

US EPA ARCHIVE DOCUMENT

D R A F T R E P O R T

**CULTURAL RESOURCES ASSESSMENT
OF THE PROPOSED EQUISTAR CHEMICAL COMPANY
CHANNELVIEW OLEFINS PLANT EXPANSION PROJECT
CHANNELVIEW, HARRIS COUNTY, TEXAS**

**Prepared for: Equistar Chemical Company
2502 Sheldon Road, Channelview, TX 77530**

AND

**Environmental Protection Agency (U.S. EPA Region 6)
1445 Ross Avenue, Dallas, TX 75202**

Prepared by: Lauren Poche and Robert Lackowicz

November 19, 2012

Project No. 25014882

URS

**URS Corporation
7389 Florida Blvd., Suite 300
Baton Rouge, Louisiana 708 06
225/922-5700**

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CHANNELVIEW OLEFINS PLANT EXPANSION PROJECT

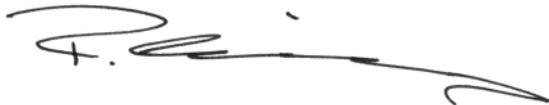
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November 19, 2012

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REPORT SUMMARY

Equistar Chemical Company (Equistar) has submitted a permit application to the United States Environmental Protection Agency (USEPA) Region 6 for Greenhouse Gases (GHG) Prevention of Significant Deterioration (PSD) Permit for the proposed Olefins Plant Expansion at the Channelview Chemical Complex in Channelview, Harris County, Texas. The USEPA Region 6 has determined, in accordance with Advisory Council on Historic Preservation regulations pertaining to historic properties protection (36 CFR 800.4), that the project is subject to the provisions of Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended). Section 106 of the NHPA requires federal agencies take into account the effect that an undertaking will have on historic properties. Historic properties are those included in, or eligible for inclusion in, the National Register of Historic Places (NRHP) and may include archeological sites, buildings, structures, sites, objects, and districts.

URS Corporation (URS), at the request of Equistar, conducted a desktop cultural resource review for the proposed Olefins Plant Expansion Project. The purpose of this review was to identify any historic properties that might be adversely affected by the proposed undertaking. The proposed project activities are located within an active chemical processing plant comprised of industrial buildings and infrastructure that are between 15 and 55 years in age. The direct Area of Potential Effects (APE) is limited to construction activities within the defined limits shown in the attached maps and associated primarily with the Olefins Plant-1 and Olefin Plant-2 furnaces, which were brought on line between 35 and 36 years ago, respectively. The indirect APE is limited to visual effects from the furnaces' construction to buildings and archaeological sites within direct visual sight of the completed facility, which given the existing terrain and placement of industrial buildings, is estimated to be less than one half mile to the west and one quarter mile in other directions. As noted above, no architectural historic properties or other cultural properties such as cemeteries have been identified within that radius.

Subsurface investigations within the direct APE were not deemed warranted. In conjunction with existing geologic and soil conditions, the review indicated that there was no potential for project to affect undisturbed archaeological sites based upon previous disturbances from historic and modern land use, as well as the presence of existing industrial infrastructure and facilities. No historic buildings outside the facility that could be visually affected by the project lie within the indirect APE. Based on these data, it is the opinion of URS that the project will not adversely affect historic properties that are eligible for inclusion to the NRHP. URS therefore recommends that a finding of No Historic Properties Present or Affected be applied to this undertaking.

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ATTACHMENTS

- Attachment 1 - Figures
- Attachment 2 – Photographic Log
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1.1 PROJECT INTRODUCTION

Equistar Chemical Company (Equistar) has submitted a permit application to the United States Environmental Protection Agency (USEPA) Region 6 for a Greenhouse Gases (GHG) Prevention of Significant Deterioration (PSD) Permit for the proposed Olefins Plant Expansion at the Channelview North Plant, located in Channelview, Harris County, Texas (Figure 1). Equistar proposes to expand the North Plant and increase the production capacity with the construction of two cracking furnaces, at OP-1 and OP-2, immediately adjacent to the existing furnaces currently in operation at the Channelview Site, as well as adding two de-coking pots and the addition or modification of associated equipment.

The USEPA Region 6 has determined that the project is subject to the provisions of Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended), and defined in 36 CFR Part 800. The intent of Section 106 is for federal agencies to take into account adverse effects on any historic properties situated within the direct or indirect APE of the proposed undertaking, and to afford the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officers (SHPOs), tribal groups, and any other interested parties an opportunity to comment on the proposed action within a reasonable period. URS Corporation (URS), at the request of Equistar, conducted a desktop cultural resource review for the proposed Olefins Plant Expansion Project in order to assess the potential of the proposed development to adversely affect historic properties as required under the Section 106 regulations.

A historic property is defined as any district, archeological site, building, structure, or object that is either listed, or eligible for listing, in the National Register of Historic Places (NRHP). Under this regulatory definition, other cultural resources may be present within a project's total Area of Potential Effect (APE) but are not be considered historic properties if they do not meet the eligibility requirements for listing in the NRHP. To be considered eligible for the NRHP, a property must meet one of the four following criteria (36 CFR 60.4): (a) they are associated with events that have made a significant contribution to the broad patterns of our history; (b) they are associated with the lives of persons significant in our past; (c) they embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or (d) they have yielded, or may be likely to yield, information important in prehistory or history.

The proposed project is located approximately 1 mile southeast of the intersection of US-90 and Sheldon Road. The site is located on the Highlands and Jacinto City United States Geological Survey (USGS) Quads, at 29.833° north latitude and 95.117° west longitude (Figure 2). Construction for the proposed expansion, associated infrastructure and auxiliary equipment will take place entirely within the confines of the existing facility. Excavations will be limited to the seven discrete locations highlighted yellow in Figure 3. The expansion of OP-1 will include a new cracking furnace, a new decking pot, a SCR system for the new furnace, new equipment

components in ammonia service associated with the new SCR system, a group of new process sampling analyzers, a group of new equipment components in VOC service, and new MSS emissions associated with the periodic clean-out of the new proposed process vessels. The expansion of OP-2 will mirror that of OP-1 with the exception of new equipment components in ammonia service associated with the new SCR system. According to the project plans, the new cracking heaters will be built adjacent to the existing cracking heater rows for OP-1 and Op-2. The foundation for these cells will be excavated up to six foot depth, while a proposed ammonia (NH₃) sump located within the NH₃ storage location will be excavated up to 12 foot depth.

As identified above, proposed excavation activities are not anticipated to exceed a depth of 12 feet below grade and will occur in areas previously disturbed and modified from previous construction, plant expansions (as discussed in Section 1.9) and operations of the Channelview Chemical Complex. Several surrounding shown in orange on Figure 3 will not involve land removal but will be used temporarily during construction for contractor and equipment laydown yards and vendor trailers.

1.2 GEOLOGY AND ECOREGION

The regional landscape strongly influences the preservation and subsequent identification of any archeological materials that may have been deposited within the proposed project areas. The project area is located in Harris County, which occupies approximately 1,765 square miles (1,129,000 ac) in southeastern Texas (Wheeler 1976:1). It is situated within the San Jacinto River drainage basin which flows into the Gulf of Mexico, and it is immediately adjacent to Upper San Jacinto Bay.

The county is situated in the Western Gulf section of the Coastal Plain Physiographic Province of North America, and specifically within the Northern Humid Gulf Coastal Prairies ecoregion (Perttula 1993; Ricklis 2004; Swanson 2001). The Northern Humid Gulf Coastal Prairies are situated at elevations between sea level and 300 feet above sea level, in an area that is characterized by low plains and low gradient rivers and streams. The Beaumont Formation is the major geological landscape in the project area; it first developed during the Late-Pleistocene in a very fluidic and deltaic environment and is primarily composed of clayey soils. The exposed portions of this formation are largely flat and featureless, except for some relict river channels which indicate a Pleistocene Gulf of Mexico shoreline, which has since receded (Crenwelge 2006:271). Wide relict channels, large meander radii, and meander belt scars are also present; these appear to reflect increased rainfall amounts from the Late Pleistocene through the Early Holocene (Crenwelge 2006:271). These meander patterns can be seen on ridge surfaces throughout the county (Wheeler 1976:45).

1.3 SOILS

Although the USDA Web Soil Survey depicts sixteen (16) soils within the broader expanse of the entire Channelview facility, aerial maps demonstrate that large portions of the facility have been disturbed due to industrial expansion. The USDA identified soils are associated with the Aldine-Ozan association forested soils, Clodine-Addicks-Gessner association prairie soils, Lake Charles-Bernard association prairie soils, Midland-Beaumont association prairie soils, and Nahatche-Voss-Kaman association forested bottom land soils (Table 1; Figure 4).

Aldeine very fine sandy loam accounts for approximately 26.4% of the soils found within the Channelview Site. Other soil types that account for a large portion of the total facility area include Addicks loam (21.2%), Bernard clay loam (19.1%). Verland silty clay loam (9.7%), Kaman clay (6.5%), Lake Charles clay (5.2%), and Atasco fine sandy loam (4.7%). Nine (9) soil types account for a combined 2.9% of the area: Addicks-Urban land complex (0.7%); Beaumont clay (0.6%); Ozan loam (0.6%); Bernard-Urban land complex (0.3%); Bernard-Edna complex (0.2%); Gessner loam (0.2%); Voss sand (0.1%); Harris clay (0.1%); and Hatliff loam (0.1%). Water accounts for approximately 4.4% of the APE, although most has since been drained. All seven of the project excavation areas identified in Figure 3 are at locations where the original soils were Verland silty clay loam or were once covered by standing water. The Verland silty clay loam is a poorly drained soil type and is generally not associated with significant archaeological site locations because of this fact.

Table 1: Project Area Soil Characteristics (Wheeler 1976; USDA Web Soil Survey)

Abbreviation	Soil Name	Landform	Slope	Drainage	Description
Ad	Addicks loam	Coastal prairies	0 to 1%	Poorly drained	0-11 in; black loam 11-23 in; dark gray loam 23-49 in; light gray loam 49 in +; light gray loam with yellow/yellowish brown mottles
Ak	Addicks-Urban Land Complex	Upland prairies	0 to 1%	Poorly drained	Disturbed
Am	Aldine very fine sandy loam	Coastal plains	0 to 1%	Somewhat poorly drained	0-5 in; dark grayish brown very fine sandy loam 5-10 in; grayish brown v. fine sand loam 10-19 in; yellowish brown loam 19-30 in; gray clay with yellowish brown and red mottling 30-60 in; light gray loam

Abbreviation	Soil Name	Landform	Slope	Drainage	Description
AtB	Atasco fine sandy loam	Coastal plains	1 to 4%	Moderately well drained	0-5 in; dark grayish brown fine sandy loam 5-16 in; light yellowish brown fine sandy loam 16-19 in; brownish yellow sandy clay loam with fine sandy loam 19-60 in; yellowish brown clay and gray clay with yellowish brown and red mottling
Ba	Beaumont clay	Upland prairies	0 to 1%	Poorly drained	0-21 in; dark gray to gray clay 21-59 in; gray clay 59-73 in; grayish brown clay mottled with light olive brown and strong brown
Bd	Bernard clay loam	Upland prairies	0 to 1%	Somewhat poorly drained	0-6 in; very dark gray clay loam 6-54 in; very dark gray and dark gray clay 54in +; gray clay with yellowish brown mottling
Be	Bernard-Edna Complex	Upland prairies	1 to 2%	Somewhat poorly drained	<u>Bernard</u> 0-6 in; dark gray clay loam 6-54 in; dark gray clay 54 in +; gray clay with yellowish brown mottles and calcium carbonate concretions
					<u>Edna</u> 0-10 in; dark grayish brown fine sandy loam 10-44 in; gray and olive gray clay 44 in +; gray sandy clay
Bg	Bernard-Urban Land Complex	Upland prairies	0 to 1%	Somewhat poorly drained	Disturbed
Ge	Gessner loam	Coastal prairies	0 to 1%	Poorly drained	0-7 in; dark grayish brown loam 7-16 in; grayish brown loam 16-34 in; dark gray loam 34-53 in; light brownish gray loam 53-84 in; light gray sandy clay loam with yellowish brown mottling
Ha	Harris clay	Coastal marshland	0 to 1%	Very poorly drained	0-20 in; black clay 20-32 in; dark gray clay 32-45 in; gray clay 45-64 in; gray clay with calcium carbonate concretions
Hf	Hatliff loam	Forested stream flood plains	0 to 1%	Moderately well drained	0-5 in; dark brown loam 5-10 in; brown fine sandy loam 10 in+; varies between a yellowish brown fine sandy loam in the upper layers to a very pale brown sand in the lower layers
Ka	Kaman clay	Bottom lands	0 to 1%	Poorly drained	0-39 in; very dark gray clay and black clay 39-52 in; dark gray clay 52-70 in; dark gray clay with yellowish brown mottling
LcA	Lake Charles clay	Upland prairies	0 to 1%	Moderately well drained	0-22 in; black clay 22-36 in; very dark gray clay 36-52 in; dark gray clay 52-74; gray clay with olive brown and yellow brown mottling

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Abbreviation	Soil Name	Landform	Slope	Drainage	Description
Md	Verland silty clay loam	Coastal uplands	0 to 1%	Somewhat poorly drained	0-7 in; dark grayish brown silty clay loam 7-20 in; gray silty clay 20-50 in; dark gray clay 50-72 in; mottled gray, olive yellow, and brownish yellow clay
Oa	Ozan loam	Depressions	0 to 1%	Poorly drained	0-2 in; dark grayish brown loam 2-18 in; light brownish gray loam 18-51 in; light brownish gray loam 51-65 in; light brownish gray sandy clay loam mottled with red and yellowish brown
Vo	Voss sand	Flood plains	0 to 2%	Moderately well drained to somewhat poorly drained	0-5 in; very dark grayish brown sand 5-70 in; light gray sand
W	Water	n/a	n/a	n/a	n/a

1.4 CURRENT LAND USE

The Northern Humid Gulf Coastal Prairies ecoregion was historically used for livestock grazing and agriculture, but today it is a combination cropland, pastureland, rangeland, and urban and industrial development. Prairie grasses contribute to the local plant life, as well as cane brakes along waterways and forests of pecan, sugar hackberry, ash, southern live oak, and cedar elm trees dominate in the southern portion of the ecoregion (Griffith et al. 2004:74-75).

1.5 CLIMATE

Harris County is characterized by a humid subtropical climate with short, mild winters and long hot summers. Rainfall is heavy and often comes in the form of afternoon thunderstorms. In regards to temperature, the average low for the area is 42°F and average high is 92°F; the area is frost free approximately 75% of the year. The mean annual rainfall ranges from 37 to 58 inches. The average humidity is high, at 74%. Snowfall is extremely infrequent, averaging 0.01 inches per year, but the area often receives intense weather in the form of the remnants of tropical storms, hurricanes, and tornadoes (World Media Group, LLC 2012; Wheeler 1976:2, 59).

1.6 BACKGROUND RECORDS REVIEW

A review of known archaeological sites and known resources within a 0.5 mile search radius of the project area, bounded by the existing facility boundary, was conducted using the Texas Historical Commission's (THC) online Texas Archaeological Sites Atlas. The online National Register of Historic Places (NRHP) database was also consulted. The data below also includes a

review of Native American tribes with a stated interest in Harris County, as well as a brief historical overview.

1.7 PREVIOUS INVESTIGATIONS

Reviews of cultural resources identified on the online Texas Archaeological Sites Atlas and NRHP database were performed on September 17, 2012 to determine what, if any, previously recorded archaeological sites or National Register properties were within the 0.5 mile search radius surrounding the existing facility (or approximately 1.0 mile from the facility center point as shown in Figure 2). No cultural resources were identified within the 0.5 mile search radius; the closest site, 41HR36, was identified to the south on Bear Bayou, approximately 0.6 miles away from the southwestern facility boundary. The Texas Archaeological Sites Atlas does not mention its possible function or the time period it is associated with, most likely because it was identified in the mid-1950s. There are also no known historic buildings, National Historic Landmarks or previous cultural resource surveys located within the assessment area. The closest is a survey contracted by the Environmental Protection Area in 1979, which lies on the east side of the San Jacinto River.

1.8 TRIBAL COORDINATION DATA

A records review of the Texas Historical Commission’s online “Guidelines for Tribal Consultation” database was conducted to determine what Native American Tribes may have an interest in Harris County, Texas. Only the Tonkawa Tribe of Oklahoma is specifically identified on the Texas Historical Commission dataset as including Harris County in their area of interest. Nineteen additional tribes have a known interest in Texas, but their territorial extent is not listed (Table 2).

Table 2: Native American Tribes With Possible Territorial Interest in the Project Area

Alabama-Coushatta Tribe of Texas	The Delaware Nation	Quapaw Tribe of Oklahoma
Alabama-Quassarte Tribe Town	Kialegee Tribal Town	Seminole Nation of Oklahoma
Apache Tribe of Oklahoma	Kickapoo Traditional Tribe of Texas	Thlopthlocco Tribal Town
Caddo Nation	Kickapoo Tribe of Oklahoma	Tunica-Biloxi Tribe
Cherokee Nation of Oklahoma	Kiowa Tribe of Oklahoma	United Keetoowah Band of Cherokee Indians
Coushatta Tribe of Louisiana	Mescalero Apache Tribe	Wichita and Affiliated Tribes
The Delaware Nation	Poarch Band of Creek Indians	

1.9 HISTORY OF THE EQUISTAR CHEMICALS CHANNELVIEW FACILITY

Texas Butadiene and Chemical built the complex that would become Lyondell's petrochemical complex in 1955 on the site of the Lyondell Country Club in Channelview, Texas. The Flour Daniel Corporations was awarded a "turnkey" contract to build the original plant and broke ground on September 1, 1955. Original plans included one Houdry unit and Recovery unit; however midway during construction it was decided that market conditions were good enough for a second Houdry unit and Recovery unit. Flour was awarded the contract for the extra work and the plant was completed in early 1957. The first butadiene was produced on February 17, 1957 and the first aviation gasoline on February 22, 1957. In 1959 facilities were added to recover 300 B/D of 85% propylene product from an off-gas stream which was then being burned for fuel. The propylene product was marketed as the raw material for manufacture of propylene oxide and propylene glycols.

A Sinclair Oil subsidiary bought the plant in 1962. Four years later Richfield and Atlantic Refining merged. In 1964 Sinclair built and started the MEK (Methyl Ethyl Ketone) unit which was operated until 1989. On March 4, 1969, Sinclair and all subsidiaries were merged with Atlantic Richfield Company. Lyondell became a division of Atlantic Richfield. Since 1965, 24 additional process units have been constructed and operated at the current Equistar Chemicals Channelview Facility and include:

MEK	1965
IPA -MetaXylene	1966
SMA	1966
Poly BD	1970
IPOH	1971
B2 Furfural System	1975
Olefins Plant-1	1976
BT Unit	1976
Barge Dock Startup	November 1976
Olefins Plant-2	1977
South Plant POSM 1	1977
MTBE	1979
Methanol	1982
PEA	1983
OP-2 Product Flex	1985
MTBE South Plant	1986

Cat MTBE	1987
PolyOls Bayer Corp	1988
Olefins Expansion	1989
South BDO	1990
South Plant POSM 2	1992
Product Flex Expansion	1993
Alky & Olefins Expansion	1996
POSM 2 and EB unit Debottleneck	1997

1.10 LOCAL HISTORY

The town of Channelview, Texas was formed in 1916 as a result of the discovery of oil in its immediate vicinity, and originally served as the home for the families of oil refinery workers in the area. The town is named after its location on the Houston Ship Channel, which links the interior of the state with the Gulf of Mexico (Hazlewood 2012).

Although the area had schools for both white and African-American students by the late 1910s, a town post office was not established until 1933. Three years later, a sawmill and several businesses had also opened their doors. Although in 1940 there were only two businesses and 50 residences reported, seven years later the population had skyrocketed to 700 residences supported by 23 local businesses (Hazlewood 2012).

Twenty years after that, in 1967 the Sinclair Petrochemical plant opened near the shipping channel and the population had reached 7,860 along with 75 businesses in town. By the early 1980s, the population had grown almost four-fold to included 26,115 residents and 385 businesses. As of 2000, there were just under 30,000 residents served by 659 businesses (Hazlewood 2012).

1.11 RECORD REVIEW RESULTS

The proposed project activities are located within an active chemical processing plant comprised of industrial buildings and infrastructure that are between 15 and 55 years in age. The direct Area of Potential Effects (APE) is limited to construction activities within the defined limits shown in the attached maps and associated primarily with the OP-1 and OP-2 furnaces, which were brought on line between 35 and 36 years ago, respectively. The indirect APE is limited to visual effects from the furnaces' construction to buildings and archaeological sites within direct visual sight of the completed facility, which given the existing terrain and placement of industrial buildings, is estimated to be less than one half mile to the west and one quarter mile in other directions. As noted above, no architectural historic properties or other cultural properties such as cemeteries have been identified within that radius.

Given the level of extensive industrial development covering the proposed construction area, subsurface investigations throughout the direct APE were not warranted. No known archaeological sites lie within 0.5 mile of the facility boundaries. The existing geologic and soil conditions as described in Section 1.3 indicate low archaeological site potential exists within the study area due to existing land-altering activities and originally a large percentage of poorly draining soils. The records review also indicates that there was little potential for the direct APE to contain undisturbed archeological resources that would meet the Section 106 criteria of being eligible for listing on the National Register of Historic Places. No known historic buildings or cemeteries outside of the facility have also been identified that could be visually affected within the indirect APE. We therefore recommend that a finding of No Historic Properties Present or Affected be applied to this undertaking.

1.12 REFERENCES

Crenwelge, J.

2006 *Soil Survey of Jefferson and Orange Counties, Texas*. USDA Soil Conservation Service.

Griffith, G. E., S. A. Bryce, J. M. Omernik, J. A. Comstock, A. C. Rogers, B. Harrison, S. L. Hatch, and D. Bezanson

2004 *Ecoregions of Texas*, US Environmental Protection Agency, Corvallis, Oregon.

Hazlewood, Claudia

2012 "Channelview, TX," *Handbook of Texas Online*. Electronic document, (<http://www.tshaonline.org/handbook/online/articles/hfc06>). Last accessed September 17, 2012. Published by the Texas State Historical Association

Perttula, T. K.

1993 Section IV: Regional Preservation Plan for Archeological Resources, Southeast Texas Archeological Region. In *Archeology in the Eastern Planning Region, Texas: A Planning Document*, N. A. Kenmotsu and T. K. Perttula, pg. 205-213, Department of Antiquities Protection, Cultural Resources Management Report 3, Texas Historical Commission.

Rickliss, R. A.

2004a Occupation of Central and Lower Texas Coast. A Regional Overview. In *The Prehistory of Texas*. T. K. Perttula, Ed. Pp. 155–180. Texas A&M University Press, College Station.

Swanson, E. R.

2001 *Geo-Texas: A Guide to the Earth Sciences*. Texas A&M University Press, College Station, Texas.

Texas Parks and Wildlife Department

2012 *San Jacinto Battleground State Historic Site*. Electronic document, <http://www.tpwd.state.tx.us/state-parks/san-jacinto-battleground>. Accessed September 6, 2012. Wheeler, F. F.

1976 *Soil Survey of Harris County, Texas*. U.S. Department of Agriculture Soil Conservation Service in cooperation with Texas Agriculture Experiment Station.

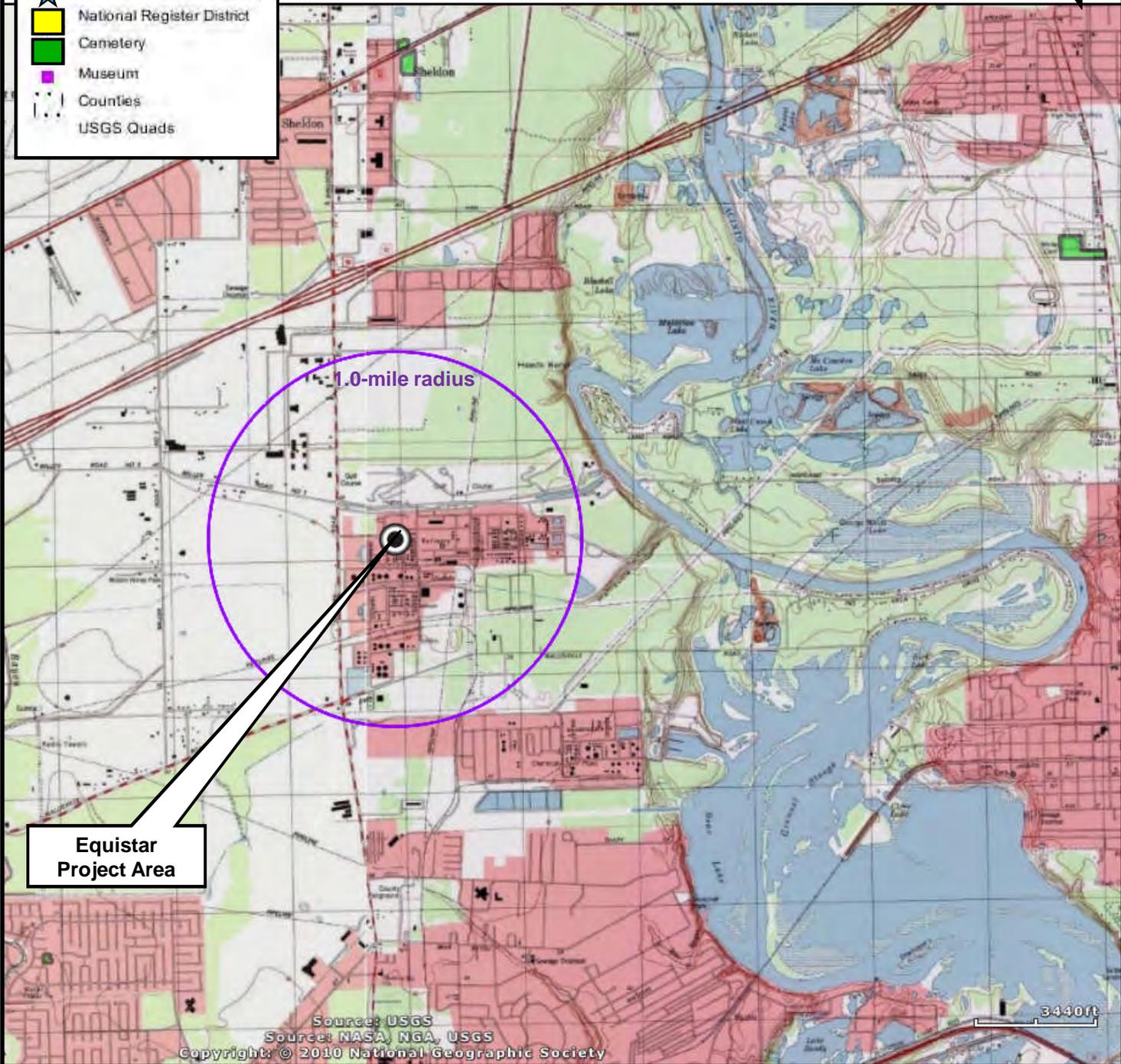
World Media Group, LLC.

2012 *Harris County Weather*. Electronic document, <http://www.usa.com/harris-county-tx-weather.htm>. Accessed on September 6, 2012.

FIGURES

Legend

- Highlighted Feature
- Neighborhood Survey
- Historical Marker
- National Register Property
- National Register District
- Cemetery
- Museum
- Counties
- USGS Quads

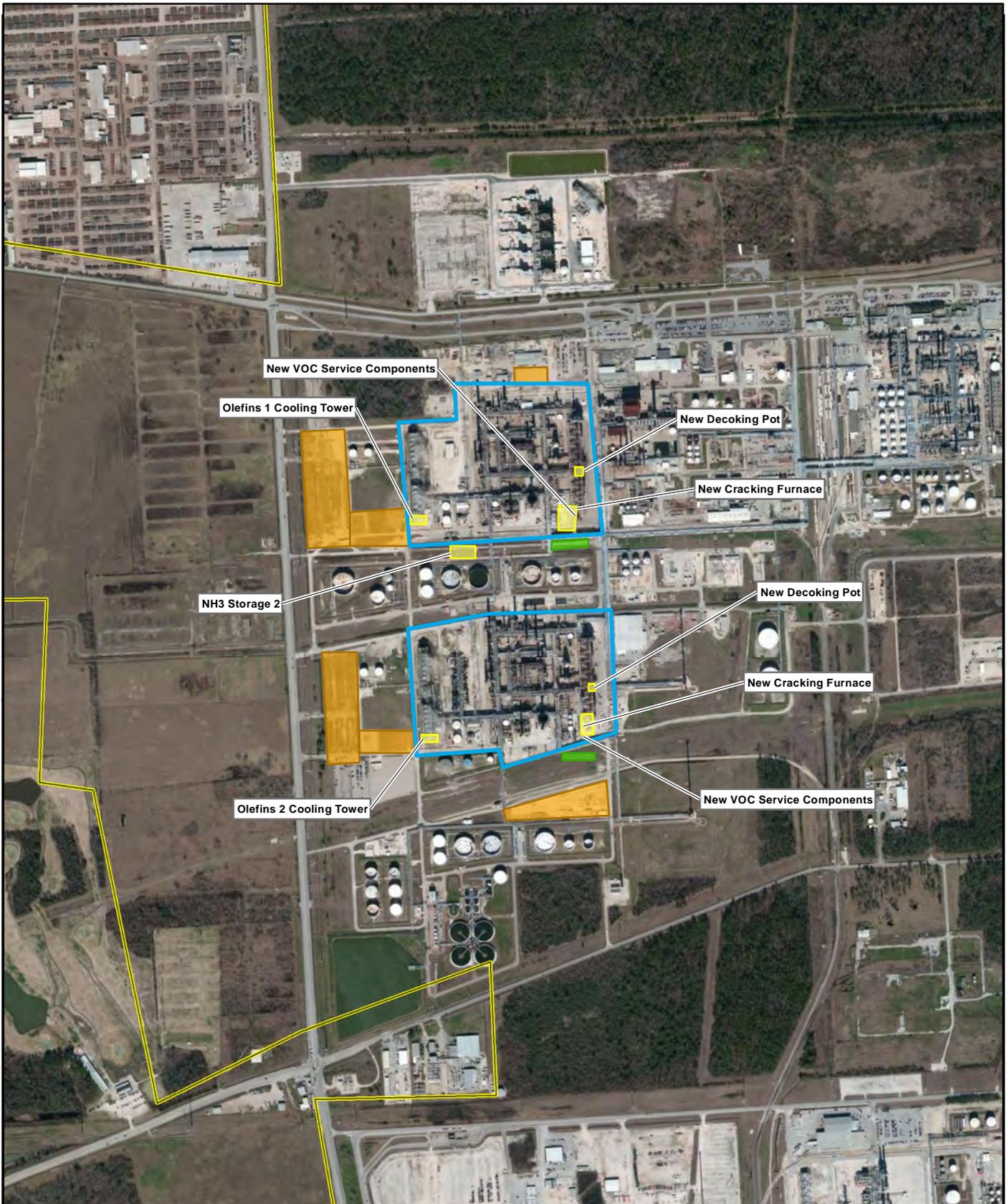


**Equistar
Project Area**

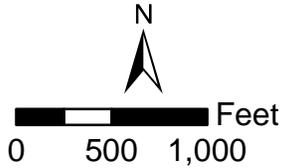
Source: Texas Historical Commission, Texas Historic Sites Atlas

CLIENT Equistar Chemical Company				TITLE Texas Historic Sites Atlas 		PN 25014882	
PROJECT Equistar Channelview Methanol Restart Project						FIGURE 2	
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FILE	CHK BY	BSM	7/6/2012				

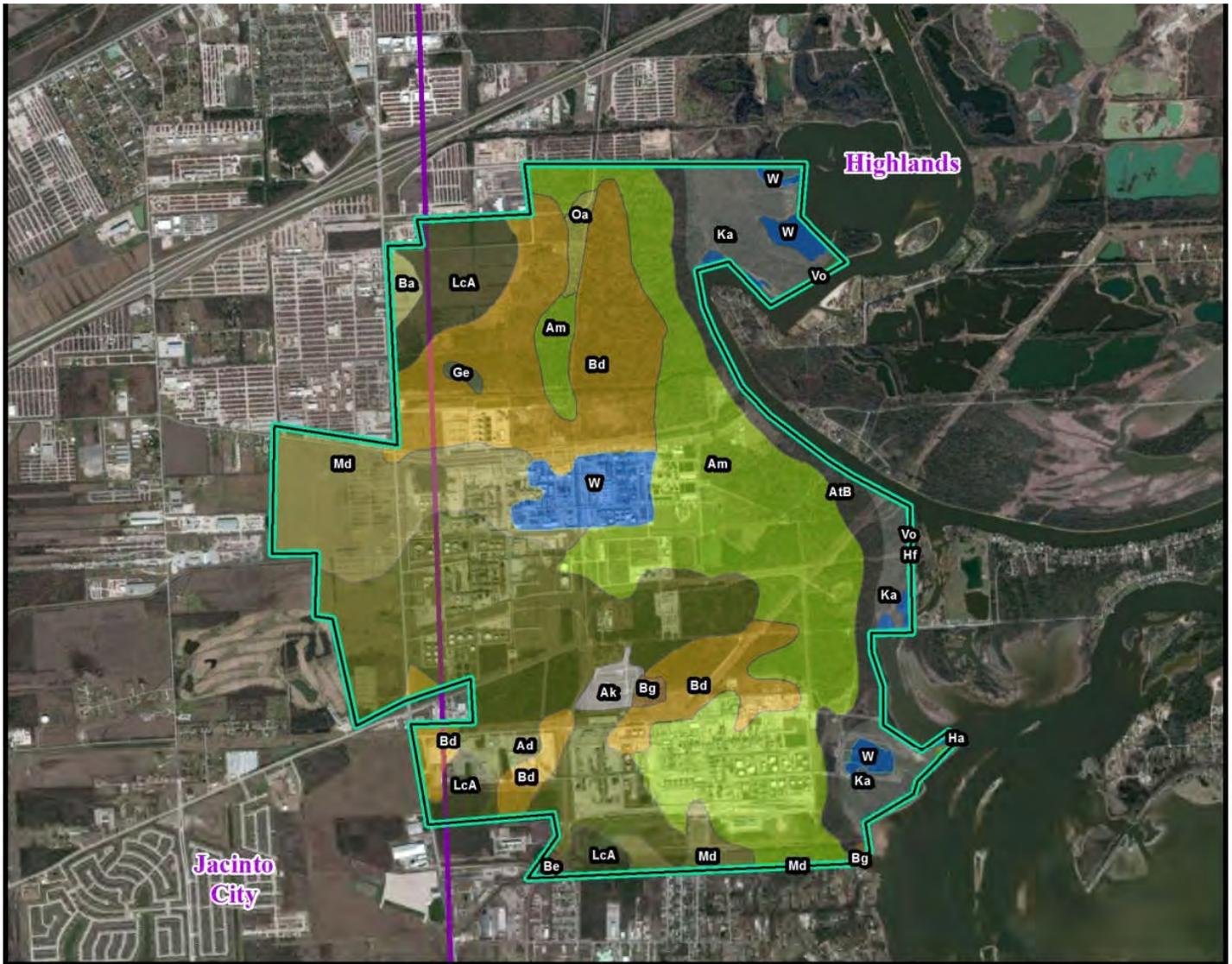
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- Property Boundary
- Olefin Units
- Blast Resistant Building Locations
- Proposed Construction Limits (Ground Disturbance)
- Construction Material Laydown and Extra Workspace (Existing)



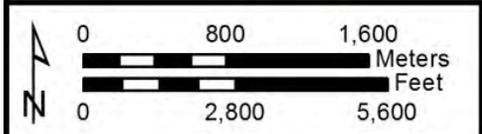
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Project:				Equistar Channelview Olefin Expansion			
Client:				Equistar Chemicals, L.P.			
Drawn by:	Date:	Project No.:		Drawn by:	Date:	Project No.:	
AM	11/16/2012	25014882		AM	11/16/2012	25014882	Figure 3



Symbol	Soil Name	Symbol	Soil Name	Symbol	Soil Name	Symbol	Soil Name
Ad	Addicks loam	Ba	Beaumont clay	Ge	Gessner loam	LcA	Lake Charles clay, 0 to 1 percent slopes
Ak	Addicks-Urban land complex	Bd	Bernard clay loam	Ha	Harris clay	Md	Verland silty clay loam
Am	Aldine very fine sandy loam	Be	Bernard-Edna complex	Hf	Hatliff loam	Oa	Ozan loam
AtB	Atasco fine sandy loam, 1 to 4 percent slopes	Bg	Bernard-Urban land complex	Ka	Kaman clay	Vo	Voss sand
						W	Water

Project Area
 USGS Quad Boundary

Locator Map



1:48,000
 UTM Nad 83
 Zone 15

USGS Quads:
 Jacinto City, TX
 Highlands, TX

CLIENT	Equistar Chemical Company		
PROJECT	Equistar Channelview Methanol Restart Project		
REVISION NO	DES BY		
SCALE	As shown	DR BY	JP 7/6/2012
FILE		CHK BY	BSM 7/6/2012

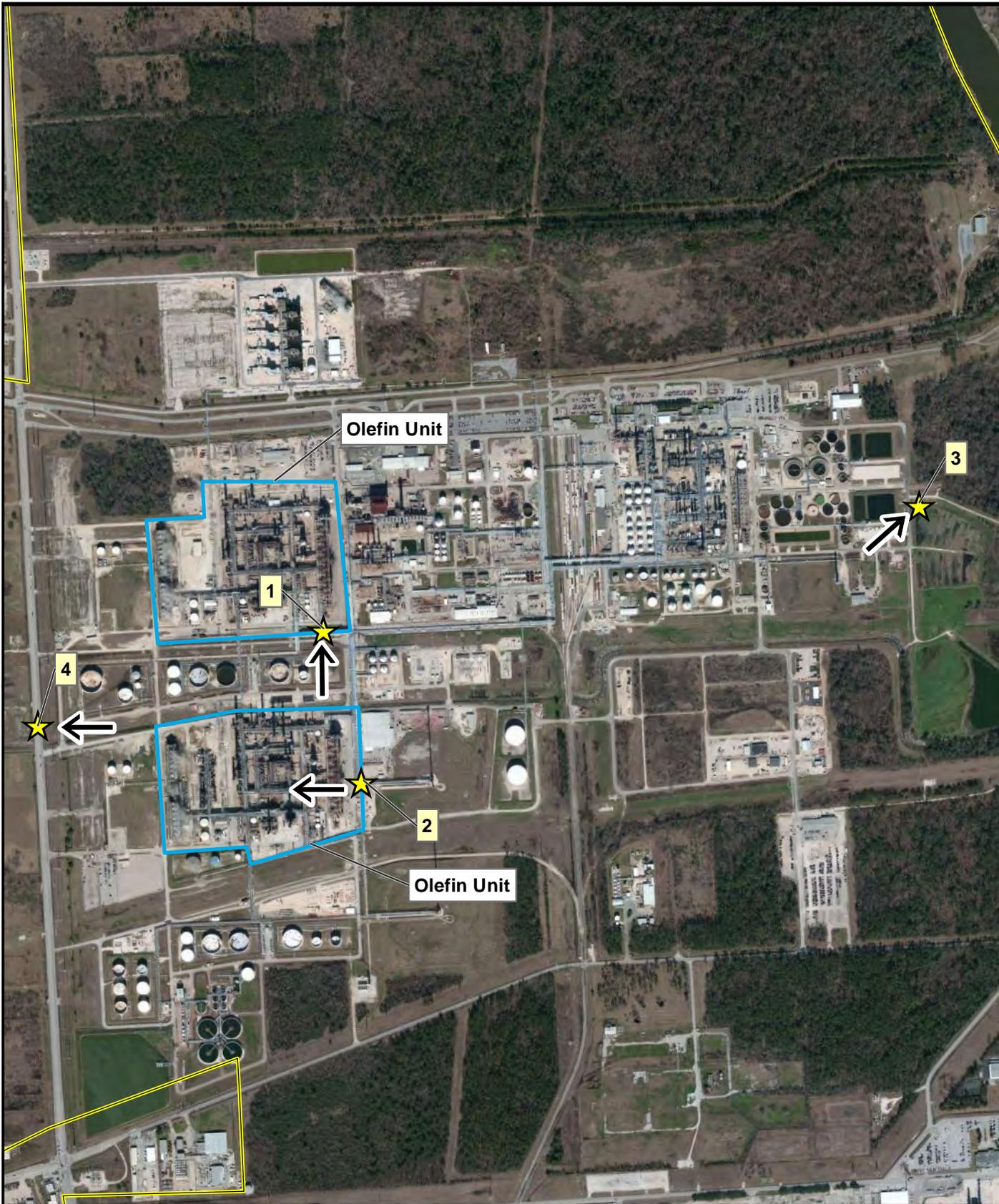
TITLE **Equistar Channelview Complex - Soils Map**



PN 25014882
 FIGURE **4**

PHOTOGRAPHIC LOG

Path: K:\ENWENV\3025014882\GIS\MXD\CIV-Olefins\PhotoKey2.mxd



URS

-  Photo Location
-  Photo Direction
-  Property Boundary



0 500 1,000 Feet

Title: Photographic Key			
Project: Equistar Channelview Olefin Restart Project			
Client: Equistar Chemicals Company			
Drawn by: AM	Date: 11/16/2012	Project No.: 25014882	Figure 2-1

Client Name: Equistar Chemicals	Site Location: Channelview Olefins Expansion Project	Project No.: 25014882
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Date 8/1/2012	Photo No. 1
Direction Photo Taken: North	

Description:

Location of new furnace to be constructed at the Olefins 1 Unit. The furnace will be located behind the above ground pipes in the foreground on an existing concrete pad or caliche filled area adjacent to existing process units.



Date 8/1/2012	Photo No. 2
Direction Photo Taken: West	

Description:

Location of new furnace to be constructed at the Olefins 2 Unit. The furnace will be located on an existing concrete pad adjacent to existing process units.



Client Name: Equistar Chemicals	Site Location: Channelview Olefins Expansion Project	Project No.: 25014882
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Date 8/1/2012	Photo No. 3
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Direction Photo Taken:
Northeast

Description:
Description:
Discharge point, where water from Outfall 001 flows through the ditch in the foreground and enters Wallisville Gully in the background, which flows into the San Jacinto River. Chinese tallow is dominant on the banks, other species include loblolly pine, green ash, and yaupon.



Date 8/1/2012	Photo No. 4
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Direction Photo Taken:
West

Description:
View west of process units towards Sheldon Road.



RESUMES



Robert J. Lackowicz M.A., R.P.A.

Cultural Resource Manager/Technical Writer

Areas of Expertise

Section 106 Compliance
Phase I, II, and III Cultural
Resources Studies
Technical Writing;
HUD Projects
Natural Gas Pipeline Studies
Federal Energy Regulatory
Commission (FERC) - Third
Party Review
Transportation Corridor Studies -
Hydroelectric Transmission Line
Corridors and Facilities
State and Federal Agency
Coordination
Project Management

Years of Experience

With URS: 3 Years
With Other Firms: 17 Years

Education

MA/Anthropology/1996/ Trent
University
BA/Anthropology/1991/
Memorial University

Overview

Mr. Lackowicz has 20 years of cultural resource management experience, with the last 7 years involving projects within Alabama, Florida, Georgia, Louisiana, Mississippi, Oklahoma, South Carolina, and Texas. He is the lead cultural resource manager overseeing thousands of individual Section 106 archaeological and architectural history studies that are being conducted for the Mississippi Development Authority's post-Hurricane Katrina Gulf Coast recovery programs. He has supervised the architectural salvage and archaeological monitoring of post-Katrina housing demolitions conducted by the Federal Emergency Management Agency and developed Section 106 compliance plans for U.S. Army Corps of Engineers (USACE) levee restoration projects in the New Orleans metropolitan area. He has conducted the full range of archaeological studies (Phase I/II/III and monitoring) and produced planning documents for federal, state and Canadian regulators. His other work in the southern states includes archaeological assessments for private companies involving FERC-regulated pipelines that cross multiple states, the Louisiana Dept. of Transportation and Development, and an everglades reclamation project overseen by the US Army Corps of Engineers, Jacksonville District. He also has conducted independent technical reviews on behalf of the Federal Energy Regulatory Commission and the U.S. Department of State to ensure Section 106 compliance of proposed natural gas pipeline and liquefied natural gas facilities in Texas and an international pipeline crossing seven Midwestern states.

Project Specific Experience

Lead Cultural Resources Manager, City of Galveston, Texas, Round 1 Hurricane Ike Disaster Recovery Housing Program, 2012-current: Mr. Lackowicz is the cultural resources program lead for URS and the City of Galveston for Section 106 agency coordination. He led the development of the Programmatic Agreement between state and local agencies that guides HUD and National Historic Preservation Act compliance for the program. He oversees cultural resources staff from several offices that implement architectural history and archaeological studies needed for individual project compliance. He has also identified and negotiated with state and federal agencies the resolution of Adverse Effects that occurred prior to URS becoming the City's program manager.

Cultural Resource Project Lead, Mississippi Development Authority (MDA) Disaster Recovery Programs, Elevation Grant, Small Rental Assistance, Neighborhood Home, Neighborhood Rental Restoration, Long Term Workforce Housing and Alternative Housing Pilot Programs, Forrest, George, Harrison, Hancock, Jackson, Jones, Lamar, Pearl River and Stone Counties, Mississippi (2008-2012): Cultural resources program lead for five



Hurricane Katrina disaster recovery programs. MDA Point of Contact for Section 106 agency coordination, responsible for development, implementation and oversight of individual archaeological and architectural assessment reports for 3000+ properties, negotiator for programmatic amendment between MDA, Advisory Council on Historic Preservation, National Trust for Historic Preservation, State Historical Preservation Office and Native American Tribes and co-developer of an archaeological sensitivity map designed to determine which of the program application sites required cultural resources field evaluation (Jackson, Hancock, Harrison, and Pearl River Counties, Mississippi).

Cultural Resource Manager, Air Products and Chemicals, Jefferson County, Texas, 2011: Principal Investigator for a Phase I cultural resources inventory of proposed 13 mile long CO₂ and 7 mile long hydrogen pipelines and writer for cultural resource section of the Environmental Assessment for pipeline and associated activities in existing refinery and oil field.

Cultural Resource Manager, Chesapeake Operating Inc., DeSoto Parish, Louisiana, 2010: Principal Investigator for a Phase I cultural resources inventory studies at oil leases and access roads scattered within the Parish.

Cultural Resource Manager, Natural Gas Pipelines and Liquefied Natural Gas Facilities, Various Counties and Parishes in Alabama, Florida, Georgia, Louisiana, Mississippi and South Carolina for Southern Natural Gas Company, 2004-2010: Project Manager / Senior Project Manager for Phase I and Phase II cultural resources studies associated with proposed natural gas pipeline and liquefied natural gas facility projects, including Elba Island LNG facility, Cypress Pipeline, Elba Express Pipeline and multiple abandonment / replacement projects.

Cultural Resource Manager, Hurricane Protection Studies, New Orleans, Louisiana, United States Corps of Engineers (USACE), 2007: Senior Project Manager overseeing development of Section 106 management plans for the West Bank of New Orleans, USACE post-Hurricane Katrina Independent Environmental Review (IER) levee repair and restoration projects (St. Charles, Jefferson, Orleans, and St. Bernard Parishes, Louisiana) and Phase I inventory study of Sebastopol Borrow Pit (St. Bernard Parish, Louisiana).

Senior Technical Reviewer, TransCanada Keystone and Cushing Extension Pipelines, Various Counties in North Dakota, South Dakota, Missouri, Nebraska, Illinois, Kansas and Oklahoma, 2007-2008: Senior Technical Reviewer for Entrix and the U.S. State Department, determining Section 106 compliance for the United States portion of this international pipeline and writing the cultural resource sections of the resulting Environmental Impact Statement.

Cultural Resource Manager, Natural Gas Pipelines and Facilities,



Various Counties in Texas and Oklahoma, 2005, 2007: Senior Project Manager for Phase I cultural resources studies associated with two proposed natural gas pipeline projects in east Texas. Brazoria Interconnector Gas Pipeline and Gulf Crossing Pipeline projects (Brazoria, Cass, Delta, Fannin, Franklin, Grayson, Hopkins, Lamar, Morris, and Titus Counties, Texas; also Bryan County, Oklahoma).

Cultural Resource Manager, Natural Gas Pipelines and Facilities, Various Parishes in Louisiana, 2004, 2007: Project Manager and Senior Project Manager for archaeological predictive modeling and Phase I cultural resources studies associated with three proposed natural gas pipeline and/or facility projects; Shannon to Carthage Natural Gas Pipeline, BOA Pipeline Project, and Continental Connector Pipeline Project (Bossier, Caddo, Claiborne, East Carroll, Jefferson, Lafourche, Lincoln, Morehouse, Ouachita, Plaquemines, Union, Webster, and West Carroll Parishes).

Cultural Resource Manager, Natural Gas Pipelines and Facilities, Various Counties in Mississippi, 2006-2007: Senior Project Manager for Phase I cultural resources studies associated with three proposed natural gas storage and pipeline projects. Petal Cavern Conversions, Smith Parcel Wells, and Petal Compressor Station 3 projects (Forrest, Greene, Jasper, and Smith Counties, Mississippi).

Cultural Resource Manager, Road Improvement and Expansion, Alabama and Louisiana, 2004-2006: Senior Project Manager for Phase I cultural resource inventories associated with the I-49 North project corridor (Caddo and Natchitoches Parishes, Louisiana) and a cultural resource predictive modeling effort associated with the proposed US 84 to US 80 West Alabama Freeway Project (Choctaw, Clarke, Marengo and Sumter Counties, Alabama).

Cultural Resource Manager, Jacksonville, United States Corps of Engineers (USACE), 2005: Project Manager for Phase I and Phase II cultural resources inventory associated with the Picayune Strand Cultural Resources Survey. Project was performed in support of Everglades wetland restoration at a proposed residential development site that was cancelled (Collier County).

Principal Investigator, Transmission Lines and Facilities, Louisiana, 2005: Principal Investigator for Phase I cultural resource inventory study for a proposed Entergy power line corridor in Tangipahoa Parish.

Conecuh National Forest, Escambia County, Alabama, 2004: Contributor for Phase I cultural resource reports for 48 timber sale stands within Compartments 61, 62, 63, and 64 of the Conecuh National Forest.

Naval Air Station Pensacola, Escambia County, Florida, 2007:



Contributor to Phase I cultural resources studies associated with the proposed undergraduate navigator training program building expansion.

Principal Investigator, Forestry Assessments, British Columbia, Canada, 1996-2003: Principal Investigator and major contributor to the development of 11 large scale (ca. 750,000 to 1,600,000 acres) GIS and non-GIS archaeological predictive models and Principal Investigator for various Phase I, II and III cultural resource investigations for Atco Lumber Ltd., Kalesnikoff Lumber Co. Ltd., Meadow Creek Cedar Ltd., and Pope and Talbot Ltd. and the B.C. Ministry of Forests (Arrow, Boundary, Columbia, Kootenay Lake, and Vernon Forest Districts).

Principal Investigator, Transmission Lines and Facilities, British Columbia, Canada, 1996, 1999-2001, 2004: Principal Investigator and major contributor for archaeological predictive modeling studies for hydroelectric power projects (West Kootenay Power 230kV Transmission System, Brilliant Expansion, and Keenleyside Powerplant projects) and Phase I cultural resources inventory investigations for West Kootenay Power 230kV Transmission System and Aquila Networks Canada transmission systems.

Project Manager/Principal Investigator, Natural Gas Pipelines and Facilities, British Columbia, Canada, 1997-1998, 2001-2002: Project Manager and Principal Investigator for Phase I, II and III cultural resources inventory studies for the Southern Crossing Pipeline Project, including Phase III data recoveries at two prehistoric sites and monitoring of site alterations at seven historic and prehistoric sites.

Residential Subdivisions, British Columbia and Ontario, Canada, 1995-1997, 1999-2000, 2000, 2002-2004: Principal Investigator and Crew Chief for Phase I cultural resources investigations concerning 15 proposed subdivision, golf course and park developments.

Professional Societies/Affiliates

Register of Professional Archaeologists (RPA)

Academic Manuscripts

1991 A Palaeobotanical Investigation in the Acadian Region of the Maritime Provinces, in Comparison to Archaeological and Ethnohistorical Evidence. B.A. Honours Thesis on File, Dept. of Anthropology, Memorial University of Newfoundland, St. John's.

1996 An Attribute and Spatial Analysis of Several Ground Stone Artifact Types From Southern Ontario, in Relation to their Patterning and Context in the Northeast. M.A. Thesis on File, Dept. of Anthropology, Trent University, Peterborough, Ontario.

Chronology

03/2008-Present: URS Corporation, Baton Rouge, LA

06/2004-02/2008: R. C. Goodwin & Associates, New Orleans, LA

01/1996-06/2004: Kutenai West Heritage Consulting, Kelowna, BC



Lauren B. Poche, M.A.

Historian/Archaeology Lab Supervisor

Areas of Expertise

Section 106 Compliance
Phase I, II, and III Cultural
Resources Surveys
Phase I, II, and III Cultural
Material Analysis
National Register of Historic
Places Application Preparation
Archival and Historic Research
Data Management and
Coordination

Years of Experience

With URS: 4 Years
With Other Firms: 6 Years

Education

MA/History – Public
History/2012/ Southeastern
Louisiana University
BA/Anthropology –
Archaeology/2002/Millersville
University of Pennsylvania

Registration/Certification

Asbestos Training, 2008
OSHA Construction Safety &
Health 2007

Overview

Ms. Poche has ten years of cultural resource management experience within the Northeast, Mid-Atlantic, Southeast, and Midwest. She has recently completed her Master of Arts in History at Southeastern Louisiana University in Hammond, Louisiana, where she concentrated on Public History, Southern History, and Louisiana History, with an emphasis on sugar plantations and mills.

Ms. Poche currently acts as a Historian, and Archaeology Laboratory Supervisor/Analyst. As the laboratory supervisor, her main responsibilities include analysis of prehistoric and historic period artifacts, taking and preparing artifact photos, and preparing artifact discussions and tables for reports. Her additional responsibilities include database creation and management, preparation of collections for turnover to state and federal agencies, and the management of lab staff. Ms. Poche has lead or assisted in the preparation of collections for turnover to Alabama, Arkansas, Florida, Georgia, Louisiana, Maryland, Michigan, Mississippi, Pennsylvania, Texas, Virginia, West Virginia, and Puerto Rico. She also has experience with preparing several collections for the National Park Service from sites in the Mid-Atlantic and Northeast.

Ms. Poche also conducts background research on project areas, historical research including chain of title research, prepares historical period chapters for reports, and supervises field projects. She has acted as field supervisor in Georgia, Kansas, Louisiana, and Texas and as a field archaeologist in Connecticut, Florida, Georgia, Kansas, Louisiana, Maryland, Mississippi, New Jersey, Pennsylvania, Tennessee, and Virginia. Project types she has worked on include golf courses, highway and road expansions, military base expansion, pipelines, subdivisions, urban expansion, and levee improvements.

Project Specific Experience

Historian/Archaeology Laboratory Supervisor/Field Supervisor, Damage Assessment, Phase II and Phase III Investigations, Nucor Steel Louisiana, LLC, St. James Parish, Louisiana, 2010-2012: Ms. Poche conducted historic background research, artifact collection inventories, artifact analysis, prepared the report discussions, and photographed notable artifacts for several localities located on three sites situated on the proposed Nucor Steel Louisiana, LLC property in St. James Parish. Ms. Poche also supervised a portion of the backhoe excavation of a large nineteenth century sugar mill on the property, in addition to the damage assessment of a 15 acre parcel along The Mississippi River.

Historian/Archaeology Laboratory Supervisor, NRG Petro-Nova 80 Mile Pipeline Project, Fort Bend, Wharton, and Jackson Counties Texas, 2012:

Ms. Poche was responsible conducting historic research and preparing the discussion on the history of the study area. She also conducted the artifact analysis and report discussions for six archaeological sites identified during the course of the project.

Historian, SELA Historic Landscape Planning Study – Right-of-Way on Napoleon Avenue from South Claiborne Avenue to Constance Street, Orleans Parish, Louisiana, 2011-2012: Ms. Poche conducted archival and historic research for the portion of Napoleon Avenue between Carondelet Street



and Constance Street, in addition to preparing the historic discussion for this area. She also prepared the discussions focusing on the vegetation types, encaustic tiling, historic granite curbing, and lighting units present along the entirety of the project area.

Historian/Archaeology Laboratory Supervisor, Enbridge Energy Proposed 35.2 Mile Long Line 79, Ingham, Jackson, and Washtenaw Counties, Michigan, 2011–2012: Ms. Poche conducted historical research and prepared the historical discussions for the project area and adjacent communities. In addition to this, she also conducted the artifact analysis, and prepared the artifact discussions and photographs for the report.

Historian/Archaeology Laboratory Supervisor, Main Street, LLC - Phase III Investigations, Louisiana, 2011–2012: Ms. Poche was responsible for conducting archival research for the study area and preparing discussion on the history of the property located in downtown Baton Rouge. She conducted also the artifact analysis of over 6,500 historic artifacts collected from the site, prepared the artifact discussions and photographs for the report. In addition to this, Ms. Poche prepared the state catalog sheets, field paperwork, and photographs for turnover to the State of Louisiana, conducted chain of title research on the property, and prepared the historic period chapter for the report.

Historian/Archaeology Laboratory Supervisor, Seven Union Pacific Rail Road Projects in St. Landry, Pointe Coupee, Iberville, St. James, St. John the Baptist, and St. Charles Parishes, Louisiana, 2011-2012: Ms. Poche prepared the historic period overview as well as the artifact collection inventories, artifact analysis, prepared the artifact discussions, and photographed notable artifacts for the Union Pacific Project.

Archaeology Laboratory Supervisor, Sasol North America, Inc. Site Assessment of the Westlake Sasol Gas to Liquids and Lake Charles Cracker Project, Calcasieu Parish, Louisiana, 2012: Ms. Poche conducted the artifact analysis, completed artifact discussions and tables, and photographed artifacts for the Sasol Site Assessment Project.

Internship for Master of Arts Degree in History for Southeastern Louisiana University at the Louisiana Division of Historic Preservation, Baton Rouge, Louisiana, 2010: In the summer of 2010, Ms. Poche completed a two month long internship with the Louisiana Division of Historic Preservation as part of the internship requirement for the Public History option in the Graduate Program for the Department of History and Political Science at Southeastern Louisiana University in Hammond, Louisiana.

Internship for Master of Arts Degree in History for Southeastern Louisiana University at the Louisiana Division of Historic Preservation, Baton Rouge, Louisiana, 2010/2011: During the summers of 2010 and 2011, Ms. Poche completed two, two month long internships with the Louisiana Division of Historic Preservation as part of the internship requirement for the Public History option in the Graduate Program for the Department of History and Political Science at Southeastern Louisiana University in Hammond, Louisiana. In the summer of 2010, Ms. Poche assisted in the plotting of buildings and cemeteries recorded through the Louisiana Historic Standing Structures Survey, and the scanning of the original documents to PDF format. Using ArcGIS, she plotted and verified the location of approximately 1500

standing structures in Ascension and Avoyelles Parishes. This information will eventually be uploaded to the Louisiana Cultural Resources Map. In 2011, Ms. Poche assisted in the National Register of Historic Places Program, the Main Street Louisiana Program, the Tax Credits and Incentives Program, and the Section 106/Historic Preservation Reviews. In addition to these tasks, Ms. Poche also prepared a National Register of Historic Places form for a contemporary house located in Baton Rouge, Louisiana.

Historian/Archaeology Laboratory Supervisor, Gulf Coast Connection Project for Air Products and Chemicals, Inc. (APCI), Jefferson and Orange Counties, Texas and Calcasieu, Jefferson Davis, Acadia, Lafayette, St. Mary, Iberville and West Baton Rouge Parishes, Louisiana, 2009-2011: Ms. Poche conducted the artifact analysis, completed artifact discussions and tables, and photographed artifacts for the Gulf Coast Connection Project.

Historian/Archaeology Laboratory Supervisor, Mississippi Development Authority (MDA) Disaster Recovery Programs, Elevation Grant, Small Rental Assistance, Neighborhood Rental Restoration, Long Term Workforce Housing, Alternative Housing Pilot, and Neighborhood Home Programs – Forrest, George, Hancock, Harrison, Jackson, Jones, Lamar, Pearl River, and Stone Counties, Mississippi, 2008–2012: Ms. Poche conducted the analysis, and prepared the artifact discussions and photographs for archaeological sites discovered during the testing of properties associated with the Mississippi Development Authority Programs, including Phase II National Register eligibility testing at two sites on the Gulf Coast. She currently assists in certifying applications for concurrence with Section 106 Compliance.

Archaeology Laboratory Supervisor, Cleco 7-Mile Transmission Line, Natchitoches Parish, Louisiana, 2010: Ms. Poche conducted the historic artifact analysis, completed artifact discussions and photographed artifacts for the project report. In addition to her lab duties, she also prepared the Historic Settings portion of the report.

Historian/Archaeology Laboratory Supervisor, Napoleonville Community Center, Assumption Parish, Louisiana, 2010: Ms. Poche conducted the historic artifact analysis, completed artifact discussions and photographed artifacts for the project report. In addition to her lab duties, she also wrote the Natural Settings, Previous Investigations, and History portions of the report.

Archaeology Laboratory Supervisor, Petrohawk Haynesville-Shale Archaeological Predictive Model Project, Bossier, Caddo, DeSoto, Natchitoches, Red River, Sabine, and Webster Parishes, Louisiana, 2010: Ms. Poche conducted the data collection of all archaeological sites, cemeteries, cultural resource survey reports, historic standing structures, National Historic Landmarks, and National Register of Historic Places items within the area of interest. In addition to the data collection, Ms. Poche assisted in the plotting of these items in ArcPad for the predictive model.

Archaeology Laboratory Supervisor, Reporting for Archaeological Monitoring of FEMA-Funded Demolition of Residential Structures in Orleans Parish as a Result of Hurricanes Katrina and Rita, 2010: Ms. Poche conducted the historic artifact analysis, completed artifact discussions and tables, and photographed artifacts for the Orleans Parish FEMA-Funded Demolitions Project. In addition to this Ms. Poche also supervised the curation of artifacts for turnover to the State of Louisiana.



Archaeology Laboratory Supervisor, International Paper-Vicksburg Project, 2009: Ms. Poche conducted the prehistoric and historic artifact analysis, completed artifact discussions and photographed artifacts for the project report.

Archaeology Laboratory Supervisor, Mississippi Gulf Coast Community College Expansion Project, 2009: Ms. Poche conducted the historic artifact analysis, completed artifact discussions and photographed artifacts for the Mississippi Gulf Coast Community College Expansion Project.

Archaeology Laboratory Supervisor, Mississippi Development Authority (MDA) Disaster Recovery Programs, 2008-2010 Elevation Grant, Small Rental Assistance, Neighborhood Rental Restoration, Long Term Workforce Housing and Alternative Housing Pilot Programs, Hancock, Harrison, Jackson and Pearl River Counties, Mississippi, 2008-2011: Ms. Poche conducted the artifact analysis, completed artifact discussions and photographed artifacts for the all five programs.

Archaeological Crew Chief/Archaeology Laboratory Supervisor, Various Projects, Louisiana, 2008-2009: Ms. Poche has acted as an Archaeological Crew Chief on a number of proposed projects since joining URS, including pipelines, tank farms, and non-federal levee improvements and borrow pits. In addition to those duties, she has conducted background research on previous archaeological information, historical research, artifact analysis, and assisted in report writing and production.

Professional Societies/Affiliates

Louisiana Archaeology Society
National Council on Public History

Chronology

5/2008-Present: URS Corporation, Baton Rouge, Louisiana
6/2011-7/2011: Internship at the Office of Culture, Recreation and Tourism, Louisiana Division of Historic Preservation, Baton Rouge, Louisiana
6/2010-7/2010: Internship at the Office of Culture, Recreation and Tourism, Louisiana Division of Historic Preservation, Baton Rouge, Louisiana
10/2006-05/2008: R. Christopher Goodwin & Associates, New Orleans, Louisiana
10/2002-10/2006: R. Christopher Goodwin & Associates, Frederick, Maryland

Contact Information

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