Volume 2020 Article 42

2020

Cultural Resources Survey and Evaluation of Archeological Sites 41WS105, 41WS159, 41WS160, and 41WS161 for the Proposed Fence Line Project in Grasslands Units 48, 62 and 63, Lyndon B. Johnson National Grassland, Wise County, Texas

Steve Sarich

Josh Haefner

Cultural Resources Survey and Evaluation of Archeological Sites 41WS105, 41WS159, 41WS160, and 41WS161 for the Proposed Fence Line Project in Grasslands Units 48, 62 and 63, Lyndon B. Johnson National Grassland, Wise County, Texas

Cultural Resources Survey and Evaluation of Archeological Sites 41WS105, 41WS159, 41WS160, and 41WS161 for the Proposed Fence Line Project in Grasslands Units 48, 62 and 63, Lyndon B. Johnson National Grassland, Wise County, Texas

By:

Steve Sarich and Josh Haefner

Prepared for:

United States Forest Service
National Forests & Grasslands in Texas
Lufkin, Texas
Forest Service Event ID:
R2020081308003

Prepared by:

TRC Environmental Corporation
Austin, Texas

Josh Haefner, Principal Investigator

TRC Technical Report No. 355649

February 2020

This page intentionally left blank.

ABSTRACT

The United States Forest Service (USFS) is proposing to reconstruct perimeter fencing surrounding three Grasslands units located within the Lyndon B. Johnson National Grassland (LBJ National Grassland) in Wise County, Texas. As part of the proposed perimeter fence reconstruction within the three proposed Grasslands units, the USFS is seeking a general inventory of cultural resources which includes background and historic research, archeological field survey, site delineation, a determination of the condition of recorded cultural resources, and recommendation of eligibility for listing on the National Register of Historic Places (NRHP) of any sites encountered.

The overall project tracts are subject to federal jurisdiction and falls under the regulations of Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (U.S. Code 16, §470, et seq.). To ensure compliance with Section 106 of the NHPA, the USFS contracted with TRC Environmental Corporation (TRC) to conduct any necessary field investigations required as determined during the coordination process.

The Area of Potential Effects (APE) consists of three Grasslands units where proposed perimeter fence reconstruction will occur. The three Grasslands units include Unit 48, Unit 62, and Unit 63. Together, the three Grasslands units measure 399 acres. A cultural resources survey of these three Grasslands units was performed under Section 106 of the NHPA. For these investigations, Josh Haefner served as the Principal Investigator and Steve Sarich was the Project Archeologist. Field work was conducted by Josh Haefner, Steve Sarich, Benjamin Johnson, Gregg Cestaro, and Haley Wilkerson, the latter two individuals employed by Hicks & Company, the small-business subconsultant for this project.

Results of the background review, completed prior to the field investigation determined that one previously recorded site, 41WS105, is located within the APE; no cemeteries or historic structures were noted within the APE; while one previous cultural resources survey has been performed within or within the vicinity of the APE. This previous survey was a limited seismic survey of Unit 48 and resulted in the discovery of 41WS105.

Prior to survey, TRC coordinated with the USFS on the proposed survey methodology and research design. TRC archeologists performed survey supplemented with shovel testing at the three Grasslands units on October 31– November 08 and December 04 – 06, 2019. During the investigations, a total of 412 shovel tests were excavated. Of these tests, 405 were negative for cultural materials. In addition to these tests 65 points were recorded as “No Dig” locations due to ground disturbance, slope, or other impediment. Seven shovel tests were positive for cultural materials. Three new sites were recorded within the APE and an extension to previously recorded 41WS105 (forest service number: 08130800055) was delineated as a result of the survey. As shovel testing at two of the new sites, 41WS160 (08130800526) and 41WS161 (08130800527), noted no buried cultural deposits and historic cultural materials were observable on the ground surface, these boundaries were established by the mapping of the horizontal distribution of artifacts along the ground surface. Boundaries for the 41WS105 and 41WS159 (08130800525) were based on both the distribution of positive shovel tests and the presence of cultural materials on the ground surface. Based on the results of the cultural resources survey, TRC recommends that no further investigations are necessary and the project may proceed as planned with no historic properties affected.

This page intentionally left blank

TABLE OF CONTENTS

1.0 Introduction 1
2.0 Physiographic and Environmental Context 5
3.0 Culture History 12
4.0 Previous Investigations 16
5.0 Field Methods 17
6.0 Results 19
7.0 Project Summary and Recommendations 46
7.1. Project Recommendations 46
References 48

LIST OF FIGURES

Figure 1-1 Topographic map of APE. 2
Figure 1-2 Aerial map of APE. 3
Figure 2-1 Project Location within the Oak Woods & Prairies Physiographic Region of Texas. 6
Figure 2-2 Underlying geology within and adjacent to the LBJ Grasslands APE. 8
Figure 2-3 Soils within LBJ Grasslands Unit 48 APE. 9
Figure 6-1 Overview of vegetation at Unit 48, facing north. 20
Figure 6-2 Overview of vegetation at Unit 62, facing south. 20
Figure 6-3 Overview of vegetation at Unit 63, facing southeast. 21
Figure 6-4 Site 41WS105 overviews facing north, east, southwest, and west (left to right). 23
Figure 6-5 White chert debitage recorded on the surface of 41WS105 Extension. 24
Figure 6-6 Debitage recorded in shovel test 177 SS at 20-30 cmbs. 24
Figure 6-7 Two items of lithic debitage recorded in shovel test 177-SS at 30-40 cmbs. 25
Figure 6-8 Two items of debitage recorded in shovel test 177-SS at 60-70 cmbs. 25
Figure 6-9 Debitage recorded in shovel test 52-JH at 20-30 cmbs. 26
Figure 6-10 Debitage recorded in shovel test 63-BJ at 60-70 cmbs. 26
Figure 6-11 Overviews of 41WS159, facing north, east, south, and west (left to right). 28
Figure 6-12 Ironstone, milk glass, and molded glass recorded in 72-SS at 0-10 cmbs. 29
Figure 6-13 Green glass recorded in 72-SS at 10-20 cmbs. 29
Figure 6-14 Transfer print sherd and plain whiteware sherd recorded in 72-SS at 20-30 cmbs. 30
Figure 6-15 Undecorated stoneware sherd and milk glass recorded in 99-SS at 0-10 cmbs. 30
Figure 6-16 Container glass recorded in 101-SS at 0-10 cmbs. 31
Figure 6-17 Possible cut stone feature near road, facing northwest. 31

Figure 6-18 Push pile in sparse wooded area, facing southeast. 32
Figure 6-19 Overview of site 41WS160, facing north, east, south, and west (left to right). 33
Figure 6-20 Yukon Club Root Beer can. 34
Figure 6-21 Pull top opening common to the sanitary cans found at 41WS160. 34
Figure 6-22 Heavily rusted sanitary can with evidence of bullet holes. 35
Figure 6-23 Rusted metal container found at 41WS160. 35
Figure 6-24 Side view of rusted container showing evidence of bullet holes. 36
Figure 6-25 Overview of 41WS161, facing north, east, south, and west (left to right). 38
Figure 6-26 Fragment of blue banded stoneware crock at 41WS161. 39
Figure 6-27 Overview of fragmented crock, facing southeast. 39
Figure 6-28 Brick with letters "DEN...FIRE...B" likely produced by Denton Pressed Brick Company. 40
Figure 6-29 Unknown metal container, facing southeast. 40
Figure 6-30 Evidence of modern materials deposited and intermixed with historic materials. 41
Figure 6-31 Overview of windmill and modern galvanized stock tank, facing northwest. 42
Figure 6-32 Close up of windmill head and blades, facing northwest. 43
Figure 6-33 Metal piping without output to the stock tank, facing northwest. 43
Figure 6-34 Galvanized steel stock tank, facing southwest. 44
Figure 6-35 Farmaster label on stock tank, facing southeast. 44

LIST OF APPENDICES

Appendix A: Design Plans and APE
Appendix B: Shovel Test Results
Appendix C: Historical and Archival Research
Appendix D: Survey Results and Site Maps

1.0 INTRODUCTION

The United States Forest Service (USFS) is proposing to reconstruct perimeter fencing surrounding three Grasslands units located within the Lyndon B. Johnson National Grassland (LBJ National Grassland) in Wise County, Texas as implementation of the LBJ Prairie Savanna Restoration Project. This project is necessary to create a 40--foot fireline around LBJ National Grasslands units as these units are overgrown with dense vegetation and have limited to no mobility through them, posing a wildfire hazard. Impacts entail bulldozing to clear these perimeters of all trees and other woody vegetation, both above and below ground and new fence construction including utilization of metal t-posts and the use of an auger to drill into the ground to set metal corner posts and concrete bracing. As part of the proposed perimeter fence reconstruction, the USFS has contracted with TRC Environmental Consultants (TRC) to perform an inventory of cultural resources within three proposed Grasslands units (Units 48, 62, and 63) which includes background and historic research, archeological field survey, site delineation, a determination of the condition of recorded cultural resources, and recommendation of eligibility for listing on the National Register of Historic Places (NRHP), as amended (U.S. Code 16, §470, et seq.).

The Area of Potential Effects (APE) consists of the entirety of three Grasslands unit locations where proposed perimeter fence reconstruction will occur. The three Grasslands units include Unit 48, Unit 62, and Unit 63. Grasslands Unit 48 has an approximate perimeter measurement of 5,272 meters (m) [17,297 feet (ft)] and spans approximately 190 acres (ac). Unit 62 has an approximate perimeter measurement of 1,811 m [5,942 ft] and spans approximately 49 ac. Unit 63 has an approximate perimeter measurement of 4,035 m [13,238 ft] and spans approximately 160 ac. The total APE for the three Grasslands units is 399 ac (**Figure 1-1** and **Figure 1-2**). Though impacts from fencing and fireline constructing will likely be limited to a 40-foot corridor around each unit; archeological survey covered the entirety of each Grasslands unit to evaluate and record any cultural resources located within the three boundaries.

Fieldwork was conducted from October 31– November 08 and December 04 – 06, 2019. The field effort consisted of pedestrian survey supplemented with shovel testing of the APE. Minimally, TRC excavated shovel tests within each of the Grasslands units at 30 m transect spacing with shovel test intervals no greater than 150 m. In certain instances, this number was increased during site recording to gather additional data on deposition. Hence, a total of 412 shovel tests were excavated during the archeological survey. Of these tests, 405 were negative for cultural materials. In addition to these tests 65 points were recorded as “No Dig” locations due to ground disturbance, slope or other impediment. Seven shovel tests were positive for cultural materials. A total of three new archeological sites were recorded during the current investigations and the site boundaries to previously recorded site 41WS105 (forest service number: 08130800055) was extended approximately 124 m to the northwest. As shovel testing at two of the new sites, 41WS160 (08130800526) and 41WS161 (08130800527) , noted no buried cultural deposits and historic cultural materials were observable on the ground surface, these boundaries were established by the mapping of the horizontal distribution of artifacts along the ground surface. Extended boundary to 41WS105 and delineation of 41WS159 (08130800525) were based on both the distribution of positive shovel tests and the horizontal distribution of artifacts on the ground surface. This report presents the findings of the cultural resource investigations.

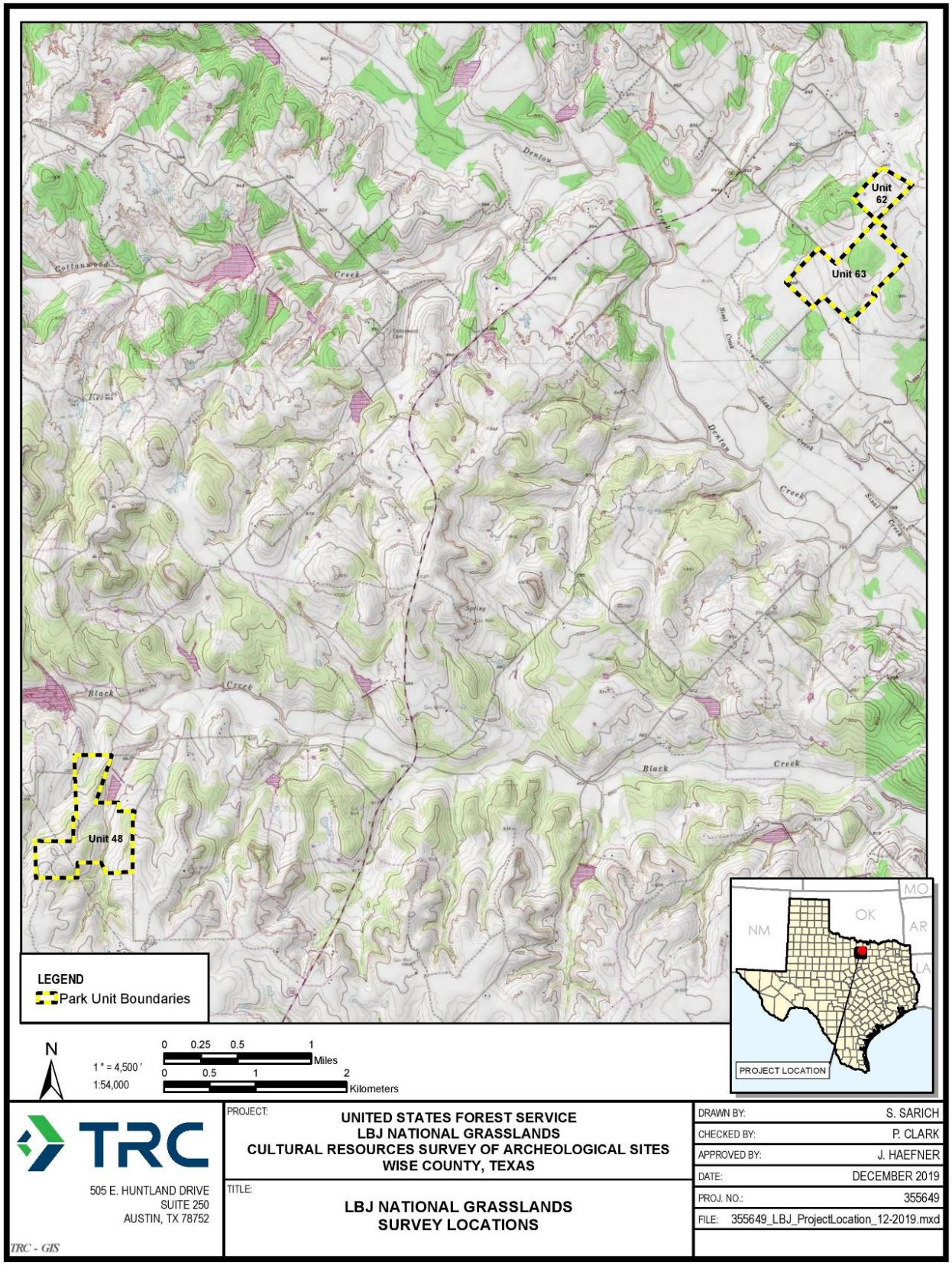


Figure 1-1 Topographic map of APE.

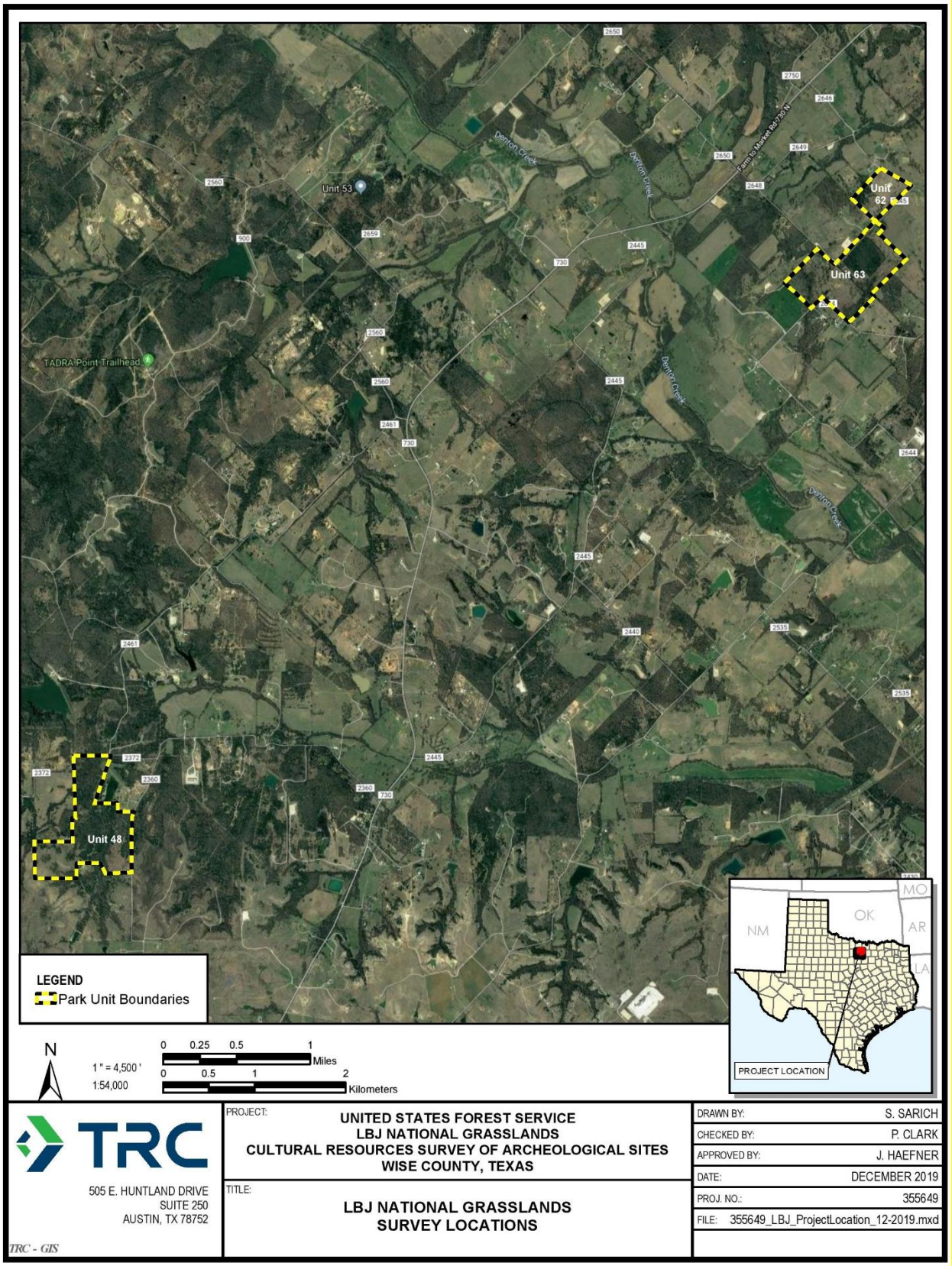


Figure 1-2 Aerial map of APE.

This page intentionally left blank

2.0 PHYSIOGRAPHIC AND ENVIRONMENTAL CONTEXT

Physiography

The project area lies within the Oak woods and Prairies physiographic region of Texas, near its interface with the Blackland Prairies to the east (**Figure 2-1**). To the west, the Cross Timbers and Prairies are bordered by the Rolling Plains. The Oak woods and Prairies region can be further subdivided into four ecological or vegetative sub-regions: the West Cross Timbers, Fort Worth Prairie, Lampasas Cut Plain, and the East Cross Timbers. dominate geologic units of the Cross Timbers and Prairies were formed during the Paleozoic (approximately 30 percent) and Mesozoic eras (70 percent) and the resulting topography is characterized by gently rolling uplands dissected by ephemeral and deeply cut streams.

Flora and Fauna

The proposed project lies within the Cross Timbers and Prairies Ecological Area of Texas (Gould 1960) and in the Texan Biotic Province (Blair 1950). The Cross Timbers and Prairies Ecological Area is a transitional area between the Great Plains of the central United States and the forested low mountains and hills of eastern Oklahoma and Texas. The region is a mosaic of forest, woodland, savanna, and prairie. The physiognomy of the Cross Timbers is oak wood and tallgrass prairie. Dominant woody species include post oak (*Quercus stellata*), blackjack oak (*Quercus marilandica*), eastern red cedar (*Juniperus virginiana*), bumelia (*Bumelia lanuginosa*), and greenbrier (*Smilax bona-nox*). Forbs of the region include bluebonnets (*Lupinus texensis*), Engelmann daisy (*Engelmannia pinnatifida*), and Maximillian sunflower (*Helianthus maximilliani*). Tall and midgrasses are dominant and include such species as big bluestem (*Andropogon gerardii*), little bluestem (*Schizachyrium scoparium*), indiangrass (*Sorghastrum nutans*), and sideoats grama (*Bouteloua curtipendula*). This region is not well suited for cropland and is mostly used for rangeland and pastureland. Oil production is also a major activity in this region (Gould et al. 1960).

Mammal species typical of the Texan Biotic Province include Virginia Opossum (*Didelphis virginiana*), Eastern Mole (*Scalopus aquaticus*), Fox Squirrel (*Sciurus niger*), Fulvous Harvest Mouse (*Reithrodontomys fulvescens*), Hispid Cotton Rat (*Sigmodon hispidus*), Deer Mouse (*Peromyscus maniculatus*), Eastern Cottontail (*Sylvilagus floridanus*), Swamp Rabbit (*Sylvilagus aquaticus*), and Black-tailed Jackrabbit (*Lepus californicus*). Reptiles of the province include Ornate Box Turtle (*Terrapene ornata*), Eastern Box Turtle (*Terrapene carolina*), Green Anole (*Anolis carolinensis*), Fence Lizard (*Sceloporus undulatus*), Eastern Racer (*Coluber constrictor*), Coachwhip (*Masticophus flagellum*), Eastern Rat Snake (*Elaphe obsoleta*), Common Kingsnake (*Lampropeltis getula*), Cottonmouth (*Agkistrodon piscivorus*), and Western Diamondback Rattlesnake (*Crotalus atrox*). Typical anuran species include Hurter's Spadefoot Toad (*Scaphiopus hurterii*), Gulf Coast Toad (*Bufo valliceps*), Woodhouse's Toad (*Bufo woodhousii*), Northern Cricket Frog (*Acris crepitans*), Strecker's Chorus Frog (*Pseudacris streckeri*), Gray Treefrog (*Hyla versicolor*), Green Treefrog (*Hyla cinerea*), Bullfrog (*Rana catesbiana*), and Rio Grande Leopard Frog (*Rana berlandieri*) (Blair 1950).

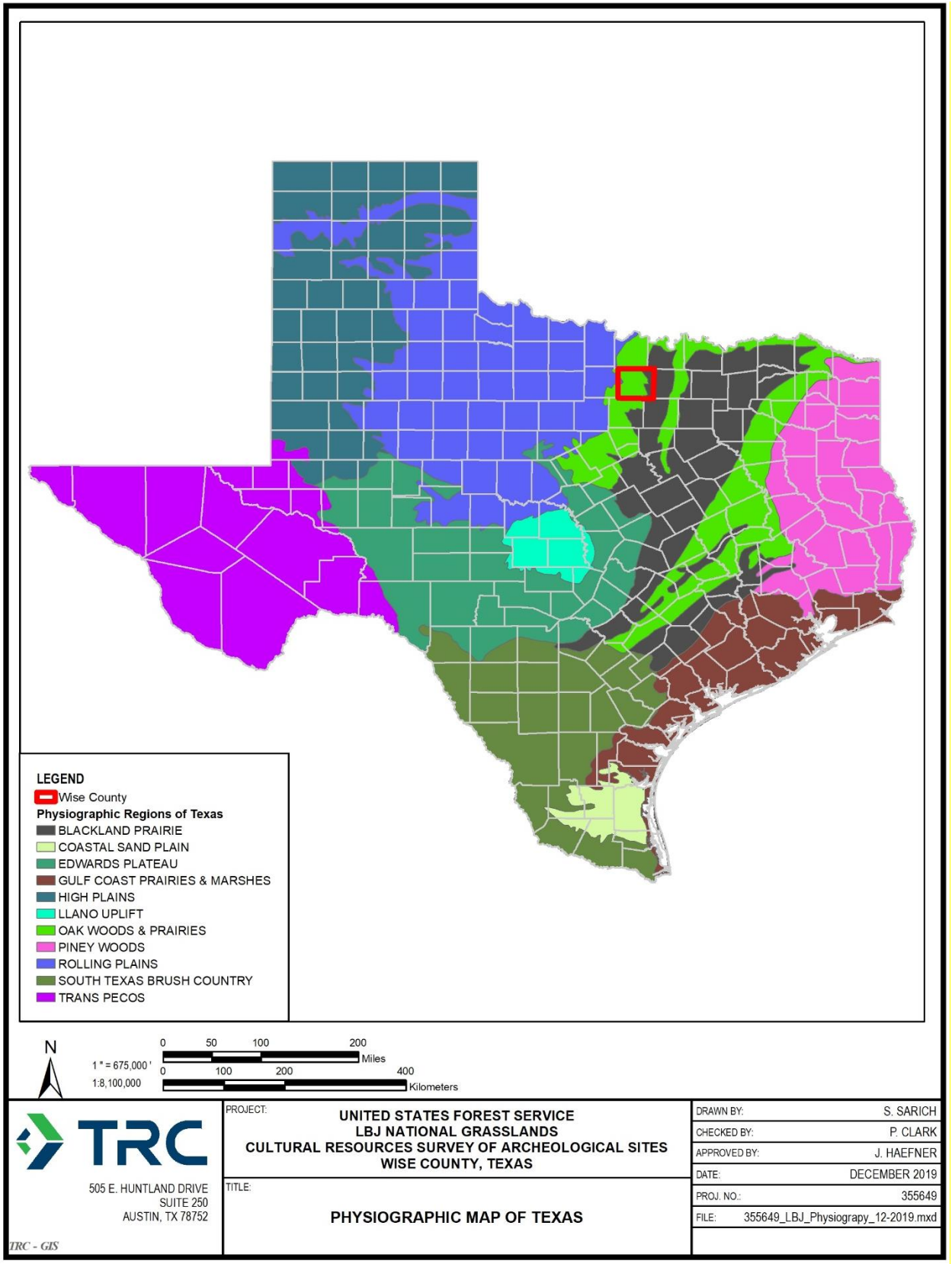


Figure 2-1 Project Location within the Oak Woods & Prairies Physiographic Region of Texas.

The underlying geology of Units 62, 63, and the majority of Unit 48 consists of Early Cretaceous Antlers Sand (Ka). The 1991 Geologic Atlas of Texas, Sherman Sheet notes that Antlers Sand is commonly found in the eastern part of the Trans-Pecos and High Plains and consists of sand, clay, and conglomerate. Lower and upper parts are mostly sand, the middle part chiefly clay, and grades northward to interbedded sand and clay. Sand is typically fine to coarse grained, conglomeratic in the lower parts, clayey in the upper parts. Conglomerate is mixed with chert, quartz, and quartzite as pebbles and granules. The thickness of Antlers Sand ranges between 500—650 ft. Sandstone, claystone, and conglomerate ranges in thickness as much as 200 ft, but is variable because of the irregular surface on which it was deposited. The underlying geology of the southern portion of Unit 48 also consists of Early Cretaceous Goodland Limestone and Walnut Clay, undivided (Kgw). According to the Geologic Atlas the formation is predominantly fine-grained Goodland Limestone which becomes more nodular toward the base. The formation grades downward to Walnut Clay, interbedded coquinite, and dark-gray, marly shale. The thickness of Goodland Limestone and Walnut Clay, undivided in Texas ranges from 13—20 ft. **(Figure 2-2)**.

According to the U.S. Department of Agriculture (USDA) Web Soil Survey (2015), the soils present within Unit 48 consist of Brackett-Aledo complex with 5 to 10 percent slopes (ByE), Duffau loamy fine sand with 1 to 5 percent slopes (DfC), Frio silty clay loam, occasionally flooded (Fr), Keeter very fine sandy loam with 1 to 6 percent slopes (KtC), Keeter very fine sandy loam with 2 to 6 percent slopes, severely eroded (KtC3), Patilo-Heaton fine sands with 3 to 12 percent slopes (PhC), Pulexas soils, frequently flooded (Pu), Somervell-Aledo complex with 1 to 8 percent slopes (SoC), Venus loam with 3 to 8 percent slopes (VeC), Water (W), Duffau-Windthorst complex with 1 to 5 percent slopes, moderately eroded (WeC), Weatherford-Duffau complex with 2 to 8 percent slopes, severely eroded (WeC3), and Duffau-Weatherford complex with 3 to 8 percent slopes (WeD) (**Figure 2-3**).

The soils present within Unit 62 consist of Bastsil fine sandy loam with 0 to 3 percent slopes (BfB), Duffau loamy fine sand with 1 to 5 percent slopes (DfC), Keeter very fine sandy loam with 1 to 6 percent slopes (KtC), Somervell-Aledo complex with 1 to 8 percent slopes (SoC), Speck clay loam with 0 to 2 percent slopes (SpB), Venus loam with 3 to 8 percent slopes (VeC), and Weatherford-Duffau complex with 2 to 8 percent slopes, severely eroded (WeC3).

The soils present within Unit 63 consist of Bastsil loamy fine sand with 0 to 3 percent slopes (BdB), Bastsil fine sandy loam with 0 to 3 percent slopes (BfB), Duffau loamy fine sand with 1 to 5 percent slopes (DfC), Hassee fine sandy loam with 0 to 2 percent slopes (HaB), Keeter very fine sandy loam with 1 to 6 percent slopes (KtC), and Weatherford-Duffau complex with 2 to 8 percent slopes, severely eroded (WeC3) **(Figure 2-4)**.

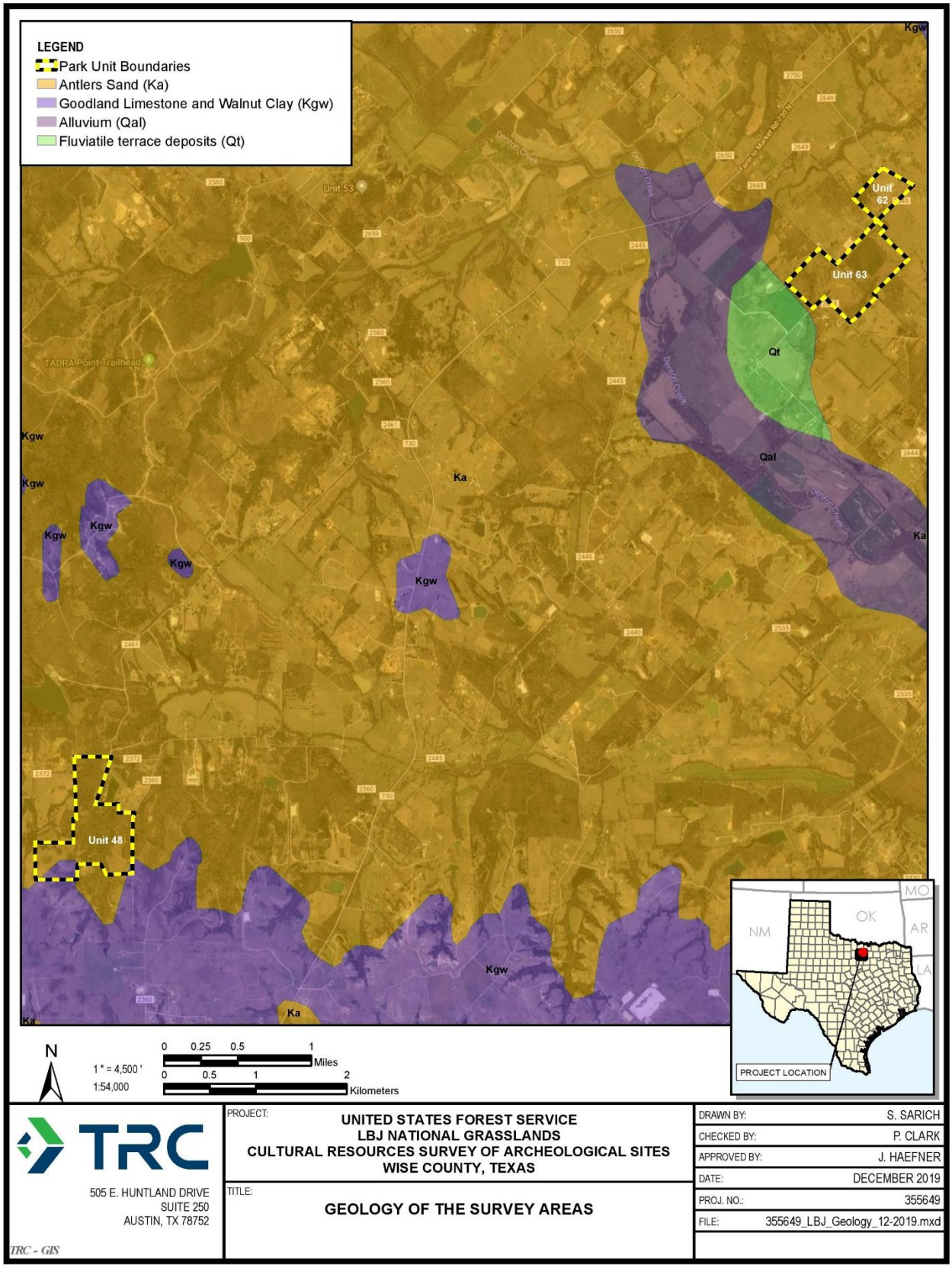


Figure 2-2 Underlying geology within and adjacent to the LBJ Grasslands APE.

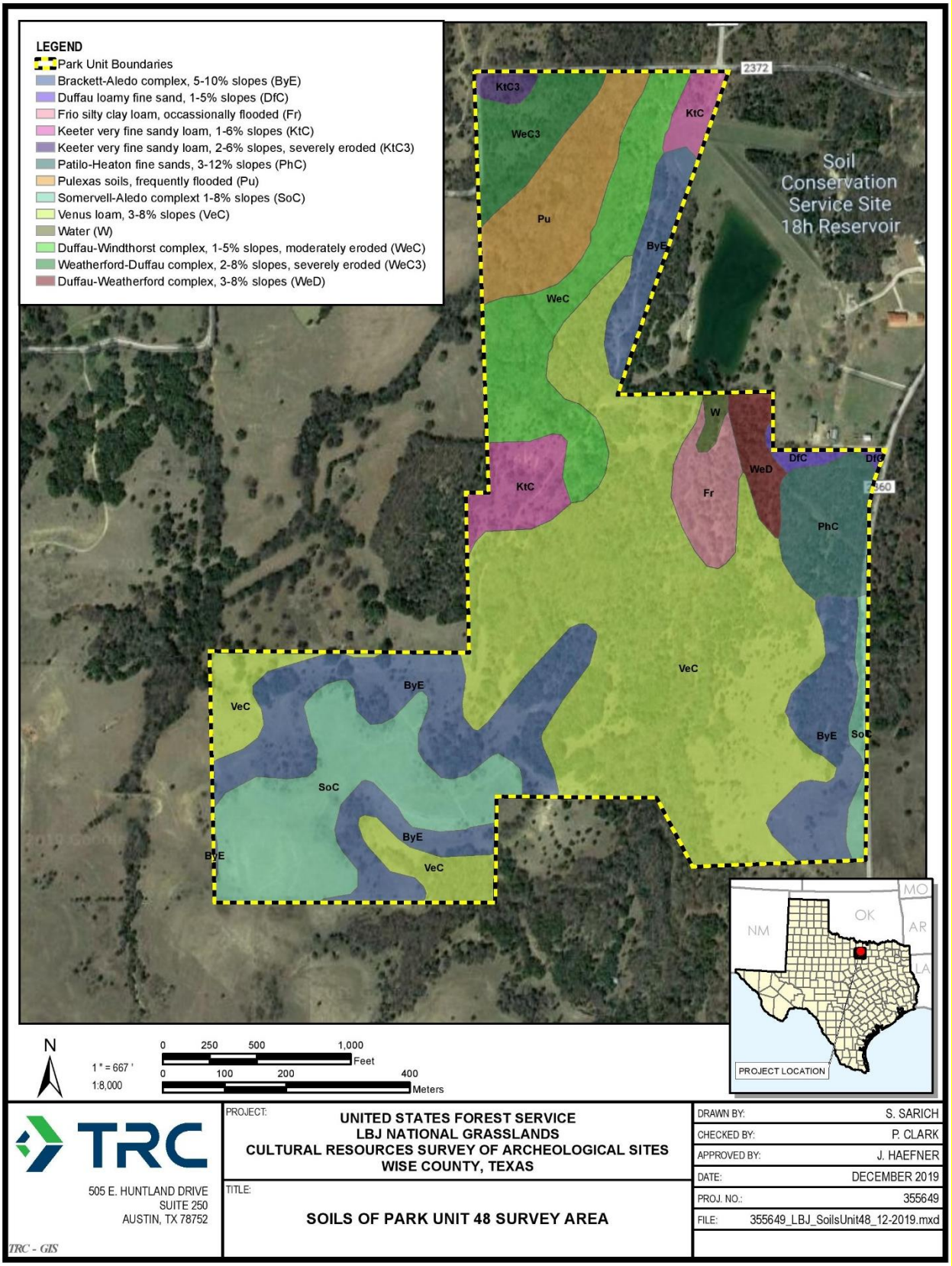


Figure 2-3 Soils within LBJ Grasslands Unit 48 APE.

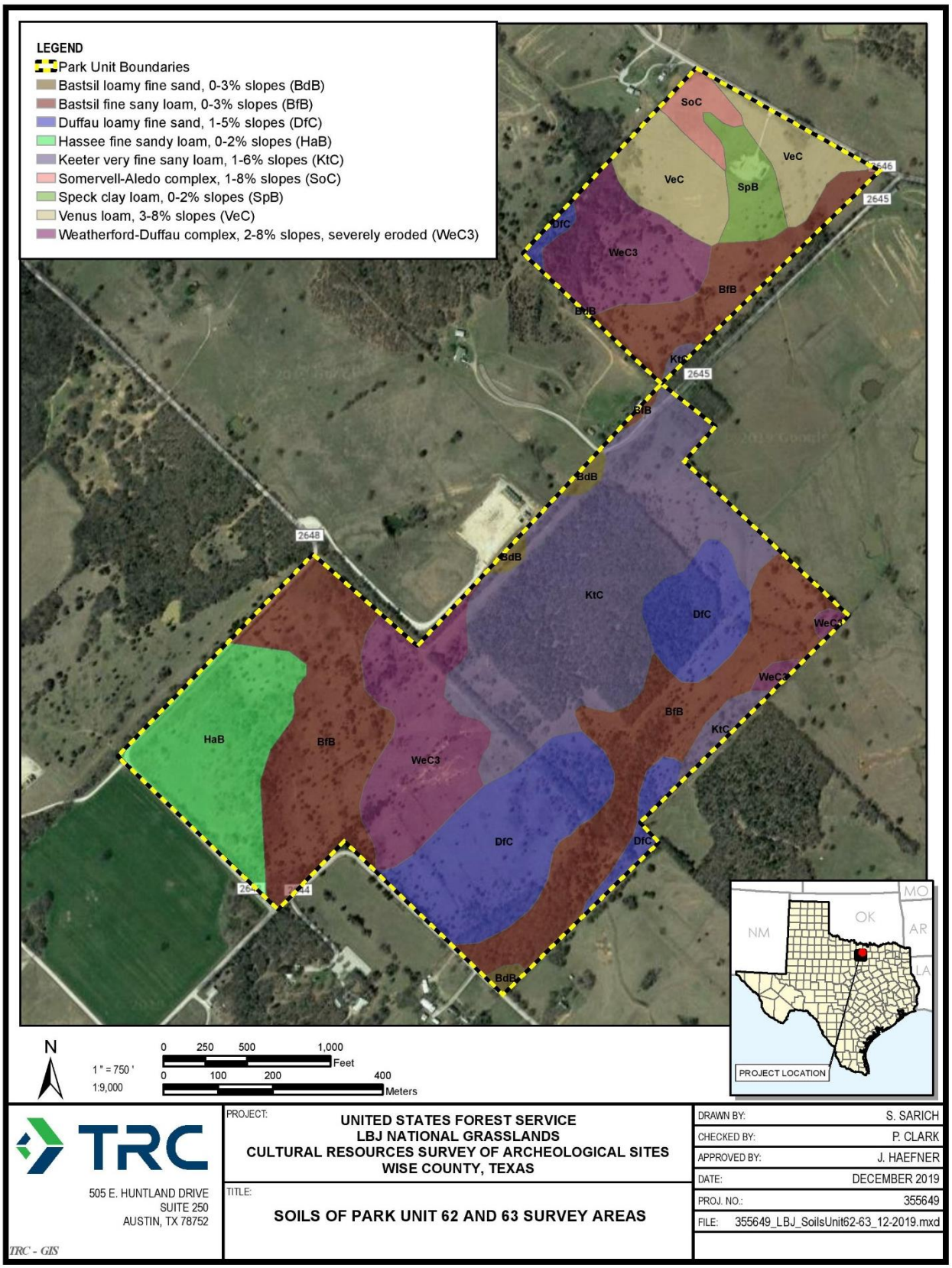


Figure 2-4 Soils within LBJ Grasslands Unit 62 and Unit 63 APE.

This page intentionally left blank.

3.0 CULTURE HISTORY

Cultural Background

The project area lies within the northeastern reach of the North-Central Texas culture area as defined by Suhm et al. (1962). Other scholars who have contributed to this region's chronological framework include Krieger (1946); Prewitt (1981); Prikryl 1990; and Vehik (1994). Generally, the cultural chronology of the area follows that proposed by Prikryl (1990): Paleoindian (pre 8500 before present), Early Archaic (8500–6000 B.P.), Middle Archaic (6000–3500 B.P.), Late Archaic (3500–1250 B.P.), Late Prehistoric I (1250–750 B.P.), and Late Prehistoric II (750–250 B.P.).

Paleoindian (ca. 11000–8500 BP)

While there is considerable evidence for a Paleoindian presence in the North-Central Texas area, most of this evidence comes in the form of mixed artifact assemblages and finds in surface contexts, limiting the information that can be extracted for this time period (Meltzer 1987). Early Paleoindian Clovis and Plainview points are reported with good frequency from Eastern Cross Timbers region northwest of Dallas, patterning in proximity to Denton and Clear creeks (Peter and Harrison 2011:21)

The oldest dated site within the North-Central Texas region, with a highly suspect age of 37 B.P., is the Lewisville Site. While claims that the site's many hearth features were excavated in situ may be accurate, critiques cite lack of diagnostic artifacts (n=1) and erroneous radiocarbon dating due to lignite contamination as valid reasons to question claims to the site's antiquity (Stanford 1981). Investigations at the Aubrey Clovis Site (Ferring 1989a, 1989b, 1990, 1995), located north of Lake Lewisville west of Elm Fork, has contributed a significant amount to what is known of regional Clovis occupations. The site is approximately seven to eight meters below the top of the Elm Fork floodplain. While the Lewisville Site assemblage consisted of more than a handful of artifacts, recovered tool and debitage samples at Aubrey number over 10,000 (Ferring 1989a). All of the lithic materials at the Aubrey Site are non-local and indicative of long-distance trade and analysis of this assemblage indicates that a curated technological organization coupled with intensive tool utilization was practiced (Ferring 1989a, 1989b). Faunal analysis suggests that there was variable exploitation of small, medium and large game including bison, deer, rabbit, squirrel, fish and turtle. Additionally, mammoth remains have been unearthed at Aubrey, although it is not clear if these animals are associated with subsistence practices. With deposits approaching eight meters below ground surface, this site is an indicator of the elusiveness of intact sites dating to this period.

Projectile points of Plainview and Dalton varieties occur with the most frequency (Prikryl 1990), and their association suggests that the area was a borderland where Plainview occupations from the Rolling and High Plains interfaced with the Dalton culture from areas located to the east (Johnson 1987). Due to mixed contexts, site dating has been done by cross referencing projectile points with same types from other, more controlled, sites. Cross dating of the Plainview and Dalton varieties date Paleoindian occupations to ca. 9.5–10 B.P. (Ferring and Yates 1997:5). Peter and Harrison (2011:21) note that these dates may correlate with the advent of early Holocene alluviation within the Trinity River Valley area.

Early Archaic (ca. 8500–6000 B.P.)

The vast majority of Early Archaic sites in the region are surface sites recorded in the Trinity River Basin and are recognized by the presence of Angostura, Early Split Stemmed, and Kirk projectile points, as well as, Clear Fork gouges (Byers 2007; Story 1990). In situ sites currently on record are limited to Lake Lewisville, which has an Early Archaic component as well as Paleoindian and Middle Archaic components (Ferring and Yates 1997). Early Archaic components have been recovered during excavations at the Aubrey Clovis Site; Ferring (1989a), however, has questioned their context.

With little in the way of isolatable sites in the region, Early Archaic lifeways are hard to define for North-Central Texas. Generally, it is hypothesized that diffused hunting and gathering subsistence economies were practiced (Prikryl 1990; Ferring and Yates 1997). Small-sized and widely distributed sites indicate high mobility.

Middle Archaic (6,000–3,500 B.P.)

In comparison with the Early Archaic, there are far less recorded Middle Archaic components for the North-Central Texas region. The Calvert Site (41DN102) at Lake Ray Roberts is the only known buried in situ site that has a definitive association with the Middle Archaic period (Byers 2007). Associated with this site were a rock-filled hearth, a flexed burial of an adult male and an unmixed assemblage of fauna and artifacts. Projectile points associated regionally with the Middle Archaic are Bulverde, Frio, Trinity, Carrolton, Wells and the basal-notched Bell and Calf Creek types. These points are often used to date surface sites (Prikryl 1990; Story 1990). Prikryl (1990:71-74) notes that within the middle Elm Fork Trinity Valley there is a noticeable paucity in Middle Archaic sites when compared to other time periods. Prikryl (1990) attributes this to the altithermal, while Ferring and Yates (1997) note that in addition to dry climate and associated reduced occupation potential, existing sites may be deeply buried.

Late Archaic (3500–1250 B.P.)

In stark contrast to the Middle Archaic, sites dating to the Late Archaic are ―by far the most common in the archaeological record‖ for North-Central Texas (Ferring and Yates 1997: 6). Prikryl (1990) notes that regional surface collections contain between two to three times the amount of Late Archaic point types than points from other archeological periods. When compared to the Middle Archaic, the ratio increases to just over 60:1 (Prikryl 1990: 52-53).

While Ferring and Yates (1997) note that regional buried Late Archaic sites are generally shallow and easily detected, they offer that this alone cannot account for their numbers in the archeological record and posit an increase in population density. Story (1981) offers that this population increase is the result of a shift in exploitation strategies, reduced mobility and a climate shift back to more mesic conditions.

Late Prehistoric I (1250–750 B.P)

During the Late Prehistoric I period, new technologies included the bow and the arrow and ceramics. The intermittent introduction of these technologies suggests a gradual, non-abrupt transition from the Archaic to the Late Prehistoric. Prikryl (1990) notes that characteristic projectile points such as Scallorn, Steiner, and Catahoula varieties were more commonly fashioned from quartzite during the early stages of the Late

Prehistoric I. During the latter half of the Late Prehistoric I, there is an increase in the use of chert as a raw material for these point types. A brief xeric episode is posited for approximately 1000 B.P., and differing sources for these projectile points may be tied to adaptive strategies as climate stress either tethered groups to certain resource locales and/or necessitated broader ranging residential movement. Dating to the end of the Late Prehistoric I (1050 B.P–750 B.P), numerous graves were unearthed in Young County at the Harrell Site in periods of Plains Villager occupation at the site, about A.D. 1200– 1500. From the arrangements of the individual interments and the discovery of arrow points among the bones, these mass graves have been interpreted as the result of violent events—perhaps raids from enemies competing for increasingly scarce resources such as fertile, well-watered farmland. Coupled with similar evidence of violence from sites across the Southern Plains, the Late Archaic in North-Central Texas appears to be a turbulent time. Typically, sites dating to the Late Prehistoric I period are located within floodplains and adjacent terraces.

Late Prehistoric II (750–250 B.P.)

The xeric conditions proposed for the Late Prehistoric I may have continued into the Late Prehistoric II period, which catalyzed a shift to a short grass prairie environment (Prikryl 1990). These grasslands may have brought back bison to the region in greater numbers. While other areas of Texas seemed to practice a mobile lifestyle possibly centered on the exploitation of the bison, North-Central Texas was also influenced by more settled cultures to the north and east. Diagnostic projectile points for this time period include Fresno, Perdiz, Maud, Washita, and Harrell. Other artifacts commonly found in assemblages dating to this period are Nocona Plain ceramics and horticultural tools fashioned from bison scapulas. Prikryl (1990) notes that chert continues to be the favored source material for lithic tools. Sites from terrace locales continue to dominate the archeological record, with the bulk of them occurring near or within the Oak woods and Prairies/Blackland Prairie ecotone.

Historic Period

According to Conner (1959) the area of modern-day Wise County was originally included in the Peters Colony Grant given to a Louisville, Kentucky Company by the Republic of Texas between 1841 and 1843 with immigration to the area hailing from the upper south and the north (Meining 1969). With the area of Wise County occupying the “frontier” and still heavily trafficked by tribes, permanent Anglo settlement did not begin until 1853 with Sam Woody’s homesteading approximately three miles north of the present location of the town of Aurora. In 1856, Wise County proper was organized from the larger boundary of Cooke County with the county seat county seat named Taylorsville in honor of General Zachary Taylor. The town was laid out by Absalom Bishop, an early settler in the region. Bishop, a member of the Texas Legislature, did not approve of Taylor's affiliation with the Whig Party, changed the name of the town to Decatur for Commodore Stephen Decatur. Over the next half-decade, the population continued to grow, burgeoned by the Butterfield Stage route which originally passed through Alvord, located within the LBJ National Grassland, before it was relocated through Decatur.

The late 1860s saw the establishment of four stores and a hotel in Decatur, which served as a supplier and market for local ranchers (Barton 2020). The eastern fork of the Chisholm Trail passed near Decatur in this period and is commemorated today by the town's annual event, the Chisholm Trail Barbeque. In 1882 the Fort Worth and Denver Railway reached Decatur, and the gambler's catch phrase "eighter from Decatur" was coined, according to local tradition, by a railway construction worker wanting to roll eights during a

game of craps. During the 1880s and 1890s, Decatur prospered as a shipping point and market for local farmers. This prosperity was reflected in the establishment of Decatur Baptist College in 1892, the building of a new courthouse in 1896, and a population that grew from only 579 in 1880 to as much as 1,746 by 1890. The town of Decatur continued to grow in the early 20th century, from a population of 1,562 in 1904 to a peak of 3,200 in 1928.

Within the area that is now the LBJ National Grasslands, early settlements included Audubon and Flatrock with stock grazing along the prairies being the primary occupation early on. Following the establishment of the railroad through the region, cash crop farming also became a productive industrye (Jurney et al. 1989). The Grasslands were originally managed by the Rural Resettlement Administration and, later, by the United States Soil Conservation Service with the goal of returning eroded land to its natural state, until the early 1950s when ownership and management of its resources were transferred to the USFS.

4.0 PREVIOUS INVESTIGATIONS

According to the Texas Historical Commission (THC) Historic and Archeological Sites Atlas (Sites Atlas), one previously recorded site and one previous survey are within the boundary of Unit 48. Site 41WS105/ 08130800055 is a prehistoric site of unknown temporal affiliation recorded in 2010 by Dixie Environmental Services Co., LP for a 3-D Seismic Survey. The site is defined as a light density prehistoric scatter without enough information to determine eligibility of the site (THC 2019).

Only one previous archeological project has been conducted within the boundary of Unit 48 that was completed in 2010 by Brazos Valley Research Associates (THC 2019). This project is listed as a 3-D seismic survey on behalf of Devon Energy Corporation. According to the Sites Atlas, it is noted as a partial survey and covers the entire extent of Unit 48.

No previously-recorded sites or previous archeological projects are recorded within or adjacent to Units 62 and 63. Additionally, no cemeteries, properties currently listed or eligible for listing in the National Register of Historic Places (NRHP), State Antiquities Landmarks (SALs), or historical markers are within or adjacent to the any of the Grasslands units (THC 2019) **(Appendix D)**.

5.0 FIELD METHODS

The goals of the cultural resources survey were as follows:

- Determine if cultural materials are present within the APE through pedestrian survey and shovel testing of the APE;
- If archeological deposits are present within the APE, determine their spatial extent;
- If archeological deposits are present within the APE, attempt to determine the general cultural affiliation/age of these deposits;
- Document any historic standing structures within the APE

Fieldwork was conducted by TRC archeologists Josh Haefner, Steven Sarich, Benjamin Johnson and Hicks & Company archeologists Gregg Cestaro and Haley Wilkerson from October 31 – November 8 and December 4 – 6, 2019 and followed the guidelines and survey standards set forth by the USFS, Council of Texas Archeologists (CTA), and the THC as coordinated with the USFS through a proposed archeological survey methodology and research design. The Area of Potential Effects (APE) consists of the entirety of three Grasslands unit locations where proposed perimeter fence reconstruction will occur. The three Grasslands units include Unit 48, Unit 62, and Unit 63. Grasslands Unit 48 has an approximate perimeter measurement of 5,272 meters m [17,297 ft] and spans approximately 190 ac. Unit 62 has an approximate perimeter measurement of 1,811 m [5,942 ft] and spans approximately 49 ac. Unit 63 has an approximate perimeter measurement of 4,035 m [13,238 ft] and spans approximately 160 ac. The total APE for the three Grasslands units is 399 ac. Though impacts from fencing and fireline constructing will likely be limited to a 40-foot corridor around each unit, shovel testing and pedestrian survey covered the entirety of each Grasslands unit to evaluate and record any cultural resources located within their boundaries.

The field effort consisted of pedestrian survey supplemented with shovel testing of the APE. Minimally, TRC excavated shovel tests within each of the Grasslands units at 30 m transect spacing with shovel test intervals no greater than 150 m. In certain instances, this number was increased during site recording to gather additional data on deposition. Shovel tests were approximately 30-to 40-centimeter (cm) (11.8-inch) in diameter, and excavated to at least 80 centimeters in depth, the base of Holocene deposits, or impenetrable bedrock whichever was encountered first. Vertical control was maintained for each shovel test in arbitrary 10 cm levels. Excavated soils were screened through ¼-inch (6.25- millimeter [mm]) hardware mesh to ensure consistent artifact recovery. Standardized field notes were maintained for each shovel test describing location, soil depth, color, texture, stratigraphy, as well as the types of artifacts recovered. The location and results of all shovel tests were recorded on electronic forms created by TRC with Fulcrum, a mobile form builder and data collection program.

A total of 412 shovel tests were excavated during the archeological survey. Of these tests, 404 were negative for cultural materials. In addition to these tests, 65 points were recorded as "No Dig" locations due to ground disturbance, slope, or other impediment. Six shovel tests were positive for cultural materials. A total of three new archeological sites were recorded during the current investigations and the site boundary to previously recorded site 41WS105 was extended approximately 124 m northwest. As shovel testing at two of the new sites, 41WS160 and 41WS161, noted no buried cultural deposits and historic cultural materials were observable solely on the ground surface, these site boundaries were established by the mapping of the

horizontal distribution of artifacts along the ground surface. However, the extended boundary to site 41WS105 and delineation of site 41WS159 were based on both the distribution of positive shovel tests and the horizontal distribution of artifacts on the ground surface.

Representative project overview photographs, site photographs, and in situ artifact and feature photographs were taken throughout the project. An artifact collection policy, as coordinated with the USFS, was followed for cultural materials identified during the survey. No standing structures over 45 years of age were observed within the APE. The final report, field notes, photographs, shapefiles, and associated paper and electronic records will be housed at the TRC office in Austin, Texas. Collected artifacts and the associated report and materials will be curated at the Center for Archaeological Studies in San Marcos, Texas.

6.0 RESULTS

As noted above, the APE was determined in coordination with the USFS consisted of three Grasslands units within the LBJ National Grassland, totaling 399 ac in size. TRC archeologists performed a pedestrian survey and shovel testing within each Grasslands unit from October 31 – November 8 and December 4 – 6, 2019. Observed disturbances within the three Grasslands units was minimal, with some noted areas of erosion and clear-cut corridors particularly around the Grasslands unit boundaries along the existing fence lines. With the exception of a small number of underground pipeline corridors, the sporadic use and maintenance of two-track roads, and fencing, and the use of the land for federal public hunting, the three Grasslands units are largely devoid of landform modification. Vegetation of the APE was typical of Wise County and Cross Timbers ecology, as well as a substantial amount of secondary growth including green briar. The northern portion of Unit 48 consists of floodplain hardwood forest and post oak woodland giving way to hardwood motte and woodland and dominated by savanna grassland to the south. Vegetation of Unit 62 consists primarily of savanna grassland with hardwood motte and woodland with scattered areas of erosion, and large area of post oak woodland to the southwest. Unit 63 consists of post oak woodland centered to the northeast surrounded by savanna grassland. Some riparian herbaceous vegetation and riparian hardwood forest is present in linear bands to the southwest. **(Figures 6-1 – 6-3)**.

Ground surface visibility was poor, less than five percent in most places apart from sporadic areas of heavy erosion, and occasionally rising between approximately 10 to 30 percent in areas of savanna grassland. Soils within Unit 48 generally consisted of sandy loam (10YR 3/2) or sandy clay loam soils (7.5YR 5/2) from 0 to 30 centimeters below ground surface (cmbs) followed by clay B-horizon soils (5YR 6/4), and sandy clay soil (5YR 4.3) from 0 to 20 cmbs over a shallow bedrock layer in the southwest portion of the Grasslands unit. Deep sand (7.5YR 6/4) was noted in and around 41WS105 and typically went from 80 to 100 cmbs. Soils within Unit 62 generally consisted of silty clay loam (7.5YR 3/3) or clay loam (10YR 5/4) from 0 to 20 cmbs followed by shallow, reddish brown clay B-horizon soils (2.5YR 2.5/4). Shovel test depth was limited on several occasions due to heavily compacted soils. Soils within the savanna grassland portions of Unit 63 generally consisted of clay loam (10YR 3/6) from 0 to 30 cmbs with underlying red clay B-horizon soils (2.5YR 4/6). Soils within the wooded section of Unit 63 generally consisted of sandy loam (10YR 4/4) from 0 to 30 cmbs with underlying reddish-brown sandy clay (5YR 4/4) or red clay (2.5YR 4/8) B-horizon soils. Complete shovel test data is included as **Appendix B.**

Seven shovel tests were positive for cultural materials. A total of three new archeological sites were recorded during the current investigations and the site boundary to previously recorded site 41WS105 was extended approximately 124 m northwest. As shovel testing at two of the new sites, 41WS160 and 41WS161, noted no buried cultural deposits and historic cultural materials were observable on the ground surface, these boundaries were established by the mapping of the horizontal distribution of artifacts along the ground surface. Extended boundary to 41WS105 and delineation of 41WS159 were based on both the distribution of positive shovel tests and the horizontal distribution of artifacts on the ground surface. One isolated historic feature/structure, a galvanized steel windmill, was identified within Unit 63 along the southwest boundary near County Road (CR) 2648 (**Appendix D**).

Figure 6-1 Overview of vegetation at Unit 48, facing north.

Figure 6-2 Overview of vegetation at Unit 62, facing south.

Figure 6-3 Overview of vegetation at Unit 63, facing southeast.

Site 41WS105/08130800055 Extension

During the survey of Unit 48, previously recorded site 41WS105 was revisited to determine if additional cultural materials were present within or adjacent to the current site boundaries. The original site boundary is located on a slight ridge overlooking an unnamed tributary of Black Creek and measures approximately 6,420 square meters. 41WS105 was originally recorded during a seismic survey in 2010 on behalf of the Forest Service. The site was originally described as a light density prehistoric scatter on a slight finger ridge running roughly north-south and parallel to a tributary of Black Creek (Shaddox and Hall 2010). It is situated on the western edge of the ridge top and continues down the western slope towards the drainage. At that time, the only artifacts found at this site are described by the analyst as debitage, and very little could be said with no temporally or functionally diagnostic artifacts recorded and an absence of observed features. During the current survey, the site was revisited, and additional materials were found northwest and adjacent to the previously recorded site **(Appendix D)**. The extension is located northwest of the previously recorded boundary with additional materials found in a clear-cut corridor with mixed hardwood forest on either side **(Figure 6-4)**. Heavy slopes are present along the western boundary. The geology consists of Early Cretaceous Antlers Sand. The 1967 Geologic Atlas of Texas, Sherman Sheet notes that Antlers Sand is commonly found in Eastern part of Trans-Pecos and High Plains and consists of sand, clay, and conglomerate. The lower and upper parts are mostly sand, the middle part chiefly clay, and grades northward to interbedded sand and clay. Sand is fine to coarse grained, conglomeratic in lower part, clayey in upper part, and brownish-yellow. Conglomerate, chert, quartz, and quartzite are found as pebbles and granules. Thickness can be as much as 200 ft but is variable because of the irregular surface on which it was deposited. Soils in the area were found to be consistent with the USDA Web Soil Survey (2015) which classifies the soils as Patilo-Heaton fine sands with 3 to 12 percent slopes. These soils are characteristically very deep and located on gently sloping to strongly sloping uplands (USDA 1989). The typical soil profile documented during shovel testing consisted of dark brown sandy loam (10YR 4/2) from 0 to 20 cmbs overlying brown sand or sandy loam (10YR 5/3) from 20 to 100 cmbs, though occasionally terminating in reddish brown sand (5YR 4/4) between 60 to 80 cmbs. The site extension was delineated using 10 m and 20 m radial shovel tests in cardinal directions until two consecutive negative shovel tests were recorded. A total of 19 shovel tests were excavated and only three were positive for cultural materials (177-SS, 52-JH, and 63-BJ) while 16 were negative (178-SS, 176-SS, 69-BJ, 183-SS, 68-BJ, 67-BJ, 60-BJ, 61-BJ, 180-SS, 179-SS, 181-SS, 182-SS, 66-BJ, 65-BJ, 64-BJ, and 62-BJ). Subsequent to shovel testing, an approximate 10 m boundary was established based on the distribution of positive shovel tests, and a small number of surface artifacts extended the previously recorded site boundary an additional 124 m to the northwest along the clear-cut corridor. The extension measures 2,406 square-meters yielding a total revised site size of approximately 8,826 square meters. The site extension consists of nine pieces (n=9) of lithic debitage found subsurface with one large piece (n=1) of white chert debitage observed on the surface **(Figures 6-5 to 6-10)**. Subsurface lithic debitage was predominantly found between 20 to 40 cmbs, though two pieces were found between 60 to 70 cmbs. The small amount of material and the lack of diagnostic artifacts seems to support the previous description of the site as a limited activity area. Because the site extension is located in a modified clear-cut corridor and no diagnostic artifacts were discovered during the survey, site 41DM273 has very limited research value and does not currently meet any of the criteria necessary for consideration as eligible for listing on the NRHP.

Figure 6-4 Site 41WS105 overviews facing north, east, southwest, and west (left to right).

Figure 6-5 White chert debitage recorded on the surface of 41WS105 Extension.

Figure 6-6 Debitage recorded in shovel test 177 SS at 20-30 cmbs.

Figure 6-7 Two items of lithic debitage recorded in shovel test 177-SS at 30-40 cmbs.

Figure 6-8 Two items of debitage recorded in shovel test 177-SS at 60-70 cmbs.

Figure 6-9 Debitage recorded in shovel test 52-JH at 20-30 cmbs.

Figure 6-10 Debitage recorded in shovel test 63-BJ at 60-70 cmbs.

41WS159/08130800525

Site 41WS159 is an assemblage of historic cultural materials partially located within a mixed grass prairie setting with the eastern boundary of the site overlapping a small stand of mixed hardwood trees **(Appendix D)**. The northeast boundary overlaps a channelized drainage that parallels the gravel road that leads to a pump station. A gate and dirt path parallels the drainage running, northwest to southeast **(Figure 6-11)**. A transmission line corridor runs northeast to southwest and parallels CR 2648. The geology consists of Early Cretaceous Antlers Sand. The 1967 Geologic Atlas of Texas, Sherman Sheet notes that Antlers Sand is commonly found in Eastern part of Trans-Pecos and High Plains and consists of sand, clay, and conglomerate. The lower and upper parts are mostly sand, the middle part chiefly clay, and grades northward to interbedded sand and clay. Sand is fine to coarse grained, conglomeratic in lower part, clayey in upper part, and brownish-yellow. Conglomerate, chert, quartz, and quartzite are found as pebbles and granules. Thickness can be as much as 200 ft but is variable because of the irregular surface on which it was deposited. Topographically the area is uniformly flat. There was some evidence of push piles located in the wooded area perhaps related to the dirt road or channelized drainage. Subsoil consists of shallow, red clay typically found no deeper than 30 to 40 centimeters below surface. Measuring approximately 1,103 square meters in size, site 41WS159 is a small assemblage of historic artifacts found at surface and subsurface. The site was delineated using 10 m and 20 m cardinal radial shovel tests until two consecutive negative shovel tests could be established. Of the 20 recorded shovel tests only four were positive for historic cultural materials (101-SS, 99-SS, 72-SS, and 80-JH) while 12 were negative (181-JH, 56-JH, 191-SS, 70-BJ, 69-BJ, 75-BJ, 76-BJ, 72-BJ, 71-BJ, 73-BJ, 185-SS, 184-SS, and 100-SS), and three were recorded as 'No dig' tests due to their location in a drainage or in proximity to the transmission line pole (188-SS, 187-SS, 186-SS). The historic assemblage consists of one floral pattern, flow blue whiteware sherd (n=1), one undecorated whiteware sherd (n=1), one undecorated ironstone sherd (n=1), one stoneware sherd (n=1), one green glass shard (n=1), two milk glass shards (n=2), one colorless, molded glass shard (n=1), and sixteen colorless container glass shards likely from the same vessel (n=16). A total of 24 artifacts were found **(Figures 6-12 – 6-16)**. Some cut stone was found near the eastern boundary of the site toward the road and along the fence line **(Figure 6-17)**. Two cut stone pieces appear to be in sequence and measures approximately 20 inches [50.8 centimeters] in length. The stones are approximately 4 inches wide [10.2 centimeters]. Additional cut stones were nearby but scattered. According to the THC's Key to Historic Ceramics (2006) the floral pattern, flow blue sherd dates between 1835 and 1900. Additionally, ironstone ranges from the 1840s to the 1930s. According to the SHA Bottle Guide (2018), the milk glass shards likely date between 1870 and 1950. The colored glass shard appears to be citron green which dates to the last quarter of the 19th century. The colorless glass likely does not date prior to 1870, but is likely more recent than that (Toulouse 1969). Some modern trash left by hunters was found within the stand of trees. Push piles were also found within the stand of trees to the east, possibly associated with the channelized drainage or dirt roadway to the northeast. Archival research was conducted at the Wise County Clerk's office and the Wise County Heritage Museum to determine former occupation and to obtain any family history information regarding past property owners. According to an 1895 historic plat of Wise County, the land on which Unit 62 and 63 are located was part of the J.W. Crunk survey (Pressler 1895). A portion of this land was owned by J.G. Graves and conveyed to J. Fortenberry in 1886 (Wise County Clerk 1886). According to the Fortenberry family archives, the family moved to Texas from Arkansas in 1858 and, over time, built several homes around Greenwood and Slidell (Wise County Heritage Museum n.d.). After careful review of the Fortenberry family archives at the Wise County Heritage Museum, no definitive

account of a farmstead at the location of the artifact assemblage was found. However, according to additional deed research, J. Fortenberry conveyed the land to J.B. Howard on February 4, 1903 (Wise County Clerk 1903). According to family history records, John Barnett Howard and Lillie Caroline Chance moved to Texas at the turn of the century and purchased a farm two miles west of Greenwood (WCHSC 1982). This is the only written record of a farmstead located within the general vicinity of the artifact assemblage. The plot of land that J.B. Howard purchased was subsequently conveyed to J.T. Washburn in 1910 (Wise County Clerk 1910). James Thomas Washburn was born in 1868 and moved to Wise County around 1906 where he "farmed in the Greenwood community until Mrs. Washburn's death in 1931" (Wise County Messenger 1954). While this is a vague account, there is a good possibility that this is the same farm formerly owned by J.B. Howard. Noted impacts include natural erosion, as well as artificial impacts from the channelized drainage, dirt road, the installation of transmission line poles, and push piles located in the wooded area **(Figure 6-18)**. There is also anecdotal evidence from hunters in the area that a hunting interest group occasionally does trash clean up within the Grasslands units and may constitute an unintentional, artificial impact. Because of the small number of commonly found historic materials and several natural and artificial disturbances, site 41WS159 has very limited research value and does not meet any of the criteria necessary for consideration as eligible for listing on the NRHP.

Figure 6-11 Overviews of 41WS159, facing north, east, south, and west (left to right).

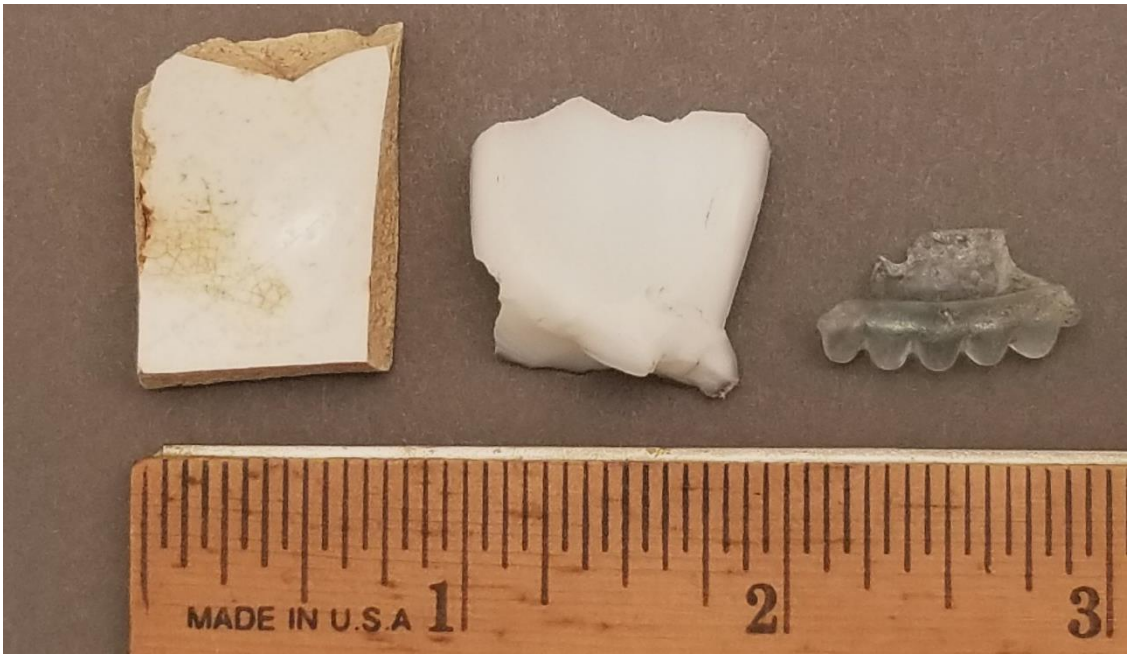


Figure 6-12 Ironstone, milk glass, and molded glass recorded in 72-SS at 0-10 cmbs.

Figure 6-13 Green glass recorded in 72-SS at 10-20 cmbs.

Figure 6-14 Transfer print sherd and plain whiteware sherd recorded in 72-SS at 20-30 cmbs.

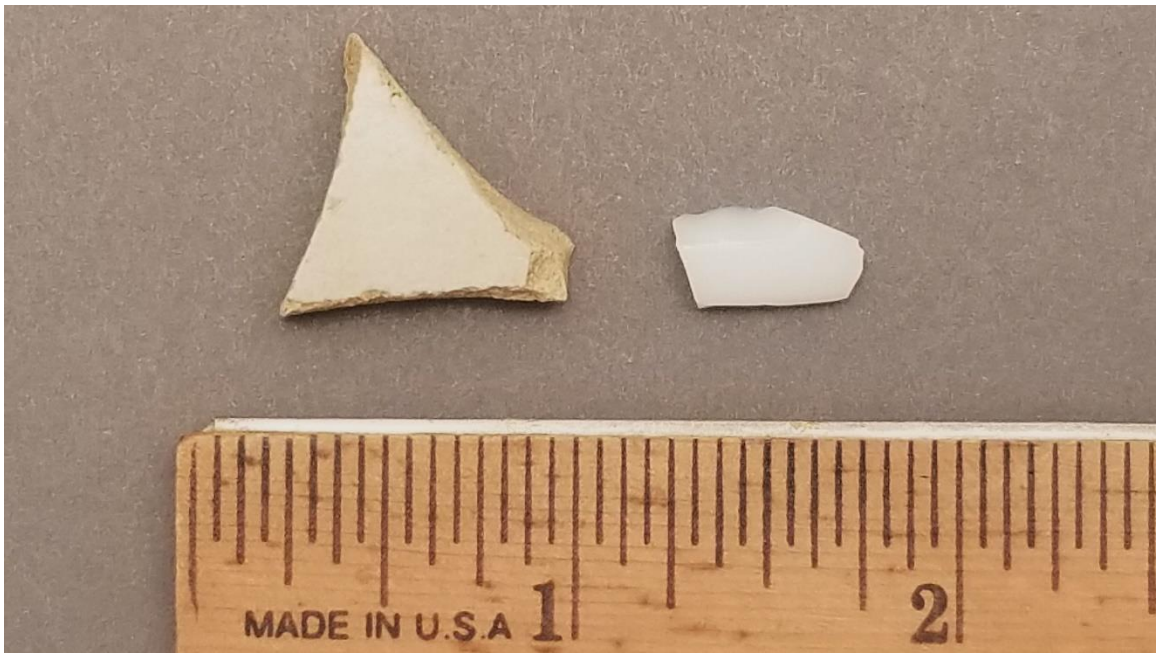


Figure 6-15 Undecorated stoneware sherd and milk glass recorded in 99-SS at 0-10 cmbs.

Figure 6-16 Container glass recorded in 101-SS at 0-10 cmbs.

Figure 6-17 Possible cut stone feature near road, facing northwest.

Figure 6-18 Push pile in sparse wooded area, facing southeast.

41WS160/08130800526

Site 41WS160 is a small assemblage of historic cans and unknown metal artifacts. The site is located at the base of a western facing, eroded, gravel slope within the tree line to the west of a two-track road in the northern half of Unit 48 **(Appendix D)**. It is situated in a relatively flat area in the mixed hardwood tree line. The geology consists of Early Cretaceous Antlers Sand. The 1967 Geologic Atlas of Texas, Sherman Sheet notes that Antlers Sand is commonly found in Eastern part of Trans-Pecos and High Plains and consists of sand, clay, and conglomerate. The lower and upper parts are mostly sand, middle part chiefly clay, and grades northward to interbedded sand and clay. Sand is fine to coarse grained, conglomeratic in lower part, clayey in upper part, and brownish-yellow. Conglomerate, chert, quartz, and quartzite are found as pebbles and granules. Thickness can be as much as 200 ft but is variable because of the irregular surface on which it was deposited. The site was discovered during systematic shovel testing of LBJ National Grasslands Unit 48. It consists of a concentration of sanitary cans, oil cans and unknown metal fragments. A possible hearth/campfire is located within the area, but heavy leaf litter limited ground surface visibility **(Figure 6-19)**. As shovel testing at the site 41WS160 noted no buried cultural deposits and historic cultural materials were observable on the ground surface, these boundaries were established by the mapping of the horizontal distribution of artifacts along the ground surface. No artifacts were collected, and any diagnostic artifacts were documented and photographed in situ **(Figures 6-20 – 6-24)**. There is some modern sheet metal in association with the can assemblage. According to Horn (2005) the round oil cans were introduced in 1933. However, soft drinks were first canned in 1953. The 12 oz. cans featured a pull

tab style opening first invented in 1962 and lasted until the late 1970s (Can Museum 2011). One can was labeled as Yukon Club Root Beer featuring a pull tab style top/opening. Yukon Club Root Beer cans are described as 355mL (12 fl. oz.) steel bodied, pull top cans made in the United States. This particular can style was first issued in 1967. Noted impacts include natural erosion of the sloped are immediately east of the site as well as bullet holes in the cans indicating impacts from hunters. The cans and metal artifacts are heavily rusted, and oxidation will likely continue. There is also anecdotal evidence from hunters in the area that a hunting interest group occasionally does trash clean up within the Grasslands units and may constitute an unintentional, artificial impact. Because of the small number of commonly found historic materials and several natural and artificial disturbances, site 41WS160 has very limited research value and does not meet any of the criteria necessary for consideration as eligible for listing on the NRHP.

Figure 6-19 Overview of site 41WS160, facing north, east, south, and west (left to right).

Figure 6-20 Yukon Club Root Beer can.

Figure 6-21 Pull top opening common to the sanitary cans found at 41WS160.

Figure 6-22 Heavily rusted sanitary can with evidence of bullet holes.

Figure 6-23 Rusted metal container found at 41WS160.

Figure 6-24 Side view of rusted container showing evidence of bullet holes.

41WS161/08130800527

Site 41WS161 is an assemblage of late 19th or early 20th century historic artifacts mixed with modern materials **(Appendix D)**. Located northwest of and immediately adjacent to CR 2645, the site is in a sparse stand of mixed hardwood, young growth trees **(Figure 6-25)**. There was some evidence of tree cutting and removal. Topographically, the area is uniformly flat. Open pasture is directly to the northwest of the sparse woodland. The geology consists of Early Cretaceous Antlers Sand. The 1967 Geologic Atlas of Texas, Sherman Sheet notes that Antlers Sand is commonly found in eastern part of Trans-Pecos and High Plains and consists of sand, clay, and conglomerate. The lower and upper parts are mostly sand, the middle part chiefly clay, and grades northward to interbedded sand and clay. Sand is fine to coarse grained, conglomeratic in lower part, clayey in upper part, and brownish-yellow. Conglomerate, chert, quartz, and quartzite are found as pebbles and granules. Thickness can be as much as 200 ft, but is variable because of the irregular surface on which it was deposited. The site was discovered during systematic shovel testing of LBJ National Grasslands Unit 62. The site appears to be a trash dump consisting of a concentration of recent historic and modern materials. The artifact assemblage includes bricks and cut stone, metal fragments, a fragmented stoneware crock, a plastic bottle, a plastic bag, and modern sheet metal **(Figures 6-26 – 6-30)**. An active residence is located southwest of the site along CR 2645, and a storage shed is southeast of the site on the opposite side of County Road 2645. Shovel tests adjacent to the site were negative and indicated shallow, red, sandy clay loam/sandy clay subsoil at 40 cmbs or less. The site was delineated based on the surface assemblage. Three fragments of a blue and gray stoneware utilitarian vessel, likely a crock, were found amongst the assemblage. One of the sherds is decorated with two parallel, cobalt blue bands that run the circumference of the crock. The lack of additional diagnostic characteristics makes precise dating difficult. It is likely a 19th to early 20th century utilitarian vessel. Additionally, a brick fragment is stamped with "DENT…FIRE B…" The brick fragment may be associated with the Denton Pressed Brick Company established in 1901 and later acquired by the Acme Brick Company in 1912 (Beck 2016). Noted impacts include natural erosion in a small number of areas and roadway construction towards the southeast where the site coincides with CR 2645. There is also anecdotal evidence from hunters in the area that a hunting interest group occasionally does trash clean up within the Grasslands units and may constitute an unintentional, artificial impact and loss of site resolution. Because of the small number of commonly found historic materials, the presence of modern materials, and several natural and artificial disturbances, site 41WS161 has very limited research value and does not meet any of the criteria necessary for consideration as eligible for listing on the NRHP.

Figure 6-25 Overview of 41WS161, facing north, east, south, and west (left to right).

Figure 6-26 Fragment of blue banded stoneware crock at 41WS161.

Figure 6-27 Overview of fragmented crock, facing southeast.

Figure 6-28 Brick with letters "DEN...FIRE...B" likely produced by Denton Pressed Brick Company.

Figure 6-29 Unknown metal container, facing southeast.

Figure 6-30 Evidence of modern materials deposited and intermixed with historic materials.

Isolated Feature - Windmill

An isolated feature, a galvanized steel framed windmill, was found along the northeast side of the northwest-southeast running CR 2648 within the boundaries of Unit 63 **(Appendix D)**. Directly adjacent to the windmill was a galvanized steel modern stock tank **(Figures 6-31 –6-35)**. The windmill is located within a sparse stand of mixed hardwood, young growth trees. The area immediately surrounding the windmill and stock tank had been cleared of trees and the windmill built on a slightly raised, graded surface approximately 7 m in diameter. Shovel testing adjacent to the isolated feature were negative for cultural features. The galvanized stock tank is labeled Farmaster and was a modern manufacturer of a various farm equipment headquartered in Columbus, NE. The company merged with Behlen Manufacturing Company in 1983 according to the company's history (Behlen Manufacturing 2019). Metal frame windmills span a broad range of time being first developed in 1876, increasing in popularity by the 1890s and declining in use over the course of the 1930s, 40s, and 50s as alternate technology was developed (National Park Service 2019). However, windmills for pumping water are still being used by small farms across the Great Plains. Given the presence of the Farmaster stock tank, it is likely that the windmill was constructed between the mid to late 20th century. The galvanized steel windmill is a common design throughout the rural United States and has very limited research value and does not meet any of the criteria necessary for consideration as eligible for listing on the NRHP.

Figure 6-31 Overview of windmill and modern galvanized stock tank, facing northwest.

Figure 6-32 Close up of windmill head and blades, facing northwest.

Figure 6-33 Metal piping without output to the stock tank, facing northwest.

Figure 6-34 Galvanized steel stock tank, facing southwest.

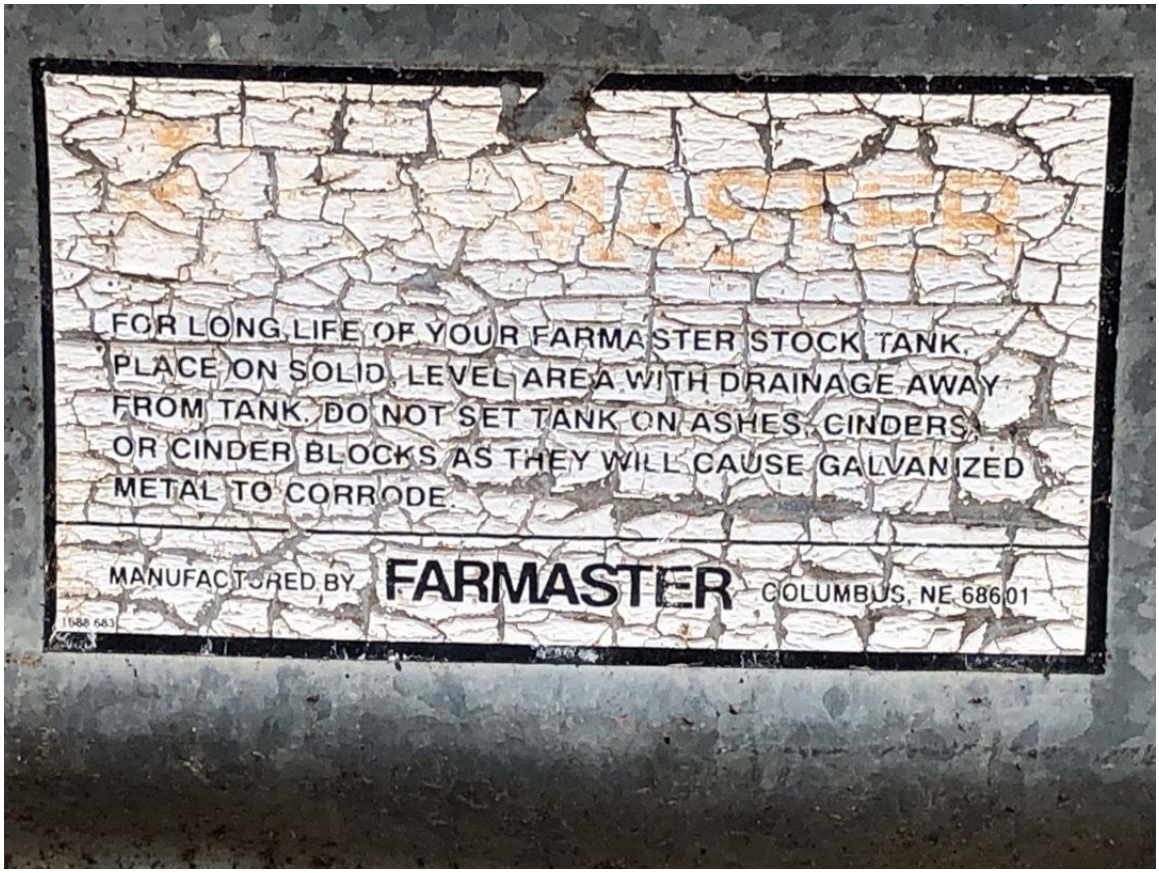


Figure 6-35 Farmaster label on stock tank, facing southeast.

This page intentionally left blank.

7.0 PROJECT SUMMARY AND RECOMMENDATIONS

The USFS is proposing to reconstruct perimeter fencing surrounding three Grasslands units located within the LBJ National Grassland in Wise County, Texas as implementation of the LBJ Prairie Savanna Restoration Project. This project is necessary to create a 40-foot fireline around LBJ National Grasslands units as these units are overgrown with dense vegetation and have limited to no mobility through them, posing a wildfire hazard. Impacts entail bulldozing to clear these perimeters of all trees and other woody vegetation, both above and below ground and new fence construction including utilization of metal t-posts and the use of an auger to drill into the ground to set metal corner posts and concrete bracing. As part of the proposed perimeter fence reconstruction, the USFS has contracted with TRC to perform an inventory of cultural resources within three proposed Grasslands units (Units 48, 62, and 63) which includes background and historic research, archeological field survey, site delineation, a determination of the condition of recorded cultural resources, and recommendation of eligibility for listing on the NRHP).

7.1. Project Recommendations

A background review prior to fieldwork depicted no recorded SALs, NRHP-eligible or listed properties, or cemeteries located within or adjacent to the APE. TRC archeologists performed systematic shovel testing, pedestrian survey, and visual inspection at three Grasslands units (Units 48, 62, and 63) on October 31–November 8 and December 4 – 6, 2019. During the investigations, a total of 477 shovel tests were recorded across the APE including No Dig shovel tests. Six shovel tests were positive for cultural materials. Three new sites were recorded within the APE and an extension to previously recorded site 41WS105 was delineated as a result of the survey. While the revisit of 41WS105 resulted in a small number of additional lithic artifacts, it did not yield any diagnostic artifacts that would indicate a specific temporal or cultural affiliation. The three new sites, 41WS159, 41WS160, and 41WS161, consist of historic cultural materials ranging between the late 19th to the middle part of the 20th century. In the case of 41WS161, there were a number of modern materials intermixed with the historic assemblage. In each case, there was evidence of a combination of natural and artificial impacts affecting the integrity of the assemblages. Boundaries for the 41WS105 extension and 41WS159 were based on both the distribution of positive shovel tests and the presence of cultural materials on the ground surface. As shovel testing at two of the new sites, 41WS160 and 41WS161, noted no buried cultural deposits and historic cultural materials were observable on the ground surface, these boundaries were established by the mapping of the horizontal distribution of artifacts along the ground surface. During the investigations an isolated historic windmill with an adjacent modern galvanized steel stock tank was encountered within Unit 63. The galvanized steel windmill is a common design throughout the rural United States and has very limited research value and does not meet any of the criteria necessary for consideration as eligible for listing on the NRHP. Based on the results of the survey, TRC recommends that no further investigations are necessary, and the project may proceed as planned.

In the event that any human or potential human remains are encountered during construction activities, all work should cease immediately in that specific area and the contractor shall notify local law enforcement, who in turn shall notify the local medical examiner's office. If these remains are not considered recent by the medical officer (i.e., most likely prehistoric in age), then TRC archeologists should be notified and THC contacted.

This page intentionally left blank.

REFERENCES

Beck, B.

2016 *Acme Brick Company: 125 Years Across Three Centuries*. The Donning Company Publishers. Virginia Beach, VA.

Behlen Manufacturing

2019 Acquisitions. Electronic document. https://www.behlenmfg.com/acquisitions, accessed December 2019.

Blair, W. F.

1950 Biotic Provinces of Texas. The Texas Journal of Science 2(1):93–117.

Byers, Johnny A.

2007 The Geologic and Archaeological History of the Dickie Carr Site 41PR26. MA thesis, University of North Texas, Denton, Texas.

Can Museum

2011 Yukon Club Root Beer 355mL United States. Electronic document. http://www.canmuseum.com/Detail.aspx?CanID=34253, accessed December 2019.

Conner, Seymour V.

1959 The Peters Colony of Texas: A History and Bibliographical Sketch of the Early Settlers. The Texas State Historical Association, Austin.

Ferring, C.R. 1

1989a The Aubrey Site: A Clovis Occupation Site on the Southern Plains. In *Abstracts of the First World Summit Conference on the Peopling of the Americas*, edited by J. Tomenchuk and R. Bonnichsen, p. 20 Orono: Center for the study of the First Americans, University of Maine.

1989b The Aubrey Site: A Paleo-Indian Locality in the Upper Trinity River Basin, Texas. *Current Research in the Pleistocene* 6:9-11.

1990 Archeological geology of the Southern Plains. In *Archaeological Geology of North America,* edited by N.P. Lasca and J. Donahue, pp. 253-266. Geological Society of America, Centennial Special Volume 4, Boulder Colorado.

1995 Subsistence and Mobility Patterns at the Aubrey Clovis Site, Texas. Abstracts of the 60th Annual Meeting of the Society for American Archaeology, pp. 74-75. Minneapolis, Minn.

Ferring, C.R. and B.C.Yates

1997 Holocene Geoarchaeology and prehistory of the Ray Roberts Lake Area, North Central Texas.Institute of Applied Sciences, University of North Texas, Denton.

Gould, F.W., G.O. Hoffman, and C.A. Rechenthin

1960 Vegetational Areas of Texas. Leaflet 492. Texas Agricultural Experiment Station, College Station, Texas.

Horn, J.

2005 Historic Artifact Handbook. Alpine Archaeological Consultants, Inc. Montrose, CO.

Jurney, David H., Frank Winchell, and Randall W. Moir

1989 *Cultural Resources Overview of the National Grasslands in North Texas: Studies in Predictive Archaeological Modeling for the Caddo and LBJ Grasslands*. Archaeology Research Program, Institute for the Study of Earth and Man, Southern Methodist University.

Johnson, Eileen

1987 Cultural Activities and Interactions. In *Lubbock Lake: Late Quaternary Studies on the Southern High Plains*, edited by E. Johnson, pp.120-158. Texas A&M University Press, College Station.

Kreiger, A.D.

1946 *Culture Complex and Chronologies in Northern Texas.* University of Texas Publication No. 4640, Austin.

Meining, D.W.

1969 *Imperial Texas: An Interpretive Essay in Cultural Geography.* The University of Texas Press.

Meltzer, D.J.

1987 The Clovis Paleoindian Occupation of Texas: Results of the Texas Clovis Fluted Point Survey. *Bulletin of the Texas Archeological Society* 57:27-68.

National Park Service

2019 Windmills of the American Plains. Electronic document, https://www.nps.gov/articles/windmills.htm, accessed December 2019.

Peter, Duane and James Harrison

2011 *Archaeological Data Recovery (41TR198) and Survey within the Riverside Oxbow Project, Tarrant County, Texas.* Geomarine, Incorporated. Plano, Texas.

Pressler, H. & Texas.

1895 *Map of Wise County*. [Austin, Tex.: General Land Office] [Map] Retrieved from the Library of Congress, https://www.loc.gov/item/2012592136/, accessed December 2019.

Prewitt, Elton R.

1981 Cultural Chronology in Central Texas. *Bulletin of the Texas Archeological Society 52:65-90.*

Prikryl, D.J. 1

1990 *Lower Elm Fork Prehistory, A Redefinition of Cultural Concepts and Chronologies Along the Trinity River, North-Central Texas*. Office of the State Archeologist Report 37. Texas Historical Commission, Austin.

Soil Survey Staff

2015 Web Soil Survey. Electronic document, http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, accessed October 2019.

Shaddox, L. and J. Hall

2010 41WS105 Archeological Site Form (Atlas #9497010501). Texas Archeological Sites Atlas. Electronic document. https://atlas.thc.state.tx.us/Account/Login, accessed November 2019.

Stanford, Dennis J.

1982 A Critical Review of Archeological Evidence Relating to the Antiquity of Human Occupation of the New World. In *Plains Indians Studies: A Collection of Essays in Honor of John C. Ewers and Waldo Wedel,* edited by D.H. Ubelaker and H.J. Viola, pp. 208-218. Smithsonian Contributions to Anthropology 30. Smithsonian Institution Press, Washington D.C.

Story, Dee Ann

1981 An Overview of the Archaeology of East Texas. *Plains Anthropologist* 26(92):139-156. 1990 Cultural History. In *The Archeology and Bioarcheology of the Coastal Plain*: Volume I Arkansas Archeological Survey Research series 38.

1990 Environmental Setting. In *The Archeology and Bioarcheology of the Gulf Coastal Plain*, 2 vols., by D. A. Story, J. A. Guy, B. A. Burnett, M. D. Freeman, J. C. Rose,

D. G. Steele, B. W. Olive, and K. J. Reinhard, pp. 1:5-1:26. Research Series No. 38. Arkansas Archeological Survey, Fayetteville.

Suhm, Dee Ann, Alex D. Krieger, and Edward B. Jelks

1962 An Introductory Handbook of Texas Archeology. In *Bulletin of the Texas Archeological Society,* Volume 25.

Society for Historical Archaeology

2018 Historical Glass Bottle Identification and Information Website. Electronic document, https://sha.org/bottle/index.htm, accessed December 2019.

Texas Historical Commission

2019 Texas Archeological Sites Atlas. Electronic document. https://atlas.thc.state.tx.us/Account/Login, accessed October 2019.

Texas Historical Commission

2006 A Steward's Illustrated Key to Historic Ceramics. Electronic document. https://www.txhas.org/PDF/THC%20Reference/CERAMICSfinal2.pdf, accessed December 2019.

2019 Texas Archeological Sites Atlas. Electronic document. https://atlas.thc.state.tx.us/Account/Login, accessed October 2019.

Texas Water Development Board

1991 USGS Geologic Atlas of Texas, Sherman Sheet. Electronic document, https://www.twdb.texas.gov/groundwater/aquifer/GAT/, accessed March 17, 2017.

Toulouse, J.H.

1969 Fruit Jars. New York: Thomas Nelson & Sons.

Wise County Clerk

1886 General Warranty Deed. Deed 8. Wise County Deed Records, Wise County, City of Decatur.

1903 General Warranty Deed. Vol 70, pg. 201. Wise County Deed Records, Wise County, City of Decatur

1910 General Warranty Deed. Vol 70, pg. 357. Wise County Deed Records, Wise County, City of Decatur.

Wise County Heritage Museum

n.d. Family Archives. Fortenberry Family. Wise County, City of Decatur.

Wise County Historical Survey Committee

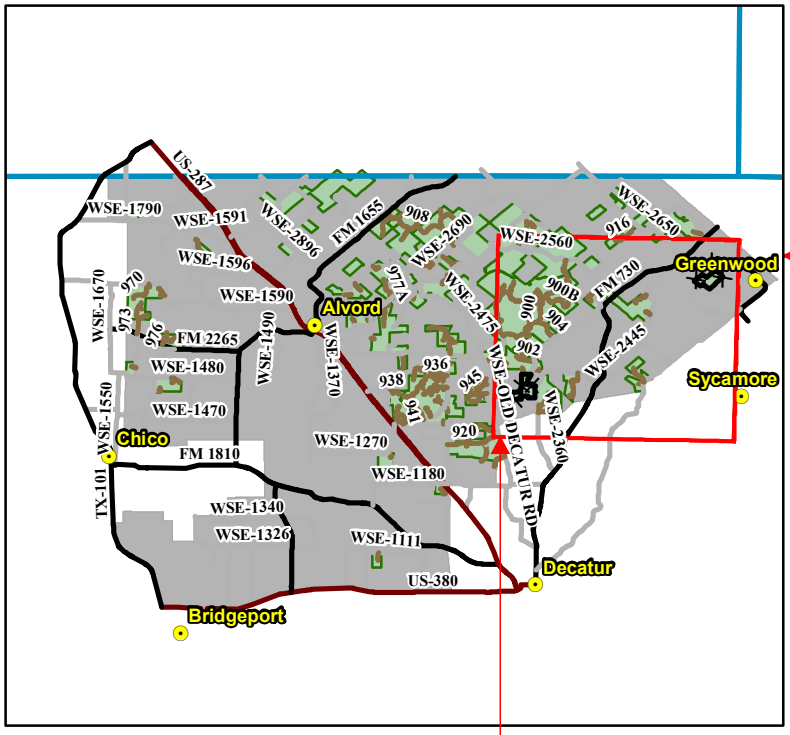
1982 Wise County History: A Link with the Past, Vol. 2. Eakin Publications, Austin.

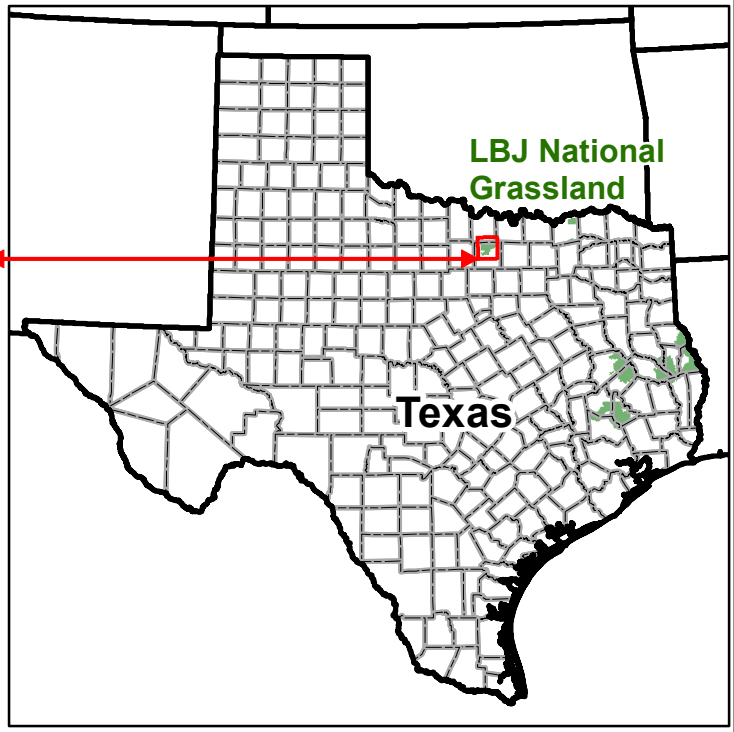
Wise County Messenger

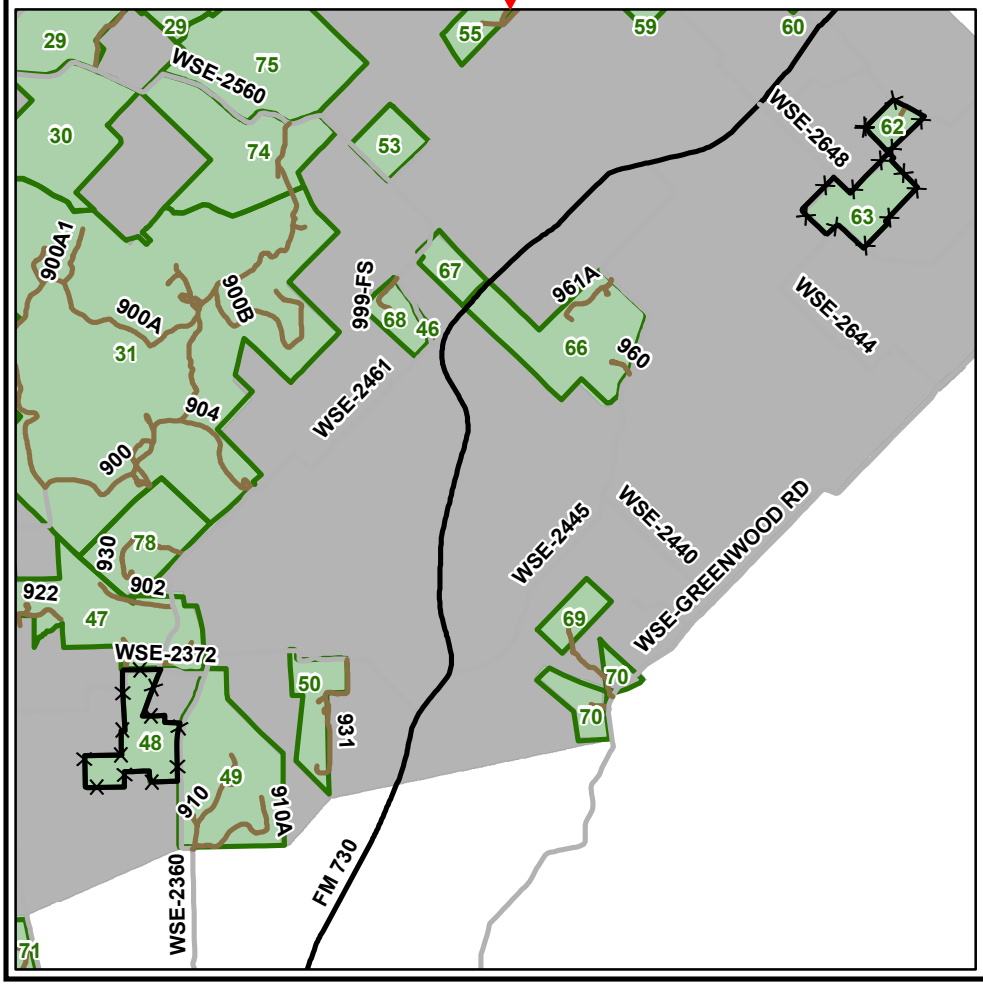
1954"Services Held For James Washburn." Obituaries, pg. 4. Wise County, City of Decatur.

APPENDIX A: DESIGN PLANS AND APE

LBJ Fencelinet Project
Unit 348, 62 and 63
R2014081308011
LBJ National Grassland
National Forests and Grasslands in Texas
Wise County, Texas
Figure 1: Vicinity Map







LBJ Fence Reconstruction Unit
Town
Unit
Land Ownership Within USFS Boundary
USDA Forest Service Land
Non-Forest Service Land

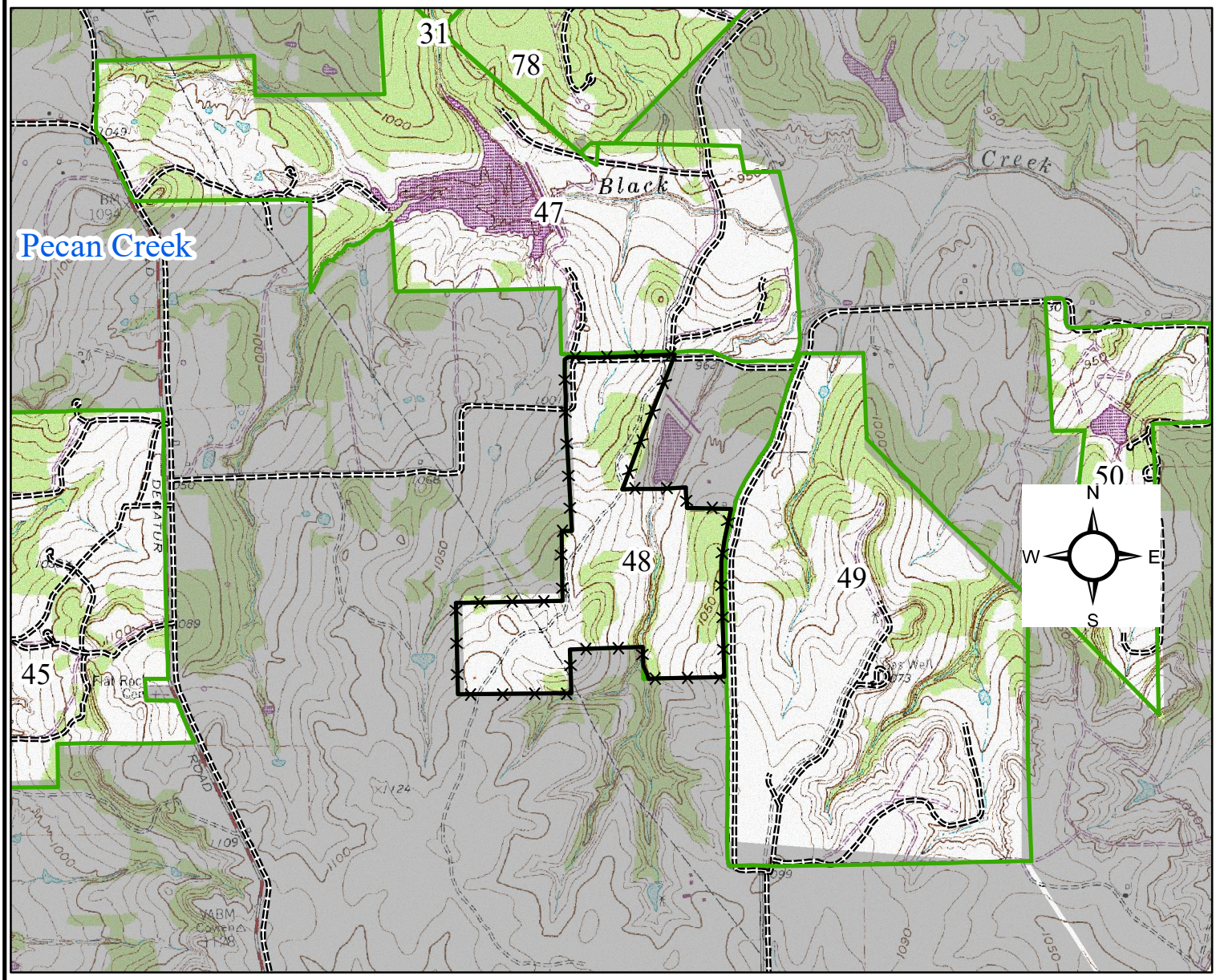
0 0.5 1 2
Miles

1:86,080

N

Map by jdgarcia
July 15, 2014
NAD 1983 Texas Statewide Mapping System

LBJ Fenceline Project
Unit 48
Lyndonj B. Johnson National Grasslands
National Forests & Grasslands in Texas
Pecan Creek 7.5' Quadrangle
Wise County, Texas
Figure 2: Project Location Map



LBJ Fence Reconstruction Unit
LBJ National Grassland
Non-Forest Service

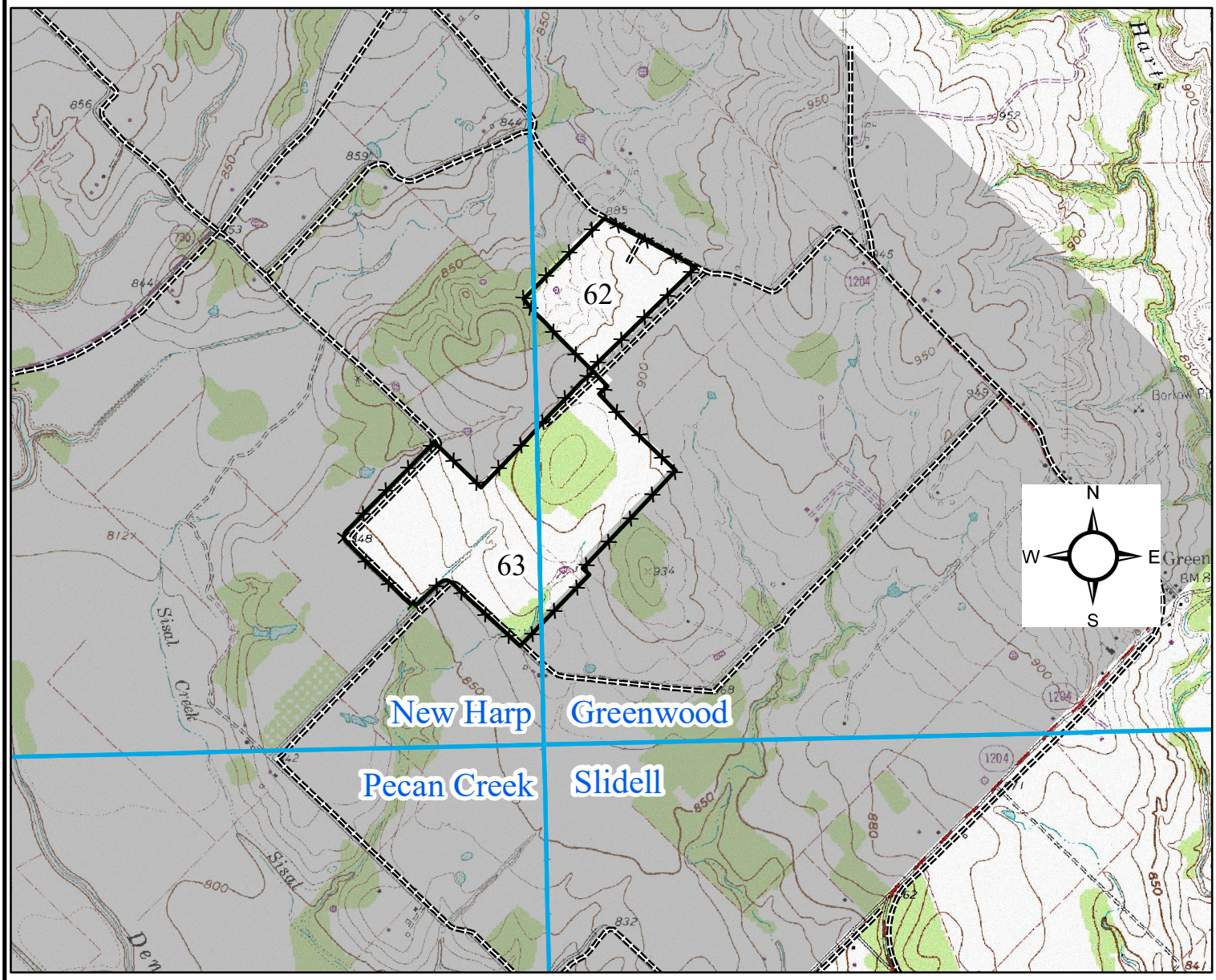
0 750 1,500 Meters

0 0.25 0.5 1 Miles

1:24,000

Map by jdgarcia
July 01, 2019
NAD 1983 Texas Statewide Mapping System

LBJ Fenceline Project
Unit 62 and 63
Lyndonj B. Johnson National Grasslands
National Forests & Grasslands in Texas
New Harp and Greenwood 7.5' Quadrangle
Wise County, Texas
Figure 3: Project Location Map



LBJ Fence Reconstruction Unit
LBJ National Grassland
Non-Forest Service

0 750 1,500 Meters

0 0.25 0.5 1 Miles

1:24,000

Map by jdgarcia
July 01, 2019
NAD 1983 Texas Statewide Mapping System

APPENDIX B: SHOVEL TEST RESULTS

Date	ST ID	Easting	Northing	Land Use	Vegetation	% GSV	Disturbance Type	Degree Disturbance	Dig/No Dig	Reason for Termination	ST Results	ST Comments	Depth	Soil Color	Soil Texture	Status	Artifact Type	Artifact Count
10/31/19	ST-191031-001-GC	631290	3689486	Two-Track Road	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 30 30 to 35 35 to 40	yellowish brown strong brown strong brown	Silty Clay Loam Clay Clay	neg neg neg		
10/31/19	ST-191031-001-HW	631232	3689510	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Roots throughout	0 to 10 10 to 20 20 to 30	brown brown brown	Sandy Clay Loam Sandy Loam Sandy Clay Loam	neg neg neg		
10/31/19	ST-191031-001-JH	631216	3689494	Forest		20-30%	Erosion	None	Dig	Max ST Depth	Negative		0 to 100	light yellowish brown	Sand	neg		
10/31/19	ST-191031-001-SS	631303	3689510	Forest,Road	Woodland	0-10%	Roadway Construction	0-25%	Dig	Sterile Subsoil	Negative	Adjacent to two track field road. Shallow clay subsoil. 5% gravel in topsoil. Clear cut area east of wooded area.	0 to 10 10 to 20 20 to 30	dark brown reddish brown reddish brown	Sandy Clay Loam Sandy Clay Sandy Clay	neg neg neg		
10/31/19	ST-191031-002-GC	630946	3689462	Creek,Fallow Field	Forest,Mixed Grasses	0-10%	Inundated	26-50%	Dig	Sterile Subsoil	Negative	Quite Undulating small wooded grass mounds abound clay at 25	0 to 10 10 to 20 20 to 25	light brown light brown reddish yellow	Clay Loam Clay Loam Clay	neg neg neg		
10/31/19	ST-191031-002-HW	631076	3689508	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Roots throughout 0-10 layer	0 to 10 10 to 20 20 to 30 30 to 40	black black brownish yellow brownish yellow	Sandy Clay Loam Sandy Clay Loam Sandy Clay Clay	neg neg neg neg		
10/31/19	ST-191031-002-JH	631015	3689503	Forest	Riparian Woodland	10-20%	Erosion	None	Dig	Max ST Depth	Negative		0 to 100	strong brown	Sandy Loam	neg		
10/31/19	ST-191031-002-SS	631143	3689514	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	15 m south of paved road. Heavily wooded. Roots at base limited shovel test depth.	0 to 10 10 to 20 20 to 30	dark brown yellowish brown yellowish brown	Sandy Clay Loam Sandy Clay Sandy Clay	neg neg neg		
10/31/19	ST-191031-003-GC	631149	3689472	Creek,Drainage	Forest,Mixed Grasses	0-10%	Bioturbation	0-25%	Dig	Sterile Subsoil	Negative	Heavily rooted and wet	0 to 10 10 to 20 20 to 30 30 to 40	brown brown brown brown	Sandy Clay Loam Sandy Clay Loam Clay Loam Clay	neg neg neg neg		
10/31/19	ST-191031-003-HW	630929	3689507	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Clay at surface	0 to 10	brownish yellow	Sandy Clay	neg		
10/31/19	ST-191031-003-JH	630938	3689417	Two-Track Road	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 30 30 to 35 35 to 55	yellowish brown strong brown strong brown	Silty Clay Loam Sandy Clay Loam Clay	neg neg neg		
10/31/19	ST-191031-003-SS	630995	3689502	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	15 m south of paved road. Heavily wooded. Roots at base limited shovel test depth.	0 to 10 10 to 20 20 to 30 30 to 40 40 to 50	yellowish brown yellowish brown light yellowish brown light yellowish brown light yellowish brown	Sandy Loam Sandy Loam Sandy Clay Sandy Clay Sandy Clay	neg neg neg neg neg		
10/31/19	ST-191031-004-GC	631014	3689441	Creek	Forest,Mixed Grasses	10-20%	Inundated	0-25%	Dig	Max ST Depth	Negative		0 to 100	light gray	Sandy Loam	neg		
10/31/19	ST-191031-004-HW	631001	3689442	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Some gravels <1%	0 to 10 10 to 20 20 to 30	strong brown strong brown strong brown	Sandy Clay Sandy Clay Clay	neg neg neg		
10/31/19	ST-191031-004-JH	631069	3689434	Riparian Woodland	Riparian Woodland	20-30%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30	dark brown reddish yellow	Loam Clay Loam	neg neg		
10/31/19	ST-191031-004-SS	630939	3689438	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Adjacent to and 10m east of road. Shallow clay subsoil. 5% gravel in topsoil.	0 to 10 10 to 20 20 to 30	dark brown reddish brown reddish brown	Sandy Clay Loam Sandy Clay Sandy Clay	neg neg neg		
10/31/19	ST-191031-005-GC	631152	3689425	Creek	Forest,Mixed Grasses	10-20%	Inundated	0-25%	Dig	Sterile Subsoil	Negative	Sands with small gravel at 80	0 to 75 75 to 80	very pale brown very pale brown	Sand Sandy Clay	neg neg		
10/31/19	ST-191031-005-HW	631155	3689443	Forest	Woodland	0-10%	None	None	No dig	Slope	No dig	On slope						
10/31/19	ST-191031-005-JH	631231	3689430	Pasture	Pasture	30-40%	Grading	51-75%	No dig	mod	No dig	Berm and mud area						
10/31/19	ST-191031-005-SS	631083	3689455	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Heavily wooded. Roots at base limited shovel test depth.	0 to 10 10 to 20 20 to 30	dark brown yellowish brown yellowish brown	Sandy Clay Loam Sandy Clay Sandy Clay	neg neg neg		
10/31/19	ST-191031-006-GC	631206	3689399	Agricultural Roadway	Mixed Grasses	0-10%	Erosion	None	Dig	Sterile Subsoil	Negative	West of two track start of transact	0 to 10 10 to 80 80 to 90	light brownish gray very pale brown very pale brown	Sandy Loam Sand Sandy Clay Loam	neg neg neg		
10/31/19	ST-191031-006-HW	631078	3689381	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Some roots, slightly disturbed environs	0 to 10 10 to 20 20 to 30 30 to 36	dark grayish brown brownish yellow brownish yellow brownish yellow	Sandy Loam Sandy Clay Loam Sandy Clay Loam Sandy Clay	neg neg neg neg		
10/31/19	ST-191031-006-JH	631153	3689398	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Heavily wooded. Sand to max depth.	0 to 10 10 to 20 20 to 30 30 to 40 40 to 50 50 to 100	dark brown yellowish brown yellowish brown yellowish brown yellowish brown light yellowish brown	Sandy Clay Loam Sandy Loam Sandy Loam Sandy Loam Sandy Loam Sand	neg neg neg neg neg neg		
10/31/19	ST-191031-006-SS	631249	3689449	Pond	Clear Cut	0-10%	Grading	76-99%	No dig	Heavy Disturbance	No dig	Modified landscape. On berm around artificial pond.						
10/31/19	ST-191031-007-GC	631083	3689400	Drainage	Eroded,Forest,Inundated	20-30%	Inundated	51-75%	Dig	Sterile Subsoil	Negative	Clay mix within undulating and eroded stream bed	0 to 10 10 to 30 30 to 40	brown brown light reddish brown	Sandy Clay Loam Clay Loam Clay	neg neg neg		

10/31/19	ST-191031-007-HW	630938	3689364	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Some roots, slightly disturbed environs	0 to 10 10 to 20 20 to 30 30 to 32	brown yellowish brown yellowish brown brownish yellow	Sandy Loam Sandy Clay Loam Sandy Clay Loam Clay	neg neg neg neg
10/31/19	ST-191031-007-JH	630996	3689387	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative	P wood natural chart and sandstone 40 to 5 alluvial fan	50 to 60 0 to 50	light brown light yellowish brown	Clay Sand	neg neg
10/31/19	ST-191031-007-SS	631271	3689419	Pond	Clear Cut	0-10%	Grading	76-99%	No dig	Heavy Disturbance	No dig	Modified landscape. On berm around artificial pond.				
10/31/19	ST-191031-008-GC	630938	3689408	Agricultural Roadway,Creek,Drainage	Forest	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative	20 e of road	0 to 10 10 to 20 20 to 30	black light brownish gray yellowish red	Clay Loam Clay Loam Clay	neg neg neg
10/31/19	ST-191031-008-HW	631015	3689348	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Some roots, near stock pond	0 to 10 10 to 20	yellowish brown yellowish brown	Sandy Clay Loam Clay	neg neg
10/31/19	ST-191031-008-JH	631022	3689324	Forest	Forest	30-40%	None	None	Dig	Sterile Subsoil	Negative	West of old stock pond	0 to 20 20 to 40	very dark brown reddish yellow	Sandy Clay Loam Clay	neg neg
10/31/19	ST-191031-008-SS	631223	3689380	Pond	Clear Cut	0-10%	Grading	76-99%	No dig	Heavy Disturbance	No dig	Modified landscape. On berm and two track				
10/31/19	ST-191031-009-GC	630942	3689312	Agricultural Roadway,Modern Dump,Scrub	Forest,Woodland	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative	Corner of road,, modern trash bud platinum Gerber baby, ketchup, coffee	0 to 10 10 to 30 30 to 40	dark brown yellowish brown weak red	Silty Clay Loam Sandy Clay Clay	neg neg neg
10/31/19	ST-191031-009-HW	631163	3689347	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Roots throughout STP	0 to 10 10 to 20 20 to 30 30 to 40 40 to 50	dark gray dark gray dark gray light yellowish brown brownish yellow	Sandy Clay Loam Sandy Clay Sandy Clay Sandy Clay Clay	neg neg neg neg neg
10/31/19	ST-191031-009-JH	631225	3689326	Forest	Forest	10-20%	Grading	0-25%	Dig	Bedrock	Negative	East of two track above slope	0 to 50 50 to 60	dark yellowish brown very pale brown	Sand Sand	neg neg
10/31/19	ST-191031-009-SS	631156	3689376	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Heavily wooded. Sand to max depth.	0 to 10 10 to 20 20 to 30 30 to 40 40 to 50 50 to 100	dark brown yellowish brown yellowish brown yellowish brown yellowish brown light yellowish brown	Sandy Clay Loam Sandy Loam Sandy Loam Sandy Loam Sandy Loam Sand	neg neg neg neg neg neg
10/31/19	ST-191031-010-GC	631139	3689328	Riparian Woodland,Scrub	Forest,Inundated	0-10%	Inundated	0-25%	Dig	root	Negative	Slope from creek bottom 5 degree. 3-5cm flat sandstone gravels from 30-60 cmbs	0 to 10 10 to 20 30 to 60	brown brown reddish yellow	Silty Clay Loam Silty Clay Loam Silty Clay	neg neg neg
10/31/19	ST-191031-010-HW	631124	3689278	Forest	Woodland	0-10%	None	None	Dig	Heavy Disturbance	Negative	Terminated at roots	0 to 10 10 to 20 20 to 30 30 to 40 40 to 50 50 to 60	dark grayish brown dark grayish brown dark grayish brown dark grayish brown dark grayish brown dark grayish brown	Sandy Loam Sandy Loam Sandy Loam Sandy Loam Sandy Loam Sandy Clay	neg neg neg neg neg neg
10/31/19	ST-191031-010-JH	631088	3689295	Forest	Forest,Riparian Woodland	10-20%	Erosion	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 20	very dark brown reddish yellow	Clay Loam Sandy Clay Loam	neg neg
10/31/19	ST-191031-010-SS	631001	3689365	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Heavily wooded. Roots at base limited shovel test depth. 1m south of small drainage	0 to 10 10 to 20 20 to 30	dark brown yellowish brown yellowish brown	Sandy Clay Loam Sandy Clay Sandy Clay	neg neg neg
10/31/19	ST-191031-011-GC	631192	3689302	Agricultural Roadway,Scrub	Forest,Mixed Grasses	40-50%	Slope	0-25%	Dig	Bedrock	Negative	20m W of two track. Small hill of cretaceous limestone outcrop with oyster and small ammonite styled fossils on surface,,10cm of silty clay before hard compact sand and bedrock	0 to 10 10 to 20	light reddish brown light gray	Silty Clay Loam Sand	neg neg
10/31/19	ST-191031-011-HW	630968	3689271	Forest	Woodland	0-10%	None	None	Dig	Heavy Disturbance	Negative	Terminated at roots	0 to 10 10 to 20 20 to 30	dark grayish brown dark grayish brown dark grayish brown	Sandy Loam Sandy Loam Sandy Loam	neg neg neg
10/31/19	ST-191031-011-JH	630951	3689236	Forest	Forest	10-20%	None	None	Dig	roots	Negative	Roots	0 to 25	very dark brown	Clay Loam	neg
10/31/19	ST-191031-011-SS	630950	3689340	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Heavily wooded. Roots at base limited shovel test depth.	0 to 10 10 to 20 20 to 30	dark brown yellowish brown yellowish brown	Sandy Clay Loam Sandy Clay Sandy Clay	neg neg neg
10/31/19	ST-191031-012-GC	630982	3689291	Forest,Scrub	Forest	0-10%	Inundated	26-50%	Dig	Sterile Subsoil	Negative	Sticky wet Clay's dk gray sterile	0 to 45	dark gray	Clay	neg
10/31/19	ST-191031-012-HW	631024	3689197	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Terminated at roots	0 to 10 10 to 20 20 to 30 30 to 35	dark grayish brown dark grayish brown pale brown yellowish brown	Sandy Loam Sandy Loam Sandy Loam Clay	neg neg neg neg
10/31/19	ST-191031-012-JH	631116	3689219	Riparian Woodland,Scrub	Forest,Inundated	0-10%	Inundated	0-25%	Dig	root	Negative		0 to 10 10 to 20 30 to 100	brown brown reddish yellow	Silty Clay Loam Silty Clay Loam Silty Clay	neg neg neg
10/31/19	ST-191031-012-SS	631091	3689349	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Heavily wooded. Roots at base and throughout. Downslope low-lying area.	0 to 10 10 to 20 20 to 30 30 to 40	dark brown dark brown yellowish brown yellowish brown	Sandy Clay Loam Sandy Clay Sandy Clay Clay	neg neg neg neg

10/31/19	ST-191031-013-GC	631029	3689225	Floodplain,Riparian Woodland,Scrub	Forest,Riparian Woodland,Woodland	20-30%	Inundated	26-50%	Dig	orange mottled at depth	Negative	Sheet wash floodplain 10m from actual streambed, sandy with mottles at 75 cmbs	0 to 10 10 to 80	dark grayish brown pale brown	Sandy Loam Sandy Clay Loam	neg neg
10/31/19	ST-191031-013-HW	631169	3689199	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Terminated at 10cm due to modern gravels	0 to 10	yellowish brown	Sandy Loam	neg
10/31/19	ST-191031-013-JH	631166	3689136	Forest	Forest	10-20%	None	None	No dig	Slope	No dig					
10/31/19	ST-191031-013-JH	630964	3689160	Forest	Forest	10-20%	None	None	Dig	roots	Negative	Roots	0 to 25	very dark brown	Clay Loam	neg
10/31/19	ST-191031-013-SS	631230	3689352	Forest	Woodland	0-10%	None	None	Dig	Heavy Roots	Negative	Heavily wooded. Roots at base and throughout. 2m east of two track and 2m west of modified pond area	0 to 10 10 to 20 20 to 30 30 to 40 40 to 50 50 to 60	dark brown dark brown yellowish brown yellowish brown yellowish brown yellowish brown	Sandy Clay Loam Sandy Clay Sandy Loam Sandy Loam Sandy Loam Sandy Loam	neg neg neg neg neg neg
10/31/19	ST-191031-014-GC	631093	3689156	Floodplain,Riparian Woodland,Scrub	Forest,Riparian Woodland	0-10%	Inundated	0-25%	Dig	Sterile Subsoil	Negative	Woodland 1 deg slope sandy silty clay with calcium carb at 50 cmbs	0 to 10 10 to 20 20 to 30 30 to 40 40 to 50 50 to 60	dark grayish brown light brownish gray light brownish gray light brownish gray light brownish gray light brownish gray	Silty Clay Loam Silty Clay Loam Silty Clay Loam Silty Clay Loam Silty Clay Loam Silty Clay Loam	neg neg neg neg neg neg
10/31/19	ST-191031-014-HW	631101	3689179	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Root intrusion	0 to 10 10 to 60	dark grayish brown brown	Sandy Loam Sandy Loam	neg neg
10/31/19	ST-191031-014-JH	630940	3689139	Forest	Forest	10-20%	None	None	Dig	roots	Negative	Roots	0 to 25	very dark brown	Clay Loam	neg
10/31/19	ST-191031-014-SS	631198	3689273	Forest	Woodland	0-10%	None	None	Dig	Compact Soils	Negative	Heavily wooded. Roots at base and throughout. 5m west of two track on rise. 60-70% white gravel at base	0 to 10 10 to 20 20 to 30	dark brown dark brown brown	Sandy Clay Loam Sandy Clay Sandy Loam	neg neg neg
10/31/19	ST-191031-015-GC	631007	3689121	Creek,Drainage,Floodplain,Forest	Forest,Woodland	10-20%	Inundated	0-25%	Dig	root	Negative	Nice woodland but rooty....stopped 45cmbs	0 to 10 10 to 20 20 to 30 30 to 40 40 to 45	dark grayish brown dark grayish brown dark grayish brown dark grayish brown dark grayish brown	Silty Clay Loam Silty Clay Loam Silty Clay Loam Silty Clay Loam Silty Clay Loam	neg neg neg neg neg
10/31/19	ST-191031-015-HW	630944	3689182	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Terminated at roots	0 to 10 10 to 40	dark grayish brown brown	Sandy Loam Sandy Clay	neg neg
10/31/19	ST-191031-015-JH	631092	3689128	Forest	Woodland	0-10%	None	None	Dig	Compact Soils	Negative		0 to 40	dark grayish brown	Clay Loam	neg
10/31/19	ST-191031-015-SS	631053	3689277	Forest	Woodland	0-10%	None	None	Dig	Heavy Roots	Negative	Heavily wooded. Roots at base and throughout.	0 to 10 10 to 20 20 to 30	dark brown dark brown yellowish brown	Sandy Clay Loam Sandy Clay Sandy Clay	neg neg neg
10/31/19	ST-191031-016-HW	631004	3689091	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Terminated at roots	0 to 10 10 to 30	dark grayish brown brown	Sandy Loam Sandy Clay	neg neg
10/31/19	ST-191031-016-SS	630944	3689202	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Heavily wooded. Roots at base and throughout. 10m from creek and sluice gate.	0 to 10 10 to 20 20 to 30	dark brown dark brown very dark brown	Sandy Clay Loam Sandy Clay Clay	neg neg neg
10/31/19	ST-191031-017-SS	631116	3689203	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Heavily wooded. Roots at base and throughout. On slight slope.	0 to 10 10 to 20 20 to 30 30 to 40 40 to 50 50 to 60	dark brown dark brown yellowish brown yellowish brown yellowish brown light yellowish brown	Sandy Clay Loam Sandy Clay Sandy Loam Sandy Loam Sandy Loam Sandy Clay	neg neg neg neg neg neg
10/31/19	ST-191031-018-SS	631168	3689169	Forest	Woodland	0-10%	None	None	Dig	Heavy Roots	Negative	Heavily wooded. 60-70% gravel	0 to 10 10 to 20 20 to 30	dark brown dark brown brown	Sandy Clay Loam Sandy Clay Sandy Clay	neg neg neg
10/31/19	ST-191031-019-SS	631037	3689173	Forest	Woodland	0-10%	None	None	Dig	Heavy Roots	Negative	Heavily wooded. Large root limited shovel test depth.	0 to 10 10 to 20 20 to 30 30 to 40	very dark brown very dark brown very dark brown very dark brown	Sandy Clay Loam Sandy Clay Loam Sandy Clay Loam Sandy Clay Loam	neg neg neg neg
10/31/19	ST-191031-020-SS	630936	3689114	Forest	Woodland	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative	Heavily wooded. Large root limited shovel test depth.	0 to 10 10 to 20	very dark brown light yellowish brown	Sandy Clay Loam Clay	neg neg
10/31/19	ST-191031-021-SS	631093	3689115	Forest	Woodland	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative	Heavily wooded. Large root limited shovel test depth.	0 to 10 10 to 40	very dark brown brown	Sandy Clay Loam Sandy Clay Loam	neg neg
10/31/19	ST-191031-042-JH	630985	3689059	Creek,Drainage,Floodplain,Forest	Forest,Woodland	10-20%	Inundated	0-25%	Dig	Max ST Depth	Negative	Nice woodland but rooty	0 to 10 10 to 20 20 to 30 30 to 40 40 to 99	dark grayish brown dark grayish brown dark grayish brown dark grayish brown dark grayish brown	Silty Clay Loam Silty Clay Loam Silty Clay Loam Silty Clay Loam Silty Clay Loam	neg neg neg neg neg
10/31/19	ST-191031-046-JH	631022	3688959	Creek,Drainage,Floodplain,Forest	Forest,Woodland	10-20%	Inundated	0-25%	Dig	Max ST Depth	Negative	Nice woodland but rooty	0 to 10 10 to 20 20 to 30 30 to 40 40 to 99	dark grayish brown dark grayish brown dark grayish brown dark grayish brown dark grayish brown	Silty Clay Loam Silty Clay Loam Silty Clay Loam Silty Clay Loam Silty Clay Loam	neg neg neg neg neg
11/1/19	ST-191101-016-GC	639909	3695782	Oil Field,Pasture	Scrub,Short Grasses	0-10%	Industrial	26-50%	Dig	Compact Soils	Negative	Fence corner of oil pad	0 to 10 10 to 20 20 to 30 30 to 40	dark brown dark brown dark brown dark brown	Silty Clay Silty Clay Silty Clay Clay	neg neg neg neg

11/1/19	ST-191101-016-JH	639985	3695780	Pasture	Pasture	0-10%	None	None	Dig	Compact Soils	Negative	precipitae at 2 percent 20 to 30	0 to 35	brown	Clay Loam	neg
11/1/19	ST-191101-017-GC	639995	3695729	Oil Field,Pasture	Mixed Grasses	0-10%	Cultivated	26-50%	Dig	Sterile Subsoil	Negative	Rise slight	0 to 10 20 to 30 10 to 20	reddish brown reddish brown reddish brown	Silty Clay Loam Clay Silty Clay Loam	neg neg neg
11/1/19	ST-191101-017-JH	639885	3695822	Pasture	Pasture	0-10%	None	None	Dig	Compact Soils	Negative	precipitae at 2 percent 20 to 30	0 to 35	brown	Clay Loam	neg
11/1/19	ST-191101-018-GC	639960	3695662	Fallow Field,Pasture	Short Grasses,Woodland	0-10%	Cultivated	None	Dig	Sterile Subsoil	Negative	Isolated wood in pasture	0 to 10 10 to 20 20 to 30 30 to 35	black black black black	Clay Clay Clay Clay	neg neg neg neg
11/1/19	ST-191101-018-JH	639885	3695822	Pasture	Pasture	0-10%	None	None	Dig	Compact Soils	Negative	precipitae at 2 percent 20 to 30	0 to 35	brown	Clay Loam	neg
11/1/19	ST-191101-019-GC	639877	3695726	Industrial,Pasture	Pasture	0-10%	Industrial	0-25%	Dig	Sterile Subsoil	Negative	Adjacent to se corner oil pad	0 to 10 10 to 20 20 to 30 30 to 35	very dark gray very dark gray very dark gray very dark gray	Clay Clay Clay Clay	neg neg neg neg
11/1/19	ST-191101-019-JH	640062	3695743	Pasture	Pasture	0-10%	None	None	Dig	Compact Soils	Negative		0 to 30 30 to 40	yellowish brown brown	Clay Loam Clay	neg neg
11/1/19	ST-191101-020-GC	639773	3695774	Pasture	Fallow Field,Mixed Grasses	0-10%	Erosion	26-50%	Dig	Sterile Subsoil	Negative	5 deg downslope	0 to 10 10 to 20 20 to 30	light brown light brown light brown	Clay Clay Clay	neg neg neg
11/1/19	ST-191101-020-JH	640003	3695674	Pasture	Pasture	0-10%	None	None	Dig	Compact Soils	Negative		0 to 30 30 to 40	yellowish brown brown	Clay Loam Clay	neg neg
11/1/19	ST-191101-021-GC	639713	3695853	Pasture	Mixed Grasses	0-10%	Cultivated	0-25%	Dig	Compact Soils	Negative	Thin silty clay with limestone gravels over hard unpen hard clays	0 to 10 10 to 20	reddish brown reddish brown	Silty Clay Loam Clay	neg neg
11/1/19	ST-191101-021-JH	639909	3695760	Pasture	Pasture	0-10%	None	None	Dig	Compact Soils	Negative		5 to 30 0 to 5	brown yellowish brown	Clay Clay Loam	neg neg
11/1/19	ST-191101-022-GC	639645	3695801	Pasture	Woodland	10-20%	Erosion	0-25%	Dig	Sterile Subsoil	Negative	Wooded	0 to 10 20 to 25 10 to 20	dark gray dark gray dark gray	Clay Clay Clay	neg neg neg
11/1/19	ST-191101-022-JH	639803	3695794	Pasture	Pasture	10-20%	Commercial	0-25%	Dig	Heavy Disturbance	Negative	const gravel at 5 to 15. mod landform for well pad	0 to 15	strong brown	Clay Loam	neg
11/1/19	ST-191101-022-SS	639888	3695844	Pasture	Mixed Grasses	0-10%	Roadway Construction	26-50%	Dig	Sterile Subsoil	Negative	5m southeast of well pad access road. 20% gravel throughout ST.	0 to 10 10 to 20 20 to 30	dark brown dark brown brown	Clay Loam Clay Loam Clay	neg neg neg
11/1/19	ST-191101-023-GC	639715	3695765	Pasture	Mixed Grasses	0-10%	Cultivated	0-25%	Dig	Sterile Subsoil	Negative	5 deg slope west to east....hard clays	0 to 10 10 to 20 20 to 25	light reddish brown light reddish brown light reddish brown	Clay Clay Clay	neg neg neg
11/1/19	ST-191101-023-JH	639681	3695846	Pasture	Pasture	0-10%	None	None	Dig	Compact Soils	Negative		0 to 5 5 to 30	yellowish brown brown	Clay Loam Clay	neg neg
11/1/19	ST-191101-023-SS	639995	3695791	Pasture	Mixed Grasses	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative	On slight slope up to broad rise	0 to 10 10 to 20 20 to 30	dark brown dark brown brown	Clay Loam Clay Loam Sandy Clay	neg neg neg
11/1/19	ST-191101-024-GC	639810	3695702	Pasture	Mixed Grasses	0-10%	Cultivated	0-25%	Dig	Sterile Subsoil	Negative	Dense clay middle of pasture	0 to 10 10 to 20 20 to 30	light reddish brown light reddish brown light reddish brown	Clay Clay Clay	neg neg neg
11/1/19	ST-191101-024-JH	639615	3695797	Forest	Forest	20-30%	Erosion	0-25%	No dig	Slope	No dig	slope to drainage				
11/1/19	ST-191101-024-SS	640071	3695756	Pasture	Mixed Grasses	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative	On top of broad rise	0 to 10 10 to 20 20 to 30 30 to 40	dark brown dark brown reddish brown reddish brown	Sandy Clay Loam Sandy Clay Loam Sandy Clay Sandy Clay	neg neg neg neg
11/1/19	ST-191101-025-GC	639902	3695639	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative	Higher pasture	0 to 10 10 to 20 20 to 30	dark reddish brown dark reddish brown dark reddish brown	Clay Clay Clay	neg neg neg
11/1/19	ST-191101-025-JH	639685	3695761	Pasture	Pasture	0-10%	None	None	Dig	Compact Soils	Negative		0 to 5 5 to 30	yellowish brown brown	Clay Loam Clay	neg neg
11/1/19	ST-191101-025-SS	639935	3695642	Pasture	Mixed Grasses,Scrub	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative	Scrub area with small stand of trees	0 to 10 10 to 20 20 to 30 30 to 40	dark brown dark brown reddish brown reddish brown	Sandy Clay Loam Sandy Clay Loam Clay Clay	neg neg neg neg
11/1/19	ST-191101-026-GC	639834	3695525	Pasture	Tall Grasses	0-10%	Cultivated	0-25%	Dig	Sterile Subsoil	Negative		0 to 10 20 to 30 10 to 20	dark reddish brown dark reddish brown dark reddish brown	Clay Clay Clay	neg neg neg
11/1/19	ST-191101-026-JH	639790	3695696	Pasture	Pasture	0-10%	None	None	Dig	Compact Soils	Negative		0 to 5 5 to 30	yellowish brown brown	Clay Loam Clay	neg neg
11/1/19	ST-191101-026-SS	639840	3695702	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	On broad rise	0 to 10 10 to 20 20 to 30 30 to 40	dark brown dark brown reddish brown reddish brown	Sandy Clay Loam Sandy Clay Loam Clay Clay	neg neg neg neg
11/1/19	ST-191101-027-GC	639734	3695589	Pasture	Mixed Grasses	80-90%	Erosion	26-50%	No dig	high viz	No dig	Exposure of orange clay silt with small limestone gravels searched				
11/1/19	ST-191101-027-JH	639893	3695613	Pasture	Pasture	0-10%	None	None	Dig	Compact Soils	Negative		0 to 5 5 to 30	yellowish brown brown	Clay Loam Clay	neg neg

11/1/19	ST-191101-027-SS	639739	3695768	Pasture	Mixed Grasses	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative	Slight northwest facing slope down from broad rise. Lighter brown clay soils.	0 to 10 10 to 20 20 to 30 30 to 40 40 to 50	strong brown strong brown strong brown strong brown strong brown	Clay Loam Clay Loam Clay Clay Clay	neg neg neg neg neg
11/1/19	ST-191101-028-GC	639626	3695669	Pond	Forest,Inundated,Marsh Grasses	10-20%	Commercial	76-99%	No dig	Heavy Disturbance	No dig	Heavy mods for pond germs and all				
11/1/19	ST-191101-028-JH	639855	3695543	Pasture	Pasture	0-10%	None	None	Dig	Compact Soils	Negative		0 to 10 10 to 30	dark yellowish brown brown	Clay Loam Clay	neg neg
11/1/19	ST-191101-028-SS	639643	3695832	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Silt or fine sand soils. 10m southwest of grass covered drainage.	0 to 40 40 to 90 90 to 100	strong brown yellowish brown light yellowish brown	Silt Loam Silt Loam Sand	neg neg neg
11/1/19	ST-191101-029-GC	639544	3695730	Creek,Drainage,Pond	Riparian Woodland,Scrub	0-10%	Inundated	None	Dig	large root	Negative	Heavy dissected woodland adjacent to pond	0 to 10 10 to 20 20 to 30 30 to 40	light yellowish brown light yellowish brown light yellowish brown yellowish brown	Sandy Loam Sandy Loam Sandy Loam Sandy Clay Loam	neg neg neg neg
11/1/19	ST-191101-029-JH	639751	3695614	Pasture	Pasture	30-40%	Erosion	None	No dig	Slope	No dig	slope and 40 percent gsv.				
11/1/19	ST-191101-029-SS	639615	3695768	Pasture	Mixed Grasses	0-10%	None	None	Dig	Compact Soils	Negative	Silt or fine sand soils. 10m southwest of grass covered drainage. 50-60% coarse gravels. Increasing gravel limited shovel test depth.	0 to 40	strong brown	Silt Loam	neg
11/1/19	ST-191101-030-GC	639504	3695680	Creek,Pasture	Woodland	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative	Thin silty clay then red orange hard clay	0 to 10 10 to 20	dark brown dark reddish brown	Silty Clay Loam Clay	neg neg
11/1/19	ST-191101-030-JH	639716	3695648	Pasture	Pasture	30-40%	Erosion	None	No dig	Slope	No dig	slope and 40 percent gsv.				
11/1/19	ST-191101-030-SS	639715	3695710	Pasture	Mixed Grasses	0-10%	Erosion	51-75%	Dig	Sterile Subsoil	Negative	Area of erosion. Drainage down from southwest facing slope. Areas of 60-70% GSV. Small coarse gravels visible. Sub at surface.	0 to 10	strong brown	Silty Clay	neg
11/1/19	ST-191101-031-GC	639614	3695575	Pasture	Mixed Grasses	0-10%	Commercial	26-50%	Dig	Heavy Disturbance	Negative	Modified mixed a possible water control feature	0 to 40	dark yellowish brown	Sandy Clay Loam	neg
11/1/19	ST-191101-031-JH	639653	3695678	Pasture	Pasture	60-70%	Erosion	None	Dig	pond	Negative	old ponding area lined w cypress on nw side	0 to 10	reddish brown	Clay	neg
11/1/19	ST-191101-031-SS	639807	3695652	Pasture	Mixed Grasses	0-10%	Erosion	51-75%	Dig	Sterile Subsoil	Negative	Area of erosion. Drainage down from southwest facing slope. Areas of 60-70% GSV. Small coarse gravels visible. Sub at surface.	0 to 10	strong brown	Silty Clay	neg
11/1/19	ST-191101-032-GC	639693	3695517	Pasture	Pasture	0-10%	Cultivated	0-25%	Dig	Sterile Subsoil	Negative	Top of slight rise	0 to 10 10 to 20 20 to 30 30 to 40	reddish brown reddish brown reddish brown reddish brown	Clay Clay Clay Clay	neg neg neg neg
11/1/19	ST-191101-032-JH	639563	3695751	Forest,Pasture	Forest,Pasture	0-10%	Erosion	None	Dig	Bedrock	Negative	bedded gravels at 75 to 80	0 to 80	pink	Sand	neg
11/1/19	ST-191101-032-SS	639894	3695589	Pasture	Mixed Grasses	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative	On top of broad rise	0 to 10 10 to 20 20 to 30 30 to 40	dark brown dark brown reddish brown reddish brown	Sandy Clay Loam Sandy Clay Loam Sandy Clay Sandy Clay	neg neg neg neg
11/1/19	ST-191101-033-GC	639755	3695451	Forest,Pasture	Forest,Woodland	10-20%	Erosion	None	Dig	Sterile Subsoil	Negative	Managed woodland setting only hardwoods pretty	0 to 10 10 to 20 20 to 30 30 to 40	dark gray dark gray dark gray red	Silty Clay Loam Silty Clay Loam Silty Clay Loam Silty Clay Loam	neg neg neg neg
11/1/19	ST-191101-033-JH	639532	3695693	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative	good thick clay	0 to 30 30 to 40	dark yellowish brown yellowish red	Sandy Clay Loam Clay	neg neg
11/1/19	ST-191101-033-SS	639872	3695568	Pasture	Mixed Grasses	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative	On top of broad rise	0 to 10 10 to 20 20 to 30 30 to 40	dark brown dark brown reddish brown reddish brown	Sandy Clay Loam Sandy Clay Loam Sandy Clay Sandy Clay	neg neg neg neg
11/1/19	ST-191101-034-GC	639689	3695424	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 10 10 to 20 20 to 30 30 to 35	reddish yellow reddish yellow reddish yellow reddish brown	Silty Clay Loam Silty Clay Loam Silty Clay Loam Clay	neg neg neg neg
11/1/19	ST-191101-034-JH	639621	3695630	Pasture	Pasture	0-10%	None	None	Dig	Compact Soils	Negative	low area w slope to west	0 to 5 5 to 30	yellowish brown brown	Clay Loam Clay	neg neg
11/1/19	ST-191101-034-SS	639776	3695636	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Near berm and 5m northeast of eroded area.	0 to 10 10 to 20 20 to 30 30 to 40	dark brown dark brown reddish brown reddish brown	Sandy Clay Loam Sandy Clay Loam Sandy Clay Sandy Clay	neg neg neg neg
11/1/19	ST-191101-035-GC	639615	3695490	Pasture	Pasture	0-10%	Cultivated	0-25%	Dig	Sterile Subsoil	Negative	8 degree slope east to west	0 to 10 10 to 20 20 to 25	dark reddish brown dark reddish brown dark reddish brown	Silty Clay Loam Silty Clay Loam Clay	neg neg neg
11/1/19	ST-191101-035-JH	639698	3695568	Pasture	Pasture	0-10%	Erosion	None	Dig	Sterile Subsoil	Negative	next to erosional drsinage	0 to 20	yellowish brown	Clay Loam	neg
11/1/19	ST-191101-035-SS	639668	3695698	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	On slight western facing slope. 3m east of terrace to floodplain. Sub near surface	0 to 10 10 to 20 20 to 30	dark brown reddish brown reddish brown	Clay Loam Sandy Clay Sandy Clay	neg neg neg
11/1/19	ST-191101-036-JH	639773	3695512	Pasture	Pasture	0-10%	Erosion	None	Dig	Sterile Subsoil	Negative	next to erosional drsinage	0 to 20	yellowish brown	Clay Loam	neg
11/1/19	ST-191101-036-SS	639585	3695768	Creek	Riparian Woodland	50-60%	Inundated	76-99%	Dig	Sterile Subsoil	Negative	Inundated creek with 3-5m banks on either side.	0 to 10 10 to 20 20 to 30	dark brown reddish brown reddish brown	Clay Loam Sandy Clay Sandy Clay	neg neg neg

11/1/19	ST-191101-037-GC	639511	3695591	Creek,Floodplain,Forest	Forest,Woodland	20-30%	Erosion	26-50%	Dig	Sterile Subsoil	Negative		0 to 10 10 to 20 20 to 30 30 to 40 40 to 50 60 to 70	very pale brown very pale brown very pale brown very pale brown light reddish gray dusky red	Sandy Loam Sandy Loam Sandy Loam Sandy Loam Sandy Loam Clay	neg neg neg neg neg neg
11/1/19	ST-191101-037-JH	639735	3695415	Pasture	Pasture	0-10%	Erosion	None	Dig	Sterile Subsoil	Negative	next to erosional drsinage	0 to 20	yellowish brown	Clay Loam	neg
11/1/19	ST-191101-037-SS	639540	3695710	Creek	Riparian Woodland	70-80%	Erosion	51-75%	Dig	Sterile Subsoil	Negative	Eroded creek bank. Dredged pond 40m south. Steep slope directly south and north. Sandy soils to max depth.	0 to 50 50 to 80 80 to 100	grayish brown dark grayish brown light yellowish brown	Sandy Loam Sandy Loam Sand	neg neg neg
11/1/19	ST-191101-038-JH	639639	3695500	Pasture	Pasture	0-10%	Erosion	None	Dig	Sterile Subsoil	Negative	next to erosional drsinage	0 to 20	yellowish brown	Clay Loam	neg
11/1/19	ST-191101-038-SS	639617	3695657	Pasture	Mixed Grasses	70-80%	None	None	Dig	Sterile Subsoil	Negative	Sandy topsoil with deep red heavy clay subsoil. Distinct from typical.	20 to 30 30 to 40 0 to 10 10 to 20	red red dark brown dark brown	Clay Clay Sandy Clay Loam Sandy Clay Loam	neg neg neg neg
11/1/19	ST-191101-039-JH	639587	3695568	Pasture	Pasture	0-10%	Erosion	None	Dig	Sterile Subsoil	Negative	next to erosional drsinage	0 to 20	yellowish brown	Clay Loam	neg
11/1/19	ST-191101-039-SS	639711	3695590	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	5m southeast above eroded area.	0 to 10 10 to 20 20 to 30	dark brown dark brown reddish brown	Sandy Clay Loam Sandy Clay Loam Sandy Clay	neg neg neg
11/1/19	ST-191101-040-JH	639496	3695655	Pasture	Pasture	0-10%	Erosion	None	Dig	Sterile Subsoil	Negative	next to erosional drsinage	0 to 20	yellowish brown	Clay Loam	neg
11/1/19	ST-191101-040-SS	639808	3695517	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sub at surface	0 to 5 5 to 20 20 to 30	dark brown reddish brown reddish brown	Sandy Clay Loam Sandy Clay Loam Sandy Clay	neg neg neg
11/1/19	ST-191101-041-SS	639820	3695855	Pasture	Mixed Grasses	0-10%	None	None	Dig	Compact Soils	Negative	Compacted. Silt at base of ST.	0 to 50 50 to 70	strong brown dark yellowish brown	Silty Clay Loam Silt Loam	neg neg
11/1/19	ST-191101-042-SS	639730	3695913	Pasture	Mixed Grasses	0-10%	None	None	Dig	Compact Soils	Negative	Compacted coarse gravels at base of ST.	0 to 40	dark brown	Silty Clay Loam	neg
11/1/19	ST-191101-043-SS	639759	3695936	Pasture	Mixed Grasses	0-10%	None	None	Dig	Compact Soils	Negative	Compacted coarse gravels at base of ST.	0 to 10 10 to 30	dark brown strong brown	Silty Clay Loam Silty Clay Loam	neg neg
11/1/19	ST-191101-044-SS	639833	3695897	Pasture	Mixed Grasses	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative		0 to 10 10 to 20 20 to 30 30 to 40	dark brown dark brown reddish brown reddish brown	Sandy Clay Loam Sandy Clay Loam Sandy Clay Sandy Clay	neg neg neg neg
11/4/19	ST-191104-017-HW	631093	3689064	Forest	Riparian Woodland	0-10%	None	None	Dig	Heavy Disturbance	Negative	Some gravels beginning at 38 cmbd, some roots	0 to 10 10 to 20 20 to 30 30 to 40 40 to 60	dark brown dark yellowish brown dark yellowish brown dark yellowish brown dark yellowish brown	Sandy Loam Sandy Loam Sandy Loam Sandy Loam Sandy Loam	neg neg neg neg neg
11/4/19	ST-191104-018-HW	630964	3689068	Forest		0-10%	None	None	Dig	Sterile Subsoil	Negative	Iron concretions @ 23 cmbd; roots throughout	0 to 3 3 to 10 10 to 20 20 to 30 30 to 35	very dark brown yellowish brown yellowish brown yellowish brown red	Sandy Loam Sandy Clay Sandy Clay Sandy Clay Clay	neg neg neg neg neg
11/4/19	ST-191104-019-HW	630947	3689023	Forest		0-10%	None	None	Dig	Sterile Subsoil	Negative	Roots throughout	0 to 3 3 to 10 10 to 20 20 to 30	very dark brown dark yellowish brown dark yellowish brown yellow	Sandy Loam Sandy Clay Sandy Clay Clay	neg neg neg neg
11/4/19	ST-191104-020-HW	631096	3689028	Two-Track Road		10-20%	Recreation	None	No dig	Heavy Disturbance	No dig	No dig, roadway				
11/4/19	ST-191104-021-HW	631094	3688944	Two-Track Road		10-20%	Recreation	None	Dig	Heavy Disturbance	Negative	Gravels at 5 cmbd	0 to 10	very dark brown	Sandy Loam	neg
11/4/19	ST-191104-022-HW	630944	3688954	Two-Track Road		10-20%	Recreation	None	Dig	Sterile Subsoil	Negative		0 to 10	yellowish brown	Clay	neg
11/4/19	ST-191104-023-HW	630993	3688914	Two-Track Road		10-20%	Recreation	None	Dig	Sterile Subsoil	Negative	Disturbed area, riparian	0 to 10	yellowish brown	Clay	neg
11/4/19	ST-191104-024-HW	631094	3688899	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Roots throughout	0 to 50 50 to 60	brownish yellow yellowish brown	Sandy Clay Clay	neg neg
11/4/19	ST-191104-025-HW	631210	3688886	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Roots throughout	0 to 50 50 to 60	dark brown very dark brown	Sandy Loam Clay	neg neg
11/4/19	ST-191104-026-HW	631339	3688877	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Heavy Disturbance	Negative	Roots throughout; termination due to impassable root system	0 to 40	brown	Sandy Loam	neg
11/4/19	ST-191104-027-HW	631486	3688820	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Along trail, micro roots to depth of 32 cmbd	0 to 50 50 to 60	yellowish brown yellowish brown	Sandy Clay Clay 	neg neg
11/4/19	ST-191104-028-HW	631454	3688819	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Along trail, micro roots to depth of 32 cmbd, near artifact dispersal	0 to 90	yellowish brown	Sandy Clay	neg
11/4/19	ST-191104-029-HW	631283	3688815	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Root intrusion throughout	0 to 30	black	Clay	neg
11/4/19	ST-191104-030-HW	631133	3688818	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Root intrusion throughout	0 to 30 30 to 40	brownish yellow brownish yellow	Sand Clay	neg neg

11/4/19	ST-191104-031-HW	630944	3688820	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Open grass field	0 to 10 10 to 18	dark brown brownish yellow	Clay Loam Clay	neg neg
11/4/19	ST-191104-032-HW	630989	3688741	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 20	dark brown strong brown	Clay Loam Clay	neg neg
11/4/19	ST-191104-033-HW	631185	3688739	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Root intrusion 0-40 cmbd	0 to 20 20 to 50 50 to 70	yellowish brown brownish yellow yellowish brown	Sand Sandy Clay Clay	neg neg neg
11/4/19	ST-191104-034-HW	631425	3688753	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	No dig	Slope	No dig	On sloping rise				
11/4/19	ST-191104-034-HW	631311	3688714	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Root intrusion @ 20	0 to 20	dark brown	Clay Loam	neg
11/4/19	ST-191104-035-HW	631067	3688673	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Root intrusion throughout STP	0 to 40 40 to 50 50 to 60	dark brown brownish yellow brownish yellow	Clay Loam Sandy Clay Clay	neg neg neg
11/4/19	ST-191104-036-HW	638897	3694814	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Root intrusion throughout STP	0 to 10 10 to 20	yellowish brown yellowish brown	Clay Loam Clay	neg neg
11/4/19	ST-191104-037-HW	638979	3694733	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Root intrusion throughout STP	0 to 30 30 to 40	yellowish brown yellowish brown	Clay Loam Clay	neg neg
11/4/19	ST-191104-038-HW	639079	3694639	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Root intrusion throughout STP	0 to 20 20 to 30	yellowish brown dark reddish brown	Clay Loam Clay	neg neg
11/4/19	ST-191104-039-HW	639161	3694558	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Root intrusion throughout STP	0 to 40 40 to 45	yellowish brown dark reddish brown	Clay Loam Clay	neg neg
11/4/19	ST-191104-040-HW	639078	3694552	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Root intrusion	0 to 20 20 to 30	yellowish brown dark reddish brown	Clay Loam Clay	neg neg
11/4/19	ST-191104-041-HW	639013	3694624	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Open area, near fence boundary	0 to 30 30 to 40	yellowish brown dark reddish brown	Clay Loam Clay	neg neg
11/4/19	ST-191104-042-HW	638946	3694684	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 30 30 to 40	yellowish brown dark reddish brown	Clay Loam Clay	neg neg
11/4/19	ST-191104-043-HW	638845	3694773	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Heavy Disturbance	Negative	Terminated early due to root intrusion	0 to 30	yellowish brown	Clay Loam	neg
11/4/19	ST-191104-043-JH	630960	3689000	Forest	Forest	10-20%	None	None	Dig	Sterile Subsoil	Negative	last stat has mottkes of 5yr 5/8	0 to 5 5 to 35 35 to 45	dark grayish brown brown strong brown	Sandy Loam Sand Clay Loam	neg neg neg
11/4/19	ST-191104-044-HW	639754	3695305	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 20 20 to 30	dark yellowish brown dark brown	Clay Loam Clay	neg neg
11/4/19	ST-191104-044-JH	631127	3689007	Forest	Forest	0-10%	Grading	None	Dig	gravel	Negative		0 to 30	brown	Clay Loam	neg
11/4/19	ST-191104-045-HW	639680	3695216	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Open area	0 to 20 20 to 30	dark yellowish brown red	Clay Loam Clay	neg neg
11/4/19	ST-191104-045-JH	631137	3688950	Forest	Forest	10-20%	None	None	Dig	Sterile Subsoil	Negative	last stat has mottkes of 5yr 5/8	0 to 5 5 to 35 35 to 45	dark grayish brown brown strong brown	Sandy Loam Sand Clay Loam	neg neg neg
11/4/19	ST-191104-045-SS	631142	3689086	Forest,Road	Clear Cut,Woodland	20-30%	Roadway Construction	76-99%	No dig	Heavy Disturbance	No dig	On gravel two track with slope to west.				
11/4/19	ST-191104-046-HW	639599	3695122	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 30 30 to 40	dark yellowish brown red	Clay Loam Clay	neg neg
11/4/19	ST-191104-046-SS	630987	3689071	Forest	Woodland	0-10%	Bedrock	76-99%	Dig	Bedrock	Negative	Shallow bedrock in ST and visible at surface. Several drainages running downslope in immediate area	0 to 15	grayish brown	Sandy Loam	neg
11/4/19	ST-191104-047-HW	639509	3695017	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Heavy Disturbance	Negative	Heavily wooded area; terminated early due to root intrusion	0 to 10 10 to 20	dark brown brown	Clay Loam Sandy Loam	neg neg
11/4/19	ST-191104-047-JH	631144	3688891	Forest	Forest	10-20%	None	None	Dig	Sterile Subsoil	Negative		30 to 40 0 to 30	light reddish brown dark yellowish brown	Clay Sandy Loam	neg neg
11/4/19	ST-191104-047-SS	630950	3689034	Forest	Woodland	0-10%	None	None	Dig	Bedrock	Negative	Sandy clay subsoil	0 to 10 10 to 20 20 to 30	grayish brown light reddish brown light reddish brown	Sandy Loam Sandy Clay Sandy Clay	neg neg neg
11/4/19	ST-191104-048-HW	639436	3694937	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Heavy Disturbance	Negative	Heavily wooded area; terminated early due to root intrusion	0 to 30 30 to 40	dark brown brown	Clay Loam Sandy Loam	neg neg
11/4/19	ST-191104-048-JH	630938	3688866	Forest	Forest	10-20%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 20 20 to 32	brown light reddish brown light reddish brown	Sandy Loam Clay Loam Clay	neg neg neg
11/4/19	ST-191104-048-SS	631085	3689040	Forest,Two-Track Road	Clear Cut,Woodland	0-10%	Grading	26-50%	Dig	Bedrock	Negative	40% gravel in subsoil. Old clear cut two track	0 to 10 10 to 20 20 to 30	dark brown dark brown dark reddish brown	Sandy Clay Loam Sandy Clay Loam Sandy Clay	neg neg neg

11/4/19	ST-191104-049-HW	639417	3694856	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Heavy Disturbance	Negative	Heavily wooded area; terminated early due to root intrusion	0 to 5 5 to 15 15 to 25	very dark gray brown yellowish brown	Sandy Loam Sandy Clay Clay	neg neg neg		
11/4/19	ST-191104-049-JH	631254	3688880	Forest	Forest	0-10%	Erosion	None	No dig	Slope	No dig	finger ridge to prom drainage.						
11/4/19	ST-191104-049-SS	631142	3689038	Forest,Two-Track Road	Clear Cut,Woodland	20-30%	Grading	76-99%	No dig	Heavy Disturbance	No dig	On gravel two track with slope to west.						
11/4/19	ST-191104-050-HW	639485	3694939	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Heavily wooded area	0 to 10 10 to 30	dark yellowish brown red	Sandy Loam Clay	neg neg		
11/4/19	ST-191104-050-JH	631367	3688894	Forest	Forest	0-10%	None	None	No dig	Slope	No dig	245 deg dlope up to east						
11/4/19	ST-191104-050-SS	631148	3688984	Energy Corridor,Forest	Clear Cut,Woodland	0-10%	Grading	76-99%	No dig	Heavy Disturbance	No dig	Clear cut utility? corridor. On slope.						
11/4/19	ST-191104-051-HW	639557	3695028	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Heavily wooded area	0 to 5 5 to 15	dark yellowish brown red	Sandy Loam Clay	neg neg		
11/4/19	ST-191104-051-JH	631541	3688802	Forest	Forest	0-10%	None	None	Dig	Max ST Depth	Negative	root at 80 cmbs	0 to 10 10 to 60 60 to 80	dark grayish brown brown brown	Sandy Loam Sand Sandy Loam	neg neg neg		
11/4/19	ST-191104-051-SS	631041	3688983	Forest	Woodland	0-10%	None	None	Dig	Bedrock	Negative	Along north-south drainage edge	0 to 10 10 to 20 20 to 30	dark brown dark brown reddish brown	Sandy Clay Loam Sandy Clay Loam Sandy Clay	neg neg neg		
11/4/19	ST-191104-052-HW	639630	3695087	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Heavily wooded area	0 to 10 10 to 20	dark yellowish brown red	Sandy Loam Clay	neg neg		
11/4/19	ST-191104-052-JH	631475	3688789	Energy Corridor	Forest	10-20%	None	None	Dig	Max ST Depth	Positive	on site TS1	0 to 20 20 to 30 30 to 100	strong brown reddish yellow brown	Sand Sandy Clay Loam Sand	neg pos neg	Debitage	1
11/4/19	ST-191104-052-SS	630948	3688981	Forest	Woodland	0-10%	None	None	Dig	Bedrock	Negative	Reddish sand.	0 to 10 10 to 20 20 to 30 30 to 40	reddish brown reddish brown reddish brown reddish brown	Sandy Loam Sandy Loam Sandy Loam Sandy Clay	neg neg neg neg		
11/4/19	ST-191104-053-HW	639681	3695154	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Edge of forested area, in open	0 to 10 10 to 20	dark yellowish brown red	Sandy Loam Clay	neg neg		
11/4/19	ST-191104-053-JH	631397	3688786	Forest	Forest	0-10%	Erosion	None	No dig	Slope	No dig							
11/4/19	ST-191104-053-SS	630945	3688922	Forest	Woodland	0-10%	None	None	Dig	Bedrock	Negative	Red clay sub at surface	0 to 5 5 to 38	dark brown reddish brown	Sandy Clay Loam Clay	neg neg		
11/4/19	ST-191104-054-HW	639748	3695229	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	By fence line, open area	0 to 10 10 to 20	dark yellowish brown red	Sandy Loam Clay	neg neg		
11/4/19	ST-191104-054-JH	631331	3688819	Forest	Forest	10-20%	None	None	Dig	Sterile Subsoil	Negative		0 to 30 30 to 40	dark yellowish brown light reddish brown	Sandy Loam Clay	neg neg		
11/4/19	ST-191104-054-SS	631092	3688928	Forest	Woodland	0-10%	None	None	Dig	Bedrock	Negative	Sugar sand	0 to 100	reddish brown	Sand	neg		
11/4/19	ST-191104-055-HW	639832	3695067	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 15 15 to 30	dark yellowish brown red	Sandy Loam Clay	neg neg		
11/4/19	ST-191104-055-JH	631174	3688796	Forest	Forest	10-20%	None	None	Dig	Sterile Subsoil	Negative		0 to 30 30 to 40	dark yellowish brown light reddish brown	Sandy Loam Clay	neg neg		
11/4/19	ST-191104-055-SS	631222	3688927	Forest	Woodland	0-10%	None	None	Dig	Bedrock	Negative	Open grassy area in woods	0 to 100	reddish brown	Sand	neg		
11/4/19	ST-191104-056-HW	639751	3694974	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 30 30 to 40	dark yellowish brown red	Sandy Loam Clay	neg neg		
11/4/19	ST-191104-056-SS	631345	3688916	Energy Corridor,Forest	Clear Cut,Woodland	0-10%	Slope	76-99%	No dig	Slope	No dig	On slope.						
11/4/19	ST-191104-057-HW	639670	3694877	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 15 15 to 35 35 to 40	very dark brown light yellowish brown yellowish brown	Sandy Loam Sandy Clay Clay	neg neg neg		
11/4/19	ST-191104-057-JH	630920	3688729	Forest	Forest	10-20%	None	None	Dig	Sterile Subsoil	Negative	Near tree line high caliche in strat ii and bedrock gravels. Bedded at base	0 to 20 20 to 40	dark brown light brown	Sandy Loam Silty Clay Loam	neg neg		
11/4/19	ST-191104-057-SS	631550	3688836	Forest	Woodland	0-10%	None	None	Dig	Max ST Depth	Negative	Deep sand	0 to 100	yellowish brown	Sand	neg		
11/4/19	ST-191104-058-HW	639595	3694775	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Clay at surface	0 to 10	yellowish brown	Clay	neg		
11/4/19	ST-191104-058-JH	631130	3688738	Forest	Forest	10-20%	None	None	Dig	Sterile Subsoil	Negative		0 to 20 20 to 40	dark brown light brown	Sandy Loam Silty Clay Loam	neg neg		
11/4/19	ST-191104-058-SS	631442	3688828	Forest	Woodland	0-10%	None	None	Dig	Max ST Depth	Negative	Deep sand	0 to 100	yellowish brown	Sand	neg		
11/4/19	ST-191104-059-HW	639668	3694699	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 15 15 to 35 35 to 40	very dark brown light yellowish brown yellowish brown	Sandy Loam Sandy Clay Clay	neg neg neg		
11/4/19	ST-191104-059-JH	631278	3688740	Forest	Forest	0-10%	Erosion	None	No dig	Slope	No dig	Slope to drainage						
11/4/19	ST-191104-059-SS	631323	3688852	Forest	Woodland	0-10%	None	None	Dig	Max ST Depth	Negative	Black subsoil	0 to 10 10 to 20 20 to 30	dark brown dark brown very dark brown	Sandy Loam Sandy Loam Clay	neg neg neg		
11/4/19	ST-191104-060-HW	639758	3694759	Forest	Forest,Mixed Grasses,Riparian Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 15 15 to 20 20 to 35	very dark brown light yellowish brown yellowish brown	Sandy Loam Sandy Clay Clay	neg neg neg		

11/4/19	ST-191104-060-JH	631369	3688740	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative	On slope just south of site	0 to 45 45 to 55	light brown reddish yellow	Sandy Loam Clay Loam	neg neg
11/4/19	ST-191104-060-SS	631217	3688845	Creek,Forest	Slope,Woodland	0-10%	Slope	76-99%	No dig	Slope	No dig	Creek Cut Bank				
11/4/19	ST-191104-061-JH	631501	3688696	Forest	Forest	0-10%	None	None	Dig	root	Negative	Win site	0 to 80	light brown	Sand	neg
11/4/19	ST-191104-061-SS	631086	3688855	Forest	Woodland	0-10%	None	None	Dig	Max ST Depth	Negative	Deep sand	0 to 100	yellowish brown	Sand	neg
11/4/19	ST-191104-062-SS	630946	3688869	Forest	Woodland	0-10%	None	None	Dig	Max ST Depth	Negative	Shallow sub	0 to 5 5 to 30	brown reddish gray	Sandy Clay Loam Clay	neg neg
11/4/19	ST-191104-063-SS	630919	3688787	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Shallow sub	0 to 5 5 to 30	brown reddish gray	Sandy Clay Loam Clay	neg neg
11/4/19	ST-191104-064-SS	631045	3688777	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	On slight slope 5m southwest of drainage.	0 to 5 5 to 20 20 to 30	very dark brown grayish brown reddish gray	Sandy Loam Sandy Loam Clay	neg neg neg
11/4/19	ST-191104-065-SS	631171	3688780	Forest	Woodland	0-10%	None	None	Dig	Max ST Depth	Negative	On slight slope adjacent to creek	0 to 100	grayish brown	Sandy Loam	neg
11/4/19	ST-191104-066-SS	631307	3688777	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Clear grassy area	0 to 10 10 to 20 20 to 30	black black dark grayish brown	Silty Clay Loam Silty Clay Loam Clay	neg neg neg
11/4/19	ST-191104-067-SS	631425	3688780	Forest	Woodland	0-10%	Slope	76-99%	No dig	Slope	No dig	Western facing slope				
11/4/19	ST-191104-068-SS	631541	3688788	Forest	Woodland	0-10%	None	None	Dig	Max ST Depth	Negative	Deep sands	0 to 100	grayish brown	Sandy Loam	neg
11/4/19	ST-191104-069-SS	631368	3688697	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	On slight slope. 40% gravel in sub	0 to 30 30 to 40	dark brown reddish brown	Sandy Clay Loam Sandy Clay	neg neg
11/4/19	ST-191104-070-SS	631166	3688703	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Root system limited shovel test depth	0 to 30 30 to 40	dark brown very dark brown	Sandy Loam Sandy Clay	neg neg
11/4/19	ST-191104-071-SS	630937	3688692	Forest	Woodland	0-10%	Slope	51-75%	No dig	Slope	No dig	Slope				
11/4/19	ST-191104-073-SS	639177	3694941	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 20 20 to 30	dark brown reddish brown	Sandy Loam Sandy Clay	neg neg
11/4/19	ST-191104-074-SS	639278	3694857	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Shallow sub.	0 to 5 5 to 30	dark brown reddish brown	Sandy Loam Clay	neg neg
11/4/19	ST-191104-075-SS	639374	3694772	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Shallow sub.	0 to 5 5 to 30	dark brown reddish brown	Sandy Loam Clay	neg neg
11/4/19	ST-191104-076-SS	639473	3694675	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Along northern tree line	0 to 20 20 to 30	dark brown reddish brown	Sandy Loam Sandy Clay	neg neg
11/4/19	ST-191104-077-SS	639560	3694579	Pond	Inundated	0-10%	Inundated	Completely Destroyed	No dig	Inundated	No dig	In small pond.				
11/4/19	ST-191104-078-SS	639645	3694513	Pasture,Two-Track Road	Eroded	0-10%	Erosion	51-75%	No dig	Heavy Disturbance	No dig	Eroded area. 80-90% GSV. Two track gate entrance				
11/4/19	ST-191104-079-SS	639600	3694470	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sub at surface	0 to 30	reddish brown	Sandy Clay	neg
11/4/19	ST-191104-080-SS	639506	3694570	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Strong red sub	0 to 10 10 to 30	grayish brown red	Sandy Loam Clay	neg neg
11/4/19	ST-191104-081-SS	639410	3694662	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Strong red sub	0 to 10 10 to 20 20 to 35	brown brown reddish brown	Sandy Loam Sandy Loam Clay	neg neg neg
11/4/19	ST-191104-082-SS	639323	3694742	Pasture	Eroded	0-10%	Erosion	76-99%	No dig	Heavy Disturbance	No dig	Eroded area. 80-90% GSV. 3-5m high cut through landscape.				
11/4/19	ST-191104-083-SS	639238	3694821	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Strong red sub	0 to 5 5 to 30	brown red	Sandy Loam Clay	neg neg
11/4/19	ST-191104-084-SS	639133	3694910	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Strong red sub	0 to 20 20 to 30	brown red	Sandy Loam Clay	neg neg
11/4/19	ST-191104-085-SS	638952	3694933	Pasture	Eroded	0-10%	Erosion	76-99%	No dig	Heavy Disturbance	No dig	Eroded area. 80-90% GSV.				
11/4/19	ST-191104-085-SS	639031	3694996	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Strong red sub	0 to 20 20 to 30	brown red	Sandy Loam Clay	neg neg
11/4/19	ST-191104-086-SS	639052	3694849	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Strong red sub	0 to 20 20 to 30	brown red	Sandy Loam Clay	neg neg
11/4/19	ST-191104-087-SS	639150	3694762	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Strong red sub	0 to 10 10 to 20 20 to 30	brown red red	Sandy Loam Clay Clay	neg neg neg
11/4/19	ST-191104-088-SS	639248	3694676	Pasture	Eroded	0-10%	Erosion	76-99%	No dig	Heavy Disturbance	No dig	Eroded area. 80-90% GSV. 3-5m high cut through landscape.				
11/4/19	ST-191104-089-SS	639340	3694598	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Strong red sub	0 to 10 10 to 20 20 to 30 30 to 40	brown brown red red	Sandy Loam Clay Clay Clay	neg neg neg neg
11/4/19	ST-191104-090-SS	639433	3694521	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Mottled sub with 2.5YR6/1 and 10YR5/4. Likely hydric.	0 to 10 10 to 20 20 to 30 30 to 40 40 to 50	brown brown brown red red	Sandy Loam Clay Sandy Loam Clay Clay	neg neg neg neg neg
11/4/19	ST-191104-091-SS	639537	3694438	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Deep sands	0 to 10 10 to 20 20 to 30 30 to 40 40 to 50 50 to 60	brown brown brown brown brown red	Sandy Loam Clay Sandy Loam Sandy Loam Sandy Loam Clay	neg neg neg neg neg neg
11/4/19	ST-191104-092-SS	639526	3694403	Pasture	Eroded	0-10%	Erosion	76-99%	No dig	Heavy Disturbance	No dig	Eroded area. 80-90% GSV. Near large drainage				
11/4/19	ST-191104-093-SS	639413	3694499	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Mottled sub with 2.5YR6/1 and 10YR5/4. Likely hydric.	0 to 10 10 to 20 20 to 30 30 to 40 40 to 50	brown brown brown red red	Sandy Loam Clay Sandy Loam Clay Clay	neg neg neg neg neg

11/4/19	ST-191104-094-SS	639310	3694591	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Shallow strong red subsoil	0 to 5 5 to 30	brown red	Sandy Loam Clay	neg neg		
11/4/19	ST-191104-095-SS	639208	3694680	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Shallow strong red subsoil	0 to 10 10 to 30	brown red	Sandy Loam Clay	neg neg		
11/4/19	ST-191104-096-SS	639110	3694766	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Shallow strong red subsoil	0 to 10 10 to 30	brown red	Sandy Loam Clay	neg neg		
11/4/19	ST-191104-097-SS	638991	3694861	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Shallow strong red subsoil	0 to 10 10 to 30	brown red	Sandy Loam Clay	neg neg		
11/4/19	ST-191104-098-SS	638925	3694919	Pasture	Pasture,Woodland	0-10%	Roadway Construction	Completely Destroyed	No dig	Heavy Disturbance	No dig	Road berm.						
11/5/19	ST-191105-056-JH	639054	3695039	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-057-JH	639211	3694893	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-058-JH	639326	3694766	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-059-JH	639331	3694766	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-060-JH	639539	3694562	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-061-JH	639616	3694499	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-062-JH	639580	3694457	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-063-JH	639451	3694591	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-064-JH	639313	3694712	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	near confluence of two small drainages	0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-065-JH	639192	3694834	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	near confluence of two small drainages	0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-066-JH	639066	3694940	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	near confluence of two small drainages	0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-067-JH	639067	3694940	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-068-JH	638980	3694945	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 10 10 to 20	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-069-JH	639089	3694852	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 10 10 to 20	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-070-JH	639196	3694777	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-071-JH	639319	3694653	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	near confluence of two small drainages	0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-072-JH	639444	3694551	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 50 50 to 60	dark brown strong brown yellowish red	Sandy Clay Loam Sandy Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-072-SS	639067	3695042	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Positive	Ceramic and glass in top 10 centimeters. Small number of historics beneath including blue transfer print sherd down to 20-30cmbs in red brown clay. No artifacts past 30cmbs. 40m southeast of road in clear cut grassy area. 5m southeast of transmission line corridor	0 to 10 10 to 20 20 to 30 30 to 40 40 to 50	dark brown reddish brown light reddish brown light reddish brown light reddish brown	Sandy Clay Loam Sandy Clay Loam Clay Clay Clay	pos pos pos neg neg	Container Glass, Ceramic-Porcelain (Euro-American), Ceramic-Whiteware (Euro-American), Container Glass, Ceramic-Transfer Print , Ceramic-Whiteware (Euro-American)	6
11/5/19	ST-191105-073-JH	639552	3694452	Pasture	Mixed Grasses	0-10%	None	None	Dig	thick root	Negative		0 to 10 10 to 20	dark brown strong brown	Sandy Clay Loam Clay Loam	neg neg		
11/5/19	ST-191105-074-JH	639510	3694376	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30 30 to 40	dark brown strong brown brown	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-075-JH	639390	3694483	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 50 50 to 60	dark brown strong brown yellowish red	Sandy Clay Loam Sandy Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-076-JH	639288	3694574	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Sandy Clay Loam Clay	neg neg neg		

11/5/19	ST-191105-077-JH	639167	3694669	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 10 10 to 20	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-078-JH	639076	3694758	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	just west of berm	0 to 5 5 to 10 10 to 20	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-079-JH	638960	3694865	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 10 10 to 20	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-080-JH			Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Positive	delineation test next to bedrock pavers	0 to 10 10 to 20 20 to 30	dark brown strong brown strong brown	Sandy Clay Loam Clay Loam Clay Loam	neg pos neg	Container Glass	1
11/5/19	ST-191105-081-JH	639045	3695039	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30 30 to 40	dark brown strong brown yellowish red	Sandy Clay Loam Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-099-SS			Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Positive	One milk glass shard and one plain whiteware sherd in the top 10cmbs. Shallow strong red subsoil. Adjacent to roadway and transmission line corridor.	0 to 10 10 to 20 20 to 30	dark reddish gray dark reddish gray red	Sandy Clay Sandy Clay Clay	pos pos neg	Ceramic-Whiteware (Euro-American), Milk Glass	2
11/5/19	ST-191105-100-SS	639104	3695042	Forest,Two-Track Road	Clear Cut,Woodland	30-40%	Grading	26-50%	Dig	Sterile Subsoil	Negative	Shallow sub. 20m delineation test	0 to 10 10 to 20 20 to 30	reddish brown reddish brown red	Sandy Clay Loam Sandy Clay Loam Clay	neg neg neg		
11/5/19	ST-191105-101-SS			Pasture	Mixed Grasses,Woodland	0-10%	None	None	Dig	Sterile Subsoil	Positive	Several container glass sherds in top 10cmbs. One shard at 10-20cmbs like from top of level.	0 to 10 10 to 20 20 to 30 30 to 40	red dark reddish gray red red	Clay Sandy Clay Clay Clay	neg pos pos neg	Container Glass	15
11/6/19	ST-191106-001-BJ	638892	3694874	Forest	Young Forest	0-10%	Industrial	0-25%	Dig	Compact Soils	Negative	Very compact sand at 80 cmbs	0 to 60 60 to 80	brown light brown	Sandy Loam Sand	neg neg		
11/6/19	ST-191106-002-BJ	638989	3694809	Forest	Young Forest	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative	Dense sandy clay at 45 cmbs	0 to 45 45 to 55	brown strong brown	Sandy Loam Sandy Clay	neg neg		
11/6/19	ST-191106-003-BJ	639062	3694720	Pasture	Mixed Grasses	10-20%	Erosion	0-25%	Dig	Sterile Subsoil	Negative	Sandy clay at surface	0 to 20 20 to 35	reddish brown yellowish red	Sandy Clay Sandy Clay	neg neg		
11/6/19	ST-191106-004-BJ	639153	3694620	Pasture	Mixed Grasses	10-20%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 30 30 to 40	brown strong brown	Sandy Clay Loam Sandy Clay	neg neg		
11/6/19	ST-191106-005-BJ	639241	3694544	Pasture	Mixed Grasses	10-20%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 30 30 to 40	brown strong brown	Sandy Clay Loam Sandy Clay	neg neg		
11/6/19	ST-191106-006-BJ	639035	3694506	Pasture	Mixed Grasses	0-10%	Erosion	None	Dig	hit ground hive	Negative	Ground hive at 30 cmbs, ended excavation	0 to 30	brown	Sandy Clay Loam	neg		
11/6/19	ST-191106-007-BJ	638961	3694560	Forest	Young Forest	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 25 25 to 35	brown reddish brown	Sandy Loam Sandy Clay	neg neg		
11/6/19	ST-191106-008-BJ	638862	3694660	Forest	Young Forest	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 25 25 to 35	brown reddish brown	Sandy Loam Sandy Clay	neg neg		
11/6/19	ST-191106-009-BJ	638771	3694753	Forest	Young Forest	0-10%	Utility	Completely Destroyed	Dig	Heavy Disturbance	Negative	In transmission corridor. Mottled soils	0 to 30	brown	Sandy Clay Loam	neg		
11/6/19	ST-191106-010-BJ	639693	3695278	Pasture	Pasture	0-10%	Grading	26-50%	Dig	Sterile Subsoil	Negative		0 to 30 30 to 40	brown strong brown	Sandy Clay Loam Sandy Clay	neg neg		
11/6/19	ST-191106-011-BJ	639598	3695178	Forest	Young Forest	10-20%	Erosion	0-25%	Dig	Sterile Subsoil	Negative	Bottom strat mottled with 7.5 YR 5/6 clay	0 to 30 30 to 70 70 to 80	brown light brown light brown	Sandy Loam Sand Sandy Clay	neg neg neg		
11/6/19	ST-191106-012-BJ	639495	3695078	Forest	Woodland	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 30 30 to 40	brown reddish brown	Sandy Loam Sandy Clay	neg neg		
11/6/19	ST-191106-013-BJ	639417	3694995	Forest	Woodland	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 30 30 to 40	brown reddish brown	Sandy Loam Sandy Clay	neg neg		
11/6/19	ST-191106-014-BJ	639336	3694914	Forest,Trail	Young Forest	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 25 25 to 35	brown reddish brown	Sandy Loam Sandy Clay	neg neg		
11/6/19	ST-191106-015-BJ	639409	3694805	Pasture	Short Grasses	20-30%	Erosion	51-75%	Dig	Sterile Subsoil	Negative		0 to 20 20 to 38	strong brown strong brown	Sandy Loam Sandy Clay	neg neg		
11/6/19	ST-191106-016-BJ	639478	3694889	Forest	Forest	10-20%	Erosion	76-99%	Dig	Sterile Subsoil	Negative		0 to 30	reddish brown	Sandy Clay	neg		
11/6/19	ST-191106-017-BJ	639552	3694962	Forest	Forest	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 10 10 to 30	light brown reddish brown	Sandy Loam Sandy Clay	neg neg		
11/6/19	ST-191106-018-BJ	639614	3695053	Forest	Forest	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 20 20 to 30	light brown reddish brown	Sandy Loam Sandy Clay	neg neg		
11/6/19	ST-191106-019-BJ	639720	3695131	Pasture	Short Grasses	0-10%	Erosion	26-50%	Dig	Sterile Subsoil	Negative		0 to 30	strong brown	Sandy Clay	neg		
11/6/19	ST-191106-020-BJ	639888	3695086	Pasture	Short Grasses	0-10%	Erosion	26-50%	Dig	Sterile Subsoil	Negative		0 to 30	strong brown	Sandy Clay	neg		
11/6/19	ST-191106-021-BJ	639784	3694998	Forest	Forest	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 30 30 to 40	dark brown strong brown	Sandy Loam Sandy Clay	neg neg		
11/6/19	ST-191106-022-BJ	639720	3694919	Forest	Forest	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 30 30 to 40	dark brown strong brown	Sandy Loam Sandy Clay	neg neg		
11/6/19	ST-191106-023-BJ	639669	3694831	Forest	Forest	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 30 30 to 40	dark brown strong brown	Sandy Loam Sandy Clay	neg neg		
11/6/19	ST-191106-024-BJ	639612	3694780	Pasture	Pasture	20-30%	Erosion	76-99%	Dig	Sterile Subsoil	Negative		0 to 30	strong brown	Sandy Clay	neg		
11/6/19	ST-191106-025-BJ	639617	3694678	Forest	Forest	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 38	reddish brown	Sandy Clay	neg		
11/6/19	ST-191106-026-BJ	639714	3694785	Pasture	Pasture	30-40%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 50 50 to 60	strong brown reddish brown	Sandy Loam Sandy Clay	neg neg		

11/6/19	ST-191106-027-BJ	639822	3694872	Pasture	Short Grasses	0-10%	Erosion	26-50%	Dig	Sterile Subsoil	Negative		0 to 30	strong brown	Sandy Clay	neg
11/6/19	ST-191106-28-BJ	639926	3694966	Pasture	Short Grasses	50-60%	Erosion	76-99%	Dig	Sterile Subsoil	Negative	Eroded area, slightly sloped into small drainage	0 to 30	srong brown	Sandy Clay	neg
11/6/19	ST-191106-082-JH	638859	3694839	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15 15 to 25	light brown dark brown reddish yellow	Sandy Loam Silty Clay Loam Clay Loam	neg neg neg
11/6/19	ST-191106-084-JH	639038	3694671	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15 15 to 25	light brown dark brown reddish yellow	Sandy Loam Silty Clay Loam Clay Loam	neg neg neg
11/6/19	ST-191106-085-JH	639166	3694547	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15 15 to 25	light brown dark brown reddish yellow	Sandy Loam Silty Clay Loam Clay Loam	neg neg neg
11/6/19	ST-191106-086-JH	639338	3694436	Forest	Forest	10-20%	None	None	Dig	Sterile Subsoil	Negative		0 to 20 20 to 30	brown yellowish brown	Sandy Loam Clay	neg neg
11/6/19	ST-191106-087-JH	639445	3694312	Energy Corridor,Forest	Forest	10-20%	None	26-50%	Dig	Sterile Subsoil	Negative	mottled soils	0 to 20 20 to 30	brown yellowish brown	Sandy Loam Clay	neg neg
11/6/19	ST-191106-088-JH	639488	3694361	Energy Corridor	Forest	10-20%	Industrial	None	No dig	Heavy Disturbance	No dig					
11/6/19	ST-191106-089-JH	639420	3694428	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15 15 to 25	light brown dark brown reddish yellow	Sandy Loam Silty Clay Loam Clay Loam	neg neg neg
11/6/19	ST-191106-090-JH	639005	3694557	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15 15 to 25	light brown dark brown reddish yellow	Sandy Loam Silty Clay Loam Clay Loam	neg neg neg
11/6/19	ST-191106-091-JH	638925	3694650	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15 15 to 25	light brown dark brown reddish yellow	Sandy Loam Silty Clay Loam Clay Loam	neg neg neg
11/6/19	ST-191106-092-JH	638832	3694727	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15 15 to 25	light brown dark brown reddish yellow	Sandy Loam Silty Clay Loam Clay Loam	neg neg neg
11/6/19	ST-191106-093-JH	638789	3694774	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15 15 to 25	light brown dark brown reddish yellow	Sandy Loam Silty Clay Loam Clay Loam	neg neg neg
11/6/19	ST-191106-094-JH	639732	3695236	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15 15 to 25	light brown dark brown reddish yellow	Sandy Loam Silty Clay Loam Clay Loam	neg neg neg
11/6/19	ST-191106-095-JH	639645	3695141	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15 15 to 25	dark brown light yellowish brown yellowish red	Sandy Loam Silty Clay Loam Clay Loam	neg neg neg
11/6/19	ST-191106-096-JH	639503	3695030	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15 15 to 25	dark brown light yellowish brown yellowish red	Sandy Loam Silty Clay Loam Clay Loam	neg neg neg
11/6/19	ST-191106-097-JH	639443	3694977	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15 15 to 25	dark brown light yellowish brown yellowish red	Sandy Loam Silty Clay Loam Clay Loam	neg neg neg
11/6/19	ST-191106-098-JH	639385	3694883	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15 15 to 25	dark brown light yellowish brown yellowish red	Sandy Loam Silty Clay Loam Clay Loam	neg neg neg
11/6/19	ST-191106-099-JH	639319	3694827	Forest	Forest	0-10%	None	None	No dig	gsv	No dig					
11/6/19	ST-191106-100-JH	639461	3694813	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15	dark grayish brown reddish yellow	Loam Clay	neg neg
11/6/19	ST-191106-101-JH	639543	3694895	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15	dark grayish brown reddish yellow	Loam Clay	neg neg
11/6/19	ST-191106-102-JH	639657	3694999	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 5 5 to 15	dark grayish brown reddish yellow	Loam Clay	neg neg
11/6/19	ST-191106-102-SS	638874	3694782	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Wooded area to southwest	0 to 20 20 to 30	brown very dark brown	Sandy Loam Clay	neg neg
11/6/19	ST-191106-103-JH	639764	3695112	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative	North of berm	0 to 5 5 to 15	dark grayish brown reddish yellow	Loam Clay	neg neg
11/6/19	ST-191106-103-SS	638961	3694702	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Wooded area to southwest	0 to 30 30 to 40	brown very dark brown	Sandy Loam Clay	neg neg
11/6/19	ST-191106-104-JH	639858	3695015	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative	North of berm	0 to 5 5 to 15	dark grayish brown reddish yellow	Loam Clay	neg neg
11/6/19	ST-191106-104-SS	639061	3694615	Pasture	Mixed Grasses,Woodland	30-40%	None	None	Dig	Sterile Subsoil	Negative	Shallow strong red subsoil	0 to 20 20 to 30	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-105-JH	639757	3694910	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative	North of berm	0 to 5 5 to 15	dark grayish brown reddish yellow	Loam Clay	neg neg
11/6/19	ST-191106-105-SS	639149	3694539	Forest,Pasture	Mixed Grasses,Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Deep sand to red sub. 30m northeast of paved road in treeline	0 to 40 40 to 50	dark grayish brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-106-JH	639660	3694806	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative	North of berm	0 to 5 5 to 15	dark grayish brown reddish yellow	Loam Clay	neg neg
11/6/19	ST-191106-106-SS	639237	3694460	Pasture	Mixed Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Shallow strong red subsoil	0 to 20 20 to 30	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-107-JH	639554	3694709	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative	North of berm	0 to 5 5 to 15	dark grayish brown reddish yellow	Loam Clay	neg neg
11/6/19	ST-191106-107-SS	639343	3694368	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Shallow strong red subsoil	0 to 20 20 to 30	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-108-JH	639678	3694622	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative	North of berm	0 to 5 5 to 15	dark grayish brown reddish yellow	Loam Clay	neg neg

11/6/19	ST-191106-108-SS	639424	3694296	Two-Track Road	Clear Cut	30-40%	Grading	76-99%	Dig	Sterile Subsoil	Negative	Shallow strong red subsoil to black sandy loam to red sub soil. Mixed, disturbed soils. Edge of graded, clear cut access road	0 to 5 5 to 10 10 to 20 20 to 30	brown red very dark brown red	Sandy Loam Clay Sandy Clay Loam Clay	neg neg neg neg
11/6/19	ST-191106-109-JH	639766	3694726	Forest	Forest	0-10%	None	None	Dig	Sterile Subsoil	Negative	North of berm	0 to 5 5 to 15	very dark grayish brown brown reddish yellow	Loam Clay	neg neg
11/6/19	ST-191106-109-SS	639465	3694333	Energy Corridor,Two-Track Road	Clear Cut	0-10%	Utility	Completely Destroyed	No dig	Proximity To Existing Utility	No dig	Proximity to existing gas pipeline or energy corridor. Push piles to northwest				
11/6/19	ST-191106-110-SS	639376	3694416	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Shallow strong red subsoil	0 to 20 20 to 30	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-111-SS	638975	3694487	Pasture	Mixed Grasses,Woodland	20-30%	None	None	Dig	Sterile Subsoil	Negative	Shallow strong red subsoil	0 to 20 20 to 30	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-112-SS	638904	3694579	Pasture	Mixed Grasses	20-30%	None	None	Dig	Sterile Subsoil	Negative	Black sub	0 to 30 30 to 40	dark brown black	Sandy Loam Clay	neg neg
11/6/19	ST-191106-113-SS	638830	3694605	Pasture	Mixed Grasses	20-30%	None	None	Dig	Sterile Subsoil	Negative	Black sub	0 to 30 30 to 40	dark brown black	Sandy Loam Clay	neg neg
11/6/19	ST-191106-114-SS	638800	3694671	Pasture	Mixed Grasses	20-30%	None	None	Dig	Compact Soils	Negative	Heavily compacted gray silt subsoil	0 to 20 20 to 30 30 to 40	dark brown very dark brown grayish brown	Sandy Loam Sandy Clay Silt	neg neg neg
11/6/19	ST-191106-115-SS	638734	3694732	Ditch,Road	Paved	0-10%	Roadway Construction	Completely Destroyed	No dig	Heavy Disturbance	No dig	Road ditch				
11/6/19	ST-191106-116-SS	639712	3695351	Pasture	Short Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Adjacent to gravel road and no vehicle gate entrance. House to the southwest	0 to 30 30 to 40	dark brown red	Sandy Clay Loam Clay	neg neg
11/6/19	ST-191106-117-SS	639622	3695255	Energy Corridor	Clear Cut	20-30%	Utility	Completely Destroyed	Dig	Sterile Subsoil	Negative	Shallow strong red subsoil to black sandy loam to red sub soil. Mixed, disturbed soils.	0 to 3 3 to 6 6 to 10 10 to 20	brown red very dark brown red	Sandy Loam Clay Sandy Clay Loam Clay	neg neg neg neg
11/6/19	ST-191106-118-SS	639527	3695154	Energy Corridor	Clear Cut	0-10%	Utility	Completely Destroyed	No dig	Proximity To Existing Utility	No dig	Proximity to existing gas pipeline or energy corridor. Push piles to southeast				
11/6/19	ST-191106-119-SS	639428	3695049	Energy Corridor	Clear Cut	0-10%	Utility	Completely Destroyed	No dig	Proximity To Existing Utility	No dig	Proximity to existing gas pipeline or energy corridor. Push piles to southeast. Southeast of well pad/facility site				
11/6/19	ST-191106-120-SS	639326	3694943	Energy Corridor	Clear Cut	0-10%	Utility	Completely Destroyed	No dig	Proximity To Existing Utility	No dig	Proximity to existing gas pipeline or energy corridor. Push piles to southeast.				
11/6/19	ST-191106-121-SS	639363	3694825	Pasture	Clear Cut,Short Grasses	20-30%	None	None	Dig	Sterile Subsoil	Negative	Sandy soil over strong red sub	0 to 30 30 to 40	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-122-SS	639447	3694915	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sandy soil over strong red sub	0 to 20 20 to 30	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-123-SS	639530	3695015	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sub at surface, large gravel limited depth	0 to 10	red	Clay	neg
11/6/19	ST-191106-124-SS	639613	3695091	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sandy soil over strong red sub	0 to 10 10 to 30	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-125-SS	639698	3695189	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sandy soil over strong red sub	0 to 20 20 to 30	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-126-SS	639850	3695122	Pasture	Short Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sandy soil over strong dark brown clay subsoil	0 to 30 30 to 40	brown very dark brown	Sandy Loam Clay	neg neg
11/6/19	ST-191106-127-SS	639747	3695011	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sandy soil over strong red sub	0 to 10 10 to 30	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-128-SS	639651	3694911	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sandy soil over strong red sub	0 to 30 30 to 40	grayish brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-129-SS	639556	3694813	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sandy soil over strong red sub	0 to 20 20 to 30	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-130-SS	639471	3694723	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative		0 to 20 20 to 40 40 to 50	light reddish brown dark gray reddish brown	Sandy Loam Sandy Clay Loam Clay	neg neg neg
11/6/19	ST-191106-131-SS	639567	3694655	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sandy soil over strong red sub	0 to 20 20 to 30	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-132-SS	639642	3694742	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sub at surface	0 to 5 5 to 20	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-133-SS	639731	3694833	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sub at surface	0 to 5 5 to 20	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-134-SS	639812	3694924	Pasture	Short Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sub at surface	0 to 5 5 to 30	brown red	Sandy Loam Clay	neg neg
11/6/19	ST-191106-135-SS	639927	3695028	Pasture	Short Grasses	0-10%	None	None	Dig	Sterile Subsoil	Negative	Sub at surface	0 to 5 5 to 30	brown red	Sandy Loam Clay	neg neg
11/8/19	ST-191108-136-SS	639870	3694855	Pasture	Short Grasses	70-80%	Erosion	76-99%	No dig	Erosion	No dig	Heavily eroded. High GSV				
11/8/19	ST-191108-137-SS	639982	3694970	Pasture	Short Grasses	70-80%	Erosion	76-99%	No dig	Erosion	No dig	Heavily eroded. High GSV				
12/4/19	ST-191204-028-BJ	631462	3688275	Pasture	Short Grasses	50-60%	Erosion	76-99%	No dig	Bedrock	No dig	Bedrock just below surface				
12/4/19	ST-191204-029-BJ	631332	3688288	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	Dig	Compact Soils	Negative		0 to 30	brown	Clay Loam	neg
12/4/19	ST-191204-030-BJ	631299	3688338	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	Dig	Bedrock	Negative	Bedrock at 30 cmbs	0 to 30	brown	Clay Loam	neg
12/4/19	ST-191204-031-BJ	631437	3688343	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	No dig	Slope	No dig	Slope				
12/4/19	ST-191204-032-BJ	631541	3688335	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	Dig	Bedrock	Negative	Lots of gravel in soil	0 to 25	brown	Clay Loam	neg
12/4/19	ST-191204-033-BJ	631451	3688411	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative	Lots of gravel in soil	0 to 40 40 to 50	brown reddish brown	Clay Loam Sandy Clay	neg neg
12/4/19	ST-191204-034-BJ	631317	3688427	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative	Mottled clay in bottom strat	0 to 40 40 to 50	brown gray	Clay Loam Sandy Clay	neg neg
12/4/19	ST-191204-035-BJ	631193	3688426	Forest	Forest	0-10%	Slope	Completely Destroyed	No dig	Slope	No dig	Slope				

12/4/19	ST-191204-036-BJ	630997	3688433	Forest	Forest	0-10%	Slope	Completely Destroyed	No dig	Slope	No dig	Slope			
12/4/19	ST-191204-037-BJ	630820	3688431	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	Dig	Bedrock	Negative	Bedrock just below surface	0 to 10	brown	Clay Loam	neg
12/4/19	ST-191204-038-BJ	630680	3688422	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	Dig	Bedrock	Negative	Bedrock just below surface	0 to 5	brown	Clay Loam	neg
12/4/19	ST-191204-039-BJ	630548	3688410	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	Dig	Bedrock	Negative	On lower end of slope	0 to 30	reddish brown	Sandy Clay	neg
12/4/19	ST-191204-040-BJ	630566	3688248	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	No dig	Proximity To Existing Utility	No dig	In pipeline corridor				
12/4/19	ST-191204-041-BJ	630689	3688257	Creek,Pasture	Mixed Grasses	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative	In drainage area, hyrdic clay	0 to 30	very dark gray	Clay	neg
12/4/19	ST-191204-042-BJ	630823	3688266	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	No dig	Slope	No dig	Sloped				
12/4/19	ST-191204-043-BJ	630915	3688292	Pasture	Mixed Grasses	0-10%	Erosion	0-25%	No dig	Slope	No dig	Sloped, pipeline corridor				
12/4/19	ST-191204-044-BJ	630700	3688322	Creek,Pasture	Mixed Grasses	0-10%	Erosion	0-25%	Dig	Bedrock	Negative	Slight slope towards drainage	0 to 15	dark brown	Sandy Clay Loam	neg
12/4/19	ST-191204-045-BJ	630546	3688503	Pasture	Pasture	0-10%	Erosion	0-25%	Dig	Bedrock	Negative	Heavy gravel just below surface	0 to 15	reddish brown	Sandy Clay	neg
12/4/19	ST-191204-046-BJ	630678	3688516	Pasture	Pasture	0-10%	Erosion	0-25%	Dig	Bedrock	Negative	Heavy gravel just below surface	0 to 10	reddish brown	Sandy Clay	neg
12/4/19	ST-191204-047-BJ	630808	3688517	Pasture	Pasture	0-10%	Erosion	26-50%	Dig	Bedrock	Negative	Heavy gravel just below surface, on slight incline at base of slope	0 to 10	reddish brown	Sandy Clay	neg
12/4/19	ST-191204-048-BJ	630976	3688519	Forest	Forest	0-10%	Erosion	0-25%	Dig	Bedrock	Negative	Heavy gravel at 35 cmbs	0 to 10 10 to 35	very dark gray brown	Sandy Loam Sandy Clay Loam	neg neg
12/4/19	ST-191204-049-BJ	631138	3688540	Forest	Forest	0-10%	Erosion	0-25%	Dig	Bedrock	Negative	Heavy gravel at 25 cmbs	0 to 25	brown	Sandy Clay Loam	neg
12/4/19	ST-191204-050-BJ	631268	3688528	Drainage	Forest	0-10%	Erosion	0-25%	No dig	Inundated	No dig	In deep drainage channel				
12/4/19	ST-191204-051-BJ	630919	3688544	Pasture	Mixed Grasses,Pasture	0-10%	Erosion	26-50%	Dig	Bedrock	Negative	Heavy gravel just below surface	0 to 10	reddish brown	Sandy Clay	neg
12/4/19	ST-191204-052-BJ	630934	3688623	Pasture	Mixed Grasses,Pasture	0-10%	Erosion	26-50%	No dig	Heavy Disturbance	No dig	Two track				
12/4/19	ST-191204-053-BJ	631060	3688628	Forest,Pasture	Mixed Grasses	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative	In clearing of forest	0 to 40 40 to 50	strong brown reddish brown	Sandy Loam Sandy Clay	neg neg
12/4/19	ST-191204-054-BJ	631226	3688615	Forest	Forest	40-50%	Erosion	0-25%	Dig	Sterile Subsoil	Negative		0 to 70 70 to 80	brown dark gray	Sand Sandy Clay	neg neg
12/4/19	ST-191204-055-BJ	631360	3688615	Forest,Pasture	Forest,Mixed Grasses	0-10%	Erosion	26-50%	Dig	Sterile Subsoil	Negative	At edge of forest	0 to 30 30 to 40	dark brown dark reddish brown	Silty Clay Loam Clay	neg neg
12/4/19	ST-191204-056-BJ	631470	3688641	Pasture	Mixed Grasses,Pasture	50-60%	Erosion	26-50%	Dig	Sterile Subsoil	Negative	Eroded area	0 to 35 35 to 45	brown reddish brown	Sandy Loam Sandy Clay	neg neg
12/4/19	ST-191204-057-BJ	631527	3688603	Forest	Forest	30-40%	Erosion	76-99%	Dig	Bedrock	Negative	Heavy gravel at 5 cmbs	0 to 5	brown	Sandy Clay	neg
12/4/19	ST-191204-058-BJ	631525	3688530	Forest,Pasture	Forest,Mixed Grasses	0-10%	Slope	51-75%	No dig	Slope	No dig	Slope				
12/4/19	ST-191204-059-BJ	631393	3688541	Pasture	Mixed Grasses,Pasture	0-10%	Erosion	26-50%	Dig	Heavy Disturbance	Negative	Mixed soils, heavy gravel concentration	0 to 30	reddish brown	Sandy Clay	neg
12/4/19	ST-191204-138-SS	631539	3688254	Pasture	Mixed Grasses	0-10%	Bedrock	26-50%	Dig	Bedrock	Negative	Shallow gravel, 50% in sub.	0 to 10 10 to 20	dark brown brown	Silt Loam Silt Loam	neg neg
12/4/19	ST-191204-139-SS	631394	3688253	Pasture	Mixed Grasses	0-10%	Erosion	26-50%	Dig	Sterile Subsoil	Negative	Shallow subsoil	0 to 10 10 to 30	dark brown strong brown	Silty Clay Loam Clay	neg neg
12/4/19	ST-191204-140-SS	631294	3688249	Pasture	Mixed Grasses	0-10%	Erosion	26-50%	Dig	Sterile Subsoil	Negative	Shallow subsoil	0 to 10 10 to 30	dark brown strong brown	Silty Clay Loam Clay	neg neg
12/4/19	ST-191204-141-SS	631248	3688305	Forest	Woodland	0-10%	Slope	51-75%	No dig	Slope	No dig	Sloped area				
12/4/19	ST-191204-142-SS	631380	3688311	Pasture	Mixed Grasses	0-10%	Erosion	51-75%	Dig	Sterile Subsoil	Negative	Shallow subsoil	0 to 5 5 to 30	dark brown dark reddish brown	Silty Clay Loam Clay	neg neg
12/4/19	ST-191204-143-SS	631505	3688312	Pasture	Mixed Grasses	0-10%	Bedrock	26-50%	Dig	Bedrock	Negative	Shallow gravel, 70% in sub.	0 to 5 5 to 10	dark brown brown	Silt Loam Silt Loam	neg neg
12/4/19	ST-191204-144-SS	631524	3688373	Pasture	Mixed Grasses,Woodland	0-10%	Slope	51-75%	No dig	Slope	No dig	Sloped area				
12/4/19	ST-191204-145-SS	631375	3688373	Pasture	Mixed Grasses	0-10%	Erosion	51-75%	Dig	Sterile Subsoil	Negative	Red brown subsoil	0 to 20 20 to 30	dark brown dark reddish brown	Silty Clay Loam Clay	neg neg
12/4/19	ST-191204-146-SS	631211	3688370	Creek	Inundated	0-10%	Inundated	Completely Destroyed	No dig	Inundated	No dig	In creek. 5m cut banks				
12/4/19	ST-191204-147-SS	631065	3688377	Pasture	Mixed Grasses	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative	Red brown subsoil	0 to 40 40 to 50	dark brown dark reddish brown	Silt Loam Clay	neg neg
12/4/19	ST-191204-148-SS	630923	3688376	Pasture	Mixed Grasses	0-10%	Bedrock	51-75%	Dig	Bedrock	Negative	Shallow bedrock	0 to 5	dark brown	Silt Loam	neg
12/4/19	ST-191204-149-SS	630778	3688366	Pasture	Mixed Grasses	0-10%	Utility	51-75%	No dig	Proximity To Existing Utility	No dig	Natural gas pipeline				
12/4/19	ST-191204-150-SS	630620	3688366	Pasture	Mixed Grasses	0-10%	Bedrock	51-75%	Dig	Bedrock	Negative	Shallow bedrock. 70% gravel	0 to 20	dark brown	Silt Loam	neg
12/4/19	ST-191204-151-SS	630490	3688364	Pasture	Mixed Grasses	0-10%	Slope	51-75%	No dig	Slope	No dig	Sloped area				
12/4/19	ST-191204-152-SS	630501	3688196	Pasture	Mixed Grasses	0-10%	None	None	Dig	Bedrock	Negative	Red brown subsoil	0 to 30 30 to 40	dark brown dark reddish brown	Silt Loam Clay	neg neg
12/4/19	ST-191204-153-SS	630637	3688200	Pasture	Mixed Grasses	30-40%	Bedrock	51-75%	Dig	Bedrock	Negative	Shallow bedrock. 70% gravel	0 to 5	dark brown	Silt Loam	neg
12/4/19	ST-191204-154-SS	630770	3688203	Pasture	Mixed Grasses	0-10%	Slope	51-75%	No dig	Slope	No dig	Sloped area				
12/4/19	ST-191204-155-SS	630884	3688189	Creek	Inundated	0-10%	Inundated	Completely Destroyed	No dig	Inundated	No dig	In creek. 5m cut banks				
12/4/19	ST-191204-156-SS	630852	3688323	Pasture	Mixed Grasses	30-40%	Bedrock	51-75%	Dig	Bedrock	Negative	Shallow bedrock. 70% gravel	0 to 5	dark brown	Silt Loam	neg
12/4/19	ST-191204-157-SS	630572	3688323	Pasture	Mixed Grasses	30-40%	Bedrock	51-75%	Dig	Bedrock	Negative	Shallow bedrock. 70% gravel	0 to 20	brown	Silt Loam	neg
12/4/19	ST-191204-158-SS	630491	3688464	Pasture	Mixed Grasses	0-10%	Bedrock	51-75%	Dig	Bedrock	Negative	Shallow bedrock. 70% gravel	0 to 15	brown	Silty Clay Loam	neg
12/4/19	ST-191204-159-SS	630611	3688490	Pasture	Mixed Grasses	0-10%	Slope	76-99%	No dig	Slope	No dig	Sloped area				

12/4/19	ST-191204-160-SS	630750	3688498	Forest,Pasture	Woodland	0-10%	None	None	Dig	Bedrock	Negative	Small stand of trees	0 to 20 20 to 30	dark brown dark reddish brown	Silt Loam Silty Clay	neg neg			
12/4/19	ST-191204-161-SS	630907	3688503	Forest,Pasture	Woodland	0-10%	None	None	Dig	Bedrock	Negative	Small stand of trees	0 to 20 20 to 30	dark brown dark reddish brown	Silt Loam Silty Clay	neg neg			
12/4/19	ST-191204-162-SS	631048	3688506	Pasture	Clear Cut,Mixed Grasses	0-10%	Utility	76-99%	No dig	Proximity To Existing Utility	No dig	Utility corridor							
12/4/19	ST-191204-163-SS	631201	3688505	Forest	Woodland	0-10%	None	None	Dig	Bedrock	Negative	Forested area. Adjacent to small drainage	0 to 30 30 to 40	dark brown reddish brown	Sandy Loam Sandy Clay	neg neg			
12/4/19	ST-191204-164-SS	631229	3688569	Forest	Woodland	0-10%	Slope	26-50%	Dig	Roots	Negative	Forested area. Heavy roots. Slight slope to creek.	0 to 30	dark brown	Sandy Loam	neg			
12/4/19	ST-191204-165-SS	631051	3688573	Forest	Woodland	0-10%	Slope	26-50%	Dig	Sterile Subsoil	Negative	Forested area. Slight slope to creek. 40-50% gravel in subsoil	0 to 20 20 to 30	dark brown dark yellowish brown	Silt Loam Silty Clay	neg neg			
12/4/19	ST-191204-166-SS	630765	3688550	Pasture	Clear Cut,Mixed Grasses	0-10%	Utility	76-99%	No dig	Proximity To Existing Utility	No dig	Utility corridor							
12/4/19	ST-191204-167-SS	630645	3688548	Pasture	Mixed Grasses,Woodland	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative	Gray subsoil. Bottom of slope	0 to 20 20 to 30	dark brown gray	Silt Loam Silty Clay	neg neg			
12/4/19	ST-191204-168-SS	630516	3688547	Pasture	Mixed Grasses	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative	Reddish gray subsoil. Bottom of slope	0 to 20 20 to 30	dark brown dark reddish gray	Silt Loam Silty Clay	neg neg			
12/4/19	ST-191204-169-SS	630985	3688604	Forest,Pasture	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Gray subsoil.	0 to 40 40 to 50	dark brown gray	Silt Loam Silty Clay	neg neg			
12/4/19	ST-191204-170-SS	631159	3688611	Forest	Woodland	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative	Reddish gray subsoil.	0 to 10 20 to 30	dark brown reddish gray	Sandy Loam Sandy Clay	neg neg			
12/4/19	ST-191204-171-SS	631301	3688616	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Gray subsoil.	0 to 30 30 to 40	dark brown gray	Silty Clay Loam Silty Clay	neg neg			
12/4/19	ST-191204-172-SS	631415	3688622	Forest	Woodland	0-10%	None	None	Dig	Sterile Subsoil	Negative	Gray subsoil. Adjacent to drainage	0 to 30 30 to 40	dark brown gray	Silty Clay Loam Silty Clay	neg neg			
12/4/19	ST-191204-173-SS	631522	3688621	Forest	Woodland	0-10%	Slope	51-75%	No dig	Slope	No dig	Sloped area							
12/4/19	ST-191204-174-SS	631519	3688515	Forest	Woodland	0-10%	Slope	51-75%	No dig	Slope	No dig	Sloped area							
12/4/19	ST-191204-175-SS	631379	3688509	Pasture	Mixed Grasses	0-10%	Slope	0-25%	Dig	Sterile Subsoil	Negative	Light brown 50% gravel	0 to 30 30 to 40	dark brown brown	Silt Loam Silty Clay Loam	neg neg			
12/5/19	ST-191205-060-BJ	631475	3688808	Forest	Forest	0-10%	Utility	0-25%	Dig	Max ST Depth	Negative	520N 500E	0 to 20 20 to 100	brown brown	Sandy Loam Sandy Loam	neg neg			
12/5/19	ST-191205-061-BJ	631474	3688800	Energy Corridor	Forest,Mixed Grasses	10-20%	Utility	26-50%	Dig	large root obstruction	Negative	510N 500E	0 to 20 20 to 80	brown brown	Sandy Loam Sandy Loam	neg neg			
12/5/19	ST-191205-062-BJ	631493	3688789	Energy Corridor	Forest	20-30%	Utility	26-50%	Dig	Max ST Depth	Negative	500N 520E	0 to 15 15 to 100	brown brown	Sandy Loam Sandy Loam	neg neg			
12/5/19	ST-191205-063-BJ	631485	3688791	Energy Corridor	Forest	20-30%	Utility	26-50%	Dig	Max ST Depth	Positive	500N 510E	0 to 100	strong brown	Sandy Loam	pos	Lithic Flake	1	
12/5/19	ST-191205-064-BJ	631500	3688788	Energy Corridor	Forest,Mixed Grasses	10-20%	Utility	0-25%	Dig	Max ST Depth	Negative	500N 530E	0 to 100	brown	Sandy Loam	neg			
12/5/19	ST-191205-065-BJ	631488	3688811	Forest	Forest	0-10%	Erosion	0-25%	Dig	Max ST Depth	Negative	520N 510E	0 to 100	strong brown	Sandy Loam	neg			
12/5/19	ST-191205-066-BJ	631488	3688801	Forest	Forest	0-10%	Erosion	0-25%	Dig	large root obstruction	Negative	510N 510E	0 to 80	brown	Sandy Loam	neg			
12/5/19	ST-191205-067-BJ	631468	3688807	Energy Corridor	Clear Cut,Mixed Grasses	10-20%	Utility	26-50%	Dig	Max ST Depth	Negative	510N 490E	0 to 100	brown	Sandy Loam	neg			
12/5/19	ST-191205-068-BJ	631468	3688817	Forest	Forest	0-10%	Erosion	0-25%	Dig	large root obstruction	Negative	520N 490E	0 to 30 30 to 65	dark brown brown	Sandy Loam Sandy Loam	neg neg			
12/5/19	ST-191205-069-BJ	639064	3695033	Pasture	Short Grasses	0-10%	Erosion	0-25%	Dig	Sterile Subsoil	Negative	480N 500E	0 to 15 15 to 40	brown yellowish red	Sandy Loam Sandy Clay	neg neg			
12/5/19	ST-191205-069-BJ	631467	3688789	Forest	Forest	0-10%	Erosion	0-25%	Dig	Max ST Depth	Negative	490N 490E	0 to 10 10 to 100	grayish brown brown	Sandy Loam Sandy Loam	neg neg			
12/5/19	ST-191205-070-BJ	639064	3695039	Pasture	Pasture,Short Grasses	0-10%	Erosion	26-50%	Dig	Sterile Subsoil	Negative	490N 500E cmbs Modern brown glass found subsurface 10-30	0 to 10 10 to 35	brown reddish brown	Sandy Clay Loam Sandy Clay	neg neg			
12/5/19	ST-191205-071-BJ	639086	3695035	Forest	Forest	0-10%	Erosion	26-50%	Dig	Sterile Subsoil	Negative	480N 520E	0 to 15 15 to 35	brown reddish brown	Sandy Loam Sandy Clay	neg neg			
12/5/19	ST-191205-072-BJ	639084	3695041	Forest,Pasture	Forest,Pasture	0-10%	Erosion	51-75%	Dig	Sterile Subsoil	Negative	490N 520E	0 to 5 5 to 30	brown yellowish red	Sandy Clay Loam Sandy Clay	neg neg			
12/5/19	ST-191205-073-BJ	639096	3695051	Pasture	Pasture	0-10%	Erosion	26-50%	Dig	Sterile Subsoil	Negative	510N 540E	0 to 10 10 to 30	brown yellowish red	Sandy Clay Loam Sandy Clay	neg neg			
12/5/19	ST-191205-075-BJ	639086	3695062	Pasture	Pasture	0-10%	Grading	51-75%	Dig	Sterile Subsoil	Negative	520N 520E	0 to 30	yellowish red	Sandy Clay	neg			
12/5/19	ST-191205-076-BJ	639086	3695056	Pasture	Pasture	0-10%	Grading	26-50%	Dig	Sterile Subsoil	Negative	510N 520E	0 to 30	yellowish red	Sandy Clay	neg			
12/5/19	ST-191205-176-SS	631457	3688791	Forest	Woodland	0-10%	Bioturbation	26-50%	Dig	Max ST Depth	Negative	500n 480e. Sandy loam to max ST depth. Heavy roots throughout. No evidence of cultural material. In woodland SW of clear cut corridor.	0 to 20 20 to 70 70 to 100	dark grayish brown brown reddish brown	Sandy Loam Sandy Loam Sandy Loam	neg neg neg			

12/5/19	ST-191205-177-SS			Energy Corridor,Forest	Clear Cut,Woodland	20-30%	Utility	26-50%	Dig	Max ST Depth	Positive	500n 490e. Sandy loam to max ST depth. Adjacent to tree line SW of clear cut corridor. At corridor edge. Small number (5 total) of chert flakes. No cultural materials beyond 70 cmbs.	0 to 20 20 to 30 30 to 40 40 to 60 60 to 70 70 to 100	dark grayish brown brown brown brown brown brown	Sandy Loam Sandy Loam Sandy Loam Sandy Loam Sandy Loam Sandy Loam	neg pos pos neg pos neg	Lithic Flakes	5
12/5/19	ST-191205-178-SS	631446	3688791	Forest	Woodland	0-10%	Bioturbation	26-50%	Dig	Max ST Depth	Negative	500n 470e. Sandy loam to max ST depth. Heavy roots throughout. No evidence of cultural material. In woodland SW of clear cut corridor.	0 to 20 20 to 70 70 to 100	dark grayish brown brown reddish brown	Sandy Loam Sandy Loam Sandy Loam	neg neg neg		
12/5/19	ST-191205-179-SS	631475	3688771	Forest	Woodland	0-10%	Bioturbation	26-50%	Dig	Max ST Depth	Negative	480n 500e. Sandy loam to max ST depth. Heavy roots throughout. No evidence of cultural material. In woodland SW of clear cut corridor.	0 to 20 20 to 50 50 to 100	dark grayish brown brown reddish brown	Sandy Loam Sandy Loam Sandy Loam	neg neg neg		
12/5/19	ST-191205-180-SS	631475	3688783	Forest	Woodland	0-10%	Bioturbation	26-50%	Dig	Root	Negative	490n 500e. Sandy loam to max ST depth. Heavy roots throughout. No evidence of cultural material. In woodland SW of clear cut corridor. Large root limited ST depth to 80cmbs.	0 to 20 20 to 60 60 to 80	dark grayish brown brown reddish brown	Sandy Loam Sandy Loam Sandy Loam	neg neg neg		
12/5/19	ST-191205-181-SS	631486	3688772	Forest	Woodland	0-10%	Bioturbation	0-25%	Dig	Max ST Depth	Negative	480n 510e. Sandy loam to max ST depth. Along animal trail. No evidence of cultural material. In woodland SW of clear cut corridor.	0 to 10 10 to 70 70 to 100	light yellowish brown brown reddish brown	Sandy Loam Sandy Loam Sandy Loam	neg neg neg		
12/5/19	ST-191205-182-SS	631485	3688783	Forest	Woodland	0-10%	Bioturbation	0-25%	Dig	Max ST Depth	Negative	490n 510e. Sandy loam to max ST depth. Along animal trail. No evidence of cultural material. Adjacent to woodland SW of clear cut corridor. At clear cut boundary.	0 to 10 10 to 80 80 to 100	light yellowish brown brown reddish brown	Sandy Loam Sandy Loam Sandy Loam	neg neg neg		
12/5/19	ST-191205-183-SS	631468	3688779	Forest	Woodland	0-10%	Bioturbation	0-25%	Dig	Max ST Depth	Negative	480n 490e. Sandy loam to max ST depth. Some roots. No evidence of cultural material. Adjacent to woodland SW of clear cut corridor.	0 to 20 20 to 100	brown brown	Sandy Loam Sandy Loam	neg neg		
12/5/19	ST-191205-184-SS	639095	3695026	Forest	Woodland	0-10%	Bioturbation	0-25%	Dig	Sterile Subsoil	Negative	20 m south Delineation test off 101-SS. In small stand of trees surrounded by mixed grass prairie. Shallow red subsoil. Roots throughout ST.	0 to 20 20 to 40	dark brown red	Silty Clay Loam Clay	neg neg		
12/5/19	ST-191205-185-SS	639094	3695038	Forest	Woodland	0-10%	Bioturbation	0-25%	Dig	Sterile Subsoil	Negative	10m south Delineation test off 101-SS. In small stand of trees surrounded by mixed grass prairie. Shallow red subsoil. Roots throughout ST.	0 to 20 20 to 40	dark brown red	Silty Clay Loam Clay	neg neg		
12/5/19	ST-191205-186-SS	639112	3695043	Drainage,Forest	Inundated,Woodland	0-10%	Grading	76-99%	No dig	Heavy Disturbance	No dig	20m East delineation test off 101-SS. In small stand of trees with channelized drainage running NW-SE. ST in drainage.						
12/5/19	ST-191205-187-SS	639095	3695060	Drainage,Forest	Inundated,Woodland	0-10%	Grading	76-99%	No dig	Heavy Disturbance	No dig	20m North delineation test off 101-SS. In small stand of trees with channelized drainage running NW-SE. ST in drainage.						
12/5/19	ST-191205-188-SS	639068	3695052	Energy Corridor,Pasture	Mixed Grasses	0-10%	Utility	Completely Destroyed	No dig	Proximity To Existing Utility	No dig	10 North delineation test off 72-SS. Half meter west of transmission pole.						
12/5/19	ST-191205-191-SS	639068	3695062	Pasture	Mixed Grasses,Woodland	0-10%	Grading	51-75%	Dig	Sterile Subsoil	Negative	20 m north delineation. Along fence line and 15m SE of road.	0 to 10 10 to 30	dark brown red	Silty Clay Loam Clay	neg neg		

APPENDIX C: HISTORICAL AND ARCHIVAL RESEARCH

THE STATE OF TEXAS, COUNTY OF Wise } **Know all Men by these Presents:**

That We J. T. Fortenberry and wife S. C. Fortenberry

in the State of Texas

of the County of Wise for and in consideration of the sum of Fifteen hundred DOLLARS, to us paid and secured to be paid by in hand paid and to be paid by J. B. Howard the receipt of which is here by acknowledged and one certain promissory note for the sum of two hundred dollars due and payable Nov 1st 1903 drawing 10% interest from date signed J B Howard and dated Feb 4th 1903

have GRANTED, SOLD AND CONVEYED, and by these presents do GRANT, SELL AND CONVEY unto the said J. B. Howard of the County of Wise State of Texas all that certain tract or parcel of land lying and situated in Wise County Texas [illegible] being a part of the J W Bruns survey and described as follows to witt:- beginning at the N. E. Corner of a tract of land sold to P. W. Foster J. Q. St. Clair from which a P.O. bush brs S 50° W 12 Vrs thence S 45° W 614 Vrs to J J Langs W line from which a P.O bush brs N. 52° 2 Vrs Do bush S 7° W 7 Vrs thence S 45 E 460 Vrs thence N 45 E. 204 1/2 Vrs to the corner of a 32 acre tract sold by J. J. Lang to J Fortenberry thence S 45 E. 480 3/5 Vrs thence N 45 E. 432 1/2 Vrs thence N. 45 W 39 1/3 Vrs thence S 45 W 23 Vrs thence N. 45 W 901 1/4 Vrs to the Beginning containing 85 acres of land

TO HAVE AND TO HOLD the above described premises, together with all and singular the rights and appurtenances thereto in anywise belonging unto the said J B Howard and his heirs and assigns forever. And we do hereby bind our heirs, executors and administrators to WARRANT AND FOREVER DEFEND all and singular the said premises unto the said J B Howard and his heirs and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

But it is expressly agreed and stipulated that the *Vendor's Lien* is retained against the above described property, premises and improvements, until the above described note and all interest thereon are fully paid according to face and tenor, effect and reading, when this deed shall become absolute.

WITNESS our hand at Greenwood this 4th day of February A. D. 1903

Witnesses at request of Grantor:

S. C. Fortenberry

J. T. Fortenberry

THE STATE OF TEXAS, COUNTY OF Wise } BEFORE ME, the undersigned authority in and for Wise County, Texas, on this day personally appeared known to me to be the person whose name subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed. Given under my hand and seal of office, this day of A. D. 190

[SEAL]

THE STATE OF TEXAS, COUNTY OF Wise } BEFORE ME, the undersigned authority in and for County, Texas, on this day personally appeared J. Fortenberry J. Fortenberry, and S. C. Fortenberry wife of said J Fortenberry known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the purposes and consideration therein expressed. And the said S C Fortenberry wife of the said J. Fortenberry having been examined by me, privily and apart from her husband, and having the same fully explained to her, she, the said S. C. Fortenberry acknowledged such instrument to be her act and deed, and declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it.

Given under my hand and seal of office, this 4th day of Feb A. D. 1903

J B McFeeter J P and Ex officio Notary Public Wise County Texas

[SEAL]

Filed for record the 5 day of 12 A. D. 1910, at 12 o'clock M., and recorded the 6 day of 12 A. D. 1910, at 2 20 o'clock P. M.

J. R. Wells Clerk County Court, Wise County, Texas.

By Deputy.

The State of Texas } Know all men by these presents
County of Wise } That we J G Graves and M F Graves wife of J G Graves of the County of Wise in the State aforesaid for and in consideration of the sum of Five hundred Dollars To us in hand paid by J Fortenberry have granted sold and conveyed and by these presents do grant sell and convey unto the said J Fortenberry of the County of Wise in the State of Texas all that certain tract or parcel of land lying and situated in Wise County Texas being apart of the J W Crunk survey and described as follows to wit beginning at the East corner of a one hundred acre tract sold to W P. Foster by J Z St. Clair from which a P O bush brs S 50° W 12 vrs Thence S 45° E 160 vrs to J J Longs W line from which a post oak bush brs N 5 E 2 vrs a do bush S 7° W 7 vrs Thence S 45° W 614 vrs a post oak bush brs N 45° E 12 vrs a do bush brs S 43° West 2 vrs Thence N 45° W 160 vrs a P O bush brs N 45° E 86 vrs Thence N 45° E 614 vrs to place of beginning To have and to hold the above described premises together with all and singular the rights and appurtenances thereto in any wise belonging unto the said J Fortenberry and his heirs and assigns forever and we do hereby bind ourselves heirs executors and administrators to warrant and forever defend all and singular the said premises unto the said J Fortenberry and his heirs and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof
Witness our hands this 25th day of September a d 1886.

J G Graves
M F Graves

The State of Texas } Before me R D Bailey Notary Public
County of Wise } in and for Wise County Texas on this day personally appeared J G Graves known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed
Given under my hand and seal of Office this 25th day of September a d 1886.

R D Bailey Notary Public
Wise Co Texas

WARRANTY DEED RECORD—With Vendor's Lien—Single and Wife's Joint Acknowledgment.

Know all Men by these Presents:

THE STATE OF TEXAS }
COUNTY OF Wise }

THAT We J B Howard and wife L C Howard in the State of Texas

of the County of Wise for and in consideration of the sum of Seventeen hundred DOLLARS,

to us paid and secured to be paid by J T Washburn as follows: Cash One Thousand Dollars the receipt of which is hereby acknowledged and 2 promissory notes of even date herewith first note for $350.00 due 21 Oct 1911 second note for $350.00 due 21 Oct 1912 Both notes to bear 8 percent int.

have GRANTED, SOLD AND CONVEYED, and by these presents do GRANT, SELL AND CONVEY unto the said J T Washburn of the County of Wise

State of Texas all that certain tract or parcel of land lying and situated in Wise County, Texas being a part of the J W Burnet survey and described as follows to wit;

Beginning at the E Corner of a tract of land sold to W. C Foster by J J St. Clair from which a BO bush bears S 5° W 12 vrs thence S 45° W 614 vrs to J J Lang's W line from which a BO bush bears S 20° 2 vrs to bush S 7° W 7 vrs thence S 45° E 160 vrs thence N 45° E 704 1/2 vrs to the corner of a 32 acre tract sold by J J Lang to J Sailesbury thence N 45° W 39 1/2 thence S 45° W 23 vrs thence N 45° W 901 1/4 vrs to the Beginning. Containing 80 acres of land

TO HAVE AND TO HOLD the above described premises, together with all and singular the rights and appurtenances thereto in anywise belonging unto the said J T Washburn his heirs and assigns forever. And we do hereby bind ourselves our heirs, executors and administrators to WARRANT AND FOREVER DEFEND all and singular the said premises unto the said J T Washburn and his heirs and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

But it is expressly agreed and stipulated that the *Vendor's Lien* is retained against the above described property, premises and improvements, until the above described note 2, and all interest thereon are fully paid according to their face and tenor, effect and reading, when this deed shall become absolute.

WITNESS our hands at Greenwood this 21 day of November A. D. 1910.

Witnesses at request of Grantor:

J B Howard
L C Howard

THE STATE OF TEXAS }
COUNTY OF Wise }

BEFORE ME, in and for County, Texas, on this day personally appeared known to me to be the person whose name subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office, this day of A. D. 190

[SEAL]

THE STATE OF TEXAS }
COUNTY OF Wise }

BEFORE ME, G B McCarty J P & Ex officio N P in and for Wise County, Texas, on this day personally appeared J B Howard of said J B Howard and L C Howard wife of the said J B Howard known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the purposes and consideration therein expressed. And the said L C Howard wife of the said J B Howard having been examined by me, privily and apart from her husband, and having the same fully explained to her, she, the said L C Howard acknowledged such instrument to be her act and deed, and declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it.

Given under my hand and seal of office, this 21st day of Nov A. D. 1910.

(SEAL)

G B McCarty J P Ex officio N. P. for Wise County Tex

Filed for record the 5 day of 12 A. D. 1910, at o'clock P.M. and recorded the 12 day of 12 A. D. 1910, at 12 o'clock M.

By Deputy.

J P Williams
Clerk County Court, Wise County, Texas.

William Fortenberry brought his family to Tex. from Sharp Co. Ark. in I858 . In this group there were other members of the family, cousins ETC. The main idea in moving to Tex. was to enter the cow business. Their first stop in Tex. was int he Pilot Point area. This stop was made becaude other members in the family had come before and settled here. They remained in the Pilot Point area for one winter and then came west to theN.E. corner of Wise co. and just west of the Denton co. Line. This area is in the corner of Wise, Cooke and Denton counties.

A nice home was built on the high hill in NE. Wise co.. The present owner of this property is James Fortenberry. They dug a cellar and dug a well. The remains of the old cellar and well are visable today. On the high hill was the logical place to build. At this time the red man was the main concern. The site made a good observation point. There is a rose bush in the front yard that was planted before the Cicil War and blooms each spring. This rare attraction really brings in the tourists each year.

In oct.I858 a member of the family was killed by the Indians. about a mile south of the home place. The state errected a marker a few years ago in honer of this brave citizen about 3/4 mile south east of where the loss of life occured. This cousin was Severe Fortenberry, and the remains are in the Gregory or Pollard Cemetery about 2 miles from the marker on Hi way 5I.

In early I87I the state closed in on the Fortenberry family and told them they would have to move west. There was not ever any homesteading in this area. They were told that they would have to go west of Jacksboro. The answer was a very emphatic no. It turned out that they had to buy the property direct from the state at the rate of $3.50 per acre.

At this time the Chisholm trail was in full operation. Sloan the oldest boy was eight years of age when they came fron Ark. He made a real hand on the trail and went up eight times.

In I877 Sloan was married to Kate Moore. He could see his way because he had a cattle business in full operation. The young couple met at a house warming. The dance was most gay and some unknown out of community young men were present. The best dancer in the group turned out to be Sam Bass. Some of my most child hood memories was hearing granny tell about dancing with Sam. He lost his life by gunfire a sort time later at Round. Rock, Tex.

A short time before the party the Fortenberry Family had errected a log cabin about two miles east of the first home site. The Indians had been driven into Indian Territory. They moved to the creek due to an abundance of wood and water. There was more game and that was a factor in more being on the table.

The log cabin was very fine and well furnished. An item that was in the house was an expensive Seth Thomas clock. This clock is in the Henry and Catherine W. Home and I can hear it ticking as I write this information. My father was born in the cabin along with three brothers. Everett was the second son being born in I882. He followed the path of his father and was in the cow business at an early age.

In I900 the family had grown and prospered and they began plans for a very modern home, a two story victorian. The present home was completed in I90I five miles north of Slidell on the north bank of Whites Creek. There was no public road to the structure at the time but as automobiles came a road was run by the house.

The contractor was Tom Walden and was the best available at the time. It has five rooms down stairs a three bed rooms above and one is a double. The materials in the house are all cypress and has beaded walls and ceilings. The lumber cost 3 cents per foot and the entire cost. $ 3500.00. Have heard the family say the head carpenter made $ I.50 a day.

Kate Fortenberry lived in this house until I943. After the death of grand Pa. she operated the ranch. She and grand pa laid the foundation for the largest Pure breed short horn cattle herd in the state of tex. The business has been carried on by the sons and grandchildren to the present . In the past years a pure breed hereford line has been added.

In the fall of I973 John C. White Commissioner of Agriculture , Tex. presented us with a plaque that honored the present owners Mr Mrs Henry Fortenbbery for having been on a farm and operating it for a I00 years in the same family. There are very few such home steads in the stste

We have kept the home in repair and live there much of the time and have a nice herd of cattle there. and on other property.

More information on this subject is available in the Denton, Co. History.

Henry H. Fortenberry

P.S. More comments about house, Parlor has double base boards, carved window facings. Ceiling design of cypress wood and original flooring. Living room has big fire place with carved mantel. Original hardware on alldoors and windows add charm to the house . The front door is high lighted with stained glass and carvings. A large screen porch surrounds much of the lower floor. I90I, date house was built, is shown at the top of the chimney and lighning rods reach for the sky. This house sits behind a white pickett fence

Robert and Oma Howard, Eva Marie, and John Fulton in the front yard of the old Howard homeplace on farm near Greenwood.

Joe and Chloe Howard about 1943.

Laura married John Moore; Lum married Nellie Fullingham; Nellie June married Walter Derryberry. Mary Jane's parents, Hulin Fulton and Margaret Hill, were born in Ireland.

Joseph C. Chance died on February 27, 1909. Mary Jane died August 28, 1913. Both are buried in Henrietta, Texas.

John and Lillie Howard are buried at Greenwood. Lillie lived to be ninety years of age. She passed away November 28, 1948.

The following is an excerpt from a poem written by Ernest after his father died.

"His life to us was a noble lesson taught,
May it reflect then for more than aught.
For the life he lived 'twas his desire,
Would help his loved to look up higher —
The noble spirit he possessed,
Went hand in hand with him to rest.
Remember then children and bear in mind.
A mother's love only will excel father's—you'll find."

Compiled by Eva Marie (Howard) Atkins

JOE BARNETT HOWARD

Joe Barnett Howard was born March 26, 1890. His parents were John Barnett Howard and Lillie Caroline Chance. They came to Texas from Monett, Missouri. After their marriage they lived in the Brumlow community. Their home was at the foot of "Tater Hill," some miles north of Decatur and west of the town of Greenwood. Joe was the fourth child of ten children born to John and Lillie, most of them being born in Brumlow.

John Barnett and Lillie bought a farm two miles west of Greenwood. This farm was later owned by Joe and Chloe Howard.

Joe attended the Greenwood Male and Female College. He later taught school in Seminole County, Oklahoma. He later returned to Greenwood, Texas and married Chloe Edith Koiner of Krum, Texas, in Denton County on October 26, 1917.

The town of Greenwood was a thriving place. It had several grocery stores, a barbershop, two drug stores, and a cotton gin.

Joe worked hard to build up the land, by rotating crops and growing peas and fertilizing with barnyard manure. He had a big fruit orchard and vegetable garden.

The first child born to Joe and Chloe Howard was Wilema. She was born September 11, 1918. She married Joe England on December 24, 1941. They had two children. Their names are Robert Thurmond and Terry Don.

Their next child, Charles Warren was born November 8, 1920. He married Emily Jones of Fernandina Beach, Florida. They had two children and their names are Charles Jr. and David.

Joe and Chloe Howard's third child, Lillie Mae, was born January 24, 1924. She married J. E. Haynes. Their

Mrs. Chloe Howard

Services Held For James Washburn

James Thomas Washburn, "Pa Washburn" as he was affectionately known to his family and close friends, departed this life Sunday morning, May 23, at 2:10 a.m. at the home of his son, C. B. Washburn in Decatur at the age of 83. He was born in Prentiss County, Mississippi, December 12, 1868.

He was united in marriage to Amer E. Ross in 1891 and four sons were born to this union. They moved to Wise County 48 years ago and farmed in the Greenwood community until Mrs. Washburn's death in 1921. After her death, he moved to Decatur where he lived until his death.

Mr. Washburn was converted and baptized into the Baptist Church at an early age. He was ordained as a deacon at the age of 30 and served his church faithfully in that capacity as long as his health permitted. He loved God and His Church deeply and his family devotedly. He taught singing schools and directed singing in his church and singing conventions over the county all during his active life, was a good singer, active in all singing organizations. He was a member of the Fundamentalist Baptist Church at the time of his death.

Two of "Pa" Washburn's sons preceeded their father in death, one in infancy and the other, Luther C. Washburn, passed away on July 30, 1943. C. B. and A. A Washburn of Decatur survive. Also surviving are a brother, George T. Washburn of Graham, 9 grandchildren and eleven great grandchildren and a host of nieces, nephews and friends.

Funeral services were held at christian's chapel Monday, May 24th at two thirty p.m. by Rev. Omer Ritchie his pastor of the Fundamentalist Baptist Church in Decatur.

Interment was in Greenwood Cemetery, Greenwood, Texas, with eight grandsons and grand sons-in-law acting pall bearers. James Washburn, C. L. Washburn, Preston Washburn, Bobbie Washburn, George Washburn, W. L. Mesquree, Larry Stage and Charlie Lewis.

APPENDIX D: SURVEY RESULTS AND SITE MAPS

Figure Redacted Due to Site Sensitive Data

Figure Redacted Due to Site Sensitive Data

Figure Redacted Due to Site Sensitive Data

Figure Redacted Due to Site Sensitive Data

Figure Redacted Due to Site Sensitive Data

Figure Redacted Due to Site Sensitive Data

Figure Redacted Due to Site Sensitive Data

Figure Redacted Due to Site Sensitive Data

Figure Redacted Due to Site Sensitive Data

Figure Redacted Due to Site Sensitive Data

Figure Redacted Due to Site Sensitive Data

Figure Redacted Due to Site Sensitive Data

Figure Redacted Due to Site Sensitive Data

Figure Redacted Due to Site Sensitive Data

TRC

505 E. HUNTLAND DRIVE
SUITE 250
AUSTIN, TX 78752

TRC - GIS

PROJECT:

UNITED STATES FOREST SERVICE
LBJ NATIONAL GRASSLANDS
CULTURAL RESOURCES SURVEY OF ARCHEOLOGICAL SITES
WISE COUNTY, TEXAS

TITLE:

HISTORIC WINDMILL
ISOLATED FEATURE LOCATION

DRAWN BY:	S. SARICH
CHECKED BY:	P. CLARK
APPROVED BY:	J. HAEFNER
DATE:	JANUARY 2020
PROJ. NO.:	355649
FILE:	355649_LBJ_Unit62-63Results_12-2019.mxd