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Cultural Resources Survey Of Jp Energy Tank Facility University Lands, Crockett County, Texas

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NEGATIVE FINDINGS

CULTURAL RESOURCE SURVEY OF

JP Energy Tank Facility

UNIVERSITY LANDS, Crockett County, Texas

Report prepared for:

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TAC Permit 7134

Jeff Turpin, Principal Investigator

TAS Inc.
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ABSTRACT

In January 2015, TAS Inc. conducted a pedestrian survey of a 26.1 acre tank facility in northern Crockett County. The tract lies in uplands near the head of Buckhorn Draw, situated west of and adjacent to Texas Highway 163. The town of Barnhart is 7.7 miles to the north. The proposed tract is in University Lands Block 41, Sections 9 and 16. The survey was sponsored by JP Energy as part of their permitting process to install a tank facility on University Lands and was authorized by Texas Antiquities Permit 7134, Jeff Turpin, Principal Investigator. The survey area consists of upland mesquite and scrub flats just east of the upper stretches of Buckhorn Draw. No evidence of significant historic or prehistoric occupation or use was found by intensive survey of the 26.1 acre tract. Therefore, cultural resources do not present an obstacle to the installation of the proposed tank facility.

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INTRODUCTION

In January 2015, TAS Inc. archeologists Terry Burgess and Kathleen Burgess conducted a pedestrian survey of a proposed 26.1-acre tank facility in northern Crockett County (Figs. 1, 2). The tract lies in uplands near the head of Buckhorn Draw, situated west of and adjacent to, Texas Highway 163. The town of Barnhart is 7.7 miles (12.4 km) to the north. The proposed facility would be in University Lands Block 41, Sections 9 and 16 (Fig. 3). The survey was sponsored by JP Energy as part of their permitting process to install a tank facility on University Lands and was authorized by Texas Antiquities Permit 7134, Jeff Turpin, Principal Investigator. The survey area consists of upland mesquite and scrub flats just east of the upper stretches of Buckhorn Draw. No evidence of significant historic or prehistoric occupation or use was found upon thorough examination of the 26.1-acre tract. Therefore, cultural resources present no impediment to the installation of the proposed tank facility.

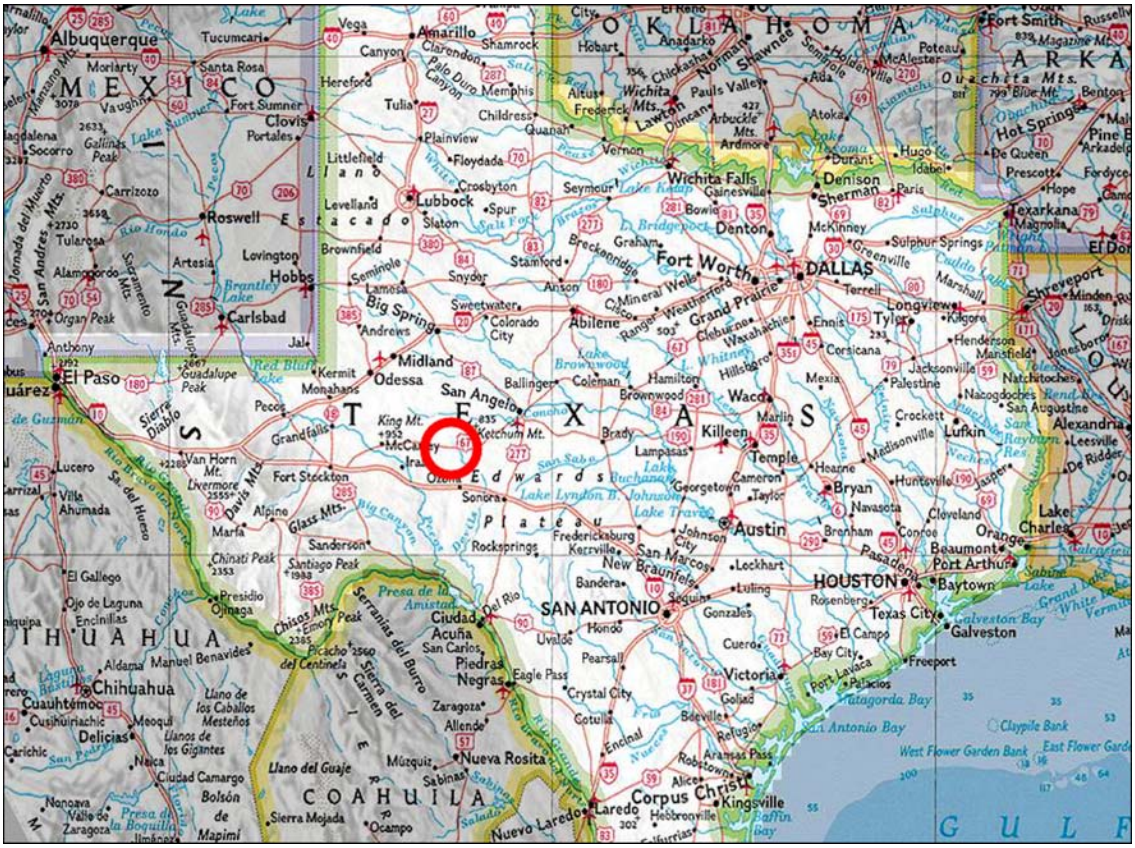

Figure 1. General location of surveyed tract (source: National Geographic Topo!)

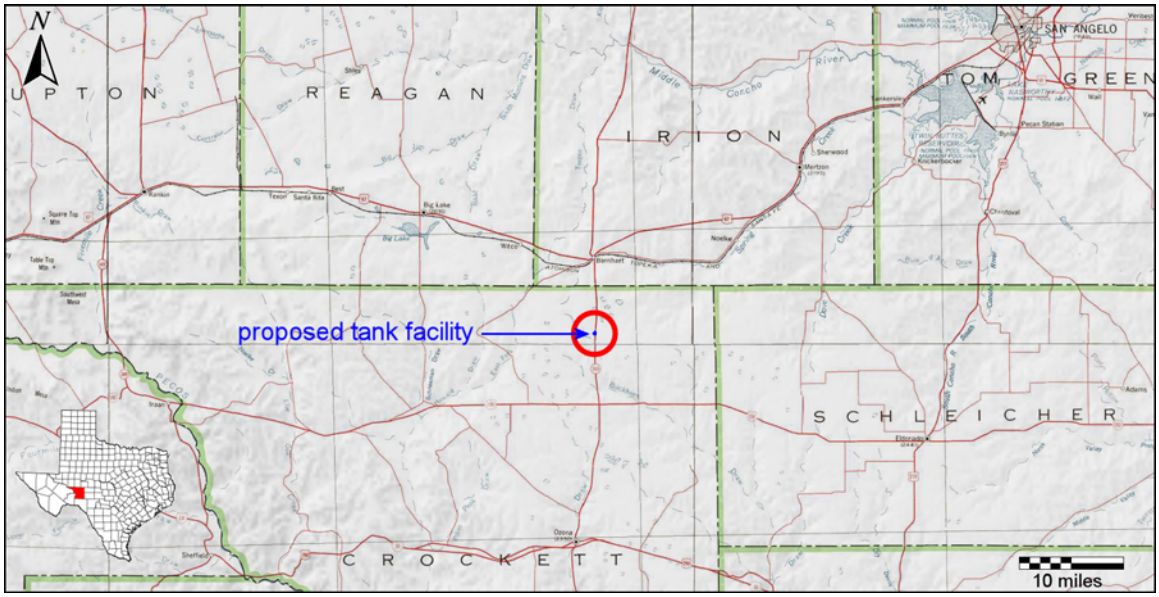

Figure 2. JP Energy Tank Facility project area (source: National Geographic Topo!)

This cultural resource assessment consisted of an archival search, an intensive pedestrian block survey, and preparation of a report of negative findings suitable for review in accordance with the Texas Historical Commission's Archeological Survey Standards for Texas.

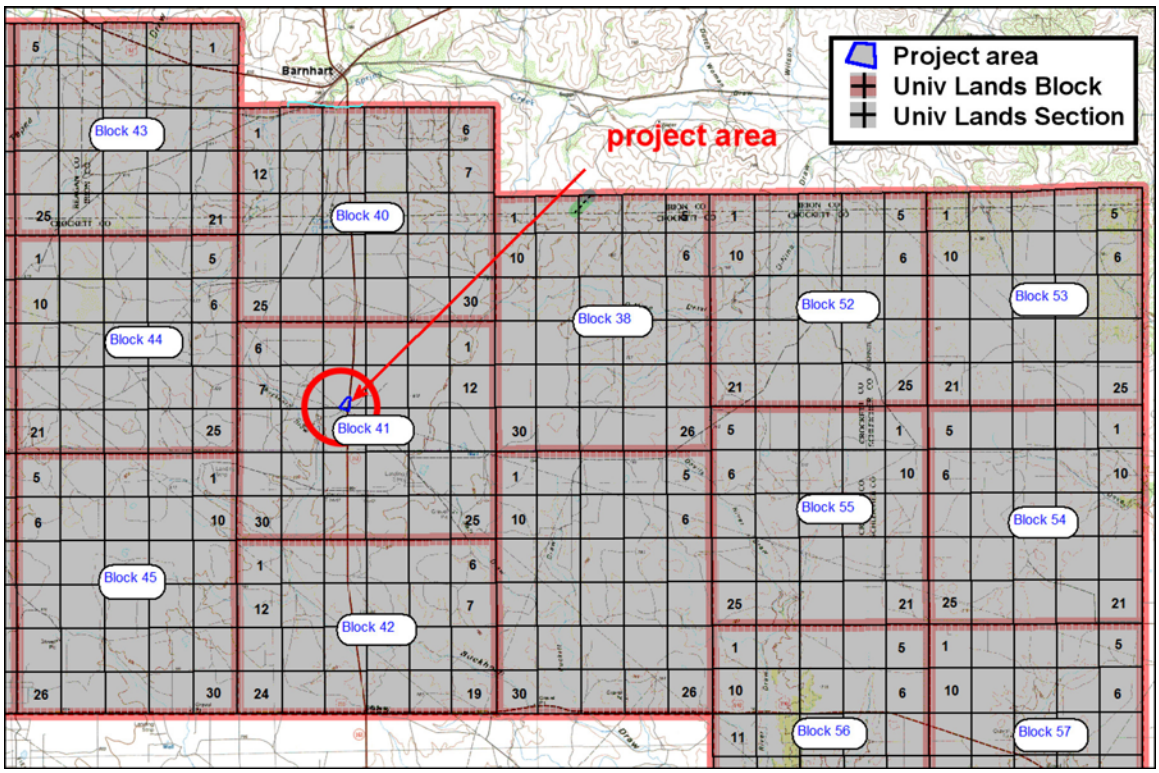

Figure 3. Proposed location of facility on University Lands (source: Terrain Navigator).

ENVIRONMENTAL CONTEXT

Technically, the project area is in the western section of the Edwards Plateau Section of the Great Plains Province of the Interior Plains (Fig. 4). The Edwards Plateau is an uplifted and elevated region originally formed from marine deposits of sandstone, limestone, shales, and dolomites 100 million years ago during the Cretaceous Period when this region was covered by an ocean (TPWD). Mesas, plateaus, and limestone ridges and hills with deep canyons and nearly level to gently sloping valley floors characterize this region. This classification is far too broad to provide a context for prehistoric adaptations in this specific study area since the landscape bears little resemblance to the Texas Hill Country as the more easterly Edwards Plateau is known in the vernacular. Here, the terrain is generally flat (Fig. 5), the climate arid, the vegetation sparse and water scarce.

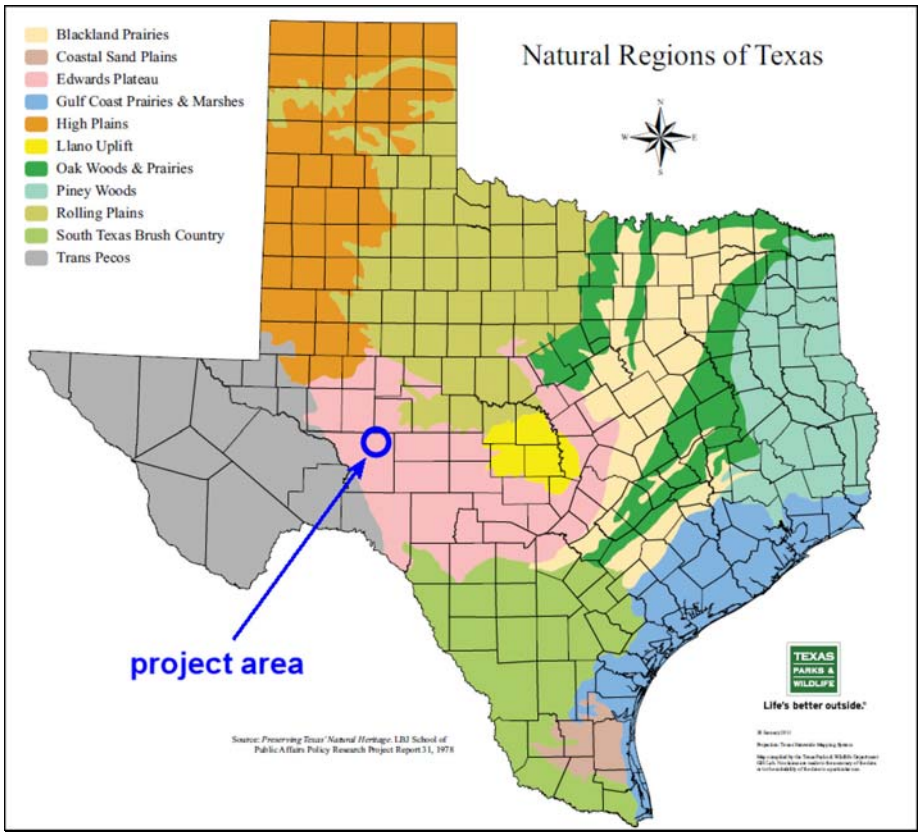

Figure 4. Natural Regions of Texas (source: Texas Parks & Wildlife)

Hydrology

Ferguson (1986) more aptly called this arid crest of the Edwards Plateau the Eldorado Divide since water sheds north to the Concho system, south and west into the Pecos and Devils rivers, and east to the Llano and San Saba drainage. No drainages cross the proposed project area; the run-off is toward Buckhorn Draw, which flows generally southeast into Grainger Draw, eventually emptying into the Devils River.

When the region was originally settled by Europeans in the mid-1800s, the area was a grassland savannah inhabited by bison and antelope. The land supported a rich diversity of forbs and grasses with an occasional mesquite tree. By 1900, continuous overgrazing and fire suppression had taken a toll. The land began to change from a grassland to a brushland with many woody species such as mesquite (*Prosopis*) displacing the overgrazed grasses. In much of the Edwards Plateau, mesquite has become the dominant plant species causing a once diverse and healthy landscape to become a "mesquite brushland" in many areas with very little plant diversity on the landscape (TPWD).

The current project area is representative of this brushland with mesquite being the predominant plant species (Fig. 6). Other flora representing different microniches dot the landscape and include grasses, tasajillo, agarita, yucca, prickly pear, and some ephedra and juniper.

Soils

Survey area soil consists primarily (76%) of Tobosa clay of the order Vertisols, clay-rich soils that shrink and swell with changes in moisture content. This shrink/swell action creates serious engineering problems and generally prevents formation of distinct, well-developed horizons in these soils. In the United States, Vertisols occupy ~2.0% of the land area and occur primarily in Texas. The remaining soil type (24%) in the survey area is Texon-Ozona complex, a Mollisol typical of semiarid regions and subhumid climates and characterized by a thick dark surface horizon developed from the addition of organic material derived from plant roots (NRCS) (Fig. 7).

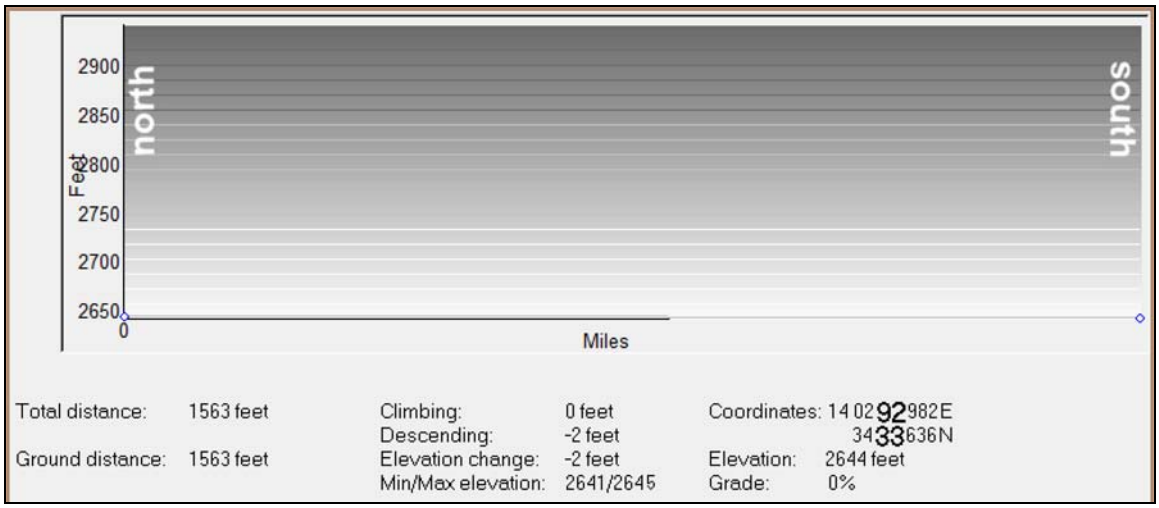

Figure 5. Elevation profile. (source Terrain Navigator)

Figure 6. General environment.

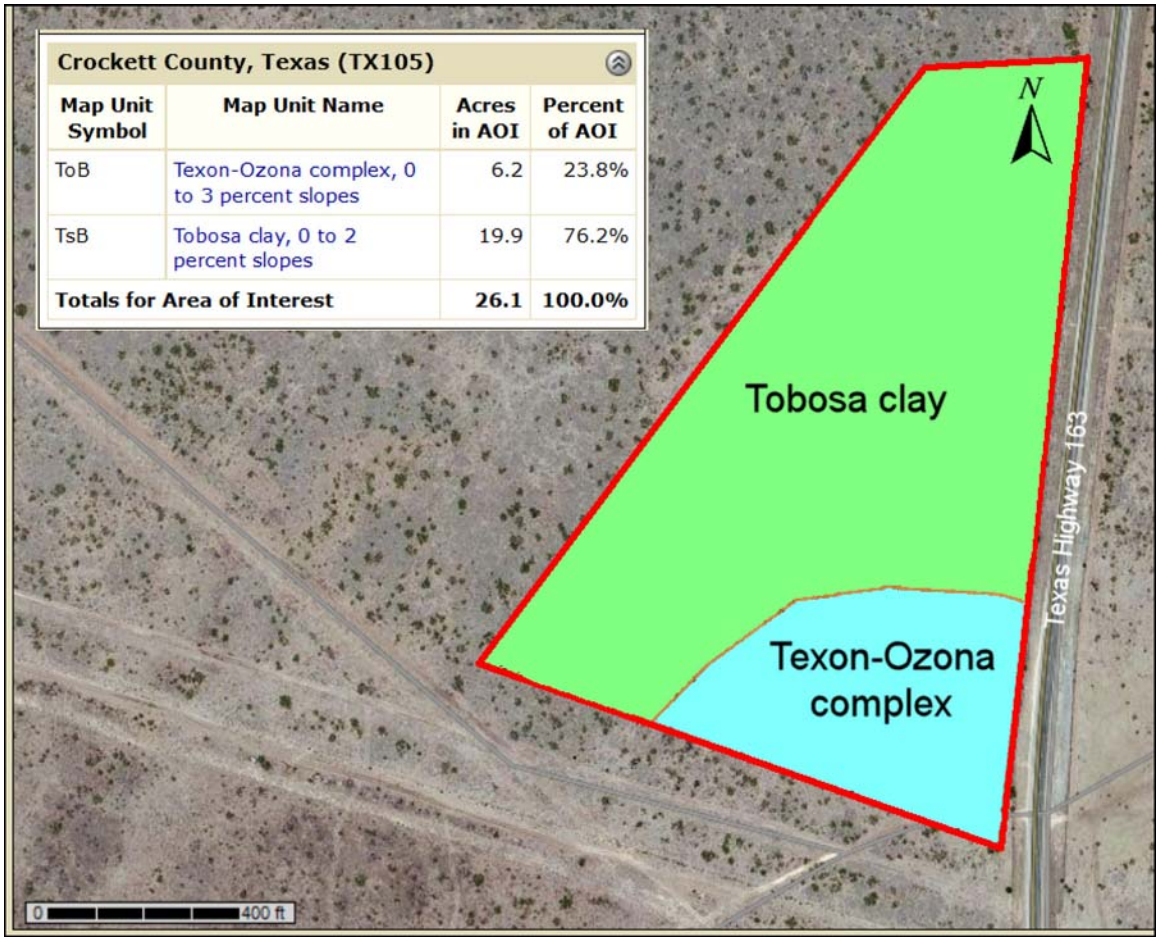

Figure 7. Soil map of proposed ROWs (source: NCSS and GoogleEarth)

PREVIOUS INVESTIGATIONS

Prior to the 2011-2014 seismic investigations carried out on University Lands, Crockett County had well over 1200 recorded sites, some attributable to the efforts of avocational archeologists such as the Iraan Archeological Society or the Texas Archeological Society's 1976 field school, some to commercial highway, transmission and pipeline surveys, and others as part of the University Lands on-going inventory (Atlas). Now, however, recent seismic surveys on University Lands have added hundreds of sites in Crockett County including over 200 sites in 2014 alone (Burgess and Turpin 2011; 2012a, b, e, f, 2013, 2014a, c).

The sites in the seismic areas of Crockett County are typically burned rock features and lithic scatters on the flats, lithic procurement sites, and rock shelters

and rock art in the canyons or under the mesa tops. Past excavations have concentrated on burned rock features, resulting in a skewed inventory of radiocarbon dates that show a time depth of only 1980 years (see Turpin 2000: for a complete listing). The sample was obviously biased toward more recent features given that much older sites are found in counties to the north and south. The current study area consists mainly of open camps with few temporally diagnostic artifacts, and thermal features sites that are mostly dispersing, deflating or disturbed hearths or BRMs so the potential for enlarging the chronology of occupation is limited.

Fifty-seven sites in Crockett County have been designated as State Antiquities Landmarks (SAL); 55 of these are in University Land's Block 13 where an intensive survey of the uplands above Cedar Canyon found a diverse array of cultural resources (Turpin 2000). The other two are Fort Lancaster, a TPWD property, and 41CX110, a petroglyph site on University Lands (Turpin 2011), both of which are also listed on the National Register of Historic Places along with another petroglyph site, 41CX233, Camp Melvin or Pontoon Crossing of the Pecos River (41CX20), the county courthouse and a home in Ozona, and the Live Oak National Register District.

Nearby Sites

There are no recorded archeological sites within a mile of the project area; the nearest at 1.3 miles distance is 41CX1311, a hearthfield of unknown prehistoric time period consisting of 16 thermal features - 10 of which are partly buried - and two uniface scrapers. And at 1.5 miles distance is 41CX1221, an open campsite of unknown prehistoric time period consisting of 3 thermal features and a few stone tools. 41CX1221 is in the drainage basin of Buckhorn Draw, and 41CX1311 lies on the divide between Buckhorn Draw and 09 Draw. These sites are not within the area of potential effects (APE) of the proposed ROWs. No site boundaries will be crossed by the current project (Fig. 8).

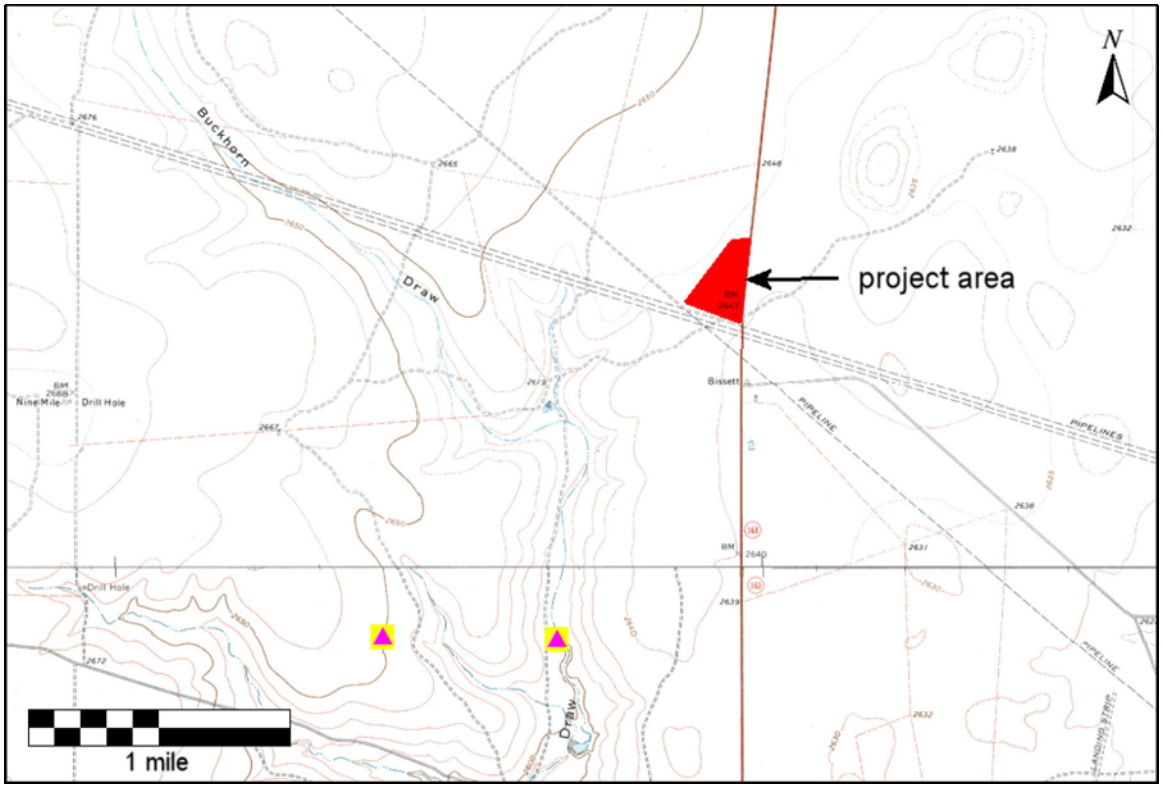

Figure 6. Nearby sites (source: Atlas and Terrain Navigator)

METHODS

Prior to field work, the site files and maps on the Texas Historical Commission's (THC) Archeological Site Atlas were searched for previously recorded site locations and references to archeological surveys undertaken in the vicinity of the proposed facility. Pedestrian survey of the 26.1-acre parcel was conducted by east-west transects spaced at 30 meter intervals, resulting in a total of 16 transects. Good surface visibility negated the need to dig shovel tests. No significant archeological remains were identified so no forms were filed or artifacts collected for curation.

SURVEY RESULTS

The proposed JP Energy Tank Facility lies in an upland flat in upper Buckhorn Draw. The area is characterized by patches of relatively open grassland with sparse mesquite trees. There are no apparent attractive

resources in the vicinity of the proposed facility. No significant archeological remains were identified.

CONCLUSIONS

A total of 26.1 acres of JP Energy's proposed tank facility lies within University Lands and was surveyed for cultural resources but no significant evidence of historic and prehistoric occupation or use was found. Therefore, cultural resources present no obstacle to the installation of this facility.

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