

US EPA ARCHIVE DOCUMENT



Cultural Resources Reconnaissance
Review and Evaluation
for the
Expansion Project at the
Mont Belvieu Natural Gas Liquids
Fractionation Facility



ONEOK Hydrocarbon, L.P.

Project No. 67371

April 2013

**Cultural Resources
Reconnaissance Review and
Evaluation
for the Expansion Project at the
Mont Belvieu Natural Gas Liquids
Fractionation Facility**

prepared for

**ONEOK Hydrocarbon, L.P.
Tulsa, Oklahoma**

April 2013

Project No. 67371

prepared by

**Burns & McDonnell Engineering Company, Inc.
Dallas, Texas**

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1.0 INTRODUCTION

A qualified professional archaeologist from Burns and McDonnell conducted a cultural resources review, which included desktop level archival investigations and a windshield reconnaissance survey of approximately 522 acres (“Project Area”) for the proposed Mont Belvieu NGL Fractionation Facility Expansion Project, in Chambers County, Texas (Figure 1, Appendix A). The survey was completed on April 5, 2012, at the request of ONEOK Hydrocarbon, L.P. (“OHLP”). OHLP proposes to construct and operate an expansion of OHLP’s Natural Gas Liquids Fractionation Facility in Mont Belvieu, Chambers County, Texas. The facility to be constructed (“the MB3 Facility”) will consist of an additional fractionation train. The proposed project is subject to National Historic Preservation Act (“NHPA”) Section 106 review because the Project will need to be authorized by a U.S. Environmental Protection Agency (“EPA”)-issued New Source Review (Prevention of Significant Deterioration) (“PSD”) air permit for greenhouse gas (“GHG”) emissions. OHLP submitted an application on September 17, 2012 to EPA for that air permit, and accordingly, provides this report pursuant to NHPA Section 106.

The archival research was supplemented with a review of local and county historical map resources maintained in libraries and museums. Following the archival review, a windshield survey was conducted within the Project Area. The survey included driving all public roads within the Project Area to determine if there are any historic properties not yet recorded that could be considered eligible for the National Register of Historic Places (“NRHP”).

These investigations were performed in compliance with the National Historic Preservation Act and that Act’s implementing regulations entitled “Protection of Historic Properties” in 36 CFR Part 800.

In the sections that follow, this report describes the comprehensive cultural resources review that Burns and McDonnell conducted regarding the proposed MB3 Facility, pursuant to which Burns and McDonnell recommends that construction and operation of the MB3 Facility will have no adverse effect on historic properties.

2.0 RESEARCH DESIGN AND METHODOLOGY

The NHPA “Area of Potential Effects” (“APE”) for the Project, also referred to herein as the “Project Area,” consists of approximately 552 acres of land (Figure 1, Appendix A) within which direct and indirect impacts may occur from the construction and operation of the MB3 Facility. The extent of the area of direct and indirect impacts is limited to the boundaries depicted on Figure 1 (Appendix A), which consists of mostly cleared properties owned by petrochemical companies and contains brine ponds, industrial structures, roads, and the OHLP’s Natural Gas Liquids Fractionation Facility (Photographs 1–4). The MB3 Facility is located in a previously disturbed area adjacent to existing natural gas liquids storage caverns and on the same site as the previously-permitted MB2 Facility fractionation plant for which ongoing construction commenced during the second quarter of 2011. No additional linear or ancillary facilities will be constructed for or as a part of the MB3.

The objective of the survey was to identify historic properties that are included in or could be considered eligible for the NHRP. Prior to the initiation of fieldwork, Burns and McDonnell conducted desktop level archival investigations supplemented with a review of local and county historical map resources maintained in libraries and museums to locate any known historic properties within or close to the APE. No shovel testing within the footprint of the MB3 facility was conducted because the MB3 Facility is located in a previously disturbed area adjacent to existing natural gas liquids storage caverns and on the same site as the previously-permitted MB2 Facility fractionation plant.

The desktop archival review included examination of the TXGen Website for Chambers County. The online cemetery records for Chambers County were also examined. The Texas Historic Sites Atlas Online was checked for recorded historic county courthouses, NRHP-listed architectural properties, historical markers, neighborhood surveys, and museums. Also reviewed was the online listing of the Perry-Castaneda Library Map Collection at The University of Texas at Austin; the early twentieth century highway maps for Chambers County, and the 1961 U.S. Geological Survey (“USGS”) 7.5-minute quadrangle map of Mont Belvieu, Texas. These were downloaded from the Texas State Library website and examined for structure locations within the APE. The Barber’s Hill-Mont Belvieu museum archives were also investigated for any known cultural resource properties within or close to the APE.

Following the archival review, a windshield survey was conducted which included a review of all property within the APE. The survey included driving all public roads within the APE to determine if there are any historic properties not yet recorded that could be considered eligible for the NRHP. When possible, the following information was recorded for each property within the APE: location of property,

number of structures present, and a detailed description of the property. The property on which the MB3 Facility will be located was also photographed and plotted, along with other relevant information, on a USGS topographic map (Figure 1, Appendix A).

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3.0 RESULTS

3.1 HISTORIC BACKGROUND

The earliest recorded historic inhabitants along the Trinity River were the Karankawa, Coapite, and Copane Indians. In 1756, Spanish missionaries established missions near present-day Wallisville and on the east bank of the Trinity River along the Chambers-Liberty County line in order to work with the Orcoquiza Indians that lived in the area (TSHA 2013). By the early 1800s, the Coushatta and Alabama Indians joined the local Orcoquizas and Bidais in planting crops and trading livestock with early settlers along the Atascosito Road (TSHA 2013). It was not until the 1820s, that American settlement began in Chambers County.

Mont Belvieu was first settled by Amos Barber in 1849. Amos Barber and his wife, Susan Ann Hodges Fitzgerald, built a two-story dog trot cabin along the main road of “Barbers Hill” from Huntsville to Lynchburg (THC 2012). In 1923, the house was dismantled and replaced by a rooming house (THC 2012). Amos and his wife were buried south of their original homestead in the Amos family cemetery (Amos Barber Cemetery). The majority of Mont Belvieu sits atop the Barbers Hill Salt Dome. The salt dome consists of approximately 1,718 acres of land that rises 45 feet above the surrounding area (THC 2012). The Barber Hill Oil Field was discovered by the son of Amos Barber, Elmer Barber in 1889 while digging water well near his home (THC 2012). However, it wasn’t until the early-1900s that oil production became profitable and the town felt the effects of the oil boom.

3.2 PREVIOUSLY RECORDED SITES AND SURVEYS

An examination of the Texas Historic Sites Atlas found no previously recorded archeological sites, Texas Historic Cemeteries, or National Register-listed architectural properties within the APE. Three Texas State Historical Markers are located to the south and west of the APE for the following sites: (1) the First United Methodist Church and Cemetery, (2) the Amos–Barbers Homesite and Cemetery, and (3) the Barbers Hill Oil Field and Salt Dome. The closest marker, First United Methodist Church and Cemetery, is located 750 feet south of the APE near the intersection of Spur 207 and Winfree Avenue (Photograph 5, Appendix B). The cemetery is bounded by a metal fence and contains 495 gravesites with 245 interments (THC 2012). The associated church, a 30-foot by 40-foot wooden structure, was originally built in 1897 (THC 2012). By 1986, the church was relocated to its present location along Hwy 3360 to “avoid the dangers of nearby petrochemical storage in the underground salt dome” (THC 2012). Since the church has been relocated several miles outside of the APE, its architectural properties were not evaluated.

Cemeteries are among those properties that ordinarily are not considered eligible for inclusion in the NRHP unless they meet special requirements. To qualify for listing under Criteria A (association with events), B (association with people), or C (design), a cemetery or grave must meet not only the basic criteria, but also the special requirements of Criteria Considerations C or D, relating to graves and cemeteries. Under Criteria C or D, a cemetery is eligible for the National Register if it derives its primary significance from association with historic events, from graves of transcendent importance, from distinctive design, or from great age. The Mont Belvieu Cemetery does not meet any of the Criteria for listing in the National Register.

Numerous archaeological surveys have been done in Chambers County of which five were within the boundaries of the APE (Table 1, Appendix C). In April 2011, Burns and McDonnell performed a historic property assessment of two houses and a number of outbuildings near the center of the APE for the Mont Belvieu NGL Fractionation Plant project initiated in 2011. Burns and McDonnell recommended that none of those properties met the NRHP criteria of significance and none were eligible for inclusion in the NRHP. All of those structures (houses and outbuildings) were subsequently removed in connection with the Mont Belvieu NGL Fractionation Plant project.

In 2008, Archaeological and Environmental Consultants, LLC, conducted an intensive archaeological survey that included shovel testing for a OHLP pipeline project. The survey was conducted near the northern portion of the APE just south of the Cedar Point Lateral canal on the west side of State Highway (SH) 146, as well as along Fitzgerald Road on the western edge of the APE. No cultural resources were recorded in either of the two surveyed areas. The remaining three archaeological surveys within the APE were conducted for road improvement or pipeline projects. The State Department of Highways and Public Transportation conducted a road improvement project in 1976 near FM 3360 from SH 146 to FM 565 in the northern limits of the APE. No cultural resource sites were recorded during this survey. A more recent archaeological survey for a road improvement project was conducted by Ecological Communications Corporation in 2006. The intensive archaeological survey, which included shovel testing, was located in the northern limits of the APE along SH 146 below the Cedar Point Lateral canal. No cultural resource sites were recorded during that investigation. The remaining survey was conducted by Horizon Environmental Services in 2006 for a pipeline project. The intensive archaeological survey also crossed the Project Area along the west side of SH 146 below the Cedar Point Lateral canal. No cultural resource sites were recorded during this survey.

3.3 RESULTS OF THE RECONNAISSANCE SURVEY

There are two residential historic-aged properties located within 300 feet of the APE (Structures 1 and 2 on Figure 1, Appendix A). A densely vegetated fence line effectively screens the two structures from the

Project Area (Photograph 6, Appendix B). Structure 1 is situated within the southern boundary of the APE along Winfree Avenue (Figure 1, Appendix A). Structure 1 is a wood-framed, single story, vernacular residence with an attached garage and an associated shed (Photograph 7, Appendix B). Structure 2 is located outside the southern boundary of the APE near the intersection of Sonny Lane and Winfree Avenue (Figure 1, Appendix A) and is also a wood-framed, single-story vernacular residence (Photographs 8 and 9, Appendix B). Structures 1 and 2 appear to be typical of vernacular residences constructed throughout Texas in the mid-twentieth century and do not appear to meet any of the criteria of significance for inclusion in the NRHP.

Soils in the APE are of Pleistocene age and much of the APE has been impacted by prior oil and gas exploration, processing and extraction activities. In addition, archaeological surveys conducted in the area show a very low site density. There is, therefore, a low probability for intact subsurface historic or prehistoric deposits being impacted by the proposed project. The current cultural resources evaluation for the proposed project identified no historic properties (that is, property included in, or eligible for inclusion in, the NRHP) within the APE.

4.0 SUMMARY AND RECOMMENDATIONS

As explained above, the cultural resource review revealed no historic properties (that is, property included in, or eligible for inclusion in, the NRHP) within the APE Area. Neither of the two standing structures observed during the survey near a boundary of the APE (Structures 1 and 2 on Figure 1, Appendix A) appear to be eligible for nomination to the NRHP. Additionally, the APE is fenced off within a heavily vegetated area, effectively screening it from those two structures. The Mont Belvieu Cemetery is located 750 feet from the APE and will not be impacted by the proposed project. In addition, the cemetery does not meet any of the Criteria for listing in the National Register.

The lack of Holocene-aged soils, along with the fact that no cultural resources were identified in previously-conducted surveys within or in the vicinity of the APE, makes it unlikely that intact buried prehistoric deposits are located in the APE. In addition, prior oil and gas industry activities have impacted the surface of much of the APE. No cultural resources were identified within the APE and there is a low probability that intact cultural resources are present that would be eligible for listing in the NRHP. It is Burns & McDonnell's opinion that the proposed project area does not require an intensive cultural resources survey, and no known archeological or historic properties eligible or potentially eligible for the NRHP would be adversely affected.

5.0 REFERENCES

Texas Historical Commission (THC)

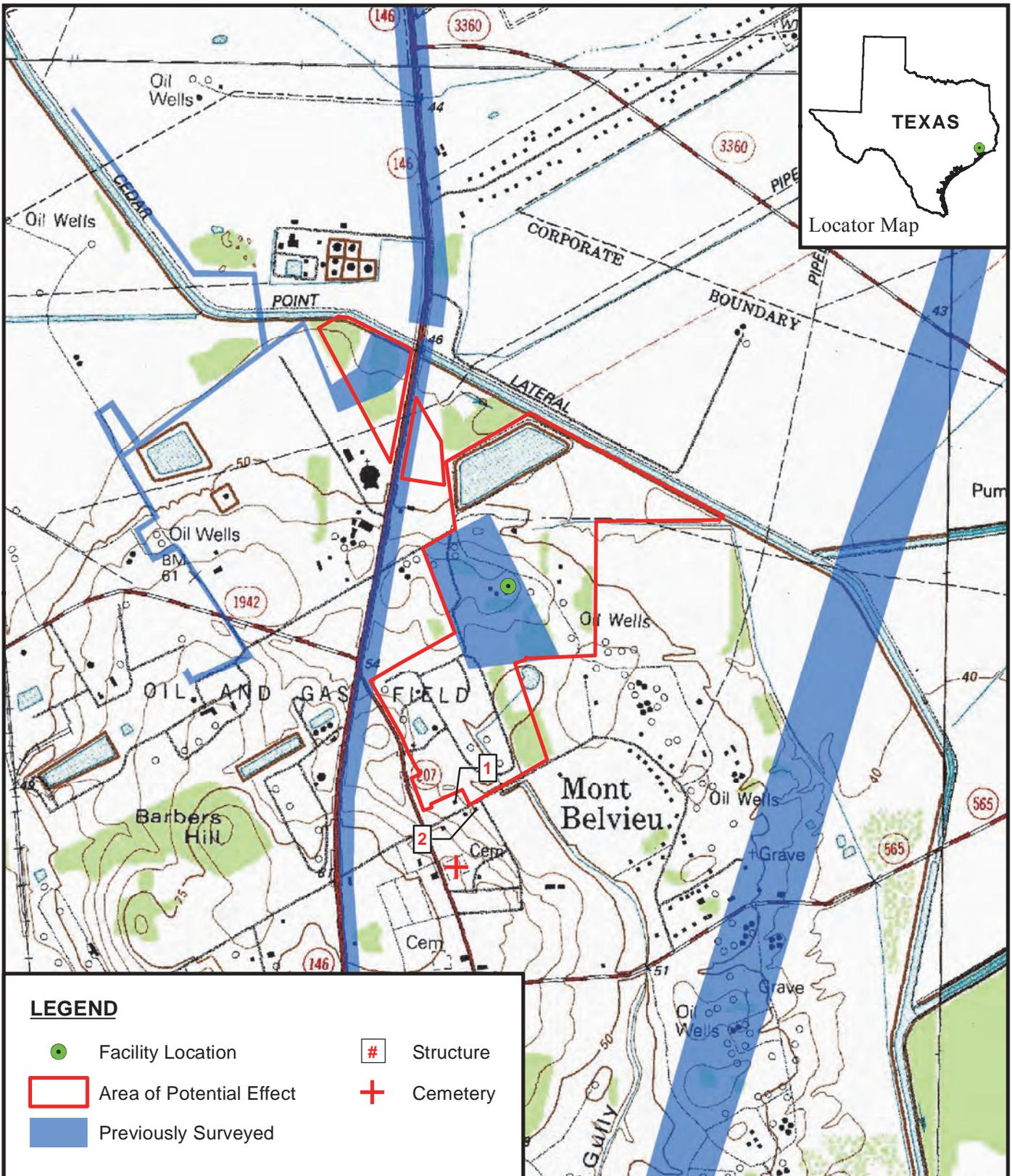
- 2012 “Texas Historical Sites Atlas”. Texas Historical Commission. <http://atlas.thc.state.tx.us/>
(accessed March 20, 2012).

Texas State Historical Association (TSHA)

- 2013 “Chambers County”. Texas Handbook Online Texas State Historical Association.
<http://www.tshaonline.org/handbook/online/articles/hcc09>
(accessed March 29, 2013).

APPENDIX A - FIGURES

\\E:\SPSRV\Data2\Projects\OneOK\66806_Mt_Belvieu\GIS\DataFiles\ArcDocs\Site_Location_Map_2_032713.mxd



LEGEND

- Facility Location
- Area of Potential Effect
- Previously Surveyed
- # Structure
- + Cemetery

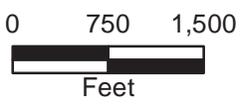


Figure 1
 Site Location Map
 ONEOK Hydrocarbon, L.P.
 Mont Belvieu NGL Fractionation Facility
 Chambers County, Texas

APPENDIX B - PHOTOGRAPHS



Photograph 1: Area of Potential Effect taken from center of the MB2/MB3 construction site, facing north.



Photograph 2: Area of Potential Effect taken from center of the MB2/MB3 construction site, facing south.

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Mont Belvieu Natural Gas Liquids
Fractionation Facility
Mont Belvieu, Chambers County, Texas



Site Photographs



Photograph 3: Area of Potential Effect taken from center of the MB2/MB3 construction site, facing east.



Photograph 4: Area of Potential Effect taken from center of the MB2/MB3 construction site, facing west.

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Mont Belvieu, Chambers County, Texas



Site Photographs



Photograph 5: First United Methodist Church cemetery on Main Street, facing east



Photograph 6: View of southern edge of Project Area showing vegetation line behind Structure 1, facing east.

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Mont Belvieu, Chambers County, Texas



Site Photographs



Photograph 7: Structure 1 along Winfree Avenue, facing northeast



Photograph 8: Structure 2 along Winfree Avenue, facing south

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Mont Belvieu, Chambers County, Texas



Site Photographs



Photograph 9: Structure 2 along Winfree Avenue, facing south.

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Mont Belvieu, Chambers County, Texas



Site Photographs

APPENDIX C - PREVIOUS ARCHAEOLOGICAL SURVEYS

Table 1: Previous Archaeological Surveys within the Area of Potential Effects

Report Number	Author	Year	Report Title	Location	Sites Recorded
N/A	SDHPT	1976	Letter Report: FM 3360 From SH 146, 1.4 Mile North of FM 1942 Southeast to FM 565, Cultural Resources Assessment, Chambers County	Within Project Area	None
HJN 06007 AR	Brownlow, R. and C. Reign	2006	An Intensive Cultural Resources Survey of the USACE Jurisdictional Areas Within the Proposed 33-mile Hull to Mont Belvieu Pipeline Right-of-Way, Liberty County, Texas	Within Project Area	None
N/A	Treiweiler, N. and R. Jones	2006	Archaeological Survey of State Highway 146, Liberty County, Texas	Within Project Area	None
Series 93	Pertulla, T. and B. Nelson	2008	Archaeological Investigations of ONEOK, Inc's Proposed Arbuckle NGL 16-Inch Pipeline, Spread 3, Navarro, Freestone, Leon, Madison, Walker, San Jacinto, Liberty, and Chambers Counties, Texas	Within Project Area	None
N/A	M. Latham	2011	Letter Report: ONEOK Hydrocarbon, L.P. Proposed Project Area, Mont Belvieu, Texas	Within Project Area	Dyer homesite

APPENDIX D- CURRICULUM VITAE OF PRINCIPAL INVESTIGATOR

Fiona H. Pemberton
Cultural Resource Specialist
Environmental Studies & Permitting
Dallas Office



Experience:

Archival Research
Impact Evaluations
Archaeological Survey
Archaeological Testing
Data Recovery
Monitoring
Artifact Analysis

Education:

Master of Arts in Anthropology,
Louisiana State University, 2005

Bachelor of Arts in Anthropology,
University of California, Davis, 2000

Associate of Arts, Solano Community
College, Liberal Arts, 1998

Organization:

Council of Texas Archeologists

Years with Burns & McDonnell:

<1

Total Years Experience:

8

Mrs. Pemberton has 8 years of experience in archaeological field work, curation, and analysis of archaeological materials. Her archaeological experience includes: impact evaluation surveys; archaeological survey, testing, and data recovery investigations; monitoring of cultural resources; analysis of prehistoric lithic, ceramic, and botanical archaeological materials; curation of prehistoric and historic artifacts; historical archival research; and survey and testing plans.

She has conducted impact evaluations, terrestrial archaeological surveys in Northeast and East-Central Texas, monitoring of cultural resources in Northeast Texas and Oklahoma, and Data Recovery investigations in Rusk County. Mrs. Pemberton is responsible for the organization, supervision, and completion of cultural resource investigations to comply with federal and state legislation as well as the preparation of technical reports documenting these investigations. Mrs. Pemberton has authored or co-authored numerous cultural resource investigative reports and participated in archaeological projects in Texas, Louisiana, Mississippi, Colorado, California, Oklahoma, and Peru.

NGL Fractionation Plant Project, ONEOK

Mont Belvieu, Texas

Ms. Pemberton serves as Principal Investigator, conducting desktop level archival investigations and a windshield survey of approximately 776-acres to determine if any unrecorded National Register of Historic Places (NRHP) properties existed within the project area.

Jacksboro-West Denton 345kV Transmission Line Project, TXU Electric Delivery

Dallas, Texas

Ms. Pemberton served as Project Archaeologist for a 70.5-mile transmission line project in Jack, Wise, and Denton Counties. Fieldwork included intensive archaeological survey and cultural resource monitoring. Her responsibilities included organization, supervision, completion, and write-up of cultural resource investigations.

Proposed Loop 9, Segment 5 Project, Texas Department of Transportation (TxDOT)

Dallas, Texas

Ms. Pemberton served as Project Archaeologist for a 6.05 mile intensive archaeological survey in Smith County. Fieldwork included intensive archaeological survey. Her responsibilities included organization, supervision, completion, and write-up of cultural resource investigations.

Southside Wastewater 138kV Transmission Line Project, TXU Electric Delivery

Dallas, Texas

Ms. Pemberton served as Project Archaeologist for this transmission line rebuild project. Fieldwork included cultural resources monitoring for 15 single-pole support structures. Her responsibilities included organization, supervision, completion, and write-up of cultural resource investigations.

**Proposed Bridge Rehabilitation of FM 981 at Desert Creek, Texas
Department of Transportation (TxDOT)**

Dallas, Texas

Ms. Pemberton conducted impact evaluations and intensive archeological surveys for bridge rehabilitation projects in Collin County.

**Belton-Nolanville 138 kV Transmission Line Rebuild, TXU Electric
Delivery**

Bell County, Texas

Ms. Pemberton served as Project Archaeologist for cultural resource monitoring along West Nolan Creek and Nolan Creek.

**Archeological Investigations at the McClure Homestead (41RK365),
TXU Mining**

Rusk County, Texas

Ms. Pemberton conducted Archeological Investigations, supervising data recovery fieldwork and wrote the report.

**Cultural Resources Reconnaissance for Proposed Reconstruction of
US Hwy 77, Texas Department of Transportation (TxDOT)**

Waxahachie, Texas (Ellis County)

Ms. Pemberton served as Project Archaeologist responsible for conducting the impact evaluation and writing the report.

Data Recovery, Vinson Plantation (41RK128), TXU Business Services

Dallas, Texas (Rusk County)

Ms. Pemberton conducted archival research and wrote research design.



Mr. Fulmer is a Cultural Resources Management Specialist with 17 years' experience in archaeology. He has supervised archaeology projects in eleven states in the Southwest, the Midwest, the Southeast, the U.S. Territory of Guam, and the Commonwealth of the Northern Mariana Islands. He has experience in obtaining cultural resources clearance for a range of energy, transportation, military, and municipal projects. He is dedicated to assisting clients in meeting their obligations under U.S. Army Corps of Engineers permits, the National Historic Preservation Act, Federal Energy Regulatory Commission permits, and other Federal and state regulations.

Expertise

- Cultural Resources Management
- CRM for Energy Projects
- CRM for Transportation Projects
- Texas Archeology
- Midwestern Archaeology
- Southeastern Archaeology
- Historic Archaeology
- Prehistoric Archaeology

Education

- BA Anthropology, University of Southern Mississippi, 1989
- MA Anthropology, University of Southern Mississippi, 1992

Total Years of Experience

17

Years With Burns & McDonnell

<1

Start Date

2012

Select Cultural Resources Management Projects:

Feeder #105 Transmission Line Rebuild, GRDA

Delaware County, OK, 2013

Cultural resources survey for a proposed 13-mile transmission line rebuild project; three new prehistoric archaeological sites were recorded. Two of the sites were subjected to geotechnical coring and found not to meet the criteria for eligibility for the NRHP.

Iatan to Nashua 345 kV Transmission Line, KCPL

Clay & Platte Counties, MO, 2013

Cultural resources survey for a proposed 31-mile transmission line replacement project. Two new archaeological sites were recorded and two previously recorded sites were revisited and assessed. KCPL was able to proceed to construction with an Unanticipated Discoveries Plan in place, prepared by Mr. Fulmer.

Wildfire Recovery Efforts at Bastrop & Buescher State Parks, TPWD

Bastrop County, TX, 2012

Principal Investigator for a cultural resources survey of approximately 1650 acres of Bastrop and Buescher State Parks. The project was in response to proposed replanting efforts resulting from recent wildfires and as part of a broader effort by TPWD to identify and assess cultural resources within its state park system. During the course of the survey, archeologists revisited the mapped locations of eight previously recorded archeological sites and located 29 new sites.

SAWS C-13 Sewer Replacement Project, CH2M Hill

San Antonio, TX, 2012

Project required an assessment of Archeological Existing Conditions in historically and prehistorically sensitive areas of downtown San Antonio prior to a proposed sewer replacement project.

Jollyville Transmission Main Project, City of Austin

Austin, TX, 2010-2012

Principal Investigator for a cultural resources survey for a water main associated with a new water treatment plant; two new sites were recorded and successfully avoided.

Dunlap Energy Substation, City of Austin

Austin, TX, 2011

Principal Investigator for a cultural resources survey of a 22-acre tract for a proposed electrical substation.

CR2331 (Nueces Road) Realignment, HNTB

Liberty County, TX, 2011

Principal Investigator for a cultural resources survey for a rural road realignment.

Leon Creek Greenway Project Phase II, Terra Design Group

San Antonio, TX, 2011

Principal Investigator for a cultural resources survey for a proposed creek-side trail.

US 69 Lindale Relief Route, Bucher, Willis & Ratliff (Lochner)

Lindale, TX, 2011-2012

Co-Principal Investigator for NRHP-eligibility testing of three sites in the path of the proposed US 69 Lindale Relief Route. Fifteen cubic meters were excavated in hand-dug units and a further eighty cubic meters were excavated through mechanical trenching. Several hundred artifacts were recovered and analyzed. The sites were ultimately recommended as ineligible for the NRHP as the loose, sandy deposits had limited integrity.

Boggy Creek Trail and Bikeway, Raymond Chan & Associates, Inc.

Austin, TX, 2012

Principal Investigator for a cultural resources survey for a proposed trail and bikeway requiring shovel testing and mechanical trenching along a creek on the east side of Austin.

Bulldog Championship Park, Terra Design Group

Socorro, TX, 2012

Principal Investigator for a cultural resources survey for the proposed Bulldog Championship Park requiring sixteen mechanical trenches.

Lone Star Rail Project, Jacobs Engineering

Williamson, Travis, Hays, Comal and Bexar Counties, TX, 2011

Principal Investigator for a cultural resources survey of a proposed passenger rail line between Georgetown and San Antonio, Texas.

Mid-Cities Boulevard, URS

Dallas, TX, 2011

Principal Investigator for a cultural resources survey of a road modification within DFW Airport.

Rio Lift Station Relocation Project, City of New Braunfels and New Braunfels Utilities

New Braunfels, TX, 2011

Principal Investigator for a cultural resources survey of a proposed Lift Station location.

Proposed Facility for Austin Community College, AMEC Geomatrix

Kyle, TX, 2011

Principal Investigator for a cultural resources survey for a proposed facility for Austin Community College in Kyle, Hays County, TX.

Proposed Facility for Austin Community College, AMEC Geomatrix

Elgin, TX, 2011

Principal Investigator for a cultural resources survey for a proposed facility for Austin Community College in Elgin, Travis and Bastrop Counties, TX.

Proposed Corrigan Ranch Park Project, TPWD

Palo Pinto & Erath Counties, TX, 2011

Project involved a background study for a proposed TPWD park, Palo Pinto and Erath Counties, TX.

Two Tap Lines Associated with the Turk Power Plant, AEP

Hempstead County, AR, 2010

Project involved a cultural resources survey for two tap lines adjacent to the Turk Power Plant, Hempstead County, AR.

Turk to Sugar Hill Transmission Line, AEP

Miller, Hempstead and Little River Counties, AR, 2010

Project Manager for a cultural resources survey for a transmission line associated with the Turk Power Plant. Investigations were conducted under a Memorandum of Agreement between AEP, the SHPO, the Caddo tribe, and the USACE authored by Mr. Fulmer.

Turk to SE Texarkana Transmission Line, AEP

Miller, Hempstead and Little River Counties, AR, 2010

Project Manager for a cultural resources survey for a transmission line associated with the Turk Power Plant. Investigations were conducted under a Memorandum of Agreement between AEP, the SHPO, the Caddo tribe, and the USACE authored by Mr. Fulmer.

NRHP-Eligibility Testing of a Portion of Site 41AU86, TxDOT

Austin County, TX, 2008

Principal Investigator for NRHP-eligibility testing of a prehistoric site that extended into TxDOT right of way. The portion of the site within the right of way was determined ineligible for the NRHP.

Other Cultural Resources Management Projects as Principal Investigator:

A Cultural Resources Survey for the CR 101 Ramp Construction Project, Brazoria County, TX.

A Cultural Resources Survey for the Proposed White Oak Bayou Mitigation Ponds, Harris County, TX.

Archeological Survey of Proposed Improvements to State Highway 36 from 0.2 Miles South of FM 2187 to 0.2 Miles North of FM 2429, Austin County, TX.

Cultural Resources Survey for the Proposed Widening of FM 1960 from Humble to the Western Edge of the San Jacinto Bridge, Harris County, TX.

NRHP Eligibility Testing of Site 41HR796, Harris County, TX.

A Cultural Resources Survey for the Proposed Widening of Crighton Road, Montgomery County, TX.

Archeological Survey for the Natural Gas Pipeline Company of America's Station 343 Compressor Replacement, Liberty County, Texas.

Cultural Resources Survey for the Rehabilitation of Carpenter's Bayou from Woodforest Boulevard to Woodford Drive, Harris County, Texas.

Archeological Survey for the Proposed Extension of Ella Boulevard from Gears Road to Rush Creek Drive, Harris County, Texas.

Cultural Resources Survey for the Farm-to-Market Road 519 Bridge Replacement at Highland Bayou, Galveston County, Texas.

Cultural Resources Survey for the Proposed Improvements to Farm-to-Market Road 359 from Precinct Line Road to US Highway 90A, Fort Bend County, Texas.

Cultural Resources Survey for the Proposed Improvements to Mason Road from Farm-to-Market Road 359 to Approximately 0.4 Miles South of State Highway 99, Fort Bend County, Texas.

Cultural Resources Survey for the Proposed Improvements to Farm-to-Market Road 1464, Fort Bend County, Texas.

Cultural Resources Survey of the 78-mile El Paso Butane Shuttle Project, Victoria, Calhoun, Refugio, and San Patricio Counties, Texas.

NRHP Testing of an Archaeological Site at Cedar Creek as part of the 117- mile El Paso Houston LPG Line Replacement Project, Brazoria County, Texas.

Cultural Resources Survey of the 117- mile El Paso Houston LPG Line Replacement Project, Harris, Fort Bend, Brazoria, Matagorda, Wharton, Jackson and Victoria Counties, Texas.

Cultural Resources Survey of El Paso South Texas Expansion Project, Hidalgo County, Texas.

Cultural Resources Survey of Proposed El Paso Drill Pads and Access Roads at El Sal del Rey, Hidalgo County, Texas.

Cultural Resources Survey of Proposed Exxon Mobil Drill Pads and Access Roads at El Sal del Rey, Hidalgo County, Texas.

Cultural Resources Survey of the PNG Hobbs Pipeline and Loop Project, Lea County, New Mexico.

Cultural Resources Survey of the Proposed CMS Beeville Natural Gas Pipeline Replacement Project, Victoria County, Texas.

Cultural Resources Survey of the Proposed Cross Timbers Pipeline, Freestone, Limestone, Leon and Robertson Counties, Texas.

Archaeological Survey and Monitoring for the Knight 3-D Seismic Survey, Polk County, Texas.

Archaeological Monitoring of the Seitel Seismic Survey, Wallisville Lake, Chambers and Liberty Counties, Texas.

Archaeological Monitoring of Kinder Morgan Pipeline Replacements at Langham Creek, Harris County, Texas.

Cultural Resources Survey of Proposed Westpark Tollway Project, Fort Bend County, Texas.

Cultural Resources Survey of Proposed Improvements to LP 197, Texas City, Galveston County, Texas.

Cultural Resources Survey of the Proposed Grand Parkway Segment E, Harris County, Texas.

Cultural Resources Survey of the Proposed Grand Parkway Segment F-1, Harris County, Texas.

Cultural Resources Survey of the Proposed Grand Parkway Segment F-2, Harris County, Texas.

Cultural Resources Survey of the Proposed Grand Parkway Segment G, Harris and Montgomery Counties, Texas.

Cultural Resources Survey of Proposed Improvements to SH332, Brazoria County, Texas.

NRHP Eligibility Testing of Three Sites in Greene County, Mississippi.

As Project Archaeologist:

NRHP Eligibility Testing of Three Sites in the Oak Hill Mine Area, Rusk County, Texas.

NRHP Eligibility Testing of Site 22LI504, Lincoln County, Mississippi.

Preliminary Cultural Resources Survey of the Tetco M-1 Project, Colbert and Franklin Counties, Alabama.

Subsurface Testing of the Chalan Pale Arnold Road Improvement Corridor, Tanapag and San Roque, Saipan, Commonwealth of the Northern Mariana Islands.

Survey of the Marpo Heights Homestead Project, Marpo, Tinian, Commonwealth of the Northern Mariana Islands.

Survey of the Bird Island Golf Course Project Area, Kalabera, Saipan, Commonwealth of the Northern Mariana Islands.

Excavation of Prehistoric Human Burials and Monitoring of the DFS Site, Garapan, Saipan, Commonwealth of the Northern Mariana Islands.

Salvage Excavation of Prehistoric Human Burials at the Ana Leon Geurrero House, Inarajan, Guam.

Assessment of Damage to the Togcha Beach Site, Togcha, Guam.

Test Excavations at the Orote Cave Site, Orote, Guam.

Test Excavations at the Sumay Village Site, Sumay, Guam.

Survey and Testing of the Fort Santiago Site, Orote, Guam.

Survey and Testing of Portions of the U. S. Naval Magazine, Guam.

Data Recovery Excavations at the Smiley Farmstead, O'Fallon, Illinois.

Monitoring of Improvements to Monarch Levee Affecting the Boisselier Graveyard, Chesterfield, Missouri.

Survey for Monarch Levee Borrow Areas, Chesterfield, Missouri.

Survey of St. Albans Island, St. Albans, Missouri.

NRHP Testing of the Kincaid Property(Site 23FR334), St. Albans, Missouri.

Survey of the Bick Property (Site 23FR350), St. Albans, Missouri.

Survey of Three Proposed Subdivision Tracts, Wentzville, Missouri.

As Historian, Lab Technician, Graphic Illustrator, and/ or Field Technician:

Architectural Survey of Proposed Improvements to Interstate 55, Jefferson County, Missouri.

Archival Search of The Ville Neighborhood, St. Louis, Missouri.

Masterplan for the Treatment of Archaeological Resources in St. Charles County, Missouri.

Survey of Proposed improvements to Interstate 55, Jefferson County, Missouri.

Testing of Seven Sites in the US Route 36 Corridor, Macon County, Missouri.

Cultural Resource Archival Search and Architectural Assessment of Two Proposed Access Corridors for a New Mississippi River Bridge, St. Louis, Missouri.

Survey of Proposed Improvements to US Route 36, Macon County, Missouri.

Assistant Instructor for Excavations at an Emergent Mississippian Site and a Colonial Era Site (East Central College Field School), Franklin County, Missouri.

Cultural Resources Archival Search of Proposed Improvements to US Route 50, Franklin, Gasconade, and Osage Counties, Missouri.

Removal of Three Exposed Historic Human Burials from the Old Lindsay Graveyard, St. Charles, Missouri.

Survey of Post- Dispatch Lake Sewer Interceptor, Forest Park, St. Louis, Missouri.

Cultural Resource Archival Search of Four St. Louis Parks, St. Louis, Missouri.

Survey of the Proposed Jefferson Barracks Casino Tract, Oakville, Missouri.

Excavations at the Orr Farmstead, Chesterfield, Missouri.

Archaeological Resources Master Plan for St. Louis City and St. Louis County, Missouri.

Cotton Homes Subdivision Survey, Florissant, Missouri.

Calhoun County Waterline Survey, Calhoun County, Illinois.

US Route 36 Expansion Architectural Survey and Cultural Resources Archival Search, Macon County, Missouri.

Pine Creek Subdivision NRHP Testing, Chesterfield, Missouri.

Premier Homes Subdivision NRHP Testing, St. Louis County, Missouri.

Ste. Genevieve Flood Mitigation Survey, Ste. Genevieve, Missouri.

Cultural Resource Salvage Investigations at the New United States Federal Court Site (Historic), St. Louis, Missouri.

Wildhorse Hills Subdivision Survey, Chesterfield, Missouri.

Data Recovery Excavations at the Truman Road Site (Archaic, Woodland, and Historic Components), St. Peters, Missouri.

Excavations at the 15th Century Walled Town of Pujini, Pemba, Tanzania.



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