	10yr 4/1	10yr 5/3	10yr 7/4		0-2%		Fine	Fully Oxidized	Sand	No	Glaze		NBP-018-78 C-2	LH
Shasta Chelsea	NBP-018	84		RUA Survey	629909	5143508		2.7		Body			2.7	17.49		16.02	8.38		8.34	2.5yr 5/4	10yr 6/3	10yr 2/1 (Black)		10-15%		Medium Coarse	Partially Oxidized	Sand	No			NBP-018-84 C-1	LBA
Shasta Chelsea	NBP-018	85		RUA Survey	629549	5142929		22.11		Body			2.1	16.49		15.17	6.52		5.94	5yr 5/8	5yr 5/6	7.5yr 4/4		2-5%		Medium Fine	Partially Oxidized	Sand	No			NBP- 018-85 C-1	LBA/EIA
Shasta Chelsea	NBP-018	85			629549	5142929		22.1		Body			0.5	12.32		6.55	5.49		5.5	5yr 6/8	5y45/8	7.5yr 5/3				Medium Fine	Partially Oxidized	Sand Gravel	No			NBP- 018-85 C-2	LBA/EIA
Shasta Chelsea	NBP-018	85		RUA Survey	629549	5142929		221		Body			3.2	21.46		17.03	8.84		7	5yr 5/6	5yr 5/8	5yr 4/6				Medium	Partially Oxidized	Sand Gravel Organic	No			NBP-018-85- C-3	LBA/EIA
Shasta Chelsea	NBP-018	85		RUA Survey	629549	5142929		22.1		Foot			2.8	23.83		14.98	7.62		5.5	5yr 4/6	5yr 2.5/1	10yr 2/1				Medium	Partially Oxidized	Sand	Yes			NBP-018-85 C-4	LBA
Shasta Chelsea	NBP-018	85		RUA Survey	629549	5142929		22.1		Neck			4.8	24.8		17.82	9.96		8.15	5yr 6/8	5yr 5/6	7.5yr 5/4		2-5%		Medium Fine	Partially Oxidized	Sand Gravel	No			NBP-018-85 C-5	LBA/EIA
Shasta Chelsea	NBP-018	85		RUA Survey	629549	5142929		22.1		Body			1.9	13.49		13.54	9.48		9.28	5yr 5/6	5yr 6/8	5yr 3/1		5-7%		Medium	Partially Oxidized	Sand Pottery/G rog Quartz	No			NBP018-85-C-6	LBA/EIA
Shasta Chelsea	NBP-018	85		RUA Survey	629549	5142929		22.1		Body			0.1	7.34		6.1	4.03		3.68	5yr 6/8	5yr 6/8	Unknown		2-5%		Medium	Partially Oxidized	Sand	No			NBP-018-85 -C-7	LBA/EIA
Shasta Chelsea	NBP-018	85		RUA Survey	629549	5142929		22.1		Body			1.7	15.02		14.59	6.32		5.55	5yr 6/6	5yr 5/6	5yr 4/4		2-5%		Medium Fine	Partially Oxidized	Sand Quartz	No			NBP-018-85-C8	LBA/EIA
Shasta Chelsea	NBP-018	85		RUA Survey	629549	5142929		22.1		Body			1.1	13.57		10.74	6.89		6.04	5yr 5/8	5yr 5/6	5yr 4/6		2-5%		Medium Fine	Partially Oxidized	Sand	No			NBP-018-85-C-9	LBA/EIA
Shasta Chelsea	NBP-018	85		RUA Survey	629549	5142929		22.1		Body			1.4	17.25		11.71	6.1		4.77	5yr 5/6	5yr 6/8	7.5yr 4/3		2-5%		Medium Fine	Partially Oxidized	Sand	No			NBP- 018-85-C10	LBA/EIA
Shasta Chelsea	NBP-018	85		RUA Survey	629549	5142929		22.1		Body			1.2	13.48		11.82	6.21		5.95	5yr 5/6	5yr 6/6	7.5yr 4/4		2-5%		Medium Fine	Partially Oxidized	Sand Organic	No			NBP-018-85-C11	LBA/EIA
Shasta Chelsea	NBP-018	85		RUA Survey	629549	5142929		22.1		Body			0.8	12.29		8.83	6.56		5.74	5yr 5/8	5yr 5/8	7.5yr 4/4		2-5%		Medium Fine	Partially Oxidized	Sand	No			NBP-018-85-C-12	LBA/EIA
Shasta Chelsea	NBP-018	85		RUA Survey	629549	5142929		22.1		Body			0.5	11.25		9.88	4.87		4.15	5yr 5/8	5yr 6/8	5yr 4/6		2-5%		Medium Fine	Partially Oxidized	Sand	No			NBP-018-85-C-13	LBA/EIA

Table E.7 (continued). Ceramic catalog

Shatar Chuluu	NBP-018	85	N/A (Survey)	629549	5142929		22.1		Body		0.5	10.84		7.25	5.47		4.41	5yr6/8	5yr 6/8	7.5yr 4/4		2-5%	Medium	Partially Oxidized	Sand Pottery/Grog	No			NBP- 018-85-C-14	LBA/EIA
Shatar Chuluu	NBP-018	86	N/A (Survey)	629596	5142789		23.6		Neck		7.2	31.8		21.225	9.52		9.47	10yr 3/1	10yr 6/3	10yr6/1		7-10%	Medium Fine	Fully Reduced	Sand	No			NBP-018-86 C-3	LH
Shatar Chuluu	NBP-018	86	N/A (Survey)	629596	5142789		23.6		Body		1.6	15.34		11.66	7.98		7.07	7.5yr 5/4	7.5yr 2.5/1	7.5yr 2.5/1 (Black)		5-7%	Medium	Partially Oxidized		No			NBP-018-86 C-1	LBA
Shatar Chuluu	NBP-018	86	N/A (Survey)	629596	5142789		23.6	15-30	Rim		14.6	32.13		25.73	18.17		9.8	Unknown	2.5yr5/8	2.5yr 6/8, 5yr 2.5/1 (Black), 2.5yr 5/8		>15%	Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-018-86 C-2	LBA
Shatar Chuluu	NBP-019	3		623350	5140710		122.4		Rim		37.16	67.9		48.03	12.03		9.13	10yr 4/2	2.5yr 3/4	2.5yr 31		7-10%	Medium	Fully Oxidized	Sand	No	Incised	CombWavy Form	NBP-019-3 C-21	LBA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		3.8	18.21		17.5	8.29		8.04	10yr 4/1	10yr 5/3	10yr 3/1		0-2%	Medium Fine	Fully Reduced	Sand				NBP-019-3 C-17	LIA_X
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		4.4	23.89		17.25	9.86		9.73	10yr 4/1	7.5yr5/4	10yr 3/1		7-10%	Medium	Fully Reduced	Sand	No			NBP-019-3 C-18	LIA_X
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		4.2	24.13		16.41	8.5		8.04	10yr5/4	10yr 6/3	10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand	No			NBP-019-3 C-1	LBA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		6.4	23.55		21.64	9.14		8.75	7.5yr 5/4	10yr 5/3	10yr 2/1 (Black)		7-10%	Medium Coarse	Partially Oxidized	Sand Granules	No	Burnished		NBP-019-3 C-2	LBA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		4.8	26.11		16.09	13.47		1309	10yr 5/6	7.5yr5/4	10yr 4/6, 10yr 2/1 (Black)			Medium	Partially Oxidized	Sand	No			NBP-019-3 C-3	LBA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		3.3	17.78		14.02	8.24		7.95	2.5yr 5/6	7.5yr5/6	10yr 2/1 (Black)			Medium	Partially Oxidized	Sand	No	Burnished		NBP-019-3 C-5	LIA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		1.9	16.53		15.02	6.64		6.21	7.5yr 6/6	7.5yr 4/2	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized		No			NBP-019-3 C-6	LBA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		3.3	20.9		12.19	9.53		9.13	7.5yr 6/3	10yr 2/1 (Black)	7.5yr 4/4, 10yr 2/1 (Black)		2-5%	Medium	Partially Oxidized	Sand	No			NBP-019-3 C-7	LBA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		1.8	15.38		12.64	7.38		6.94	7.5yr 6/1	7.5yr5/1	7.5yr 2.5/1 (Black)		0-2%	Medium Fine	Partially Oxidized	Sand	No			NBP-019-3 C-8	LBA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		1.9	19.47		14.54	7.22		6.3	75yr 5/3	7.5yr5/3	7.5yr 4/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-019-3 C-9	LBA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		1.6	15.08		14.22	7.94		7.59	2.5yr 4.8	5yr 5/2	5yr 4/1		5-7%	Medium	Partially Oxidized	Sand	No			NBP-019-3 C-11	IA?
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		1.6	13.44		12.16	6.75		6.65	5yr5/4	5yr 5/4	10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Mica	No			NBP-019-3 C-13	LBA/EIA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		2	20.43		12.91	7.16		5.76	5yr6/8	5yr 5/6	7.5yr 4/6, 7.5yr 4/1, 7.5yr 4/6		10-15%	Medium Coarse	Partially Oxidized	Sand Quartz	No			NBP-019-3 C-15	LIA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		4.1	25.76		15.98	9.1		8.98	5yr5/6	7.5yr5/2	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized		No	Slip		NBP-019-3 C-16	LIA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4	0-15	Rim	Simple Open	2.6	21.5	Simple	10.88	11.7	18	9.14	5yr 4/1	5yr 5/6	5yr 3/1	Unknown	5-7%	Medium	Partially Oxidized	Sand	No			NBP-019-3 C-22	LBA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Neck		12.3	36.73		31.03	10.76		9.57	10yr5/2	5yr 6/6	7.5yr 2.5/1 (Black)			Medium Coarse	Partially Reduced	Sand	Yes			NBP-019-3 C-19	IA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		9.9	31.72		24.82	8.89		8.56	10yr 5/1	5yr 5/4	10yr 4/1		7-10%	Medium	Partially Reduced	Sand Quartz	No	Incised	Line	NBP-019-3 C-20	LIA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		4.8	19.3		17.36	12.15		10.8	10yr 5/3	10yr 5/4	10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand	No			NBP-019-3- C-4	LBA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		5.4	22.55		15.74	10.66		9.29	10yr 5/2	7.5yr5/3	7.5yr 3/1		2-5%	Medium	Partially Oxidized	Sand	No			NBP- 019-3 C-10	LBA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		2	17.25		13.9	6.91		6.85	5yr5/6	5yr 5/6	5yr 5/6, 5yr 4/1, 5yr 5/6		10-15%	Medium Coarse	Partially Oxidized	Sand Quartz Granules	No			NBP-019-3 C-12	LBA/EIA
Shatar Chuluu	NBP-019	3	N/A (Survey)	623350	5140710		122.4		Body		1.5	16.42		10.37	6.95		6.79	7.5yr 5/4	10yr 4/1	7.5yr 3/2, 7.5yr 3/1 (Black)		7-10%	Medium Coarse	Partially Oxidized	Sand	No			NBP-019-3 C-14	LBA
Shatar Chuluu	NBP-020	1	N/A (Survey)	636066	5129074		31.2		Body		6	24.39		19.5	10.36		10.34	2.5yr 5/8	5yr 5/6	2.5yr 5/8		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-020-1 C-1	IA
Shatar Chuluu	NBP-020	1	N/A (Survey)	636066	5129074		31.2	0-15	Rim	Collared	4.7	24.78	V-Shaped	19.97	10.85	30	9.31	2.5yr 4/4	2.5yr5/8	2.5yr 5/8	Unknown	0-2%	Medium Fine	Fully Oxidized	Sand	No			NBP-020-1 C-4	LBA/EIA
Shatar Chuluu	NBP-020	1	N/A (Survey)	636066	5129074		31.2		Shoulder		11.5	31.43		22.99	18.63		12.81	2.5r 4/6	7.5yr 4/1	7.5yr 4/1, 10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Quartz Granules	No			NBP- 020-1 C-2	LBA
Shatar Chuluu	NBP-020	1	N/A (Survey)	636066	5129074		31.2		Body		9.4	28.99		24.6	12.8		11.64	2.5yr 4/4	5yr 4/4	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-020-1 C-3	LBA
Shatar Chuluu	NBP-020	16	N/A (Survey)	636596	5128920		6.8	0-15	Rim	Collared	6.8	26.82	Beveled	22.07	10.47	26	8.04	10yr 5/4	5yr 5/6	5yr 3/2	Jar	2-5%	Medium Fine	Fully Oxidized	Sand	No	Impression	Parallel Lines	NBP-020-16 C-1	LBA/EIA
Shatar Chuluu	NBP-020	26	N/A (Survey)	636776	5128878		9.9		Body		5.4	29.05		22.47	8		7.96	10yr 4/1	10yr 4/1	10yr 5/1		7-10%	Medium	Fully Reduced	Sand Quartz	Yes			NBP-020-26 C-1	LH
Shatar Chuluu	NBP-020	26	N/A (Survey)	636776	5128878		9.9		Body		4.7	22.51		19.45	8.64		8.57	5yr5/6	5yr 5/8	10yr 2/1 (Black), 5yr 5/6		>15%	Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-020-26 C-2	LBA/EIA
Shatar Chuluu	NBP-020	28	N/A (Survey)	636884	5128597		5.4		Body		5.4	26.78		16.4	10.15		9.7	7.5yr 5/4	7.5yr5/2	7.5yr , 10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No	Slip		NBP-020-28 C-1	LIA_X
Shatar Chuluu	NBP-020	29	N/A (Survey)	637241	5128278		4.8		Body		4.8	23.31		18.51	11.25		11.1	5yr6/6	5yr 5/2	7.5yr 5/2			Medium	Partially Oxidized	Sand	No			NBP-020-29 C-1	LIA
Shatar Chuluu	NBP-020	32	N/A (Survey)	639294	5126799		9.1		Body		2.9	18.07		17.04	8.9		7.8	10yr 3/1	10yr 2/1	10yr 2/1 (Black)		7-10%	Medium	Fully Reduced	Sand Mica	No			NBP-020-32 C-2	LIA_X
Shatar Chuluu	NBP-020	32	N/A (Survey)	639294	5126799		9.1		Body		6.1	28.25		22.26	8.16		8.1	5yr5/3	2.5yr 4/6	7.5yr 5/1		10-15%	Medium Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-020-32 C-1	LBA/EIA
Shatar Chuluu	NBP-021	4	N/A (Survey)	640492	5119465		9.7		Body		9.7	28.43		24.65	10.58		9.79	10yr 4/3	10yr 6/3	10yr 4/1		2-5%	Medium Fine	Fully Reduced	Granules	No	Burnished	Burnished	NBP-021-4- C-1	LIA
Shatar Chuluu	NBP-021	7	N/A (Survey)	640340	5119046		1.3		Body		1.3	16.28		11.76	7.58		6.24	2.5yr 5/6	5yr 6/4	5yr5/6		0-2%	Fine	Fully Oxidized	Sand	No			NBP-021-7 C-1	IA
Shatar Chuluu	NBP-021	8	N/A (Survey)	640113	5119103		24.4		Body		2.7	17.9		15.42	8.1		7.33	5yr6/4	7.5yr6/6	5yr 4/6		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-021-8 C-2	LBA/EIA
Shatar Chuluu	NBP-021	8	N/A (Survey)	640113	5119103		24.4		Body		6	27.39		21.38	8.12		7.8	10yr 4/1	10yr 5/1	10yr 4/1		7-10%	Medium	Fully Reduced	Sand	No			NBP-021-8 C-4	LIA_X
Shatar Chuluu	NBP-021	8	N/A (Survey)	640113	5119103		24.4		Body		9.7	30.85		21.93	11.21		10.82	5yr6/6	7.5yr5/1	10yr 3/1, 5yr 5/6		5-7%	Medium	Partially Oxidized	Sand Quartz Granules	Yes			NBP-021-8 C-1	LBA
Shatar Chuluu	NBP-021	8	N/A (Survey)	640113	5119103		24.4		Body		6.3	26.39		18.54	11.54		11.51	5yr5/4	7.5yr5/1	7.5yr 2/1 (Black), 7.5yr6/1			Medium	Partially Oxidized	Sand Quartz	No			NBP-021-8 C-3	LBA
Shatar Chuluu	NBP-021	10	N/A (Survey)	640340	5119046		8.6		Neck		3.4	20.47		18.56	6.59		6.31	2.5yr 5/8	2.5yr5/6	10yr5/6		2-5%	Medium Fine	Fully Oxidized	Sand	No	Slip	Additive	NBP-021-10 C-2	LIA
Shatar Chuluu	NBP-021	10	N/A (Survey)	640340	5119046		8.8		Foot		5.5	27.81		14.09	13.35		10.23	10yr 7/2	10yr 5/3	10yr 2/1 (Black)			Medium	Partially Reduced	Sand	Yes			NBP-021-10 C-1	LIA_X
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		6.8	34.45		18.13	9.12		8.53	2.5yr 4/6	5yr 6/6	5yr 3/4		0-2%	Medium Fine	Fully Oxidized	Sand	No	Burnished	Slip	NBP- 021-11 C-6	LIA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		3.2	24.61		20.49	7.76		7.21	5yr6/6	5yr 5/8	5yr5/8		0-2%	Fine	Fully Oxidized	Sand	No			NBP-021-11 C-17	Turk
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		2.7	20.64		18.04	6.844		6.69	5yr5/6	2.5yr6/8	5yr5/4,, 5yr 6/8		0-2%	Fine	Fully Oxidized	Sand	No			NBP-021-11 C-18	LBA/EIA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		1.3	13.72		11.31	8.98		8.76	5yr6/6	5yr 6/6	2.5yr 5/8		2-5%	Medium Fine	Fully Oxidized	Sand	No	Burnished		NBP- 021-11 C-19	Turk
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		1.5	16.04		10.12	9.66		9.13	5yr6/6	5yr 6/6	5yr5/8		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-021-11 C-20	Turk
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		4.6	23.5		17.87	9.3		8.93	7.5yr 5/2	7.5yr6/2	2.5yr 5/6		5-7%	Medium	Fully Oxidized	Sand	No			NBP-021-11 C-21	LIA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		3.3	19.93		16.58	8.9		8.88	7.5yr 5/3	7.5yr 7/6	7.5yr 5/8		7-10%	Medium	Fully Oxidized	Sand	No			NBP-021-11 C-22	LIA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		2	16.14		14.71	7.21		7.05	5yr6/4	2.5yr 4/2	5yr5/4		5-7%	Medium	Fully Oxidized	Sand	No			NBP-021-11 C-23	LIA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		138.9		Body		4.9	18.72		18.02	10.2		9.78	2.5yr 4/4	7.5yr6/4	5yr6/6		10-15%	Medium	Fully Oxidized	Sand	No	Burnished		NBP-021-11 C-24	LIA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		5.3	25.79		19.07	9.62		8.78	2.5y 4/1	10yr 5/1	10yr 2/1 (Black)		>15%	Coarse	Fully Reduced	Sand Quartz Granules	No			NBP-021-11 C-9	LBA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		4	31.51		13.56	11.13		9.34	GLEY1 3/N	GLEY1 4/N	10yr 2/1 (Black)		>15%	Coarse	Fully Reduced	Sand Quartz Granules	No			NBP-021-11 C-10	LBA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		4.8	22.24		17.46	11.08		10.32	GLEY1 4/N	GLEY1 3/N	5yr 2.5/1 (Black)		>15%	Coarse	Fully Reduced	Sand Granules Quartz	No			NBP-021-11 C-11	LBA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		1.4	16.48		13.04	7.37		7.31	GLEY1 4/N	Unknown	GLEY1 2.5/N		7-10%	Medium Coarse	Fully Reduced	Sand	No			NBP-021-11 C-13	LBA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		3.9	22.22		21.49	7.92		7.61	10yr 5/3	10yr 4/1	10yr 2/1 (Black)		7-10%	Medium Coarse	Fully Reduced	Sand	No			NBP-021-11 C-14	LBA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		9.5	29.1		24.9	7.97		6.89	10yr 5/4	10yr 6/1	10yr 6/1		7-10%	Medium	Fully Reduced	Sand	No			NBP-021-11 C-26	LH
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Neck		6.8	22.13		23.9	11.08		10.93	10yr 5/3	2.5yr5/4	7.5yr 3/1		>15%	Coarse	Partially Oxidized	Sand Quartz Granules	No	Slip		NBP-021-11 C-4	LBA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8	0-15	Rim	Simple Open	5.3	21.12	Flat	18.41	12.34	Unknown	11.97	10yr 6/2	10yr 4/1		Unknown	>15%	Coarse	Partially Oxidized	Sand Granules Mica	No			NBP-021-11 C-5	LBA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		2	15.74		14.49	7.92		7.65	2.5yr 5/6	7.5yr5/3	2.5yr 4/6, 10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand	No			NBP-021-11 C-7	LBA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		7.5	24.34		19.81	11.26		10.89	2.5yr 5/4	GLEY1 3/N	10yr 2/1 (Black), 5yr 5/4		5-7%	Medium Fine	Partially Oxidized	Sand	No	Burnished	Slip	NBP-021-11 C-8	IA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		1.4	14.21		11.63	7.29		7.18	7.5yr 5/6	7.5yr5/1	10yr 2/1 (Black)		7-10%	Medium Coarse	Partially Oxidized	Sand Quartz	No			NBP-021-11 C-16	LBA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		138.9		Body		3.1	20.25		18.98	7.26		7.19	5yr6/4	5yr 6/4	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP021-11- C-28	LBA
Shatar Chuluu	NBP-021	11	N/A (Survey)	639844	5117878		139.8		Neck		18	40.07		29.37	14.45		12.55	10yr5/3	2.5yr 5/6	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand	No	Burnished	Additive	NBP-021-11 C-29	LBA

Table E.7 (continued). Ceramic catalog

Shatar Chuluu NBP-021	11	N/A (Survey)	639844	5117878		139.8	0-15	Rim	Simple Open	4.2	20.59	Flat	18.62	10.1	Unknown	9.93	10yr 5/3	Unknown	10yr 2/1	Unknown	10-15%	Medium Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-021-11 C-30	LIA
Shatar Chuluu NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		5.4	23.92		15.89	13		11.51	10yr 5/1	10yr 5/2	10yr 2/1 (Black)		>15%	Coarse	Partially Reduced	Sand Quartz Granules	No			NBP-021-11 C-2	LBA
Shatar Chuluu NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		3	22		16.08	9.6		8.3	GLEY1 3/N	10r5/6	10yr 2/1 (Black)		10-15%	Coarse	Partially Reduced	Sand Quartz Granules	No			NBP-021-11 C-12	LBA
Shatar Chuluu NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		9.3	37.75		29.41	8.41		8.31	7.5yr 6/4	7.5yr 6/4	10yr 2/1 (Black)		5-7%	Medium Coarse	Partially Reduced	Sand	No			NBP- 021-11 C-25	LIA_X
Shatar Chuluu NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		2.3	18.67		16.41	6.39		5.96	GLEY1 4/N	GLEY1 6/N	GLEY1 5/N		2-5%	Medium Fine	Partially Reduced	Sand	No			NBP-021-11 C-27	LIA_X
Shatar Chuluu NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		7	22.08		17.64	14.41		14.22	2.5yr 4/4	7.5yr5/2	110yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Quartz Granules	No			NBP-021-11 C-1	LBA
Shatar Chuluu NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		4.3	23.11		19.63	8.73		7.21	5yr5/3	10yr 2/1 (Black)	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Granules	No			NBP-021-11 C-3	LBA
Shatar Chuluu NBP-021	11	N/A (Survey)	639844	5117878		139.8		Body		1.9	18.06		14.14	6.44		6.44	10yr 5/3	GLEY1 3/N	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP-021-11 C-15	LBA
Shatar Chuluu NBP-021	12	N/A (Survey)	639781	5117748		15.8		Neck		15.8	36.7		23.03	15.52		14.66	2.5yr 4/4	2.5yr5/6	7.5yr 6/1		10-15%	Medium Coarse	Partially Oxidized	Sand Granules	No	Slip		NBP- 021-12 C-1	IA
Shatar Chuluu NBP-021	13	N/A (Survey)	639919	5117429		5		Body		5	23.14		19.8	9.63		9.4	7.5yr 5/1	10yr 6/2	10yr 2/1 (Black), 10yr5/1		5-7%	Medium	Fully Reduced	Sand	Yes			NBP- 021-13 C-1	LIA_X
Shatar Chuluu NBP-021	16	N/A (Survey)	640042	5119011		32.7		Body		3.8	21.18		17.72	8.2		8.14	10yr 5/1	10yr 6/3	10yr 4/4		0-2%	Fine	Fully Oxidized	Sand	No	Burnished	Slip	NBP-021-16 C-4	LIA_X
Shatar Chuluu NBP-021	16	N/A (Survey)	640042	5119011		32.7		Neck		4.1	25.48		17.03	8.24		6.91	GLEY1 5/N	10yr 5/1	2.5y 31		5-7%	Medium	Fully Reduced	Sand	No		Punctate Additive	NBP-021-16 C-2	LBA
Shatar Chuluu NBP-021	16	N/A (Survey)	640030	5118989		37.2		Body		1.9	18.05		11.32	8.4		8.19	10yr 2/1 (Blac	10yr 2/1 (Black) G	GLEY1 5/N		0-2%	Medium Fine	Fully Reduced	Sand	No	Glaze		NBP-021-16 C-5	LH
Shatar Chuluu NBP-021	16	N/A (Survey)	640042	5119011		32.7	0-15	Other	Simple Open	4.4	26.65	Simple	22.15	5.12	32	4.9	7.5yr 3/1	2.5yr 4/4	10yr 2/1 (Black)	Bowl?	0-2%	Fine	Partially Oxidized	Sand	No	Burnished		NBP-021-16 C-1	LH
Shatar Chuluu NBP-021	16	N/A (Survey)	640042	5119011		32.7		Body		2.3	16.98		12.83	9.01		9	10yr 5/2	10yr 5/3	10yr 5/1		0-2%	Fine	Partially Oxidized	Sand	No	Stamped	Cross-Hatch	NBP-021-16 C-3	Turk
Shatar Chuluu NBP-021	16	N/A (Survey)	640030	5118989		32.7		Body		13	34.89		31.83	10.94		10.24	10yr 6/4	10yr 4/1	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Quartz Granules	Yes			NBP021-16 C-6	LBA
Shatar Chuluu NBP-021	16	N/A (Survey)	640036	5118918		32.7	0-15	Rim	Collared	4.6	19.52	Flat	18.32	10.65	Unknown	9	10yr 5/3	10yr5/1	10yr 2/1 (Black)	Unknown	10-15%	Medium	Partially Oxidized	Sand	No			NBP-021-16 C-7	LBA
Shatar Chuluu NBP-022	22a	N/A (Survey)	639239	5140043		57.8		Body		14.3	46.3		32.82	8.57		7.77	5yr5/6	7.5hr5/3	5yr 3/1		>15%	Coarse	Partially Oxidized	Sand Mica	No			NBP-022-22a C-1	LBA/EIA
Shatar Chuluu NBP-022	22a	N/A (Survey)	639239	5140043		57.9		Body		5.7	26.57		21.19	10.61		10.43	5yr5/6	7.5yr5/4	10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand Quartz	No	Burnished		NBP- 022-22a C-3	LBA
Shatar Chuluu NBP-022	22a	N/A (Survey)	639239	5140043		57.9		Body		7	29.11		24.49	9.23		8.87	7.5yr 5/4	2.5yr6/6	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized		No	Burnished		NBP-022-22a C-4	LBA/EIA
Shatar Chuluu NBP-022	22a	N/A (Survey)	639239	5140043		57.9		Body		5.2	28.28		17.74	8.49		7.37	7,5yr 5/3	10r5/6	10yr 3/1			Coarse	Partially Oxidized	Sand Quartz Pottery/G rog	No			NBP- 022-22a C-5	LBA/EIA
Shatar Chuluu NBP-022	22a	N/A (Survey)	639239	5140043		57.9		Body		4.9	27.51		21.87	6.37		6.22	7.5yr 5/3	5yr 5/4	10yr 2/1 (Black), 75yr 5/3, 10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP-022-22a C-6	LBA/EIA
Shatar Chuluu NBP-022	22a	N/A (Survey)	639239	5140043		57.9		Body		2.5	18.63		18.07	6.92		5.99	7.5yr 5/4	2.5yr5/8	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand	No			NBP-022-22a C-7	LBA/EIA
Shatar Chuluu NBP-022	22a	N/A (Survey)	639239	5140043		57.9		Body		2.7	18.76		14.55	7.47		6.34	7.5yr 5/6	2.5yr5/8	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP-022-22a C-8	LBA/EIA
Shatar Chuluu NBP-022	22a	N/A (Survey)	639239	5140043		57.9		Body		4.3	27.45		17.34	7.35		6.7	5yr 4/6	10yr 4/4	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP- 22-22a C-9	LBA/EIA
Shatar Chuluu NBP-022	22a	N/A (Survey)	639239	5140043		57.9		Body		2.9	21.55		18.39	6.82		5.86	7.5yr 5/4	2.5yr5/8	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP- 022-22a C-10	LBA/EIA
Shatar Chuluu NBP-022	22a	N/A (Survey)	639239	5140043		57.9		Body		9	35.78		24.31	9.47		9.01	10r 5/8	2.5yr5/8	5yr 3/2		10-15%	Medium Coarse	Partially Oxidized	Sand Quartz	No			NBP-022-22a C-2	LBA/EIA
Shatar Chuluu NBP-022	60a	N/A (Survey)	639270	5140170		56.6		Body		4.8	25.2		22.51	7.11		6.96	10r 4/8	10r5/6	10r 4/8		7-10%	Medium Coarse	Fully Oxidized	Sand Mica	No	Slip		NBP- -22-60a C-2	LBA/EIA
Shatar Chuluu NBP-022	60a	N/A (Survey)	639270	5140170		56.6		Body		3.4	21.79		17.6	6.95		6.81	10r 5/8	2.5yr5/8	2.5yr 4/8		10-15%	Medium Coarse	Fully Oxidized	Sand	No			NBP-02260a C-3	LBA/EIA
Shatar Chuluu NBP-022	60a	N/A (Survey)	639270	5140170		56.6		Body		1.8	18.23		13.54	6.89		6.85	10r 4/8	2.5yr5/6	2.5yr 5/8		5-7%	Medium	Fully Oxidized	Sand	No	Slip		NBP-02260a C-4	LBA/EIA
Shatar Chuluu NBP-022	60a	N/A (Survey)	639270	5140170		56.6		Body		2.2	16.58		15.49	7.23		7.05	5yr6/6	2.5yr5/8	2.5yr 4/6		5-7%	Medium	Fully Oxidized	Sand	No			NBP-2260a C-5	LBA/EIA
Shatar Chuluu NBP-022	60a	N/A (Survey)	639270	5140170		56.6		Body		1.2	14.35		11.26	5.57		5.27	2.5yr 5/6	10r5/8	2.5yr 3/6		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-02260a C-11	LBA/EIA
Shatar Chuluu NBP-022	60a	N/A (Survey)	639270	5140170		56.6		Body		0.9	15.76		8.89	6.12		5.73	2.5yr 5/6	10r5/8	2.5yr 3/4		5-7%	Medium	Fully Oxidized	Sand	No			NBP-02260a C-12	IA
Shatar Chuluu NBP-022	60a	N/A (Survey)	639270	5140170		56.6		Body		1	13.25		11.07	6.35		6.13	2.5yr 5/6	10r5/6	10r 3/4			Medium Fine	Fully Oxidized	Sand	No			NBP-02260a C-13	LBA/EIA
Shatar Chuluu NBP-022	60a	N/A (Survey)	639270	5140170		56.6		Body		13.2	35.95		32.29	7.77		6.8	10r 4/6	2.5yr5/6	2.5y4 3/3		7-10%	Medium	Partially Oxidized	Sand	No	Slip	Zig-Zag	NBP- 022-60a C-1	LBA/EIA
Shatar Chuluu NBP-022	60a	N/A (Survey)	639270	5140170		56.6		Body		11.1	37.12		28.83	9.24		8.02	2.5yr 5/6	2.5yr5/8	2.5yr 4/8, 5yr 3/1		5-7%	Medium	Partially Oxidized	Sand	No			NBP-02260 C-6	LBA/EIA
Shatar Chuluu NBP-022	60a	N/A (Survey)	639270	5140170		56.6		Body		6.1	24.55		24.37	9.17		7.93	5yr5/4	2.5yr 4/8	2.5yr 3/4		7-10%	Medium	Partially Oxidized	Sand	No			NBP- 022-60a C-7	LBA/EIA
Shatar Chuluu NBP-022	60a	N/A (Survey)	639270	5140170		56.6		Body		3.7	19.12		18.45	9.48		9.39	5yr 4/4	2.5yr 4/8	5yr 3/3		7-10%	Medium	Partially Oxidized	Sand	No			NBP-02260a C-8	LBA/EIA
Shatar Chuluu NBP-022	60a	N/A (Survey)	639270	5140170		56.6		Body		4.3	22.88		22.27	9.22		8.15	7.5yr 5/3	2.5yr5/6	577, 578, 579		5-7%	Medium	Partially Oxidized	Sand Granules	No			NBP-02260a C-9	LBA/EIA
Shatar Chuluu NBP-022	60a	N/A (Survey)	639270	5140170		56.6		Body		2.3	26.54		13.06	8.63		7.71	5yr5/6	10r5/8	10r 5/8, 7.5yr 3/1		5-7%	Medium	Partially Oxidized	Sand	No			NBP-02260a C-10	LBA/EIA
Shatar Chuluu NBP-022	77a	N/A (Survey)	639745	5142642		10.9		Body		10.9	37.17		26.92	7.4		6.8	10yr 5/1	10yr 4/1	10yr 3/2		10-15%	Medium Coarse	Partially Oxidized	Sand Granules	Yes			NBP-022-77a C-1	LIA_X
Bulgan Uul NBP-023	2	N/A (Survey)	638840	5090630		46.7		Other		17.6	37.58		37.43	9.58		9.36	5yr 4/3	5yr 4/4	2.5yr 4/4		10-15%	Medium	Fully Oxidized	Sand	No	Incised	Parallel Lines	NBP-023-2 C-1	LH
Bulgan Uul NBP-023	2	N/A (Survey)	638840	5090630		46.7		Body		3.3	28.85		5.99	7.01		6.89	5yr6/6	5yr 5/6	2.5yr 4/8		2-5%	Medium Fine	Fully Oxidized	Sand	No	Incised	Parallel Lines	NBP-023-2 C-8	LBA/EIA
Bulgan Uul NBP-023	2	N/A (Survey)	638840	5090630		46.7		Body		9.8	39.82		30.69	9.2		8.81	GLEY1 3/N	10yr 6/2	7.5yr 3/2			Medium	Fully Reduced	Sand Granules Quartz	No	Stamped	Parallel Lines	NBP-023-2 C-2	LIA_X
Bulgan Uul NBP-023	2	N/A (Survey)	638840	5090630		46.7		Body		4.6	24.63		16.58	10.41		10.09	5yr5/6	10yr 3/1	7.5yr 4/6, 10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-023-2 C-3	LBA
Bulgan Uul NBP-023	2	N/A (Survey)	638840	5090630		46.7		Body		1.7	16.7		12.65	6.86		6.24	5yr6/6	10yr 5/3	10yr 4/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-023-2 C-5	LBA/EIA
Bulgan Uul NBP-023	2	N/A (Survey)	638840	5090630		46.7		Body		2.7	17.02		16.7	7.35		7.05	5yr5/6	7.5yr5/2	7.5yr 3/1		5-7%	Medium Fine	Partially Oxidized	Sand	No			NBP-023-2 C-6	LBA/EIA
Bulgan Uul NBP-023	2	N/A (Survey)	638840	5090630		46.7		Body		2.6	19.01		13.52	7.56		7.2	10yr 5/3	5yr 5/4	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Mica Quartz	No			NBP-023-2 C-7	LBA
Bulgan Uul NBP-023	2	N/A (Survey)	638840	5090630		46.7		Body		4.5	25.33		21.22	7.81		7.66	10yr 4/2	7.5yr5/4	10yr 2/1		>15%	Coarse	Partially Reduced	Sand	No			NBP-023-2 C-4	LBA
Bulgan Uul NBP-024	2	N/A (Survey)	638666	5090487		69		Body		32.7	73.68		41.45	7.46		7.2	10yr 2/1 (Blac	10yr 2/1 (Black) (	10yr 6/2		2-5%	Medium Fine	Fully Reduced	Sand	No	Glaze		NBP-024-2 C-1	LH
Bulgan Uul NBP-024	2	N/A (Survey)	638666	5090487		69		Body		36.4	63.38		49.04	9.17		7.3	10yr 2/1 (Blac	10yr 2/1 (Black) (	10yr 6/2		2-5%	Medium Fine	Fully Reduced	Sand	No	Glaze		NBP-024-2 C-2	LH
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		10.2	34.68		32.67	7.04		6.51	10yr 4/2 (Gla	7.5yr6/6	7.5yr 6/6		0-2%	Fine	Fully Oxidized	Sand	No	Glaze		NBP-024-3 C-3	LH
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		2.1	17.34		14.45	6.6		6.38	2.5yr 5/6	7.5yr6/4	5yr 4/6		5-7%	Medium	Fully Oxidized	Sand Granules	No			NBP-024-3 C-15	LBA/EIA
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		26.9	49.18		35.65	10.32		9.27	10yr 2/1 (Blac	10yr 2/1 (Black) (	10yr 6/2		0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP-024-3 C-1	LH
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Foot		1.5	38.8		25.63	7.64		4.71	10yr 6/4	10yr 2/1 (Black) (	10yr 6/2		0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP-024-3 C-2	LH
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		7.5	25.49		24.63	8.24		7.03	5yr6/6	5yr 6/6	7.5yr 4/2		2-5%	Medium Fine	Fully Reduced	Sand	No	Slip		NBP-024-3- C-5	Turk
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		16.6	39.95		33.12	8.12		7.86	GLEY1 4/N	GLEY1 5/N	10yr 4/1		2-5%	Medium Fine	Fully Reduced	Sand	No			NBP-024-3 C-6	LIA_X
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		8.5	31.4		20.99	9.97		8.66	7.5yr 5/1	10yr 2/1 (Black)	10yr 2/1 (Black), 10yr 4/2		5-7%	Medium	Fully Reduced	Sand Granules	No			NBP-024-3 C-17	LIA_X
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Foot		94.7	44.44		39.21	10.14		7.28	7.5yr 3/8	7.5yr 3/8	10yr 6/4		0-2%	Fine	Partially Oxidized	Sand	No	Glaze		NBP-024-3 C-4	LH
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		6	25.77		20.64	9.95		9.7	5yr5/4	7.5yr5/2	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-024-3 C-8	LBA
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		3.8	21.63		19.42	8.95		8.39	5yr5/4	Unknown	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-024-3 C-9	LBA
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		7.1	28.48		20.3	12.51		10.85	7.5yr 5/4	7.5yr5/2	10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Granules	No			NBP-024-3 C-11	LBA
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Neck		5.4	24.47		17.81	10.17		8.2	7.5yr 6/4	7.5yr5/6	10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized		No			NBP-024-3 C-12	LBA/EIA
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		6.31	32.58		16.65	9.73		9.08	7.5yr 5/4	5yr 5/4	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Granules Mica	No			NBP-024-3 C-14	LBA
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		7.5	27.47		24.38	7.6		7.43	7.5yr 6/2	7.5yr6/2	10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand	No			NBP-024-3 C-16	LBA
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		13.5	32.63		27.57	10.47		9.87	10yr 5/1	10yr 5/2	10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand	No			NBP-024-3 C-18	LBA

Table E.7 (continued). Ceramic catalog

Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		9.7	32.29		24.08	9.45		8.98	2.5yr 5/6	7.5yr5/2	10yr 2/1 (Black),, 7.5yr 5/6		5-7%	Medium Fine	Partially Oxidized	Sand Granules	No			NBP-024-3 C-19	LBA/EIA
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		3.2	18.75		17.92	10.1		9.64	10yr 4/1	7.5yr5/2	7.5yr 4/3		>15%	Coarse	Partially Oxidized	Sand	No			NBP-024-3 C-7	LBA
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		13.2	35.58		30.56	10.96		10.87	7.5yr 6/4	10yr 4/2	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-024-3 C-10	LBA
Bulgan Uul NBP-024	33	N/A (Survey)	638634	5090430		268		Body		8.1	23.59		23.52	12.83		11.99	5yr 5/4	10yr 4/1	7.5yr 4/4, 10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Granules	No			NBP-024-3 C-13	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		5.2	22.29		21.88	8.86		7.81	2.5yr 5/8	5yr 6/6	2.5yr 6/6		0-2%	Fine	Fully Oxidized	Sand	No	Slip		NBP-025-3 C-1	Turk
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		5.4	26.32		19.335	6.34		5.71	10yr 2/1 (Blac	10yr 3/1 (Glaze)	7.5yr 6/6		0-2%	Fine	Fully Oxidized	Sand	No			NBP-025-3 C-8	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087661		497.2		Foot		71	62.9		35.5	18.26		10.75	5yr 5/6 (Glaze	10yr 2/1 (Black)	7.5yr 7/6		0-2%	Fine	Fully Oxidized	Sand	No	Glaze		NBP-025-3 C-18	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		11.9	40.85		26.16	8.97		8.23	10yr 5/3	7.5yr5/3	7.5yr 3/2		10-15%	Medium Coarse	Fully Oxidized	Sand	No	Stamped	Design	NBP-025-3 C-23	Turk
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		16.1	40.22		33.49	6.53		6.27	2.5y 3/1 (Glaz	10yr 4/2	10yr 4/1		0-2%	Fine	Fully Reduced	Sand	No	GlazeIncised	Extractive	NBP-025-3- C-7	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		9.6	37.12		25.13	10.23		9.02	10yr 2/1	10yr 2/1	10yr 2/1		10-15%	Medium Coarse	Fully Reduced	Sand Quartz	Yes			NBP-025-3 C-10	LIA_X
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		11.5	35.39		32.03	12.18		10.94	10yr 6/2	10yr 5/1	10yr 3/1		2-5%	Medium Fine	Fully Reduced	Sand Mica Quartz	No			NBP-025-3 C-15	IA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Foot		28.5	53.42		44.49	15.61		4.78	10yr 2/1 (Glaz	7.5yr 3/2	10yr 7/2		0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP-025-3 C-19	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Other		100.7	73.18		69.32	12.97		12.87	10yr 3/1 (Glaz	10yr 7/3	10yr 7/2		0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP-025-3 C-20	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		13.7	47.18		26.41	7.01		6.39	10yr 2/1 (Glaz	10yr 7/4 (Glaze)	10yr 7/2		0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP--025-3 C-21	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Other		64.9	61.38		41.87	Unknown		Unknown	10yr 2/1	10yr 2/1	10yr 2/1		10-15%	Medium Coarse	Fully Reduced	Sand Granules	No			NBP-025-3 C-22	Unknown
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		9.8	31.9		25.7	10.91		9.89	10yr 5/4	5yr 5/4	7.5yr 3/2		>15%	Coarse	Partially Oxidized	Sand	No			NBP-025-3 C-3	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		4.1	22.23		16.27	8.36		7.39	2.5yr 5/6	7.5yr 4/1	7.5yr 2.5/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Granules	Yes			NBP-025-3 C-4	LBA/EIA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		5	26.42		23.51	8.011		7.54	2.5yr 4/4	2.5yr6/3	7.5yr 5/1		5-7%	Medium Fine	Partially Oxidized	Sand	No	Slip		NBP-025-3 C-6	LBA/EIA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		4.5	20.74		20.4	7.89		7.26	5yr 5/8	GLEY1 2.5/N	2.5yr 3/6, 10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Mica	No			NBP-025-3 C-9	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		43.3	50.95		49.16	15.44		13.39	5yr 5/6	10yr 3/1	10yr 4/1		10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP- 025-3 C-14	LBA/EIA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		10.2	32.44		24.21	10.55		9.83	10yr 6/3	5yr 5/4	5yr 3/1		5-7%	Medium	Partially Oxidized		No	Burnished	Slip	NBP-025-3 C-17	Turk
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2	0-15	Rim	Everted	4	25.7	Tapered	18.1	9.86	Unknown	7.04	2.5yr 5/6, 5yr	2.5yr5/6, 5yr5/1	5yr5/1	Unknown	>15%	Coarse	Partially Oxidized	Sand Granules	No			NBP-025-3 C-24	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		9.6	27.5		23.96	10.95		10.4	10yr 5/1	5yr 5/4	5yr 5/6, 2.5yr 5/6		>15%	Coarse	Partially Reduced	Sand Quartz	No			NBP-025-3 C-2	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		3.3	22.62		16.91	7.4		6.23	10yr 6/1	5yr 5/3	10yr 2/1 (Black)		>15%	Coarse	Partially Reduced	Sand	No			NBP-025-3 C-5	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		19.1	54.37		38.58	8.85		7.68	10yr 6/2	10yr 6/2	10yr 6/1		7-10%	Medium	Partially Reduced	Sand Quartz	No			NBP-025-3 C-11	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		11.5	31.98		24.31	10.44		10.16	10yr 5/1	10yr 6/1	10yr 6/1		5-7%	Medium	Partially Reduced	Sand Organic	No			NBP-025-3 C-12	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		24.7	47.24		28.1	15.06		13.71	10yr 5/4	10yr 5/2	7.5yr 3/3			Medium Coarse	Partially Reduced	Sand Granules	No			NBP-025-3 C-13	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Neck		6.3	23.04		22.72	11.12		8.8	10yr 5/1	10yr 3/1	10yr 3/1		0-2%	Fine	Partially Reduced	Sand	No			NBP-025-3 C-16	Unknown
Bulgan Uul NBP-026	13	N/A (Survey)	634520	5088592		7.7		Body		5.8	28.17		18.49	6.95		5.85	7.5yr 3/3 (Gla	5yr 5/6	7.5yr 4/2		10-15%	Medium Coarse	Fully Oxidized	Sand Pottery/Grog	No	Glaze		NBP-026-13 C-1	LH
Bulgan Uul NBP-026	13	N/A (Survey)	634520	5088592		7.7		Body		2.5	19.99		11.22	8.54		7.9	7.5yr 6/6	10yr 5/2	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand Granules	No			NBP-026-13 C-2	LBA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Neck		8.5	33.34		22	8.49		7.8	2.5yr 5/8	7.5yr5/6	10yr 3/1		7-10%	Medium	Partially Oxidized	Sand	No			NBP-026-15 C-1	LBA/EIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		12.2	33.8		27.94	11.87		10.96	7.5yr 5/3	7.5yr5/4	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Granules	No	Slip		NBP-026-15 C-2	LBA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Neck		11.3	33.5		20.58	13.85		10.31	5yr 6/6	5yr 5/6	GLEY1 4/N		5-7%	Medium	Partially Oxidized	Sand	No			NBP-026-15 C-3	LBA/EIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		1.5	17.68		16.82	5.5		5.2	2.5yr 5/8	10r5/8	5yr5/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-026-15 C-4	LBA/EIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		4	22.97		18.27	10.08		9.97	5yr 5/4	10yr 4/1	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Granules	Yes			NBP-026-15 C-8	LBA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		2.5	17.42		16.37	8.2		8.08	5yr 6/8	GLEY1 3/N	5yr5/8, 10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand Quartz	No	Burnished		NBP- 026-15 C-9	LBA/EIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		7.6	28.43		20.84	13.04		12.18	5yr 5/4	7.5yr5/4	10yr 4/1		5-7%	Medium	Partially Oxidized	Sand Mica	No			NBP-026-15 C-10	IA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		3.7	21.13		16.8	9.45		9.14	10yr 5/3	10yr 5/3	10yr 3/1		5-7%	Medium	Partially Oxidized		No	Burnished		NBP-026-15 C-11	LIA_X
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		4.1	27.76		15.99	7.64		7.53	5yr 5/3	10yr 5/2	7.5yr 5/4, 10yr /1 (Black)		5-7%	Medium	Partially Oxidized	Sand Granules Mica	No			NBP-026-15 C-12	LIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		1.2	15.17		13.96	5.61		5.28	2.5yr 5/6	GLEY1 4/N	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand Granules	No			NBP-026-15 C-13	LBA/EIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9	0-15	Rim	Simple Open	6	32.47	Simple	15.91	9.1	Unknown	8.8	5yr 5/4	10yr5/2		Bowl?	10-15%	Medium Coarse	Partially Oxidized	Sand Quartz	No			NBP-026-15 C-14	LBA
Bulgan Uul NBP-026	15		635062	5090071		100.9	0-15	Rim	Simple Open	13.1	28.88	Simple	23.93	13.72	Unknown	10.31	2.5yr 4/6	7.5yr5/3	7.5yr 5/3	Bowl	>15%	Coarse	Partially Oxidized		No			NBP-026-15 C-15	LBA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		9.4	34.12		24.37	11.14		11.04	10yr 5/1	2.5yr5/8	2.5yr 58, 7.5yr5/1		2-5%	Medium Fine	Partially Reduced	Sand	No	Burnished		NBP-026-15 C-5	LIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		11.7	31.24		30.01	11.36		11.32	10yr 5/1	10yr 5/1	5yr5/6		>15%	Coarse	Partially Reduced		No	Incised	Incised Line	NBP-026-15 C-6	LIA_X
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		5.1	24.05		21.16	8.81		8.27	10yr 5/3	10yr 4/1	10yr 4/3, 10yr 2/1 (Black)		7-10%	Medium	Partially Reduced	Sand	Yes	Burnished		NBP-026-15 C-7	LIA_X
Bulgan Uul NBP-026	16	N/A (Survey)	634184	5089083		8.1		Neck		8.1	28.05		19.67	11.11		10.69	10r 3/1	7.5yr 4/3	7.5yr 5/4, 10r 4/6		7-10%	Medium	Partially Oxidized	Sand Granules	No	Slip		NBP-26-16 C-1	LIA_X
Bulgan Uul NBP-026	20	N/A (Survey)	634176	5088701		6.8		Body		3.7	20.94		15.94	9.35		9.26	5yr 5/6	7.5yr 4/3	5yr5/6, 10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Granules	No			NBP-026-20 C-1	LBA/EIA
Bulgan Uul NBP-026	20	N/A (Survey)	634176	5088701		6.8		Body		3	20.35		17.9	6.25		6.2	2.5yr 4/6	2.5yr 4/6	2.5yr 5/6, 7.5yr 5/4, 2.5yr 5/6		10-15%	Medium Coarse	Partially Oxidized	Sand Quartz	No			NBP-026-20 C-2	IA
Bulgan Uul NBP-026	23	N/A (Survey)	634543	5088710		7.7		Body		7.5	23.49		27.89	7.86		7.4	Light Brown	Dark Brown (Glaz	Beige	Bowl?	0-2%	Fine	Fully Oxidized	Sand	No	Glaze		NBP-026-23 C-1	LH
Bulgan Uul NBP-026	26	N/A (Survey)	635111	5090384		7.2		Body		7.2	28.7		19.4	11.62		11.42	2.5yr 4/6	5yr 5/4	10yr 3/1		10-15%	Medium Coarse	Partially Oxidized	Granules	No	Burnished		NBP-26-26 C-1	LIA
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		4.6	24.48		17.58	8.39		8.33	7.5yr 5/6	7.5yr5/4	10yr 6/4		0-2%	Fine	Fully Oxidized	Sand	No	Burnished		NBP-026-28 C-19	Turk
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Neck		11.2	28.14		25.29	8.84		8.11	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		7-10%	Medium	Fully Reduced	Sand Granules Quartz	No	Burnished		NBP-026-28 C-1	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Neck		8.2	28.92		19.32	8.76		8.59	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-2	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		7.7	29.76		22.09	8.17		7.78	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished	Smoothing Impre	NBP- 026-28 C-3	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		6	31.97		21.64	8.7		8.28	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-4	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Neck		8.2	33.02		20.26	9.3		9.16	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-5	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		6.3	29.7		26.28	9.3		9.16	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-6	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		8.3	28.43		20.96	9.34		9	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		2-5%	Medium Fine	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-7	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		5.5	23.93		20.83	8.45		8.11	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-8	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Neck		6.8	26.41		20.85	9.31		8.8	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-9	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		5	27.45		16.19	8.6		8.54	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-10	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		4.8	23.62		18.05	7.45		7.27	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP-026-28 C-11	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		3.7	20.23		18.62	8.77		8.24	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP-026-28 C-12	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Neck		6.3	26.11		23.51	9.56		7.97	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP-026-28 C-13	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		3.1	20.38		16.16	9.78		9.43	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		2-5%	Medium Fine	Fully Reduced	Sand	No	Burnished		NBP-026-28 C-14	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		6.3	30.73		18.18	7.84		7.3	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		2-5%	Medium Fine	Fully Reduced	Sand	No	Burnished	Impression Paral	NBP-026-28 C-15	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4	0-15	Body	Overhanging	8.8	29.06	Folded Out	26.48	8.7	10	5.36	10yr 2/1 (Blac	10yr 2/1 (Black) (	10yr 7/2	Jar	0-2%	Fine	Fully Reduced		No	Glaze		NBP-026-28 C-16	LH
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		7.6	31.26		19.63	10.16		9.38	10yr 4/1	10yr 5/1	10yr 4/1		2-5%	Medium Fine	Fully Reduced	Sand	No			NBP-026-28 C-17	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		7.7	27.23		26.73	8.02		7.55	10yr 4/3	10yr 4/1	10yr 4/1		2-5%	Medium Fine	Fully Reduced	Sand	No	Burnished		NBP-026-28 C-18	LIA_X

Table E.7 (continued). Ceramic catalog

Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		9.7	32.29		24.08	9.45		8.98	2.5yr 5/6	7.5yr5/2	10yr 2/1 (Black),, 7.5yr5/6		5-7%	Medium Fine	Partially Oxidized	Sand Granules	No			NBP-024-3 C-19	LBA/EIA
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		3.2	18.75		17.92	10.1		9.64	10yr 4/1	7.5yr5/2	7.5yr 4/3		>15%	Coarse	Partially Oxidized	Sand	No			NBP-024-3 C-7	LBA
Bulgan Uul NBP-024	3	N/A (Survey)	638634	5090430		268		Body		13.2	35.58		30.56	10.96		10.87	7.5yr 6/4	10yr 4/2	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP-024-3 C-10	LBA
Bulgan Uul NBP-024	33	N/A (Survey)	638634	5090430		268		Body		8.1	23.59		23.52	12.83		11.99	5yr5/4	10yr 4/1	7.5yr 4/4, 10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Granules	No			NBP-024-3 C-13	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		5.2	22.29		21.88	8.86		7.81	2.5yr 5/8	5yr 6/6	2.5yr 6/6		0-2%	Fine	Fully Oxidized	Sand	No	Slip		NBP-025-3 C-1	Turk
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		5.4	26.32		19.335	6.34		5.71	10yr 2/1 (Blac	10yr 3/1 (Glaze)	7.5yr 6/6		0-2%	Fine	Fully Oxidized	Sand	No			NBP-025-3 C-8	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087661		497.2		Foot		71	62.9		35.5	18.26		10.75	5yr5/6 (Glaze	10yr 2/1 (Black)	7.5yr 7/6		0-2%	Fine	Fully Oxidized	Sand	No	Glaze		NBP-025-3 C-18	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		11.9	40.85		26.16	8.97		8.23	10yr 5/3	7.5yr5/3	7.5yr 3/2		10-15%	Medium Coarse	Fully Oxidized	Sand	No	Stamped	Design	NBP-025-3 C-23	Turk
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		16.1	40.22		33.49	6.53		6.27	2.5y 3/1 (Glaz	10yr 4/2	10yr 4/1		0-2%	Fine	Fully Reduced	Sand	No	GlazeIncised	Extractive	NBP-025-3- C-7	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		9.6	37.12		25.13	10.23		9.02	10yr 2/1	10yr 2/1	10yr 2/1		10-15%	Medium Coarse	Fully Reduced	Sand Quartz	Yes			NBP-025-3 C-10	LIA_X
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		11.5	35.39		32.03	12.18		10.94	10yr 6/2	10yr 5/1	10yr 3/1		2-5%	Medium Fine	Fully Reduced	Sand Mica Quartz	No			NBP-025-3 C-15	IA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Foot		28.5	53.42		44.49	15.61		4.78	10yr 2/1 (Glaz	7.5yr 3/2	10yr 7/2		0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP-025-3 C-19	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Other		100.7	73.18		69.32	12.97		12.87	10yr 3/1 (Glaz	10yr 7/3	10yr 7/2		0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP-025-3 C-20	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		13.7	47.18		26.41	7.01		6.39	10yr 2/1 (Glaz	10yr 7/4 (Glaze)	10yr 7/2		0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP--025-3 C-21	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Other		64.9	61.38		41.87	Unknown		Unknown	10yr 2/1	10yr 2/1	10yr 2/1		10-15%	Medium Coarse	Fully Reduced	Sand Granules	No			NBP-025-3 C-22	Unknown
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		9.8	31.9		25.7	10.91		9.89	10yr 5/4	5yr 5/4	7.5yr 3/2		>15%	Coarse	Partially Oxidized	Sand	No			NBP-025-3 C-3	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		4.1	22.23		16.27	8.36		7.39	2.5yr 5/6	7.5yr 4/1	7.5yr 2.5/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Granules	Yes			NBP-025-3 C-4	LBA/EIA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		5	26.42		23.51	8.011		7.54	2.5yr 4/4	2.5yr6/3	7.5yr 5/1		5-7%	Medium Fine	Partially Oxidized	Sand	No	Slip		NBP-025-3 C-6	LBA/EIA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		4.5	20.74		20.4	7.89		7.26	5yr5/8	GLEY1 2.5/N	2.5yr 3/6, 10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Mica	No			NBP-025-3 C-9	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		43.3	50.95		49.16	15.44		13.39	5yr5/6	10yr 3/1	10yr 4/1		10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP- 025-3 C-14	LBA/EIA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		10.2	32.44		24.21	10.55		9.83	10yr 6/3	5yr 5/4	5yr 3/1		5-7%	Medium	Partially Oxidized		No	Burnished	Slip	NBP-025-3 C-17	Turk
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2	0-15	Rim	Everted	4	25.7	Tapered	18.1	9.86	Unknown	7.04	2.5yr 5/6, 5yr	2.5yr5/6, 5yr5/1	5yr5/1	Unknown	>15%	Coarse	Partially Oxidized	Sand Granules	No			NBP-025-3 C-24	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		9.6	27.5		23.96	10.95		10.4	10yr 5/1	5yr 5/4	5yr5/6, 2.5yr 5/6		>15%	Coarse	Partially Reduced	Sand Quartz	No			NBP-025-3 C-2	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		3.3	22.62		16.91	7.4		6.23	10yr 6/1	5yr 5/3	10yr 2/1 (Black)		>15%	Coarse	Partially Reduced	Sand	No			NBP-025-3 C-5	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		19.1	54.37		38.58	8.85		7.68	10yr 6/2	10yr 6/2	10yr 6/1		7-10%	Medium	Partially Reduced	Sand Quartz	No			NBP-025-3 C-11	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		11.5	31.98		24.31	10.44		10.16	10yr 5/1	10yr 6/1	10yr 6/1		5-7%	Medium	Partially Reduced	Sand Organic	No			NBP-025-3 C-12	LH
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Body		24.7	47.24		28.1	15.06		13.71	10yr 5/4	10yr 5/2	7.5yr 3/3			Medium Coarse	Partially Reduced	Sand Granules	No			NBP-025-3 C-13	LBA
Bulgan Uul NBP-025	3	N/A (Survey)	637050	5087660		497.2		Neck		6.3	23.04		22.72	11.12		8.8	10yr 5/1	10yr 3/1	10yr 3/1		0-2%	Fine	Partially Reduced	Sand	No			NBP-025-3 C-16	Unknown
Bulgan Uul NBP-026	13	N/A (Survey)	634520	5088592		7.7		Body		5.8	28.17		18.49	6.95		5.85	7.5yr 3/3 (Gla	5yr 5/6	7.5yr 4/2		10-15%	Medium Coarse	Fully Oxidized	Sand Pottery/Grog	No	Glaze		NBP-026-13 C-1	LH
Bulgan Uul NBP-026	13	N/A (Survey)	634520	5088592		7.7		Body		2.5	19.99		11.22	8.54		7.9	7.5yr 6/6	10yr 5/2	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand Granules	No			NBP-026-13 C-2	LBA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Neck		8.5	33.34		22	8.49		7.8	2.5yr 5/8	7.5yr5/6	10yr 3/1		7-10%	Medium	Partially Oxidized	Sand	No			NBP-026-15 C-1	LBA/EIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		12.2	33.8		27.94	11.87		10.96	7.5yr 5/3	7.5yr5/4	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Granules	No	Slip		NBP-026-15 C-2	LBA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Neck		11.3	33.5		20.58	13.85		10.31	5yr6/6	5yr 5/6	GLEY1 4/N		5-7%	Medium	Partially Oxidized	Sand	No			NBP-026-15 C-3	LBA/EIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		1.5	17.68		16.82	5.5		5.2	2.5yr 5/8	10r5/8	5yr5/1		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-026-15 C-4	LBA/EIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		4	22.97		18.27	10.08		9.97	5yr5/4	10yr 4/1	10yr 2/1 (Black)		10-15%	Medium Coarse	Partially Oxidized	Sand Granules	Yes			NBP-026-15 C-8	LBA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		2.5	17.42		16.37	8.2		8.08	5yr6/8	GLEY1 3/N	5yr5/8, 10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand Quartz	No	Burnished		NBP- 026-15 C-9	LBA/EIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		7.6	28.43		20.84	13.04		12.18	5yr5/4	7.5yr5/4	10yr 4/1		5-7%	Medium	Partially Oxidized	Sand Mica	No			NBP-026-15 C-10	IA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		3.7	21.13		16.8	9.45		9.14	10yr 5/3	10yr 5/3	10yr 3/1		5-7%	Medium	Partially Oxidized		No	Burnished		NBP-026-15 C-11	LIA_X
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		4.1	27.76		15.99	7.64		7.53	5yr5/3	10yr 5/2	7.5yr 5/4, 10yr /1 (Black)		5-7%	Medium	Partially Oxidized	Sand Granules Mica	No			NBP-026-15 C-12	LIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		1.2	15.17		13.96	5.61		5.28	2.5yr 5/6	GLEY1 4/N	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand Granules	No			NBP-026-15 C-13	LBA/EIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9	0-15	Rim	Simple Open	6	32.47	Simple	15.91	9.1	Unknown	8.8	5yr5/4	10yr5/2		Bowl?	10-15%	Medium Coarse	Partially Oxidized	Sand Quartz	No			NBP-026-15 C-14	LBA
Bulgan Uul NBP-026	15		635062	5090071		100.9	0-15	Rim	Simple Open	13.1	28.88	Simple	23.93	13.72	Unknown	10.31	2.5yr 4/6	7.5yr5/3	7.5yr 5/3	Bowl	>15%	Coarse	Partially Oxidized		No			NBP-026-15 C-15	LBA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		9.4	34.12		24.37	11.14		11.04	10yr 5/1	2.5yr5/8	2.5yr 58, 7.5yr5/1		2-5%	Medium Fine	Partially Reduced	Sand	No	Burnished		NBP-026-15 C-5	LIA
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		11.7	31.24		30.01	11.36		11.32	10yr 5/1	10yr 5/1	5yr5/6		>15%	Coarse	Partially Reduced		No	Incised	Incised Line	NBP-026-15 C-6	LIA_X
Bulgan Uul NBP-026	15	N/A (Survey)	635062	5090071		100.9		Body		5.1	24.05		21.16	8.81		8.27	10yr 5/3	10yr 4/1	10yr 4/3, 10yr 2/1 (Black)		7-10%	Medium	Partially Reduced	Sand	Yes	Burnished		NBP-026-15 C-7	LIA_X
Bulgan Uul NBP-026	16	N/A (Survey)	634184	5089083		8.1		Neck		8.1	28.05		19.67	11.11		10.69	10r 3/1	7.5yr 4/3	7.5yr 5/4, 10r 4/6		7-10%	Medium	Partially Oxidized	Sand Granules	No	Slip		NBP-26-16 C-1	LIA_X
Bulgan Uul NBP-026	20	N/A (Survey)	634176	5088701		6.8		Body		3.7	20.94		15.94	9.35		9.26	5yr5/6	7.5yr 4/3	5yr5/6, 10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Granules	No			NBP-026-20 C-1	LBA/EIA
Bulgan Uul NBP-026	20	N/A (Survey)	634176	5088701		6.8		Body		3	20.35		17.9	6.25		6.2	2.5yr 4/6	2.5yr 4/6	2.5yr 5/6, 7.5yr 5/4, 25yr 5/6		10-15%	Medium Coarse	Partially Oxidized	Sand Quartz	No			NBP-026-20 C-2	IA
Bulgan Uul NBP-026	23	N/A (Survey)	634543	5088710		7.7		Body		7.5	23.49		27.89	7.86		7.4	Light Brown	Dark Brown (Glaz	Beige	Bowl?	0-2%	Fine	Fully Oxidized	Sand	No	Glaze		NBP-026-23 C-1	LH
Bulgan Uul NBP-026	26	N/A (Survey)	635111	5090384		7.2		Body		7.2	28.7		19.4	11.62		11.42	2.5yr 4/6	5yr 5/4	10yr 3/1		10-15%	Medium Coarse	Partially Oxidized	Granules	No	Burnished		NBP-26-26 C-1	LIA
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		4.6	24.48		17.58	8.39		8.33	7.5yr 5/6	7.5yr5/4	10yr 6/4		0-2%	Fine	Fully Oxidized	Sand	No	Burnished		NBP-026-28 C-19	Turk
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Neck		11.2	28.14		25.29	8.84		8.11	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		7-10%	Medium	Fully Reduced	Sand Granules Quartz	No	Burnished		NBP-026-28 C-1	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Neck		8.2	28.92		19.32	8.76		8.59	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-2	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		7.7	29.76		22.09	8.17		7.78	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished	Smoothing Impre	NBP- 026-28 C-3	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		6	31.97		21.64	8.7		8.28	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-4	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Neck		8.2	33.02		20.26	9.3		9.16	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-5	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		6.3	29.7		26.28	9.3		9.16	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-6	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		8.3	28.43		20.96	9.34		9	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		2-5%	Medium Fine	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-7	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		5.5	23.93		20.83	8.45		8.11	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-8	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Neck		6.8	26.41		20.85	9.31		8.8	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-9	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		5	27.45		16.19	8.6		8.54	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP- 026-28 C-10	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		4.8	23.62		18.05	7.45		7.27	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP-026-28 C-11	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		3.7	20.23		18.62	8.77		8.24	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP-026-28 C-12	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Neck		6.3	26.11		23.51	9.56		7.97	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP-026-28 C-13	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		3.1	20.38		16.16	9.78		9.43	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		2-5%	Medium Fine	Fully Reduced	Sand	No	Burnished		NBP-026-28 C-14	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		6.3	30.73		18.18	7.84		7.3	GLEY1 3/N	GLEY1 4/N	GLEY1 4/N		2-5%	Medium Fine	Fully Reduced	Sand	No	Burnished	Impression Paral	NBP-026-28 C-15	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4	0-15	Body	Overhanging	8.8	29.06	Folded Out	26.48	8.7	10	5.36	10yr 2/1 (Blac	10yr 2/1 (Black) (	10yr 7/2	Jar	0-2%	Fine	Fully Reduced		No	Glaze		NBP-026-28 C-16	LH
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		7.6	31.26		19.63	10.16		9.38	10yr 4/1	10yr 5/1	10yr 4/1		2-5%	Medium Fine	Fully Reduced	Sand	No			NBP-026-28 C-17	LIA_X
Bulgan Uul NBP-026	28	N/A (Survey)	634841	5088853		128.4		Body		7.7	27.23		26.73	8.02		7.55	10yr 4/3	10yr 4/1	10yr 4/1		2-5%	Medium Fine	Fully Reduced	Sand	No	Burnished		NBP-026-28 C-18	LIA_X

Table E.7 (continued). Ceramic catalog

Bulgan Uul	NBP-027	94	RVA Survey	640421	5079540		327.4		Body			20.5	46.72		34.91	12.82		11.65	7.5yr 5/6	2.5yr 5/6	GLEY1 3/N		10-15%	Medium	Coarse	Partially Oxidized	Sand Mica	No			NBP-027-94 C-17		LBA/EIA
Bulgan Uul	NBP-027	94	RVA Survey	640421	5079540		327.4		Shoulder			14.5	37.13		30.16	13.09		12.36	5yr 5/4	2.5yr 5/6	5yr 5/6, GLEY1 3/N, 5yr 5/6		5-7%	Medium		Partially Oxidized	Sand Mica	No	Burnished		NBP-027-94 C-18		LBA/EIA
Bulgan Uul	NBP-027	94	RVA Survey	640421	5079540		327.4		Shoulder			18.6	52.71		36.74	11.48		9.48	5yr 5/4	7.5yr 5/4	GLEY1 3/N		5-7%	Medium		Partially Oxidized	Sand Mica	No			NBP-027-94 C-19		LBA/EIA
Bulgan Uul	NBP-027	94	RVA Survey	640421	5079540		327.4		Shoulder			12	42.98		23.19	10.95		10.32	5yr 5/4	5yr 6/6	5yr 4/2, 10yr 4/1		2-5%	Medium	Fine	Partially Oxidized	Sand Mica	No			NBP-027-94 C-20		LBA/EIA
Bulgan Uul	NBP-027	103	RVA Survey	639630	5076641		5.7		Body			5.7	26.09		21.94	11.22		11.19	10r 6/8	7.5yr 6/4	7.5yr 5/3		7-10%	Medium		Partially Oxidized	Sand Granules	No			NBP-027-103 C-1		LBA/EIA
Bulgan Uul	NBP-027	107	RVA Survey	639753	5076752		2.4		Body			2.4	22.42		12.17	6.53		6.43	2.5yr 5/6	7.5yr 6/4	7.5yr 5/4		2-5%	Medium	Fine	Fully Oxidized	Sand	No			NBP-027-107 C-1		IIA
Bulgan Uul	NBP-027	122	RVA Survey	639990	5077033		17.9		Body			13.7	36.46		22.95	14.22		13.92	2.5yr 4/4	5yr 5/4	10yr 4/1		7-10%	Medium		Partially Oxidized	Sand Mica	No	Burnished	Slip	NBP-027-122 C-1		LBA
Bulgan Uul	NBP-027	122	RVA Survey	639990	5077033		17.9		Body			4	22.23		16.47	10.82		10.65	7.5yr 5/3	10yr 2/1 (Black)	7.5yr 3/2		5-7%	Medium		Partially Oxidized	Sand Mica	No			NBP-027-122 C-2		LBA
Bulgan Uul	NBP-027	132	RVA Survey	639984	5077016		3.3		Body			3.3	21.82		17.56	9.97		9.57	10yr 5/3	2.5yr 5/6	2.5yr 4/6		2-5%	Medium	Fine	Partially Oxidized	Sand	No			NBP-027-132 C-1		Unknown
Bulgan Uul	NBP-027	133	RVA Survey	639777	5076967		8.2		Body			6.4	25.95		22.39	8.08		7.5	10yr 6/4	7.5yr 5/4	7.5yr 5/4		10-15%	Medium		Partially Oxidized	Sand Granules Quartz	No			NBP-027-133 C-2		IIA
Bulgan Uul	NBP-027	133	RVA Survey	639777	5076967		8.2		Neck			1.9	18.36		15.388	5.81		4.89	7.5yr 6/4	7.4yr 4/1	7.5yr 6/6		0-2%	Medium	Fine	Partially Oxidized	Sand	No			NBP-027-133 C-1		LBA/EIA
Bulgan Uul	NBP-027	134	RVA Survey	639993	5077050		16.8		Body			1.6	17.94		13.67	6.91		5.71	7.5yr 5/4	2.5yr 5/6	5yr 4/4		7-10%	Medium		Fully Oxidized	Sand Mica	No			NBP-27-134 C-3		LBA/EIA
Bulgan Uul	NBP-027	134	RVA Survey	639993	5077050		16.8		Body			6	25.44		16.68	10.47		10.19	7.5yr 5/4	10yr 5/3	10yr 3/1		>15%	Coarse		Partially Oxidized	Sand Granules	Yes	Burnished		NBP-027-134 C-1		LBA
Bulgan Uul	NBP-027	134	RVA Survey	639993	5077050		16.8		Body			2.2	16.67		16.07	7.42		7.36	5yr 6/6	5yr 6/4	5yr 3/2		5-7%	Medium	Fine	Partially Oxidized	Sand	No			NBP-027-134 C-2		LBA/EIA
Bulgan Uul	NBP-027	134	RVA Survey	639993	5077050		16.8	0-15	Rim	Simple Open		7.3	27.96	V-Shaped	21.88	10.14	Unknown	7.6	10yr 5/1	10yr 6/1	5yr 5/4	Unknown	>15%	Coarse		Partially Reduced	Sand Granules	No	Incised	Line	NBP-027-134- C-4		LIIA
Bulgan Uul	NBP-027	135	RVA Survey	639989	5077021		8		Body			8	29.64		17.37	13.21		13.03	7.5yr 5/4	10yr 2/1	10yr 3/2, 10yr 2/1 (Black)		>15%	Coarse		Partially Oxidized	Sand Granules	No			NBP-027-135 C-1		LBA
Bulgan Uul	NBP-027	136	RVA Survey	640001	5076985		3		Body			1	20.31		12.7	5.87		5.6	7.5yr 5/6	2.5yr 5/6	10yr 2/1 (Black)		2-5%	Medium	Fine	Partially Oxidized	Sand	No			NBP-027-136 C-1		LBA/EIA
Bulgan Uul	NBP-027	136	RVA Survey	640001	5076985		3		Body			1.5	15.28		14.52	5.95		5.77	7.5yr 5/4	10yr 5/2	10yr 2/1 (Black)		2-5%	Medium	Coarse	Partially Oxidized	Sand	No			NBP-027-136 C-1		LBA/EIA
Bulgan Uul	NBP-027	137	RVA Survey	639964	5077301		7.4		Shoulder			7.4	30.92		21.03	12.46		11.32	7.5yr 5/4	10yr 6/3	7.5yr 5/4, 7.5yr 5/1, 7.5yr 5/4		7-10%	Medium		Partially Oxidized	Sand	No			NBP-027-137 C-1		IIA
Bulgan Uul	NBP-027	DL5	RVA Survey	640048	5077163		2.1		Body			2.1	17.36		15.38	7.72		6.81	Red	Brown-Grey			7-10%	Medium		Partially Oxidized		No			NBP-027-DL4 C-1		LBA
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Body			9.3	33.49		28.22	9.511		8.99	GLEY1 2.5/N	5yr 3/2	10yr 6/3		2-5%	Medium	Fine	Fully Oxidized	Sand	No		Glaze	NBP-028-13 C-2		LIH
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Body			7.2	26.7		21.19	12.29		11.75	2.5yr 4/8	5yr 5/4	2.5yr 3/6		>15%	Coarse		Fully Oxidized	Sand Mica Quartz Granules	No			NBP-028-13 C-5		LBA/EIA
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Body			2.9	21.14		16.19	9.81		9.13	10yr 6/2	10r 4/6	2.5yr 4/8		2-5%	Medium	Fine	Fully Oxidized	Sand Mica	No			NBP-028-13 C-8		IIA
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Body			38	51.48		47.09	8.98		8.24	10yr 3/1 (Glaz	5yr 3/3	10yr 5/1		2-5%	Medium	Fine	Fully Reduced	Sand Quartz	No	Glaze		NBP-028-13 C-1		LH
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Shoulder			7.7	36.18		28.45	9.54		7.76	10yr 5/1	GLEY1 5/N	10yr 4/1		10-15%	Medium	Coarse	Fully Reduced	Sand Granules Quartz	No	Burnished		NBP-028-13 C-10		Turk
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Body			25.7	44.72		40.91	12.92		10.06	10yr 5/2	10yr 5/1	10yr 2/1 (Black)		7-10%	Medium		Partially Oxidized	Sand Granules Quartz	No			NBP-028-13 C-3		LBA
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9	0-15	Rim	Simple Open		15.3	34.99	Simple	29.6	10.02	Unknown	9.47	10yr 6/2	10yr 6/3	10yr 3/3, 10yr 2/1 (Black)		2-5%	Medium	Fine	Partially Oxidized	Sand Mica	No			NBP- 028-13 C-4		LBA
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Shoulder			9.7	32.24		21.44	12.82		11.17	10yr 5/2	10yr 6/4	10yr 2/1 (Black)		10-15%	Medium	Coarse	Partially Oxidized	Sand Mica Quartz	No			NBP-028-13 C-6		LBA
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Body			5.6	24.76		18.11	10.72		9.8	GLEY1 5/N	10yr 6/3	GLEy1 3/N		2-5%	Medium		Partially Oxidized	Sand Mica	Yes			NBP-028-13 C-7		LBA
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Body			1.4	17.62		13.35	Unknown		Unknown	10yr 6/2	Unknown	10yr 2/1 (Black)		2-5%	Medium	Fine	Partially Oxidized	Mica	No			NBP-028-13 C-9		LBA
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Body			6.2	27.69		21.27	9.99		9.66	10yr 5/1	GLEY1 2.5/N	10yr 2/1 (Black), 10yr 4/4		2-5%	Medium	Fine	Partially Oxidized	Sand Mica	No	Burnished		NBP-028-13 C-11		LIIA
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Body			3.2	24.47		15.04	7.38		7.21	10yr 5/1	GLEY1 3/N	7.5yr 2.5/2, 10yr 2/1 (Black)		2-5%	Medium	Fine	Partially Oxidized	Sand Mica	No			NBP- 028-13 C-12		LIIA
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Body			5.1	29.45		23.07	Unknown		Unknown	10yr 7/2	Unknown	5yr 6/4		2-5%	Medium	Fine	Partially Oxidized	Sand Mica	No			NBP-028-13 C-13		Neolithic
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Body			18.5	47.93		37.5	7.43		7.03	GLEY1 4/N	7.5yr 5/4	7.5yr 5/3		10-15%	Medium	Coarse	Partially Reduced	Sand Granules Quartz Mica	No	Stamped	Chevron	NBP-028-13 C-14		Turk
Bulgan Uul	NBP-028	13	RVA Survey	640653	5077262		159.9		Other			5.3	33.56		24.74	6.76		5.22	GLEY1 5/N	10yr 7/6	GLEY1 5/N		0-2%	Fine		Partially Reduced	Sand	No	Stamped		NBP-028-13 C-15		LIH
Bulgan Uul	NBP-028	18	RVA Survey	640862	5078244		4.6		Body			4.6	22.04		21.23	7.58		7.09	10r 5/6	10r 4/6	5yr 4/1		2-5%	Medium	Fine	Partially Oxidized	Sand	No			NBP-028-18 C-1		LIA
Bulgan Uul	NBP-028	23	RVA Survey	640550	5077430		5.5		Body			5.5	26.21		20.89	8.16		8.09	10yr 5/3	5yr 5/4	10yr 2/1 (Black)		>15%	Coarse		Partially Oxidized	Sand Granules	No			NBP- 028-23 C-1		LBA
Bulgan Uul	NBP-028	28	RVA Survey	641408	5078916		63.9	45-60	Rim	Simple Open		12.8	29.12	Beveled	25.04	13.57	Unknown	10.89	5yr 5/4	5yr 5/4	7.5yr 4/2	Bowl	10-15%	Medium	Coarse	Fully Oxidized	Sand Granules	No	Burnished		NBP- 028-28 C-1		LBA
Bulgan Uul	NBP-028	28	RVA Survey	641408	5078916		63.9		Body			3	20.61		16.35	7.07		7.02	7.5yr 6/3	7.5yr 5/4	7.5yr 5/3		7-10%	Medium		Fully Oxidized	Sand Quartz	No			NBP-028-28 C-10		LIA_X
Bulgan Uul	NBP-028	28	RVA Survey	641408	5078916		63.9		Neck			7.2	31.06		20.41	10.48		9.66	10yr 5/3	5yr 6/4	5yr 3/2		7-10%	Medium		Fully Oxidized	Sand Granules	No			NBP-028-28 C-13		LIA
Bulgan Uul	NBP-028	28	RVA Survey	641408	5078916		63.9		Body			3.1	29.49		18.68	4.41		4.3	10yr 5/1	10yr 6/2	10yr 5/1		2-5%	Medium	Fine	Fully Reduced	Sand	No			NBP-028-28 C-2		Neolithic
Bulgan Uul	NBP-028	28	RVA Survey	641408	5078916		63.9		Body			4.3	31.88		22.79	4.66		4.61	10yr 5/1	10yr 6/2	10yr 5/1		2-5%	Medium	Fine	Fully Reduced	Sand	No			NBP-028-28 C-3		Neolithic
Bulgan Uul	NBP-028	28	RVA Survey	641408	5078916		63.9		Body			9.6	34.91		24.77	8.99		8.97	10yr 5/1	10yr 5/1	10yr 5/1		5-7%	Medium		Fully Reduced	Sand	No			NBP- 028-28 C-8		LIA_X
Bulgan Uul	NBP-028	28	RVA Survey	641408	5078916		63.9		Body			3.4	24.26		15.85	9		8.42	2.5yr 4/6	10yr 4/3	10yr 3/1		7-10%	Medium		Partially Oxidized	Sand	No	Impression	Line	NBP- 028-28 C-4		IIA
Bulgan Uul	NBP-028	28	RVA Survey	641408	5078916		63.9		Body			3.4	21.61		15.82	7.79		7.69	5yr 5/6	10yr 5/2	10yr 2/1 (Black), 5yr 6/6		5-7%	Medium		Partially Oxidized	Sand Quartz	No			NBP- 028-28 C-5		IIA
Bulgan Uul	NBP-028	28	RVA Survey	641408	5078916		63.9		Body			1.6	18.34		11.08	7.08		7.04	5yr 6/8	10yr 5/1	10yr 2/1 (Black), 7.5yr 7/6		5-7%	Medium		Partially Oxidized	Sand	No	Burnished		NBP- 028-28 C-6		LIA
Bulgan Uul	NBP-028	28	RVA Survey	641408	5078916		63.9		Body			6	28.53		21.3	8.69		8.38	7.5yr 6/4	7.5yr 5/4	7.5yr 5/6, 10yr 2/1 (Black)		7-10%	Medium		Partially Oxidized	Sand Mica	No			NBP-028-28 C-7		IIA
Bulgan Uul	NBP-028	28	RVA Survey	641408	5078916		63.9		Body			5.8	28.2		21.58	9.08		8.49	7.5yr 6/4	10yr 6/3	10yr 4/4		5-7%	Medium		Partially Oxidized	Sand Granules	No			NBP-028-28 C-9		LIA
Bulgan Uul	NBP-028	28	RVA Survey	641408	5078916		63.9		Body			2.9	20.78		10.71	11.69		10.48	10yr 6/4	7.5yr 6/3	7.5yr 5/6, 7.5yr 3/4		7-10%	Medium		Partially Oxidized	Sand Quartz	No			NBP-028-28 C-11		LIA
Bulgan Uul	NBP-028	29	RVA Survey	641478	5079120		8.2		Body			2.7	18.99		18.97	5.53		5.9	2.5yr 6/8	2.5yr 4/8	2.5yr 4/8		7-10%	Medium		Fully Oxidized	Sand Granules	No			NBP-028-29 C-2		LBA/EIA
Bulgan Uul	NBP-028	29	RVA Survey	641478	5079120		8.2		Body			5.7	24.32		21.68	7.08		6.66	GLEY1 5/N	GLEY1 5/N	GLEY1 5/N		7-10%	Medium		Fully Reduced	Sand Granules	No			NBP-028-29 C-1		Turk
Bulgan Uul	NBP-028	31	RVA Survey	642647	5080715		35.5		Body			6.5	32.9		24.44	6.04		6.62	10yr 2/1 (Blac	10yr 3/6 (Glaze)	10yr 7/3		0-2%	Fine		Fully Oxidized	Sand	No	Glaze		NBP-028-31 C-1		LH
Bulgan Uul	NBP-028	31	RVA Survey	642647	5080715		35.5		Body			6.2	335.05		25.93	6.83		6.29	10yr 2/1 (Blac	10yr 3/6 (Glaze)	10yr 7/3		0-2%	Fine		Fully Oxidized	Sand	No	Glaze		NBP-028-31 C-2		LH
Bulgan Uul	NBP-028	31	RVA Survey	642647	5080715		35.5		Body			2.2	17.79		12.41	6.46		5.95	2.5yr 5/6	2.5yr 6/8	2.5yr 5/8		2-5%	Medium	Fine	Fully Oxidized	Sand	No			NBP-028-31 C-4		LBA/EIA
Bulgan Uul	NBP-028	31	RVA Survey	642647	5080715		35.5		Body			1	14.11		10.13	7.32		6.11	2.5yr 5/6	2.5yr 5/6	2.5yr 3/4		2-5%	Medium	Fine	Fully Oxidized	Sand Mica	No			NBP-028-31 C-7		EBA/MBA
Bulgan Uul	NBP-028	31	RVA Survey	642647	5080715		35.5		Body			6.4	24.91		24.89	7.49		7.32	10yr 4/1	10yr 5/1	10yr 5/1		5-7%	Medium		Fully Reduced	Sand	No			NBP-028-31 C-6		Turk
Bulgan Uul	NBP-028	31	RVA Survey	642647	5080715		35.5		Body			9.1	23		22.28	13		12.42	5yr 5/4	10yr 4/1	10yr 2/1 (Black), 5yr 5/6		>15%	Coarse		Partially Oxidized	Sand Mica	No			NBP-028-31 C-3		IIA
Bulgan Uul	NBP-028	31	RVA Survey	642647	5080715		35.5		Body			5.1	24.94		21.65	11.03		9.7	7.5yr 5/4	7.5yr 5/3	10yr 4/1		7-10%	Medium		Partially Oxidized		No			NBP-028-31 C-5		LIA
Bulgan Uul	NBP-028	32	RVA Survey	642826	5081057		21.6		Foot			10.4	37.14		28.44	11.68		5.19	7.5yr 6/6	2.5yr 6/8	2.5yr 4/8		0-2%	Fine		Fully Oxidized	Sand	No			NBP-028-32 C-1		IIA

Table E.7 (continued). Ceramic catalog

Bulgan Uul NBP-028	32	N/A (Survey)	642826	5081057		21.6		Other		5.5	22.06		18.89	18.46		9.67	10r 5/8	7.5yr 7/4	10r 6/8		0-2%	Fine	Fully Oxidized	Sand	No			NBP-028-32 C-2	Unknown
Bulgan Uul NBP-028	32	N/A (Survey)	642826	5081057		21.6		Body		5.3	25.89		16.45	9.02		8.62	7.5yr 5/4	2.5y 5/1	5yr 4/6		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-028-32 C-3	Turk
Bulgan Uul NBP-028	36	N/A (Survey)	641206	5079122		18.6		Body		18.6	44.75		35.24	8.27		8.22	2.5y 8/2 (Glaz	10r 5/6	104 5/6		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-028-36 C-1	LH
Bulgan Uul NBP-028	57	N/A (Survey)	639611	5077442		16.2		Body		2.5	18.45		13.87	7.05		7	5yr 5/4	7.5yr 6/4	7.5yr 3/2		10-15%	Medium Coarse	Fully Oxidized	Sand Mica	No			NBP-028-57 C-2	EBA/MBA
Bulgan Uul NBP-028	57	N/A (Survey)	639611	5077442		16.2		Body		1.6	15.61		11.18	6.45		6.06	10yr 6/2	7.5yr 5/3	7.5yr 5/2		10-15%	Medium	Fully Oxidized	Sand	No			NBP-028-57 C-3	EBA/MBA
Bulgan Uul NBP-028	57	N/A (Survey)	639611	5077442		16.2		Body		2.5	17.83		14.92	8.74		8.14	7.5yr 5/4	2.5yr 5/6	2.5yr 3/2		7-10%	Medium	Fully Oxidized	Sand	No			NBP-028-57 C-4	EBA/MBA
Bulgan Uul NBP-028	57	N/A (Survey)	639611	5077442		16.2		Body		6.8	32.68		18.47	8.99		8.81	10yr 6/1	10yr 6/1	10yr 5/1		2-5%	Medium Fine	Fully Reduced	Sand	No	Impression	Punctate	NBP-028-57 C-1	LH
Bulgan Uul NBP-028	57	N/A (Survey)	639611	5077442		16.2		Body		2.5	18.35		12.74	7.06		6.15	10yr 5/1	10yr 5/1	10yr 2/1 (Black)		2-5%	Medium Fine	Fully Reduced	Sand Quartz	No			NBP-028-57 C-5	LIA
Bulgan Uul NBP-028	62	N/A (Survey)	640036	5076386		3.7		Body		3.7	25.82		14.68	9.7		9.52	5yr 6/6	5yr 5/6	7.5yr 5/4		2-5%	Medium Fine	Fully Oxidized	Sand	No	Burnished		NBP- 028-62 C-1	Turk
Bulgan Uul NBP-028	64	N/A (Survey)	641133	5078376		51.6		Body		20.2	42.65		29.41	14.49		13.98	10yr 6/3	2.5yr 4/	5yr 4/4		10-15%	Medium Coarse	Fully Oxidized	Sand Quartz	No			NBP-028-64 C-1	LBA/EIA
Bulgan Uul NBP-028	64	N/A (Survey)	641133	5078376		51.6	0-15	Rim	Collared	31.2	40.15	Beveled	35.35	18.47	28	10	7.5yr 5/3	5yr 5/4	5yr 4/4	Globular Jar?	>15%	Coarse	Fully Oxidized	Sand Granules Quartz	No			NBP-028-64 C-2	LBA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Shoulder		6.7	27.05		18.66	11.59		10.17	10yr 6/3	10yr 4/1	10yr 4/4, 10yr 4/2		2-5%	Medium Fine	Fully Oxidized	Sand	No			NBP-028-65 C-10	LIA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		1.7	17.71		12.6	5.5		5.42	10yr 6/2	5yr 6/4	5yr 5/4		5-7%	Medium	Fully Oxidized	Sand	No			NBP-028-65 C-14	IA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		0.8	10.52		10.48	5.37		5.26	2.5yr 4/8	5yr 5/4	5yr 4/4		2-5%	Medium Fine	Fully Oxidized	Sand Granules	No	Burnished		NBP-028-65 C-27	EBA/MBA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Neck		18.6	45.85		34.73	10.81		6.55	10yr 4/1	10yr 53	10yr 5/1		5-7%	Medium	Fully Reduced	Sand Granules	No	Burnished		NBP-028-65 C-7	LIA_X
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		13.8	39.17		36.75	7.61		6.88	10yr 5/1	10yr 5/1	10yr 6/1		2-5%	Medium Fine	Fully Reduced	Sand	No			NBP- 028-65 C-8	Turk
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		5.9	34.04		24.1	6.36		5.95	10yr 5/1	10yr 4/1	10yr 4/1		2-5%	Medium Fine	Fully Reduced	Sand	No			NBP-028-65 C-20	Turk
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.1		Body		17.2	41.4		28.04	10.99		10.36	10yr 5/3	10yr 4/1	10yr 4/3		0-2%	Fine	Fully Reduced	Sand Mica	No			NBP-028-65 C-23	IA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		7.6	30.87		26.93	8.67		8.15	10yr 4/1	10yr 5/2	10yr 5/1		7-10%	Medium	Fully Reduced	Sand Mica	No			NBP-028-65 C-28	Turk
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		2.3	21.17		17.61	5.97		5.52	10yr 6/1	10yr 5/1	10yr 5/1		0-2%	Fine	Fully Reduced	Sand	No			NBP-028-65 C-29	Turk
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		19.8	41.5		31.19	12.79		10.61	10yr 5/1	10yr 5/1	10yr 5/1		2-5%	Medium Fine	Fully Reduced	Sand Mica	No			NBP-028-65 C-30	LIA_X
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		3	20.99		14.77	6.97		6.92	10yr 5/2	10yr 5/3	10yr 3/1		5-7%	Medium	Fully Reduced	Sand	No	Burnished		NBP-028-65 C-31	LIA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Other		6.3	2.76		25.76	6.85		4.85	10yr 5/2	10yr 5/2	10yr 4/1		5-7%	Medium	Fully Reduced	Sand Mica	No			NBP-028-65 C-33	Unknown
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		2.6	24.11		20.7	6.14		5.87	10yr 7/1	10yr 5/1	10yr 5/1		0-2%	Fine	Fully Reduced	Sand	No			NBP-028-65 C-34	LH
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		3.9	32.89		23.1	7.33		6.86	10yr 4/1	10yr 6/2	10yr 5/1		2-5%	Medium	Fully Reduced	Sand	No	SlipBurnished		NBP- 028-65 C-35	Turk
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		9.6	53.27		22.84	7.63		7.34	10yr 5/1	10yr 6/2	10yr 4/1		5-7%	Medium	Fully Reduced	Sand Quartz	No	Burnished	Slip	NBP-028-65 C-36	Turk
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		4.7	29.8		16.98	8.62		7.68	10yr 5/1	10yr 6/2	10yr 4/1		5-7%	Medium	Fully Reduced	Sand Quartz	No	Burnished	Slip	NBP-028-65 C-37	Turk
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		15.9	43.5		33.35	9.84		9.47	10yr 5/2	10yr 6/2	10yr 5/1		7-10%	Medium	Fully Reduced		No	Burnished	Line	NBP- 028-65 C-38	LIA_X
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		13.6	36.09		29.57	8.9		8.46	10yr 5/2	10yr 6/2	10yr 5/1		7-10%	Medium	Fully Reduced		No	Burnished	Line	NBP- 028-65 C-39	LIA_X
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Neck		11.2	32.94		29.53	8.45		7.54	10yr 5/2	10yr 6/2	10yr 5/1		7-10%	Medium	Fully Reduced		No	Burnished	Line	NBP- 028-65 C-40	LIA_X
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		9.2	39.6		22.4	8.27		7.36	10yr 5/2	10yr 6/2	10yr 5/1		7-10%	Medium	Fully Reduced		No	Burnished	Line	NBP- 028-65 C-41	LIA_X
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2	15-30	Rim	Simple Open	58.1	55.18	Simple	33.47	24.03	30	23.73	10yr 4/1	10yr 6/2	10yr 4/1	Unknown	>15%	Coarse	Fully Reduced	Sand Granules	Yes			NBP-028-65 C-42	LIA_X
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		9.1	30.53		25.33	10.09		9.41	2.5yr 5/6	5yr 4/2	10yr 2/1 (Black), 5yr 5/6		10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP- 028-65 C-1	LBA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		5	26.47		20.34	8.76		8.45	10r 5/6	2.5yr 5/4	5yr 4/3		10-15%	Medium Coarse	Partially Oxidized	Sand Quartz Granules	No			NBP-028-65 C-2	LBA/EIA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		13.8	32.33		30.35	12.13		12.06	2.5yr 5/6	10yr 5/1	10yr 4/1		10-15%	Medium Coarse	Partially Oxidized	Sand Granules	No			NBP-028-65 C-3	LBA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		5.2	29.41		18.96	9.19		8.48	7.5yr 6/2	10yr 5/3	7.5yr 5/6, 10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Mica	No			NBP-028-65 C-4	LBA/EIA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		8.3	29.28		22.85	10.07		10	2.5yr 4/4	2.5yr 4/6	7.5yr 3/2		10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP-028-65 C-6	LBA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		7.1	29.8		21.75	13.72		12.36	10r 5/6	5yr 4/1	7.5yr 6/1		7-10%	Medium	Partially Oxidized	Sand Mica	No			NBP-028-65 C-9	LBA/EIA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		2	18.54		16.16	5.82		5.76	7.5y 5/6	10yr 5/3	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-028-65 C-11	LBA/EIA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		1.9	17.34		14.06	5.99		5.83	10yr 63	2.5yr 4/4	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No	Burnished		NBP-028-65 C-12	LBA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		2.4	18.23		17.21	7.56		7.44	2.5yr 6/8	10yr 5/2	2.5yr 6/8, 10r 4/6		7-10%	Medium	Partially Oxidized	Sand	No			NBP- 028-65 C-13	IA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		1.4	15.64		15.31	5.6		5.54	2.5yr 5/4	7.5yr 6/3	2.5yr 3/1		5-7%	Medium	Partially Oxidized	Sand	No			NBP-028-65 C-15	IA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		1	15.52		10.28	6.79		5.68	10r 6/8	Unknown	10yr 2/1 (Black)		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-028-65 C-16	LBA/EIA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		9.3	27.08		26.2	11.03		9.45	2.5yr 5/6	7.5yr 5/3	7.5yr 4/1		10-15%	Medium Coarse	Partially Oxidized	Sand Granules	No			NBP-028-65 C-17	LBA/EIA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		3.4	21.77		16.86	7.79		7.25	7.5yr 5/3	7.5yr 6/4	5yr 4/6, 5yr 5/2, 2.5yr 4/6		7-10%	Medium	Partially Oxidized	Sand Granules Mica	No			NBP-028-65 C-18	LBA/EIA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		4.3	22.28		18.34	8.89		8.57	7.5yr 6/3	7.5yr 6/4	7.5yr 4/4, 7.5yr 5/8		10-15%	Medium Coarse	Partially Oxidized	Sand Granules	No			NBP-028-65 C-19	LBA/EIA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		2.9	19.74		16.04	7.35		7.04	10yr 6/2	7.5yr 6/4	10yr 2/1 (Black), 7.5yr 6/6		10-15%	Medium Coarse	Partially Oxidized	Sand	No			NBP-028-65 C-21	LBA/EIA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		27	44.9		40.27	12.4		11.6	2.5yr 5/4	GLEY1 3/N	GLEY1 61, 7.5yr 4/2		7-10%	Medium	Partially Oxidized		No			NBP-028-65 C-22	LBA/EIA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		4.5	29.11		13.46	9.53		8.64	7.5yr 5/2	5yr 5/3	5yr 4/2, 5yr 4/6		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP- 028-65 C-24	IA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		2.7	20.58		13.49	11.81		10.39	5yr 6/6	10yr 4/1	10yr 2/1 (Black)		5-7%	Medium	Partially Oxidized	Sand	No			NBP-028-65 C-25	LBA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		1.2	15.22		11.56	6.53		6.5	10yr 6/3	Unknown	7.5yr 5/6		2-5%	Medium Fine	Partially Oxidized	Sand	No			NBP-028-65 C-26	IA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		4.2	22.49		18.41	8.92		8.49	10yr 7/2	10yr 7/2	10yr 5/1		10-15%	Medium Coarse	Partially Oxidized	Sand Mica	No			NBP-028-65 C-32	Turk
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2	45-60	Rim	Simple Open	15	40.13	Beveled	27.31	12.54	22	12.04	5yr 5/3	10yr 4/1	5yr 5/8	Bowl?	10-15%	Medium Coarse	Partially Oxidized	Sand Mica	Yes			NBP-028-65 C-43	IA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2	30-45	Rim	Collared	10.3	28.29	Beveled	24.26	14.77	Unknown	10.34	2.5yr 4/6	2.5yr 4/2	10yr 6/1	Bowl?	2-5%	Medium Fine	Partially Oxidized	Sand	No	SlipBurnished		NBP-028-65 C-44	LIA
Bulgan Uul NBP-028	65	N/A (Survey)	639835	5075695		391.2		Body		6.2	25.57		18.53	11.36		10.57	7.5yr 6/3	GLEY1 4/N	2.5yyr 4/6		10-15%	Medium Coarse	Partially Oxidized	Sand Granules Quartz	No			NBP- 028-65 C-5	LBA
Bulgan Uul NBP-028	76	N/A (Survey)	639518	5074793		17.6		Neck		2.2	17.33		15.76	8.1		6.52	2.5yr 5/6	10r 5/4	2.5yr 6/8		5-7%	Medium	Fully Oxidized	Sand Mica	No			NBP- 028-76 C-3	LBA/EIA
Bulgan Uul NBP-028	76	N/A (Survey)	639518	5074793		17.6		Body		7.2	28.48		16.08	12.24		11.71	10yr 6/3	10yr 6/4	10yr 2/1 (Black)		7-10%	Medium	Partially Oxidized	Sand Mica	No			NBP-028-76 C-1	LBA
Bulgan Uul NBP-028	76	N/A (Survey)	639518	5074793		17.6		Body		8.4	28.02		26.05	10.05		9.72	10yr 5/2	10yr 6/2	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand Granules Mica Quartz	No			NBP-028-76 C-2	LBA/EIA
Bulgan Uul NBP-028	13a	N/A (Survey)	640653	5077262		128.2		Neck		128.2	81.77		66.61	20.19		13.57	7.5yr 5/3	7.5yr 3/3	10yr 2/1 (Black), 2.5yr 5/6		>15%	Coarse	Partially Oxidized	Sand Granules Mica Quartz	Yes	Impression	AdditivePunctate	NBP-028-13a C-1	LBA
Bulgan Uul RA_nbp-029	15	N/A (Survey)	638587	5078108		94.3		Body		52.3	68.7		46.9	11.15		7.96	10yr 2/1 (Blac	10yr 2/1 (Black) (<	10yr 6/2		2-5%	Medium Fine	Fully Reduced	Sand	No	Glaze		NBP-029-15 C-1	LH
Bulgan Uul RA_nbp-029	15	N/A (Survey)	638587	5078108		94.3		Body		21.3	39.26		37.64	8.44		8.3	10yr 2/1 (Blac	10yr 2/1 (Black) (<	10yr 6/2		2-5%	Medium Fine	Fully Reduced	Sand	No	Glaze		NBP-029-15 C-2	LH
Bulgan Uul RA_nbp-029	15	N/A (Survey)	638587	5078108		94.3		Body		21.3	53.06		48.66	6.68		5.67	10yr 2/1 (Blac	10yr 2/1 (Black) (<	10yr 6/2		2-5%	Medium Fine	Fully Reduced	Sand	No	Glaze		NBP-029-15 C-3	LH
Bulgan Uul RA_nbp-029	15	N/A (Survey)	635470	5080069		55.7		Other		55.7	63.72		35.34	35.13		23.95	5y 8/1	5y 8/1	5y 8/1		0-2%	Fine	Fully Reduced		No	Glaze			LH
Bulgan Uul RA_nbp-029	30	N/A (Survey)	638535	5078235		56.2		Foot		56.2	66.9		42.98	18.96		12.62	2.5yr 4/6 (Gla	5yr 6/6	5yr 6/6		0-2%	Fine	Fully Oxidized	Sand	No	Glaze		NBP-029-30 C-1	LH
Bulgan Uul RA_nbp-029	30	N/A (Survey)	638535	5078235		22		Body		2.2	15.89		14.47	9.2		8.78	10yr 6/2	2.5yr 6/6	7.5r 6/4, 7.5yr 5/1		2-5%	Medium Fine	Fully Reduced	Sand Mica	No			NBP-029-30 C-4	LBA/EIA
Bulgan Uul RA_nbp-029	30	N/A (Survey)	638535	5078235		22		Body		14.6	33.91		32.55	11.66		10.13	2.5yr 3/6	10yr 5/3	10yr 3/1, 10yr 5/4		7-10%	Medium	Partially Oxidized	Sand Mica	No	Burnished	Slip	NBP-029-30- C-2	LIA
Bulgan Uul RA_nbp-029	30	N/A (Survey)	638535	5078235		22		Body		5.4	22.63		19.82	11.41		11.39	7.5yr 5/4	10yr 6/2	10yr 2/1 (Black)		>15%	Coarse	Partially Oxidized	Sand	No			NBP-029-30 C-3	LBA

Table E.7 (continued). Ceramic catalog

Bulgan Uul RA_mp-038	38	PVA Element	638758	5077895		5.8		Body		2.6	20.91		17.21	7.15			5.89	2.5yr 4/4	2.5yr5/8	2.5yr 4/8			25%	Medium Fine	Fully Oxidized	Sand Mica	No	Slip		NBP-029-38	D-2		Turk	
Bulgan Uul RA_mp-038	38	PVA Element	638758	5077895		5.8		Body		3.1	22.78		20.36	3.54			3.53	10yr 2/1 (Blac	7.5yr 3/4 (Glaze)	10yr 7/4			0-2%	Fine	Fully Reduced	Sand	No	Glaze		NBP-029-38	D-1		UH	
Bulgan Uul RA_mp-039	39	PVA Element	638277	5078509		15.8		Body		15.8	49.67		35.01	9.89			8.87	2.5yr 5/8	7.5yr5/3	7.5yr 5/3, 10yr 2/1 (Black)			10-15%	Medium Coarse	Partially Oxidized	Sand Mica Quartz Granules	No			NBP- 029-309	D-1			LBA/EBA
Bulgan Uul RA_mp-040	40	PVA Element	638528	5078248		4.8	15-30	Rim	Everted	4.8	23.75	Simple	18.58	6.58	20	8.96	7.5yr 5/4, 5yr	7.5yr5/4, 2.5yr 5/, 10yr 3/2			Everted Jar?	10-15%	Medium Coarse	Partially Oxidized	Sand Granules Quartz	No	Slip		NBP-029-40	D-1			LBA/EBA

APPENDIX F: MONUMENT ANALYSIS AND FAUNAL MEASUREMENT GUIDE

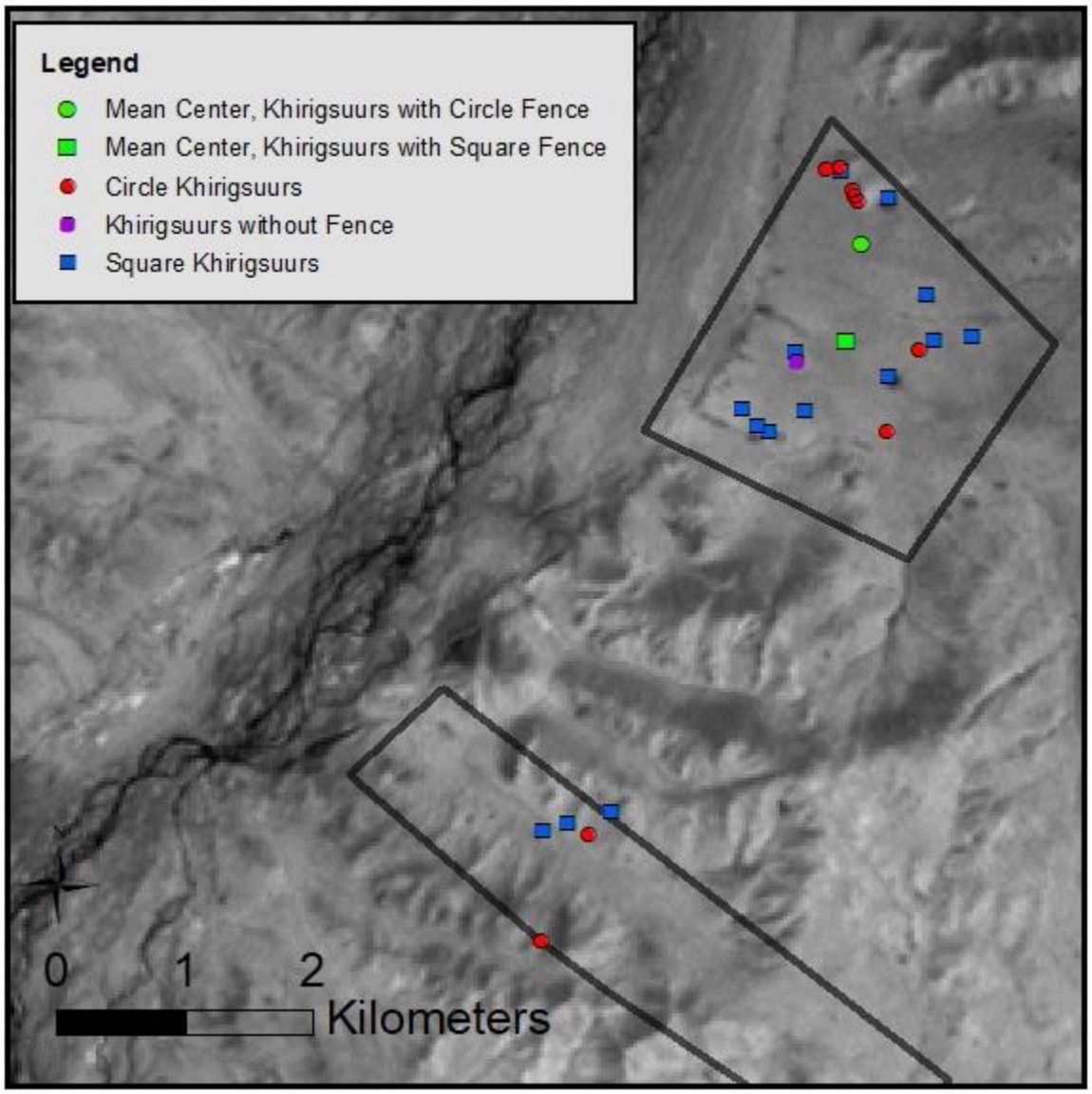


Figure F.1. Distribution of khirigsuurs and Mean Centers in Locus B.

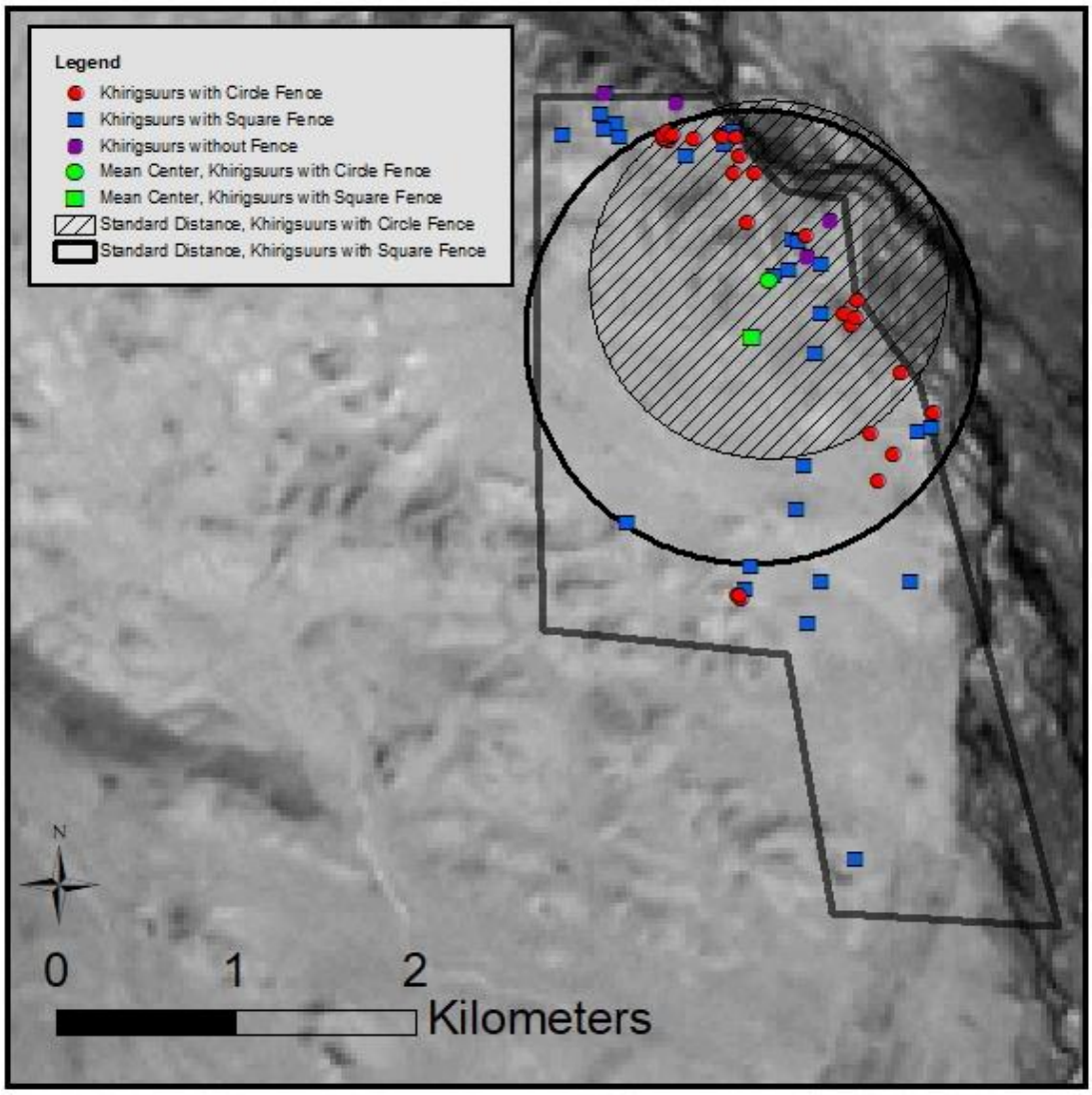


Figure F.2. Map displaying the Locus C distribution, Mean Centers, and Standard Distance of khirigsuur monuments by fence type.

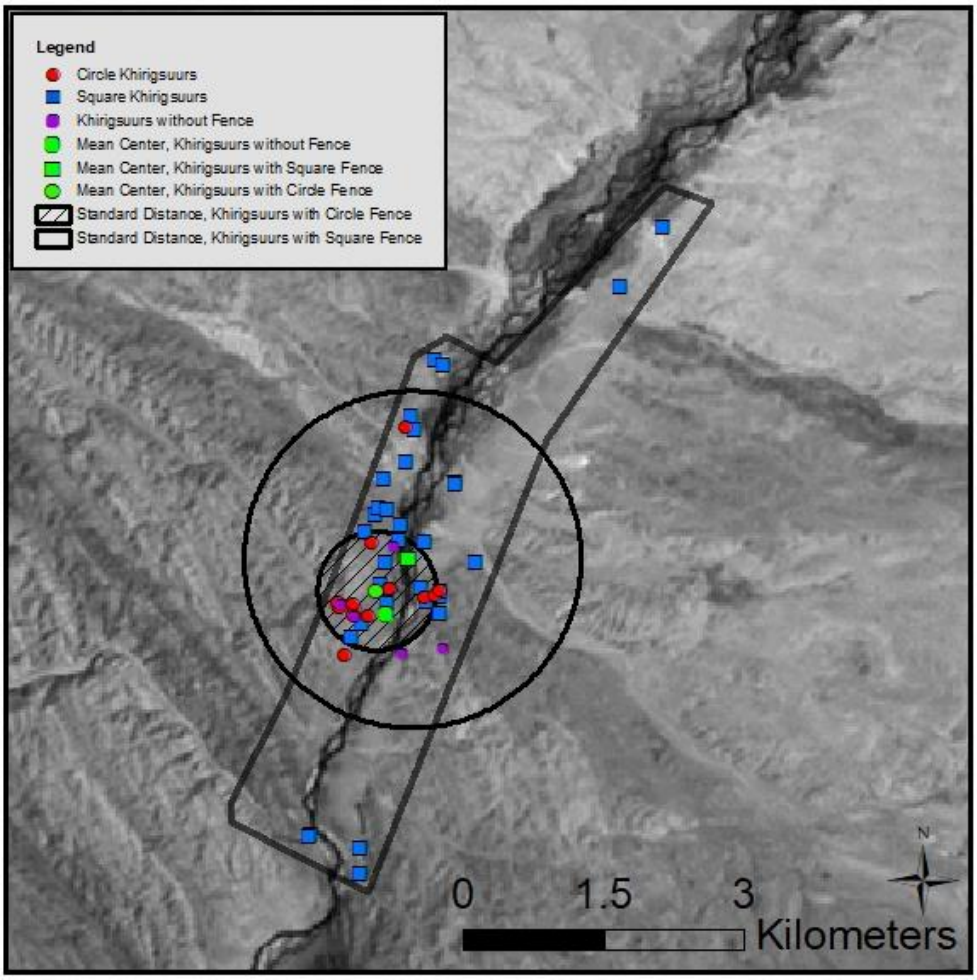


Figure F.3. Map showing the Locus D distribution, Mean Centers, and Standard Distances of khirigsuur monuments based on fence type.

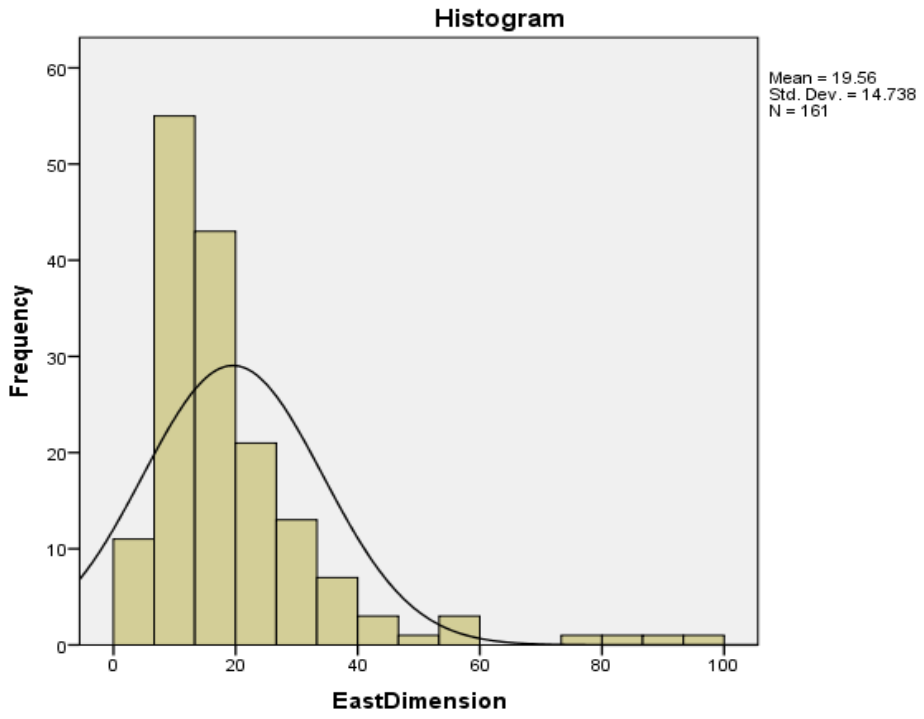


Figure F.4. Distribution graph of fence length of square khirigsuurs.

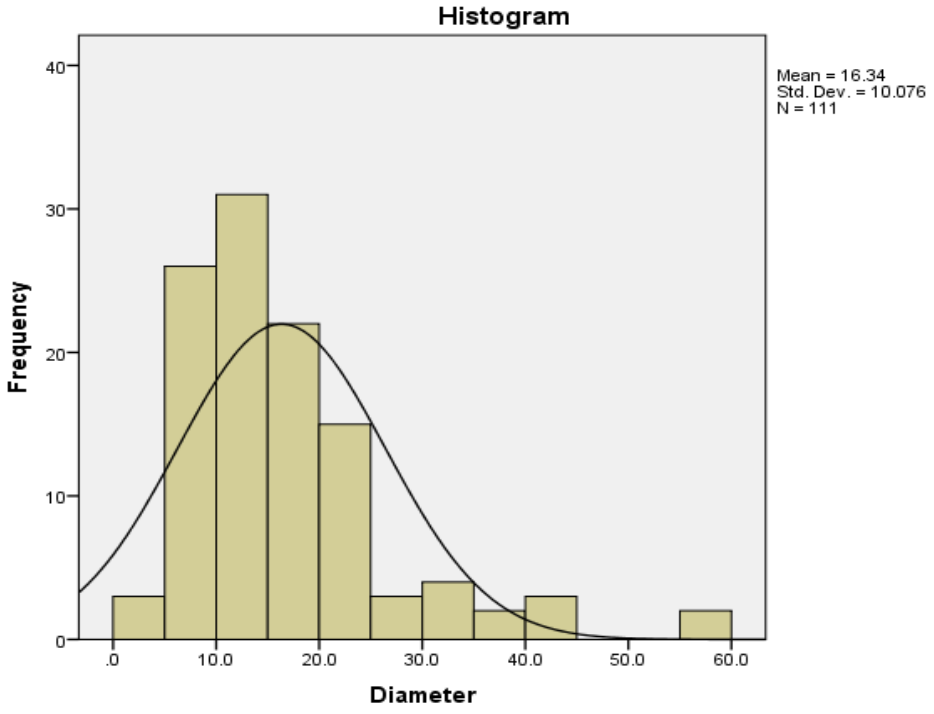


Figure F.5. Distribution of diameter of circle-fenced khirigsuurs.

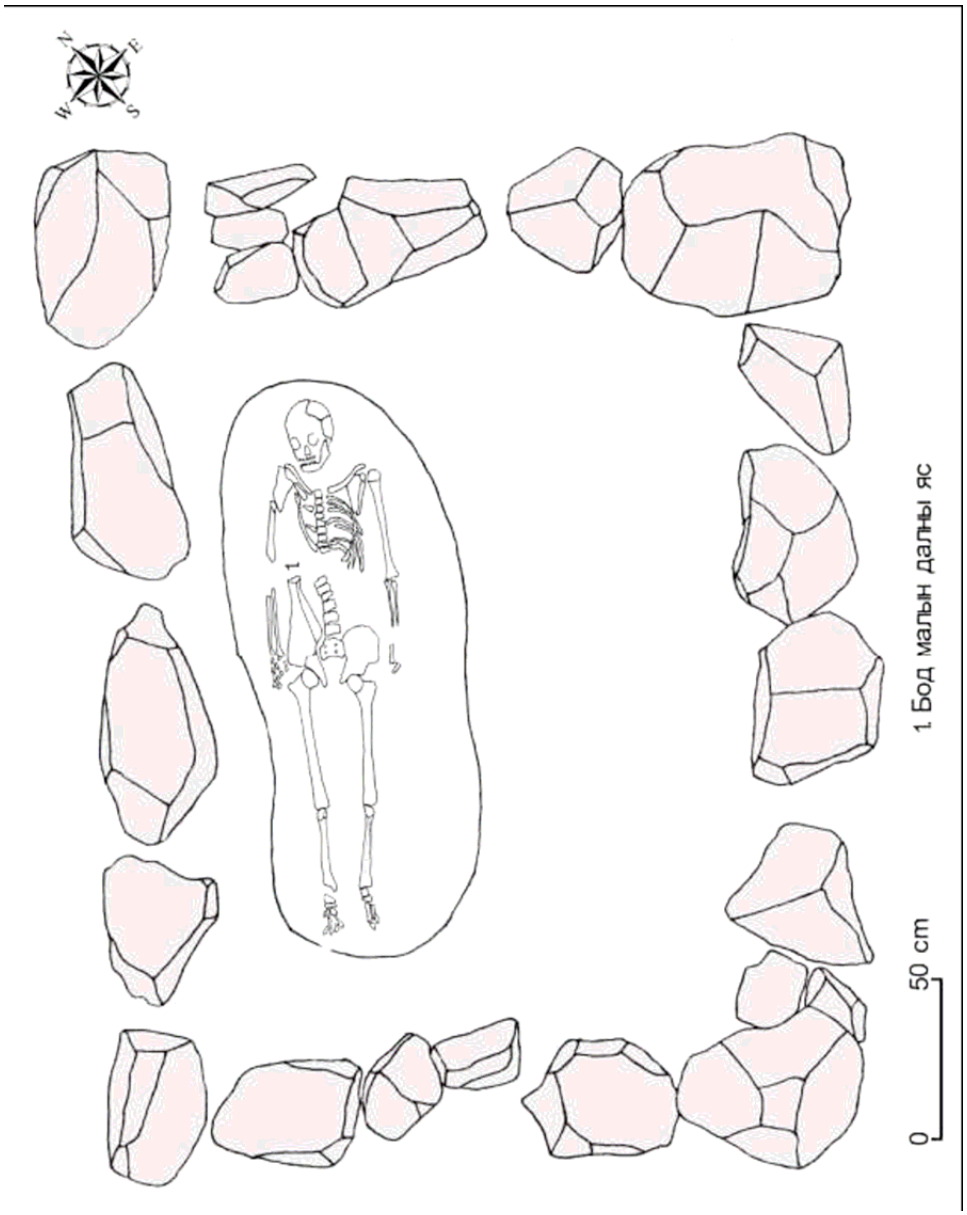


Figure F.6. Image from Günchinsüren et al. 2006 showing the variation of slab burial construction in southern Bayankhongor. This example has a similar architectural form to the slab burials discussed in Chapter 6.

Table F.1. List of measurements and their descriptions for faunal analysis.

	View	Name	Code	Description
Maxillary	TOP	Profile Length	1	Total length: Akrokranion-Prosthion
Maxillary	TOP	Greatest Breadth of Skull	41	Greatest breadth across orbits, Ectorbitale-Ectorbitale
Maxillary	SIDE	Condylobasal length	2	Aboral border of the occipital condylae-Prosthion
Maxillary	TOP	Greatest Breadth of Snout	45	Measured across the outer borders of the alveoli of I3
Maxillary	SIDE	Length of cheektooth row (L/R)	22	Measured along the alveoli
Maxillary	SIDE	Greatest inner length of the orbit	31	Ectorbitle- Entorbitale; vertical
Maxillary	SIDE	Greatest breadth of the orbit	32	Ectorbitale-Entorbitale; horizontal
Maxillary	BOTTOM	Length of molar row	23	Measured along the alveoli on the buccal side
Maxillary	BOTTOM	Length of PREmolar row	24	Measured along the alveoli on the buccal side
Maxillary	BOTTOM	Basal Length	3	Basion-Prosthion
Mandibular	SIDE	Length from the angle	1	Gonion caudale-Infradentale
Mandibular	SIDE	Length of all the cheektooth row	6	Measured along the alveoli on the buccal side
Mandibular	SIDE	Aboral height of vertical ramus	19	Gonion ventral-highest point of condyle process
Mandibular	SIDE	Oral height of vertical ramus	21	Gonion ventral-Coronium

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