

### STAR SITE SUBMISSION DATA

TEXAMERICAS CENTER CENTRAL CAMPUS



TEXAS ECONOMIC DEVELOPMENT COUNCIL

PREPARED BY:





### STAR SITE

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### Legend

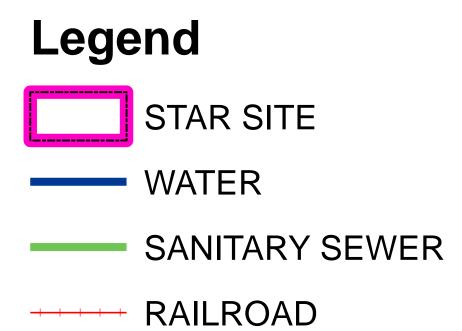
TexAmericas Center Central Campus
Property Location

### TEXAMERICAS CENTER CENTRAL CAMPUS LOCATION MAP



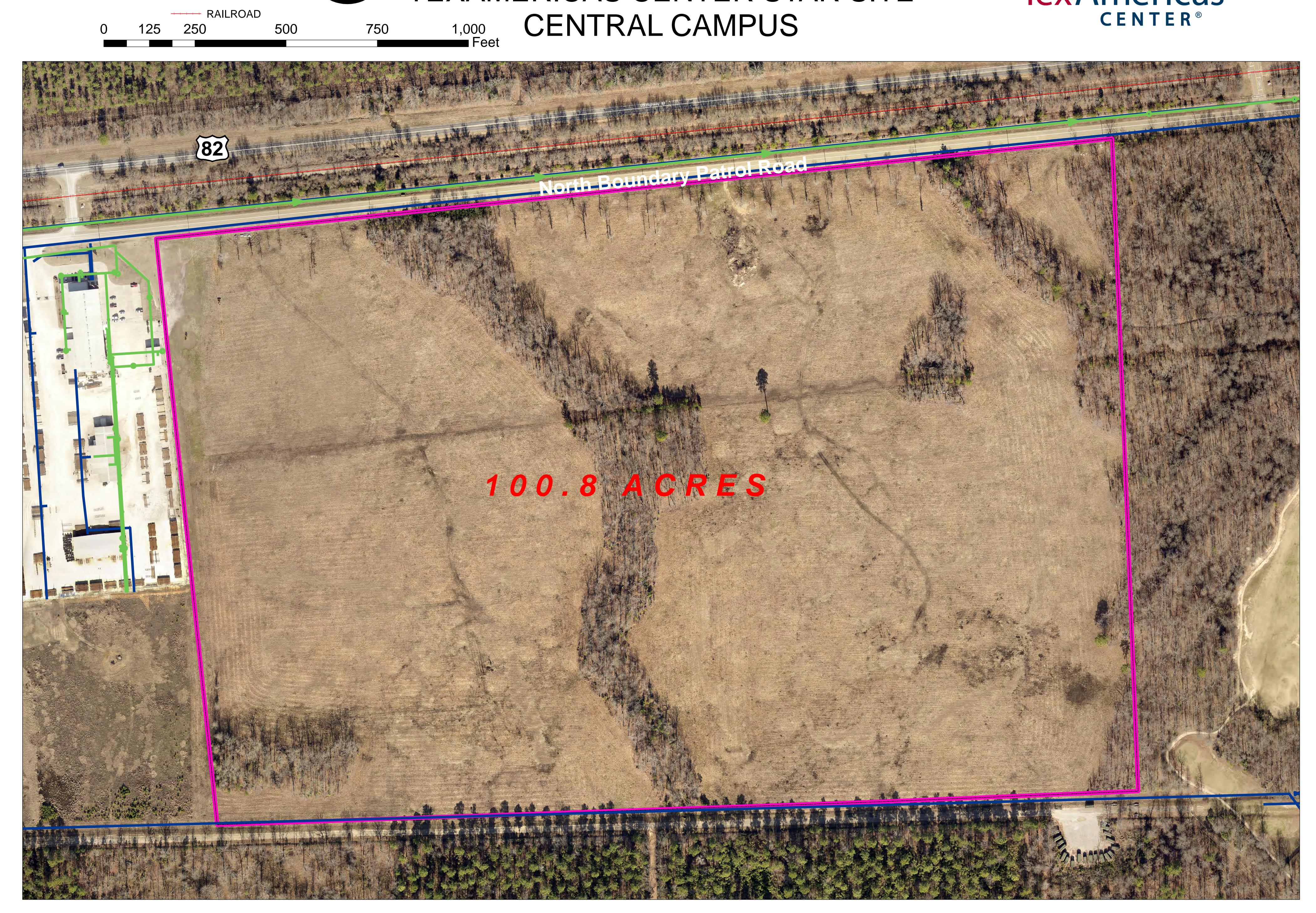






## EXHIBIT 2 - PROPERTY DETAIL MAP WATER SANITARY SEWER TEXAMERICAS CENTER STAR SITE



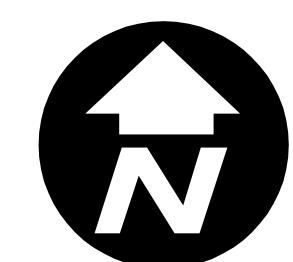




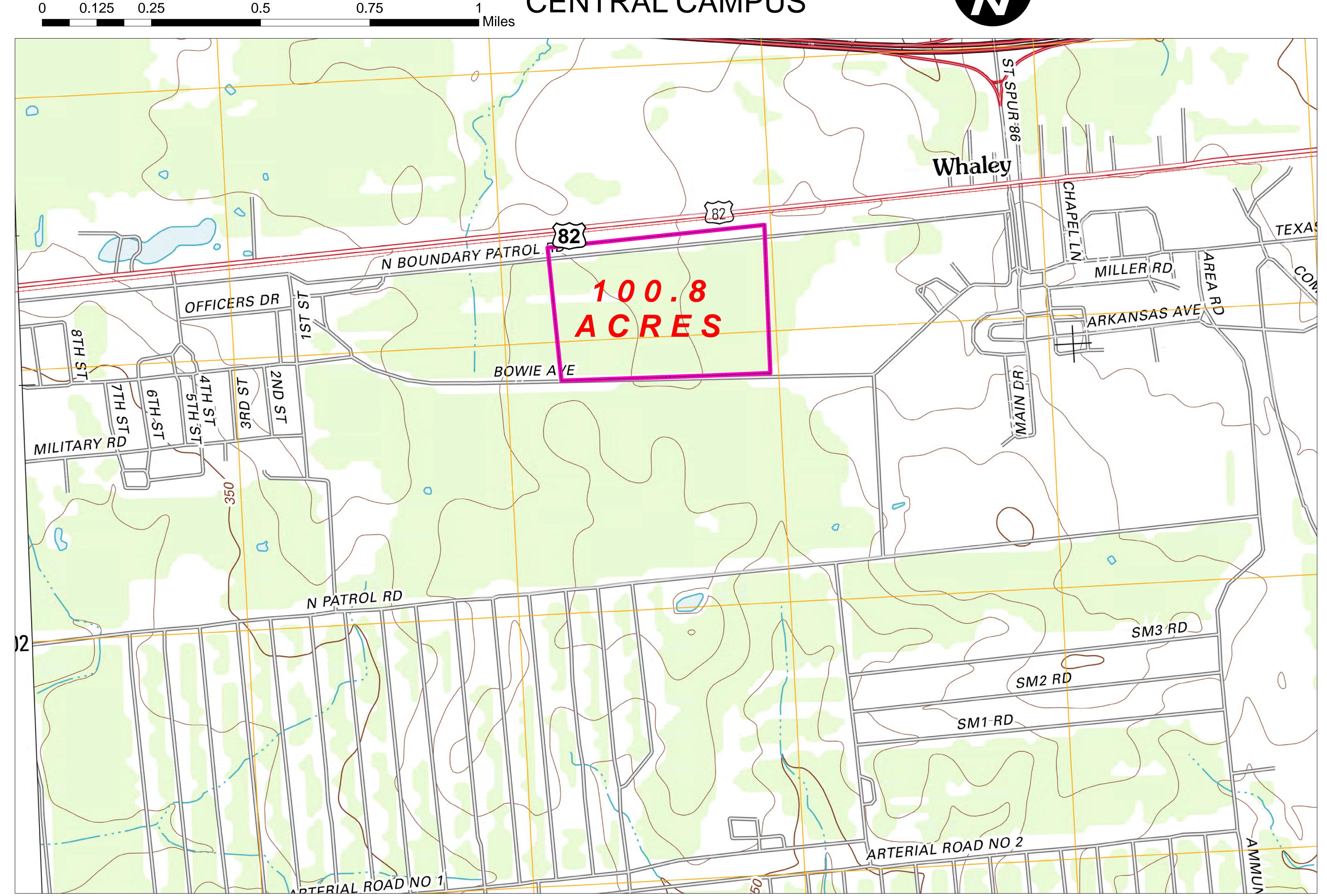


### EXHIBIT 3 - USGS HOOKS QUADRANGLE MAP

## TEXAMERICAS CENTER STAR SITE 1 CENTRAL CAMPUS





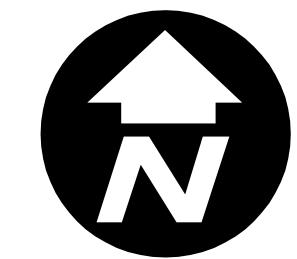


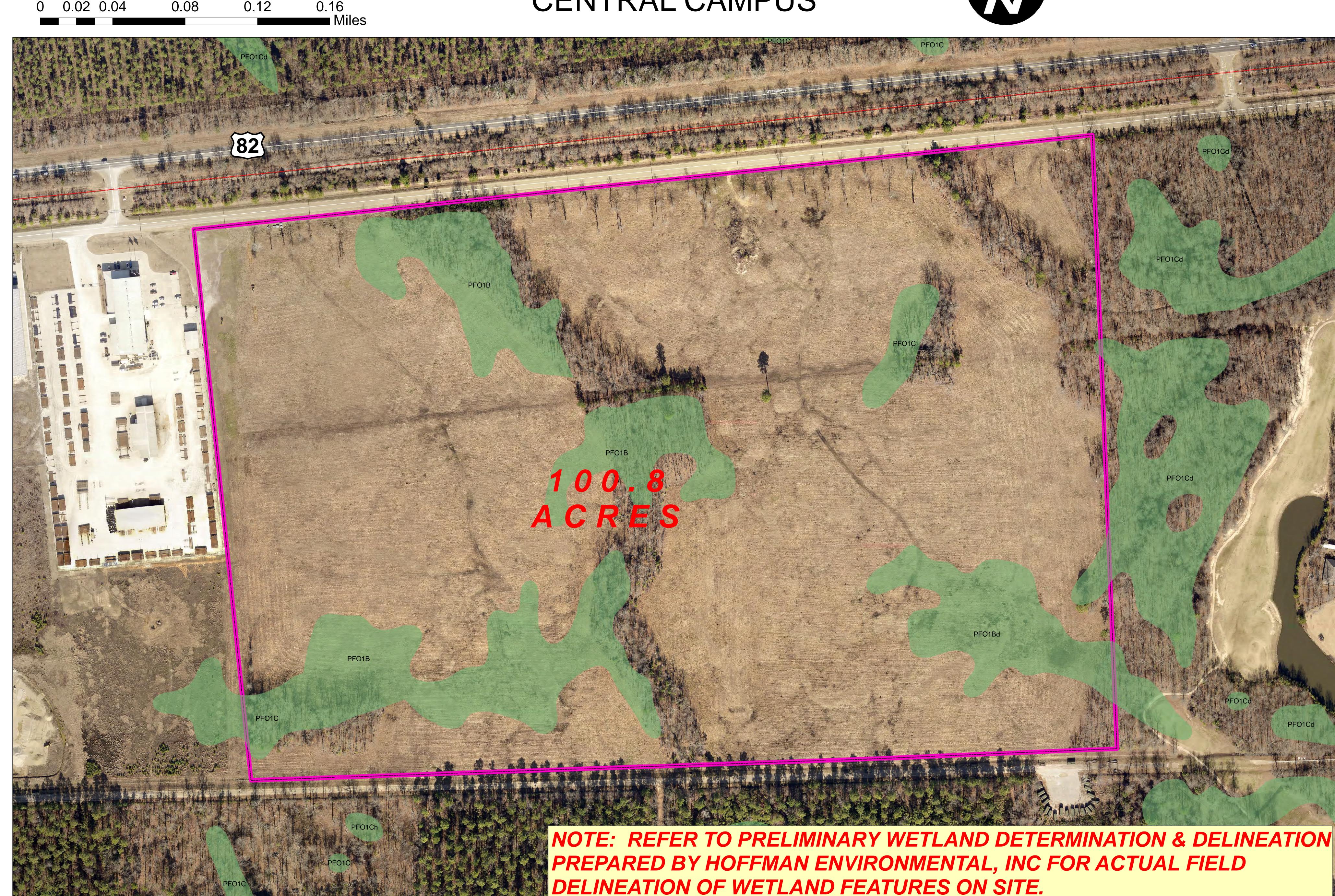
## Legend STAR SITE EXHIBIT 4 - NATIONAL WETLANDS INVENTORY MAPPING

WETLANDS

RAILROAD

TEXAMERICAS CENTER STAR SITE CENTRAL CAMPUS







### MAP LEGEND

### Area of Interest (AOI)

Area of Interest (AOI)

### Soils

Soil Map Unit Polygons



Soil Map Unit Points

### Special Point Features

Blowout

■ Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

A Lava Flow

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

### Spoil Area

Stony Spot

Wery Stony Spot

Wet Spot
Other

Special Line Features

### **Water Features**

Streams and Canals

### Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

### Background

Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bowie County, Texas Survey Area Data: Version 10, Sep 29, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 28, 2011—Oct 13, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

### **Map Unit Legend**

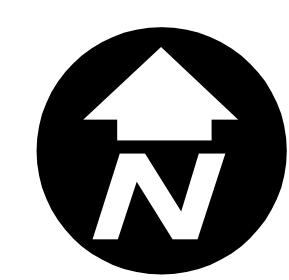
Bowie County, Texas (TX037)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1	Adaton-Muskogee complex	69.9	33.0%
4	Annona loam, 1 to 3 percent slopes	45.1	21.3%
36	Sawyer silt loam, 0 to 3 percent slopes	96.8	45.7%
Totals for Area of Interest		211.8	100.0%

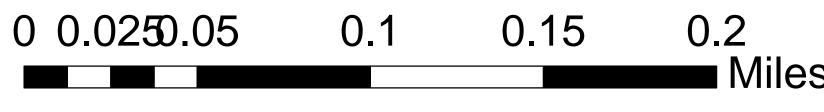
### Legend

----- RAILROAD STAR SITE S\_FLD\_HAZ\_AR

### EXHIBIT 6 - FEMA FLOODPLAIN MAP

## TEXAMERICAS CENTER STAR SITE CENTRAL CAMPUS







### Legend ----- RAILROAD

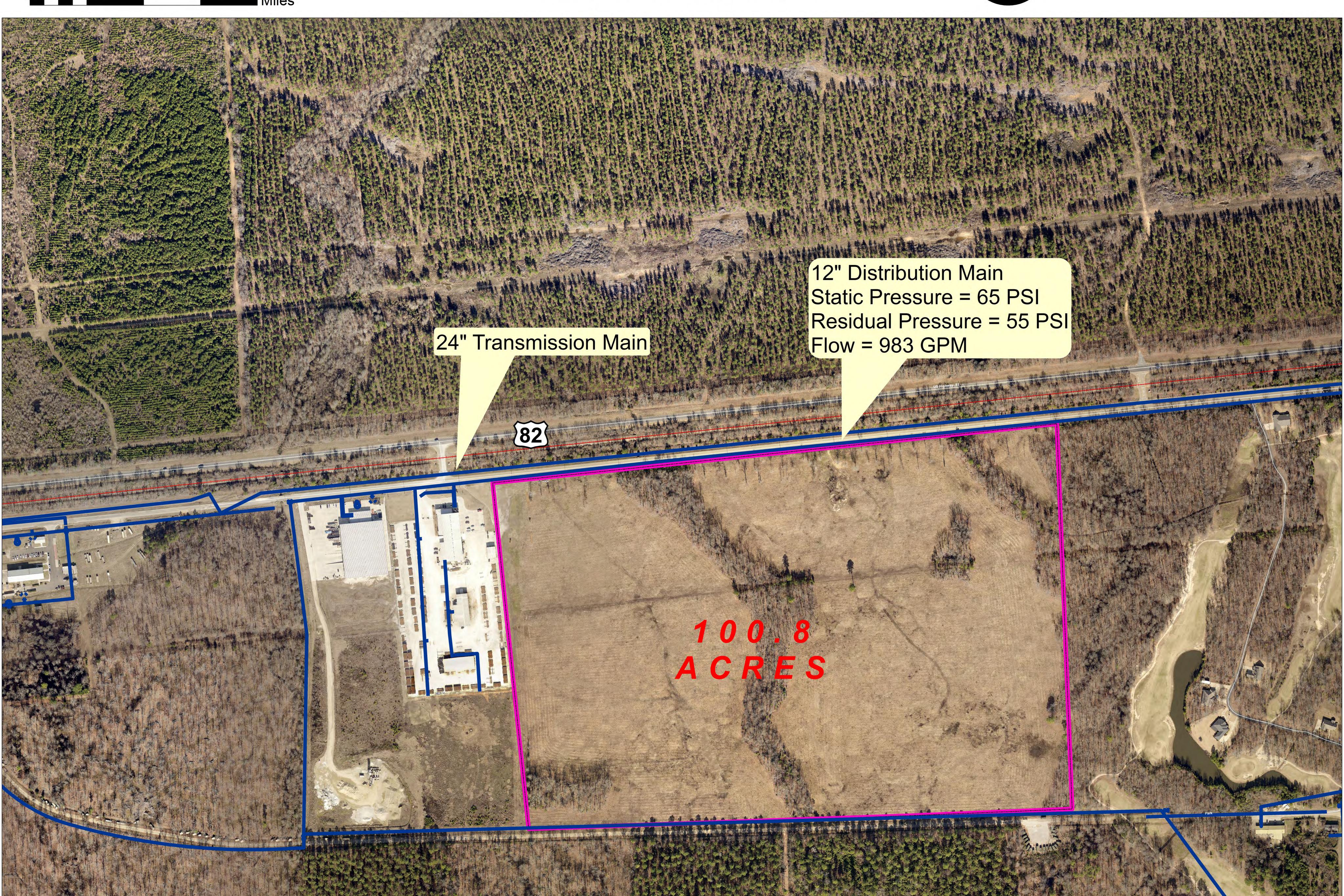
STAR SITE

### EXHIBIT 7 - POTABLE WATER INFRASTRUCTURE

# TEXAMERICAS CENTER STAR SITE CENTRAL CAMPUS





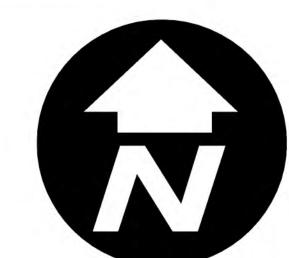


### Legend

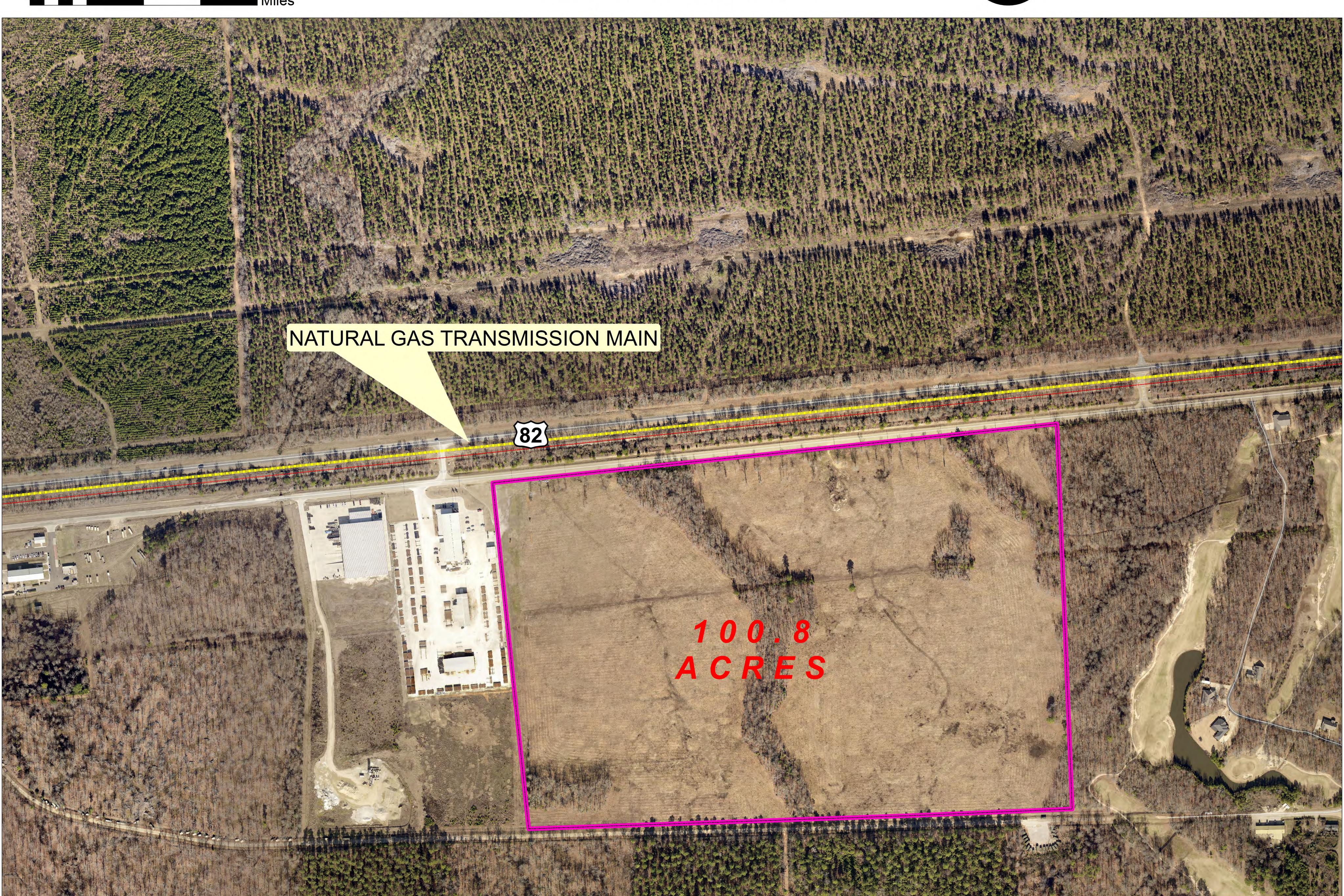
GAS\_MAIN ----- RAILROAD STAR SITE

### EXHIBIT 8 - NATURAL GAS INFRASTRUCTURE

# TEXAMERICAS CENTER STAR SITE CENTRAL CAMPUS



0 0.0250.05

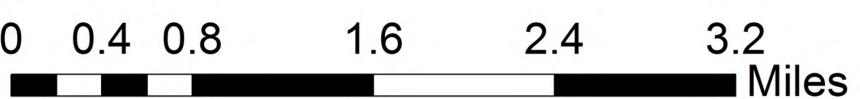


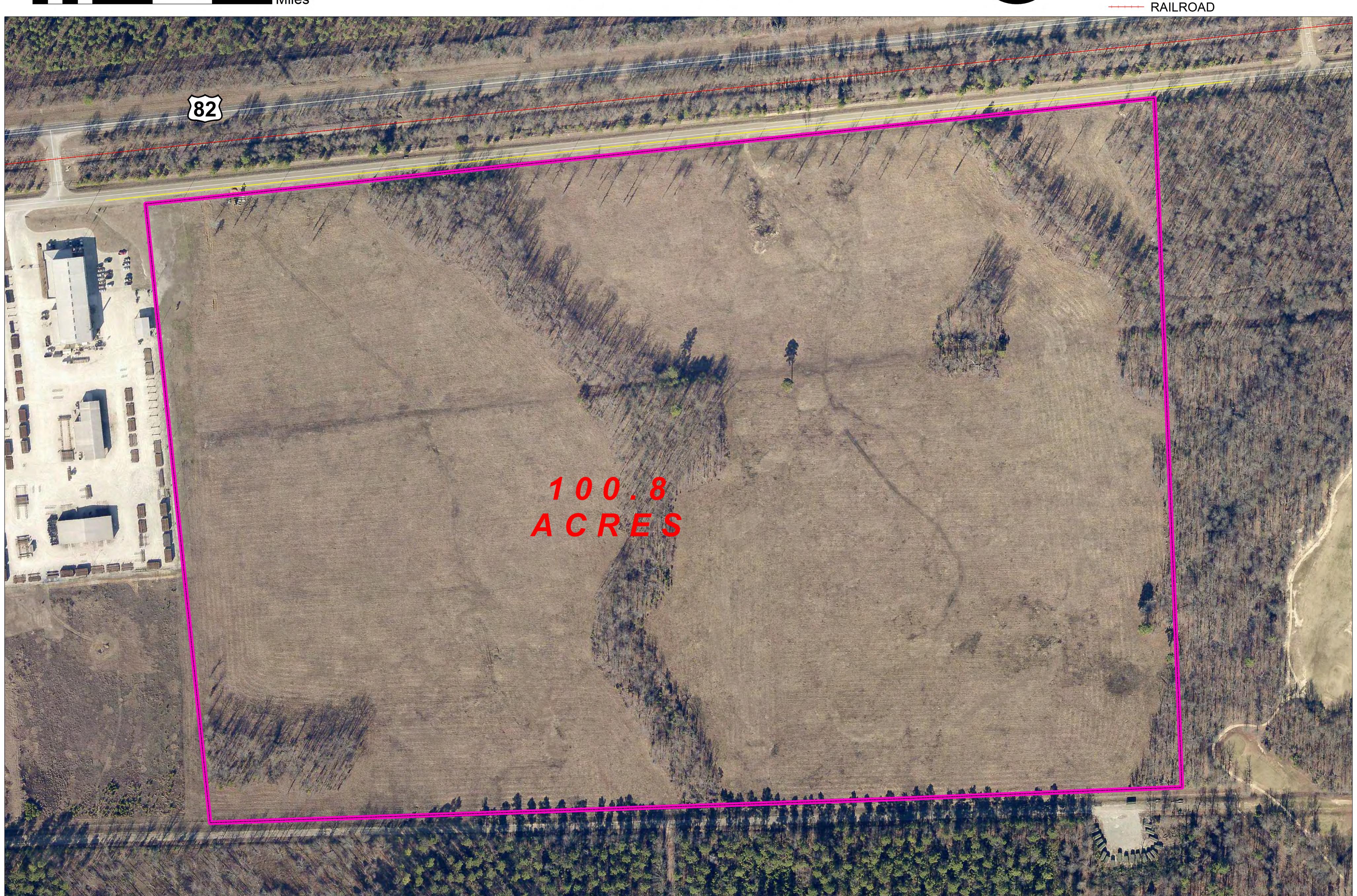
### EXHIBIT 9 - ELECTRICAL INFRASTRUCTURE

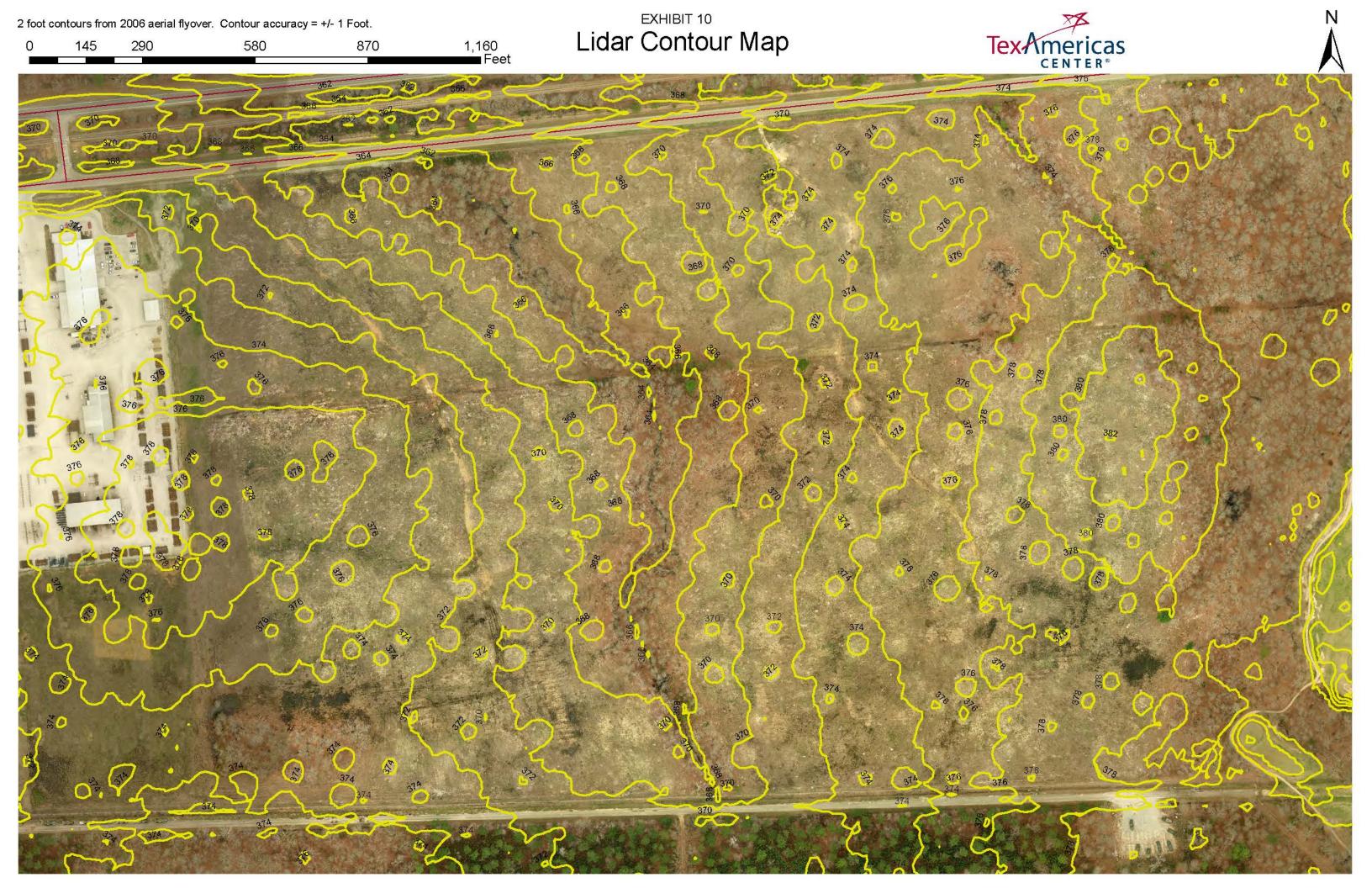
### TEXAMERICAS CENTER STAR SITE CENTRAL CAMPUS CENTRAL CAMPUS



Legend STAR SITE **ELECTRIC** 

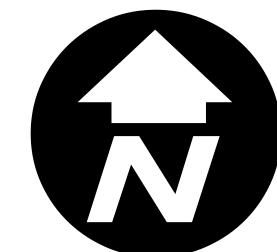






### EXHIBIT 11 - NATURAL GAS INFRASTRUCTURE

# TEXAMERICAS CENTER STAR SITE CENTRAL CAMPUS

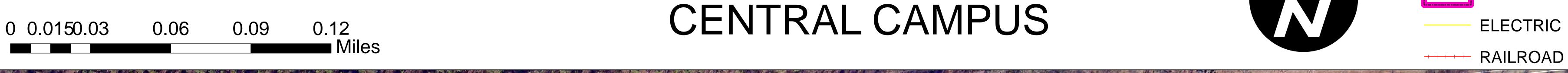


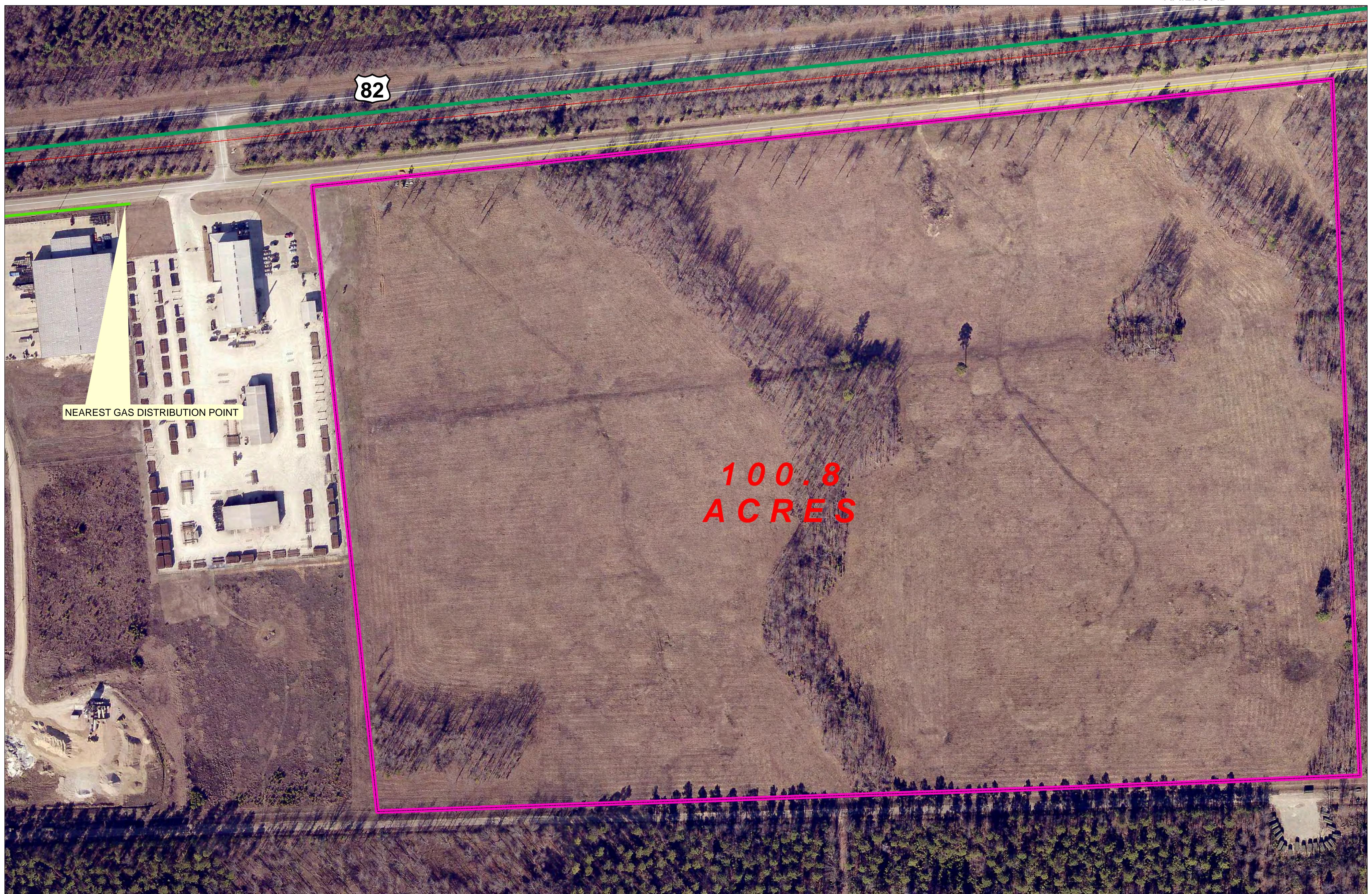
Legend

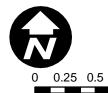
GAS\_MAIN

4" GAS DISTRIBUTION

STAR SITE







1.5

### **EXHIBIT 12 - TRANSPORTATION INFRASTRUCTURE**

TexAmericas CENTER®

### TEXAMERICAS CENTER STAR SITE **CENTRAL CAMPUS**

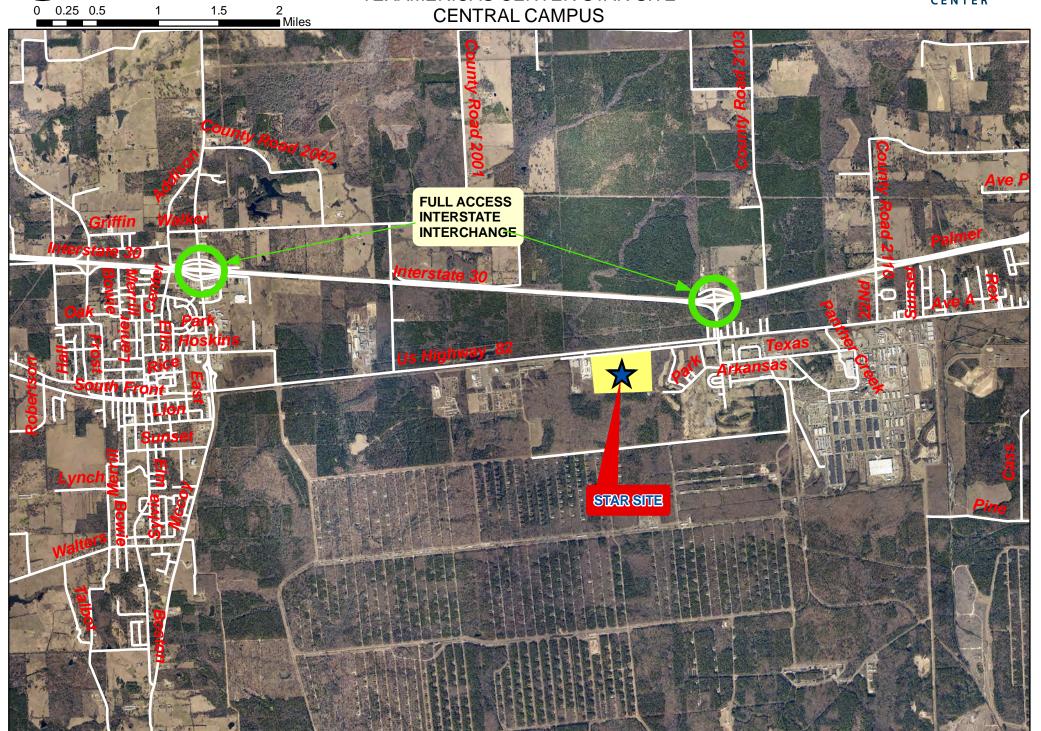


EXHIBIT A - TEXAS HISTORICAL COMMISSION COORDINATION LETTER

### **TEXAS HISTORICAL COMMISSION**

### REQUEST FOR SHPO CONSULTATION:

Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas

Please see instructions for completing this form and additional information on Section 106 and Antiquities Code

consultation on the Texas Historical Commissio	n website at http://www.thc	.state.tx.us/crm/crmsend.shtml.	
This is a new submission.			
This is additional information relating to THC t	racking number(s):		
Project Information			
PROJECT NAME TexAmericas Center Central Campus 100 Acre STAR Sit	te		
PROJECT ADDRESS 1000 Block of N Boundary Patrol Road	PROJECT CITY New Boston	PROJECT ZIP CODE(S) 75570	
PROJECT COUNTY OR COUNTIES  Bowie			
PROJECT TYPE (Check all that apply)	E-071.0457.334.3	Talkin Tona (Salagana)	
Road/Highway Construction or Improvement		on, or Renovation of Structure(s)	
Site Excavation	Addition to Existing		
■ Utilities and Infrastructure	Demolition or Reloc	cation of Existing Structure(s)	
■ New Construction  BRIEF PROJECT DESCRIPTION: Please explain the project in one	□ None of these		
Project Contact Information		/5	
Project Contact Information	TITLE	ORGANIZATION	
PROJECT CONTACT NAME  David Williams	Project Manager	MTG Engineers & Surveyors	
ADDRESS 5930 Summerhill Road	CITY Texarkana	STATE ZIP CODE TX 75503	
PHONE 903-838-8533	EMAIL dwilliams@mtgenginee	ers.com	
Federal Involvement (Section 106 of the Natio	nal Historic Preservation	Act)	
Does this project involve approval, funding, perm	it, or license from a federal	agency?	
Yes (Please complete this section)	■ No (Skip to next :		
FEDERAL AGENCY	FEDERAL PROGRAM, FU	FEDERAL PROGRAM, FUNDING, OR PERMIT TYPE	
CONTACT PERSON	PHONE		
ADDRESS	EMAIL		
State Involvement (Antiquities Code of Texas	;)		
Does this project occur on land or property owne		a political subdivision of the state	
Yes (Please complete this section)	☐ No (Skip to next		
CURRENT OR FUTURE OWNER OF THE PUBLIC LAND TexAmericas Center			
CONTACT PERSON Eric Voyles	PHONE 903-334-6949		
ADDRESS 107 Chapel Lane New Boston, TX 75570	EMAIL eric.voyles@texamerio	cascenter.com	

1000 Block of N Boundary Patrol Road

REQUEST FOR SHPO CONSULTATION -- PROJECT NAME: TexAmericas Center Central Campus 100 Acre STAR Site **New Boston** Bowie

Identification of Historic Properties: Archeology	
Does this project involve ground-disturbing activity?	
Yes (Please complete this section)	No (Skip to next section)
Describe the nature of the ground-disturbing activity, in- Currently the nature and extents of the ground-disturbing active developed as an industrial/commercial site and the ground-dis- type of construction.	vity is unknown. It is anticipated that the property will be
Describe the previous and current land use, conditions, The previous land use was a buffer zone for the Red River Arm western part of the site as a material storage yard and the remain timber clearing operations.	ny Depot. The current land use includes a portion of the
Identification of Historic Properties: Structures	
Does the project area or area of potential effects includ features (such as parks or cemeteries) that are 45 year	rs of age or older?
Yes (Please complete this section)	■ No (Skip to next section)
Is the project area or area of potential effects within or eligible for listing in the National Register of Historic Pla  Yes, name of property or district:	adjacent to a property or district that is listed in or aces?
In the space below or as an attachment, describe each	
project area or area of potential effect that is 45 years	of age or older.
ADDRESS	DATE OF CONSTRUCTION SOURCE FOR CONSTRUCTION DATE
ADDRESS	DATE OF CONSTRUCTION SOURCE FOR CONSTRUCTION DATE
ADDRESS	DATE OF CONSTRUCTION SOURCE FOR CONSTRUCTION DATE
Attachments	For SHPO Use Only
Please see detailed instructions regarding attachments	
Include the following with each submission:	
■ Project Work Description	
■ Maps	NOHISTORIC
Identification of Historic Properties	PHOPERTIES AFFECTED
Photographs	PROJECT MAY PROCEED
For Section 106 reviews only, also include:	for Mark Wolfe
Consulting Parties/Public Notification	State Historic Preservation Officer
Area of Potential Effects	Dalo 6/29/15
Determination of Eligibility	Track#
Determination of Effect	
Submit completed form and attachments to the	
address below. Faxes and email are not acceptable	2.
Mark Wolfe	
State Historic Preservation Officer	
Texas Historical Commission P.O. Box 12276, Austin, TX 78711-2276 (mail service)	
108 W 16th Street Austin TX 78701 (courier service)	



July 16, 2015

### Life's better outside.

Mr. David Williams, P.E. MTG Engineering & Surveyors 5930 Summerhill Road Texarkana, TX 75503

Commissioners

Dan Allen Hughes, Jr. Chairman Beeville

> Ralph H. Duggins vice-Chairman Fort Worth

T. Dan Friedkin Chairman-Emeritus Houston

Roberto De Hoyos Austin

> Bill Jones Austin

James H. Lee Houston

Margaret Martin Boerne

S. Reed Morian Houston

> Dick Scott Wimberley

Lee M. Bass Chairman-Emeritus Fort Worth

TexAmericas Center Central Campus 100-acre STAR Site, Bowie County TPWD Project 34760

RE:

Dear Mr. Williams:

The Texas Parks and Wildlife Department (TPWD) received the natural resources review request including threatened and endangered species for the project referenced above. TPWD is the state agency with primary responsibility for protecting the state's fish and wildlife resources in accordance with the authority granted by Parks and Wildlife Code §12.0011 and under the National Environmental Policy Act of 1969. TPWD hereby provides the following recommendations to minimize potential adverse impacts to the state's fish and wildlife resources with development of the abovereferenced project.

Please be aware that a written response to a TPWD recommendation or informational comment received by a state governmental agency may be required by state law, Parks Code, Section Wildlife http://www.statutes.legis.state.tx.us/Docs/PW/htm/PW.12.htm#12.0011. For tracking purposes, please refer to TPWD project number 34760 in any return correspondence.

Carter P. Smith **Executive Director** 

### **Project Description**

MTG Engineering & Surveyors (MTG) is assisting TexAmericas Center in gathering the documentation needed to qualify a 101.56-acre site for listing with the Texas Economic Development Council as a Texas STAR site. Texas STAR Documented Sites (Sites That Are Ready) is a program that verifies sites meet required criteria and are fully-documented as Sites That Are Ready for construction to begin. An aspect of qualification is providing a letter from TPWD stating that development of the site will not impact any endangered species. As such, MTG has submitted a TPWD review request, a Phase I Environmental Site Assessment and a preliminary wetland determination, which includes a threatened and endangered species investigation.

The project site is located on the south side of North Boundary Road approximately 0.6 miles west of the intersection of North Boundary Road and James Carlow Drive in New Boston. The site is undeveloped except for the westernmost 35 acres, which is utilized as a material storage yard. The site is also a portion of the former U.S. Army Lone Star Army Ammunitions Plant (LSAAP) that was subject to Base Realignment and Closure between 1995 and 1997 and is now owned by TexAmericas for development into the central campus for a large scale industrial park to promote economic development. At this time the development activities proposed for the site

4200 SMITH SCHOOL ROAD AUSTIN, TEXAS 78744-3291 512.389.4800 www.tpwd.texas.gov

To manage and conserve the natural and cultural resources of Texas and to provide hunting, fishing and outdoor recreation opportunities for the use and enjoyment of present and future generations.

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are unknown, thus TPWD can only asses the site for potential impacts to fish and wildlife resources that may occupy terrestrial or wetland habitats and cannot assess the potential for the proposed development to impact species that may be affected by the type of development, such as tall obstructions which may affect avian species. The footprint of proposed development has not been determined, thus TPWD assumes that all habitats and wetlands at the site would be impacted and offers footprint recommendations to minimize potential impacts to fish and wildlife resources.

### **Federal Regulations**

Migratory Bird Treaty Act (MBTA)

The MBTA prohibits taking, attempting to take, capturing, killing, selling/purchasing, possessing, transporting, and importing of migratory birds, their eggs, parts and nests, except when specifically authorized by the Department of the Interior. The U.S. Fish and Wildlife Service (USFWS) Migratory Bird Office can be contacted at (505) 248-7882 for information on potential impacts to migratory birds.

Potential impacts to migratory birds may occur during site preparation and grading activities through the disturbance of existing vegetation and bare ground that may harbor active bird nests, including nests that may occur in grass, shrubs, trees, and bare ground. Measures should be taken to ensure that migratory bird species within and near the project area are not adversely impacted by construction, maintenance, and operation activities. If migratory bird species are found nesting in or adjacent to the project area, they must be dealt with in a manner consistent with the MBTA.

Recommendation: TPWD recommends that vegetation removal and ground disturbance activities be avoided during the primary migratory bird nesting season, March through August. If ground disturbing activities during the migratory bird nesting season in unavoidable, then TPWD recommends surveying the area proposed for construction to ensure that no nests with eggs or young would be disturbed by construction activities. Any vegetation or bare ground areas where occupied nests are located should not be disturbed until the eggs have hatched and the young have fledged. TPWD recommends that these best management practices (BMPs) to minimize impacts to migratory birds be incorporated into the construction plans for future developments at the project site.

Additionally, the project area is located within the Central Flyway, a major bird migration corridor that leads to the Texas coast and Central/South America. Communication towers, wind turbines, tall buildings, and electric transmission structures and lines can create flight obstructions and collision hazards to avian species including bats and migrating birds. Collisions with communications towers and associated guy wires are known causes of avian mortality, such as when flying at night or in fog. Practices to reduce collision hazards can be found in the Guidelines Recommended by the U.S. Fish and Wildlife Service for Communications Tower Siting, Construction, Operation, and Decommissioning (http://www.fws.gov/habitatconservation/communicationtowers.html).

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Electric transmission structures and lines can also impact migratory birds. Guidelines published by USFWS and the Avian Power Lines Interaction Committee (APLIC) to avoid or reduce collision and electrocution hazards can be found in the updated state-of-the-art guidance document *Reducing Avian Collisions with Power Lines: State of the Art in 2012*. This manual identifies best practices and provides specific guidance to help reduce bird collisions with power lines. A companion document, *Suggested Practices for Avian Protection on Power Lines*, was published by APLIC and the USFWS in 2006. For more information on both documents, please visit www.aplic.org.

For information and practices to minimize potential impacts associated with wind turbine development, please visit the resources on the TPWD website at http://tpwd.texas.gov/huntwild/wild/wildlife diversity/habitat assessment/tools.phtml.

**Recommendation:** Because the type of development for the site has not been determined, TPWD recommends only granting STAR certification for development that does not include tall obstructions. Developments that will include tall obstructions and collision hazards should be coordinated with the USFWS and/or TPWD, as appropriate.

Artificial nighttime lighting can attract and disorient night-migrating birds. Birds circling the lights' glare can cause collision with structures or exhaustion mortality.

**Recommendation:** TPWD recommends utilizing the minimum amount of night-time lighting needed for safety and security. TPWD recommends lighting be down-shielded to light only the ground and reduce glare.

### **State Regulations**

State-Listed Threatened and Endangered Species

Section 68.015 of the Parks and Wildlife Code regulates state-listed species. Please note that there is no provision for take (incidental or otherwise) of state-listed species. The TPWD Guidelines for Protection of State-Listed Species, which includes a list of take species, can be found penalties for of at http://www.tpwd.texas.gov/huntwild/wildlife diversity/habitat assessment/media /tpwd statelisted species.pdf. For purposes of relocation, surveys, monitoring, and research, terrestrial state-listed species may only be handled by persons permitted through the TPWD Wildlife Permits Office. For the above-listed activities that involve aquatic species please contact the TPWD Kills and Spills Team (KAST) for For more information visit Wildlife Permits at the appropriate authorization. http://www.tpwd.texas.gov/business/permits/land/wildlife/research/ and KAST http://www.tpwd.texas.gov/landwater/water/environconcerns/kills and spills/regions/.

TPWD Annotated County Lists of Rare Species are available at http://tpwd.texas.gov/gis/rtest/. These lists provide information regarding state-listed and rare species that have potential to occur within each county in Texas. A copy of the Bowie County list is attached for your reference. State-listed species could potentially be impacted if suitable habitat is present at or near the project site.

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The project area contains two ephemeral streams, 3.1 acres of forested wetland habitat, 8.5 acres of emergent wetland habitat, and 89 acres of upland habitat in the forms of native, mixed pine/hardwood forest and cleared and maintained field. During recent logging at the site, woodland corridors along the two ephemeral streams were retained as streamside management zones to protect the stream stability and quality. Such areas also provide corridors for wildlife. The site's woodland corridors provide connection between the surrounding landscapes to the north and south which contain large areas of undeveloped woodlands.

The threatened and endangered species investigation of the wetland delineation report only addressed federally-listed species and did not address potential impacts to statelisted species.

Recommendation: TPWD recommends that TexAmericas consult the Bowie County list and conduct site reconnaissance to verify whether habitat for state-threatened species occurs within the project area. If habitat for a state-listed species is found, TPWD recommends that avoidance measures be incorporated into the project to avoid potential impacts to state-listed species. TPWD recommends that all future project submittals include an evaluation of the habitat at the project site with respect to all species on the county list.

BMPs to minimize adverse impacts to state-listed species and other fish and wildlife resources can be chosen based on species and their habitat. For instance, aquatic species can be protected by avoiding placement of structures or equipment in wetlands and streams, by retaining riparian buffers and stream vegetation, and by employing sediment controls. Many mitigation strategies can be utilized for avian and terrestrial species including, but not limited to:

- Avoiding vegetation clearing by locating the proposed activities in areas of
  previous disturbance, such as non-native pastures and vacant city lots that do
  not exhibit streams, wetlands, and bottomland, riparian and upland
  woodlands.
- Retaining buffer areas along streams to be excluded from development.
- Fencing or flagging areas to prevent disturbance during construction.
- Reducing risk of injury or harm to state-listed species by educating economic
  development and contract personnel about the state-listed species with
  potential to occur in the project area and establishing development policies
  regarding wildlife encounters during construction and maintenance.
- Planting landscape features with native species of grasses, forbs, trees and shrubs for the benefit of wildlife as well as for water conservation.

**Recommendation:** TPWD recommends that TexAmericas incorporate BMPs into the development master plan to minimize potential impacts to state-listed species and other natural resources that may occur within or near the project area.

Although the threatened and endangered species investigation did not address state-listed species, TPWD review of the project materials indicates that of the species on the Bowie county list, the state-listed threatened Timber rattlesnake (Crotalus

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horridus) has the highest potential of occurring at the site and being potentially impacted by disturbance activities. The upland mixed pine/hardwood forest (which occurs primarily along the ephemeral streams) and the forested wetland areas provide suitable habitat for the Timber rattlesnake. The juxtaposition of the site's suitable habitat to two adjacent large areas of undeveloped woodlands strengthens the potential for occurrence of the Timber rattlesnake.

Recommendation: Because snakes are generally perceived as a threat and killed when encountered on roads or during clearing and construction, TPWD recommends TexAmericas staff, new developers, and contractors be informed of the potential for the protected Timber rattlesnake to occur in the project area. Contractors should be advised to avoid impacts to any snake. Compared to other rattlesnakes, the Timber rattlesnake is a rather docile species. Injury to humans usually occurs when the snake becomes agitated following harassment or when someone attempts to handle a recently dead snake that still contains its bite reflex. Therefore, contractors should avoid contact with the species if encountered and allow the snake to safely leave the premises. Please note that this snake may only be handled by persons permitted through the TPWD Wildlife Permits Office. TPWD recommends that TexAmericas incorporate this BMP into the development master plan to ensure that the BMP is carried forward as the site becomes developed and is in operation.

Recommendation: If trenching is involved in construction, TPWD recommends that contractors keep trenching and backfilling crews close together to minimize the amount of trenches left open at any given time during construction. TPWD recommends that any open trenches or excavation areas be covered overnight and/or inspected every morning to ensure no reptiles or other wildlife species have been trapped. Trenches left open for more than two daylight hours should be inspected for the presence of trapped reptiles prior to backfilling. If trenches cannot be backfilled the day of initial trenching, then escape ramps should be installed at least every 90 meters. Escape ramps can be short lateral trenches or wooden planks sloping to the surface at an angle of less than 45 degrees (1:1). TPWD recommends that TexAmericas incorporate this BMP into the development master plan to ensure that the BMP is carried forward as the site becomes developed.

Recommendation: For soil stabilization and/or revegetation of disturbed areas within the proposed project area, TPWD recommends erosion and seed/mulch stabilization materials that avoid entanglement hazards to snakes and other wildlife species. Because the mesh found in many erosion control blankets or mats pose an entanglement hazard to wildlife, particularly snakes, TPWD recommends the use of no-till drilling, hydromulching and/or hydroseeding rather than erosion control blankets or mats due to a reduced risk to wildlife. If erosion control blankets or mats will be used, the product should contain no netting or contain loosely woven, natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic mesh matting should be avoided. TPWD recommends that TexAmericas incorporate this BMP into the development master plan to ensure that the BMP is carried forward as the site becomes developed.

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### Native Landscaping and Site Design

Native vegetation is adapted to the soil and climate of the area and usually requires less maintenance and watering than introduced species. The disease tolerance of native vegetation provides longevity to the landscape without high cost. Native landscapes provide an enjoyable outdoor space for consumers while also benefiting wildlife such as birds and butterflies.

Recommendation: Disturbance of native vegetation should be avoided or minimized during land alteration activities by using site planning and construction techniques designed to preserve existing native tree, shrubs, grasses and forbs. TPWD recommends that the TexAmericas master plan include a limited footprint site design that retains wetlands, streams and their woodland buffers. TPWD recommends incorporating the ephemeral streams, forested and emergent wetlands and woodland buffers into the landscape plan rather than clearing all vegetation.

**Recommendation:** For revegetation, TPWD recommends planting native vegetation including trees, shrubs, grasses, and forbs. Native species appropriate for the area can be found using the Lady Bird Johnson Wildflower Center native plant database http://www.wildflower.org/plants/.

Significant declines in the population of migrating monarch butterflies (*Danaus plexippus*) have led to widespread concern about this species and the long-term persistence of the North American monarch migration. Augmenting larval feeding and adult nectaring opportunities is part of an international conservation effort for the monarch.

Recommendation: TPWD recommends revegetation efforts include planting or seeding native milkweed (*Asclepias* spp) and nectar plants as funding and seed availability allow. Where appropriate and sustainable, TPWD recommends landscaping plans incorporate monarch-friendly plants and/or butterfly gardens. Information about monarch biology, migration, and butterfly gardening can be found at http://www.monarchwatch.org.

Thank you for considering the impacts of your project actions on the fish and wildlife resources of Texas. If you have any questions, please contact me at (903) 322-5001 or Karen.Hardin@tpwd.texas.gov.

Sincerely,

Karen B. Hardin

Wildlife Habitat Assessment Program

Wildlife Division

Enclosures (1)

kbh/34760

Last Revision: 3/20/2015 11:29:00 AM

### **BOWIE COUNTY**

**BIRDS** Federal Status State Status DL T **American Peregrine Falcon** Falco peregrinus anatum year-round resident and local breeder in west Texas, nests in tall cliff eyries; also, migrant across state from more northern breeding areas in US and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands. **Arctic Peregrine Falcon** Falco peregrinus tundrius DL migrant throughout state from subspecies' far northern breeding range, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands. T **Bachman's Sparrow** Aimophila aestivalis open pine woods with scattered bushes and grassy understory in Pineywoods region, brushy or overgrown grassy hillsides, overgrown fields with thickets and brambles, grassy orchards; remnant grasslands in Post Oak Savannah region; nests on ground against grass tuft or under low shrub **Bald Eagle** DL T Haliaeetus leucocephalus found primarily near rivers and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds Cerulean Warbler Dendroica cerulea treetops of riverbank woodlands, swamps, and bottomlands; mainly insectivorous Henslow's Sparrow Ammodramus henslowii wintering individuals (not flocks) found in weedy fields or cut-over areas where lots of bunch grasses occur along with vines and brambles; a key component is bare ground for running/walking **Interior Least Tern** Sterna antillarum athalassos E subspecies is listed only when inland (more than 50 miles from a coastline); nests along sand and gravel bars within braided streams, rivers; also know to nest on man-made structures (inland beaches, wastewater treatment plants, gravel mines, etc); eats small fish and crustaceans, when breeding forages within a few hundred feet of colony T **Peregrine Falcon** Falco peregrinus DL both subspecies migrate across the state from more northern breeding areas in US and Canada to winter along coast and farther south; subspecies (F. p. anatum) is also a resident breeder in west Texas; the two subspecies' listing statuses differ, F.p. tundrius is no longer listed in Texas; but because the subspecies are not easily distinguishable at a distance, reference is generally made only to the species level; see subspecies for habitat. **Piping Plover** Charadrius melodus T LT wintering migrant along the Texas Gulf Coast; beaches and bayside mud or salt flats

### **BOWIE COUNTY**

**BIRDS** 

Federal Status

State Status

**Sprague's Pipit** 

Anthus spragueii

C

only in Texas during migration and winter, mid September to early April; short to medium distance, diurnal migrant; strongly tied to native upland prairie, can be locally common in coastal grasslands, uncommon to rare further west; sensitive to patch size and avoids edges.

**Wood Stork** 

Mycteria americana

T

forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960

**FISHES** 

Federal Status

State Status

Blackside darter

Percina maculata

T

Red, Sulfur and Cypress River basins; clear, gravelly streams; prefers pools with some current, or even quiet pools, to swift riffles

Creek chubsucker

Erimyzon oblongus

T

tributaries of the Red, Sabine, Neches, Trinity, and San Jacinto rivers; small rivers and creeks of various types; seldom in impoundments; prefers headwaters, but seldom occurs in springs; young typically in headwater rivulets or marshes; spawns in river mouths or pools, riffles, lake outlets, upstream creeks

**Goldeve** 

Hiodon alosoides

Red River basin below reservoir; spawns spring to July in shallow firm-bottomed backwaters or gravel shoals in tributaries, eggs semibuoyant drift downstream or to quiet water; adults in quiet turbid water of medium to large lowland rivers, small lakes, marshes and muddy shallows connected to them; young feed on microcrustaceans and other inverts; adults on surface water insects, also frogs, fishes, and small mammals

**Orangebelly darter** 

Etheostoma radiosum

Red through Angelina River basins; just headwaters ranging from high gradient streams to more sluggish lowland streams, gravel and rubble riffles preferred; eggs buried in gravel and riffle raceways, post-larvae live in quiet water, move into progressively faster water as they mature, young feed mostly on copepods and cladocerans, adults on mayfly and fly larvae, spawn late February through mid-April in eastern Texas

**Paddlefish** 

Polyodon spathula

Т

prefers large, free-flowing rivers, but will frequent impoundments with access to spawning sites; spawns in fast, shallow water over gravel bars; larvae may drift from reservoir to reservoir

**Shovelnose sturgeon** 

Scaphirhynchus platorynchus

T

open, flowing channels with bottoms of sand or gravel; spawns over gravel or rocks in an area with a fast current; Red River below reservoir and rare occurrence in Rio Grande

### **BOWIE COUNTY**

**FISHES** Federal Status State Status

Taillight shiner

Notropis maculatus

Sulfur River and Big Cypress Bayou; mostly headwaters, typically large sluggish, mud-bottomed small to large streams and lakes, usually with some aquatic vegetation; spawns March-October in backwaters and pools; feeds mainly on insect larva and cladocerans, also algae

Western sand darter

Ammocrypta clara

Red and Sabine River basins; clear to slightly turbid water of medium to large rivers that have moderate to swift currents, primarily over extensive areas of sandy substrate

**INSECTS** 

Federal Status State Status

**American burying beetle** 

Nicrophorus americanus

LE

varies widely from oak-hickory and coniferous forest ridges tops or hillsides to riparian corridors and valley floor pastures; extremely xeric, saturated, or loose sandy soils unsuitable; adults primarily above ground, eggs in soil adjacent to buried carcass, teneral adults overwinter in soil

**MAMMALS** 

Federal Status

State Status

Black bear

Ursus americanus

T/SA:NL

Т

bottomland hardwoods and large tracts of inaccessible forested areas; due to field characteristics similar to Louisiana Black Bear (LT, T), treat all east Texas black bears as federal and state listed Threatened

**Plains spotted skunk** 

Spilogale putorius interrupta

catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie

Rafinesque's big-eared bat

Corynorhinus rafinesquii

T

roosts in cavity trees of bottomland hardwoods, concrete culverts, and abandoned man-made structures

**Red wolf** 

Canis rufus

LE

Е

extirpated; formerly known throughout eastern half of Texas in brushy and forested areas, as well as coastal prairies

Southeastern myotis bat

Myotis austroriparius

roosts in cavity trees of bottomland hardwoods, concrete culverts, and abandoned man-made structures

REPTILES

Federal Status

State Status

Alligator snapping turtle

Macrochelys temminckii

T

perennial water bodies; deep water of rivers, canals, lakes, and oxbows; also swamps, bayous, and ponds near deep running water; sometimes enters brackish coastal waters; usually in water with mud bottom and abundant aquatic vegetation; may migrate several miles along rivers; active March-October; breeds April-October

### **BOWIE COUNTY**

**REPTILES** Federal Status State Status

Northern scarlet snake Cemophora coccinea copei T

mixed hardwood scrub on sandy soils; feeds on reptile eggs; semi-fossorial; active April-September

Timber rattlesnake Crotalus horridus T

swamps, floodplains, upland pine and deciduous woodlands, riparian zones, abandoned farmland; limestone bluffs, sandy soil or black clay; prefers dense ground cover, i.e. grapevines or palmetto

**PLANTS** Federal Status State Status

**Arkansas meadow-rue** Thalictrum arkansanum

mostly deciduous forests on alluvial terraces and upper drainages of hardwood slope forests at contacts with calcareous prairies; flowering March-April, withering by midsummer

### EXHIBIT C - PHASE I ESA



### ETTL Engineers & Consultants Inc.

GEOTECHNICAL ★ MATERIALS ★ ENVIRONMENTAL ★ DRILLING ★ LANDFILLS

November 24, 2014 Tyler, Texas

Mr. Scott Norton TexAmericas Center 107 Chapel Lane New Boston, Texas 75570

Re: Phase I Environmental Site Assessment

Approximately 101.56 Acres, TAC-C Property

South side of North Boundary Road approximately 0.6 miles west of the intersection of

North Boundary Road and James Carlow Drive; and, 900 North Boundary Road

New Boston (Bowie County), Texas 75570

Dear Mr. Norton:

ETTL Engineers & Consultants Inc. is pleased to submit the accompanying Phase I Environmental Site Assessment (ESA) report for the above-referenced property. This report was prepared for the exclusive use of TexAmericas Center, their affiliates, and their agents as a Phase I Environmental Assessment of the subject property.

Should there be a need for clarification, please feel free to contact us at your convenience. We appreciate the opportunity to provide you with this service.

Sincerely,

ETTL ENGINEERS & CONSULTANTS INC.

Daniel Richbourg

De Rets

Project Manager

### PHASE I ENVIRONMENTAL SITE ASSESSMENT

Approximately 101.56 Acres, TAC-C Property South side of North Boundary Road approximately 0.6 miles west of the Intersection of North Boundary Road and James Carlow Drive; and, 900 North Boundary Road

**Prepared For:** 

TexAmericas Center 107 Chapel Lane New Boston, Texas 75570

ETTL Project E 2892-2014 November 24, 2014

De Pet

**Daniel Richbourg** 

Project Manager Field Inspector/Report Writer

Steven R. Kennedy, C.E.P.
Principal Consultant
Field Inspector/Report Writer

Prepared by:

ETTL Engineers and Consultants Inc. 1717 E. Erwin Street, Tyler Texas 75702 903-595-4421 (phone) 903-595-6113 (fax)

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- D Records of Communications
- E Site Photographs
- F Regulatory Records Review
- G Resumes of Environmental Professionals
- H Other Information

Property Plat and Legal Description

### 1. EXECUTIVE SUMMARY

ETTL Engineers and Consultants Inc. (ETTL) has performed a Phase I Environmental Site Assessment (ESA) on approximately 101.56 acres located on the south side of North Boundary Road approximately 0.6 miles west of the intersection of North Boundary Road and James Carlow Drive, as well as 900 North Boundary Road in New Boston (Bowie County), Texas. The site is currently undeveloped with the exception of the westernmost 35 acres, which is utilized by American Electric Power as a material storage yard. A Site Diagram is included in Appendix B and a legal description is provided in Appendix H. TexAmericas Center currently owns the subject property.

Work included interpretation and study of historical data, review of publicly available regulatory databases, interviews with persons having past and present knowledge of the property, and a visual and physical reconnaissance of the property. Mr. Daniel Richbourg conducted the site reconnaissance on October 30, 2014.

Appendix A includes a Phase I Checklist that provides details on the site reconnaissance, the physical setting, and records review. Potential recognized environmental conditions, if any, identified by this assessment are discussed in Sections 11 and 12 of this report and summarized in the following table.

**Brief Summary of Findings** 

Area of Investigation	Environmental Concerns	Recommendations
Site & Area Observations	-Fill material observed on-siteThree (3) ASTs located on adjacent property west of the siteMultiple fuel transport trailers parked on Bowie Avenue south of the site.	No further assessment.
Physical Setting	Six (6) potential on-site wetlands identified.	Consider potential wetlands issues prior to development.
Past Site and Area Use	Timber, Buffer-zone for Red River Army Depot (RRAD) Munitions Bunkers, Storage Yard for American Electric Power.	No further assessment.
Regulatory Database	Subject Site not identified. Twenty (23) nearby facilities identified.	No further assessment.
Other Information	Several potential environmental concern sites identified during previous assessment activities for the (RRAD).	No further assessment.

### 2. INTRODUCTION

A Phase I ESA is a process to determine if recognized environmental conditions are present or potentially present on a property. The procedures used include those outlined in the guidelines established by the American Society for Testing and Materials (ASTM) in publication E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* The ASTM standard defines recognized environmental condition as õ. . . the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.ö

### 2.1 Objectives and Scope of Work

The purpose of this ESA is to permit a user to satisfy one of the requirements to qualify for the innocent landowner defense, contiguous property owner, or bona fide prospective purchaser (landowner liability protections) limitations on CERCLA liability. The scope of this assessment entailed the following:

- Interpretation and study of historical data, including aerial photographs and other available data sources such as city directories, Sanborn Fire Insurance Maps, or historical topographic maps;
- Review of physical setting sources, including topographic and surface geology maps, wetland classification maps, and flood maps;
- Personal interviews with persons having present and past knowledge of the property;
- Review of publicly available standard record sources, including federal, state, and local regulatory lists of contaminated sites, underground storage tanks, landfills, emergency responses, and hazardous waste generation, storage, disposal, and transport facilities; and,
- A visual reconnaissance of the property.

This information was compiled in the accompanying report for the purposes of assessing the following:

- If prior or present land use has affected the value of the property with respect to environmental conditions;
- If past or present activities at the site have created environmental problems or risks
  which a potential owner or investor might assume with transfer of ownership of the
  property; and,
- If use of adjacent property has adversely affected the value of the subject property with respect to environmental conditions.

Unless specifically addressed in the õDeviations And Additional Servicesö section of this report, issues involving, but not limited to, asbestos containing materials, mold, lead-based paint, radon, lead in drinking water, cultural and historic resources, industrial hygiene, health and safety,

ecological resources, endangered species, indoor air quality, controlled substances, and biological agents are outside of the scope of work for this Phase I ESA. Also outside of the scope of work, is any sampling and analysis of building materials, soils, air, or water. This ESA does not address regulatory compliance, nor does it address areas of concern set forth in the Americans with Disabilities Act of 1990 (ADA) or those set forth in similar state and/or local laws and regulations. Federal, state, and local environmental laws may impose environmental assessment obligations beyond the scope of this practice.

### 2.2 Limitations

This ESA was performed in accordance with generally accepted practices of the profession, while observing the same degree of care and skills generally exercised by the profession under similar circumstances. No other warranty, expressed or implied, is made in regard to the work performed by ETTL during the course of this investigation. The opinions expressed in this report, together with its findings, are based on the judgment of data developed and gathered during the course of this study. It is not the intent or purpose of ETTL to convey by this assessment that the site contains no hazardous or toxic material beyond that which may have been observed during the course of the study. ESAs are not designed to wholly eliminate all uncertainties regarding the environmental conditions at a particular site. ESAs are designed to provide a reasonable assessment of a particular property within the constraints of time and costs, and within the guidelines set forth by the ASTM or by other ESA formats if so requested by the client.

Assessments should be judged solely on whether a reasonable study has been conducted at a particular site. Furthermore, environmental circumstances may change at the site or within the locale of the site following the assessment. ESAs are not designed to project or foresee any such future changes. Further, this assessment does not address requirements other than appropriate inquiry to CERCLA landowner liability protections. The user of this report should be aware that there are likely to be other legal obligations in regards to hazardous substances or petroleum products found on the subject property that may pose risks of civil and/or criminal sanctions for non-compliance.

### 2.3 User Reliance

This study and resulting report was prepared for the exclusive use of TexAmericas Center, their affiliates, and their agents for use as a Phase I environmental assessment of the subject site. The use of this report and the information contained herein by others, in whole or in part, is not authorized without the written mutual consent of TexAmericas Center and ETTL.

### 2.4 Authorization

On October 27, 2014, Mr. David Williams, a representative of MTG Engineers and Surveyors, authorized ETTL to perform a Phase I ESA on the subject property.

### 2.5 Significant Assumptions

There were no significant assumptions other than reliance on information provided to and obtained by ETTL. Data sources, including but not limited to, the environmental records database, historical use information, interviews, and user provided information, are assumed accurate and complete.

### 2.6 Special Terms and Conditions.

The user of this report dictated no special terms or conditions.

### 3. SITE DESCRIPTION

### 3.1 Subject Property Location & Legal Description

### Street Address:

900 North Boundary Road (American Electric Power leased portion of site) No current address for the remainder of the subject site.

### Legal Description:

See Appendix H.

Approximate Geographical Coordinates:

North 32° 27' 35.9ö Latitude and West 94° 20' 57.5" Longitude

### 3.2 Subject Property Improvements and Land Use

The subject property is currently undeveloped with the exception of the westernmost 35 acres, which is utilized by American Electric Power (AEP) as a material storage/lay down yard. A small portable office building utilized by AEP personnel is located on the northwest corner of the property. Access to the site is via North Boundary Road. Water and sewer service is available at the property.

### 3.3 Adjoining Property Land Use

Adjoining property land uses are as follows:

North ó	North Boundary Road/with a former Texas and Pacific Company railroad line and
	wooded property located beyond North Boundary Road
East ó	Wooded property and a golf course
South ó	Bowie Avenue/with wooded property and a Red River Army Depot
	Parking/Storage area located beyond Bowie Avenue
West ó	Quail Tools (Oil field rental equipment) and an undeveloped lot

See the site diagram located in Appendix B for a layout of adjacent properties.

#### 4. USER PROVIDED INFORMATION

The user of this report is TexAmericas Center. The user is the party seeking to use Practice E 1527-13 to complete an environmental site assessment of the property. A user may include, without limitation, a potential purchaser, a potential tenant, an owner of the property, a lender, or a property manager. As such, the user has specific obligations for completing a successful application of this practice as identified within this section and the User Information Inquiry Sheet located in Appendix A.

#### 4.1 Title Records

Land title records were not provided to ETTL.

## 4.2 Environmental Liens or Activity and Use Limitations

The user provided no knowledge of any environmental liens or activity and use limitations for the subject site.

### 4.3 Specialized Knowledge

The user owns the subject site and adjacent property west of the site.

#### 4.4 Commonly Known or Reasonably Ascertainable Information

The user provided information relative to the location of a plume management zone associated with a Red River Army Depot landfill.

#### 4.5 Valuation Reduction for Environmental Issues

The user is not aware of any possible environmental concerns related to the subject property.

#### 4.6 Reason for Performing Phase I

The Phase I ESA will be used by TexAmericas Center to evaluate environmental risk associated with the subject property.

#### 4.7 Other Information

ETTL reviewed the U.S. Army Base Realignment and Closure 95 Program, Environmental Baseline Survey Report (EBS-Draft Final Report) prepared for Red River Army Depot by Woodward-Clyde Federal Services and dated October 22, 1996. The stated purpose of this report was to classify discrete areas of real property associated with RRAD, subject to transfer or lease, into one of seven standard environmental condition categories. This process involved identification, characterization, and documentation of the presence or likely presence of a release or threatened release of hazardous substances or petroleum products. Releases at adjacent properties that could affect the environmental condition of the installation property were also

identified, characterized, and documented. The subject property for the EBS report was approximately 576 acres which included the subject property of this Phase I ESA.

Title documents were reviewed as part of the EBS to determine property uses prior to the RRAD. The EBS report states that title documents indicate the property was primarily agricultural; however, three (3) commercial entities including: a feed mill; a cotton company; and, a cotton oil company were located on the RRAD property. The report concluded there is little potential that current RRAD environmental concerns were caused by land uses prior to the transfer of the property to the federal government.

The EBS states RRAD development began in the fall of 1941. RRAD was originally intended as an ammunition storage facility; however, in 1942 tank modification/overhaul and shipment activities of tanks, artillery, and small firearms were added to RRAD¢s mission. RRAD was combined with the adjoining Lone Star Army Ammunition Plant (LSAAP) and known as Texarkana Ordnance Center and/or Red River Ordnance Depot from 1943 to 1952. The two (2) facilities were again separated and in the 1980¢s RRAD began facility modernization activities. These included light track vehicle overhaul/maintenance, rubber operations, and conversion of gasoline powered vehicles to diesel fuel. As of the date of the EBS report, the mission of the RRAD was renovation/demilitarization of conventional ammunition. RRAD maintained 702 ammunition igloos and 18 magazines, and operated as a Department of Defense distribution center. Vehicle maintenance activities included overhaul, modification, and fabrication of various Army equipment.

The subject property is a portion of the area identified as Geographic Area A in the EBS report. Geographic Area A was comprised of approximately 362 acres and the EBS indicates the property is characterized by a large, flat, wooded section to the west (this area includes the subject property for this ESA), an eight (8) unit housing facility, a 9-hole golf course, several administrative buildings, and a swimming pool. The EBS also states õextensive document reviews and an EBS site visit revealed that no mission-related activities occurred in this areaö.

The EBS further describes the area containing the subject property as a Category 1 parcel. Category 1 parcels are defined as: õAreas where no storage for one year or longer, release, or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent properties). Additionally, includes areas where no evidence exists for release, disposal, or migration of hazardous substances or petroleum products; however, the area has been used to store less than reportable quantities of hazardous substances (40 CFR 302) or 600 or fewer gallons of petroleum products.ö

The subject property is further delineated as part of BRAC Parcel Number Label 1(1), which is described as follows: õThis parcel is associated with the majority of the surface area with Geographic Area A. There has been no documented storage of hazardous substances or petroleum products; nor has there been release, disposal, or migration from an adjacent property of hazardous substances or petroleum products within the identified area.ö The EBS states, in table form, no remediation is necessary for this parcel.

Other items of potential environmental concern in the nearby vicinity of the subject property

were also addressed in the EBS. These areas of concern are described below:

A õWood Waste Landfill and Wood Burning Pitö is located west of the subject site (approximately 0.47 miles southwest). The EBS report states: õWood waste products were disposed in these locations. Citizens were allowed to rummage through these piles and remove scrap wood. The remainder was burned or compacted with heavy equipment.ö The status of the landfill was reported as closed;

Building 726 (located approximately 0.15 miles east-southeast of the subject property) was identified as a storage area for solvents, degreasers, paints, and used oils. Hazardous waste drums and flammable materials were identified inside and outside of the building during the EBS site visit. The EBS report states no documented evidence exists to conclude that any release, disposal, or migration of a hazardous substance has occurred;

Visual evidence of oil staining and stressed vegetation was observed at a golf course maintenance shed/wash station (identified as Building S-713) during the EBS site visit. Oil staining was observed near a shed adjacent the maintenance building as well. No documentation was obtained characterizing the environmental condition of this area. The EBS indicates additional investigation and possible removal or remedial action of stained soils will be required. This area is located approximately 0.21 miles east-southeast of the subject property;

A 110-gallon underground storage tank (UST) containing diesel fuel was removed from the ground in 1993. The former UST was located in the Runnels Village area approximately 0.25 miles east of the site. No contamination relative to this UST was discussed in the EBS; and,

Additional areas of environmental concern were noted in other areas of the RRAD property assessed by the EBS; however, these areas should not pose a significant risk to the subject property based upon their distance from the subject site, and any issues have likely been resolved or are monitored appropriately.

ETTL also reviewed the FY 2013 Army Defense Environmental Restoration Program Installation Action Plan for RRAD. Areas of concern within one (1) mile of the subject site include:

A former popping furnace (Building 722) identified as a Munitions Response Site (RRAD-003-R-01) is located approximately 0.5 miles west of the site. The furnace was utilized for small arms ammunition incineration. Remediation (soil removal) of metal and explosive contaminated soil was conducted to commercial/industrial protective concentration levels. A deed notice is filed for the property and land use restrictions are in place;

An explosion in a former magazine storage area located southwest of the subject site occurred in 1954. The area is identified as D-Area Y-Site D060201 in the Military Munitions Response Program. The affected area includes approximately 411 acres based upon maximum distribution of debris found after the bomb site explosion. Remediation activities were completed in 2013. These activities included surface removal of munitions in a 73 acre area and removal of munitions at depth of detection in a 10 acre area. In addition, land use controls are in-place.

Groundwater and soil are identified as the medias of concern; however, the facility is identified as õResponse Completeö. A map of the Munitions Response Sites at RRAD indicates the northeastern boundary of the affected area is approximately 0.6 miles southwest of the subject site.

#### 5. PHYSICAL SETTING REVIEW

## 5.1 Geology and Hydrogeology

A review of site-specific and regional geology and hydrogeology, along with a review of surface water characteristics, were completed as part of this study. A written narrative and Surface Geology Map are included in Appendix B.

#### 5.2 Wells

A review of mapped oil and gas well locations did not identify any oil or gas wells located on the subject site (see Appendix B, Oil & Gas Well Map). No oil, gas, or water wells were visually observed on the subject property during the site reconnaissance.

#### **5.3** Flood Potential

Review of a 2010 flood map indicates the site lies outside of the 100-year flood plain (see Appendix B, Flood Map).

#### **5.4** Potential Wetlands

Six (6) potential wetlands and/or waters of the United States (as defined by the United States Army Corp of Engineers) were identified within the subject property boundary on a 1980 National Wetlands Inventory Map of the area (see Appendix B, Wetlands Maps).

Three (3) potential wetlands areas located in the central and southwestern portions of the site are identified as Palustrine, Forested, Broad-leaved Deciduous, Saturated (PFO1B) wetlands. Two (2) potential wetlands located on the southwestern and northeastern portions of the site are described as Palustrine, Forested, Broad-leaved Deciduous, Seasonal (PFO1C) wetlands. The final potential wetlands area located on the southeastern portion of the site is described as a Palustrine, Forested, Broad-leaved Deciduous, Saturated, Partially Drained/Ditched (PFO1Bd) wetlands.

#### 6. ENVIRONMENTAL RECORDS REVIEW

#### **6.1** Environmental Database Review

ETTL reviewed federal and state regulatory databases provided by GeoSearch to identify environmental risks associated with the subject property and sites within specified distances from the property. A copy of the regulatory database report can be found in Appendix F.

Twenty-three regulated sites were identified in the database report. The report incorrectly identifies the regulated sites as being located õonö the subject property. The subject property was formerly a part of the Red River Army Depot (RRAD).

The sites identified on Red River Army Depot property are located outside the appropriate search distances. The majority (16) of the regulated sites are located on the Lone Star Army Ammunition Plant (LSAAP) property or former LSAAP property which is located approximately 2.3 miles east of the subject site.

#### 6.2 Additional Environmental Record Sources

To enhance and supplement the standard environmental record sources, local records and/or additional state or tribal records shall be checked when, in the judgment of the environmental professional, such additional records are (1) reasonably ascertainable, (2) sufficiently useful, accurate, and complete in light of the objective of the records review, and (3) generally obtained, pursuant to local good commercial or customary practice, in initial environmental site assessments.

The Red River Army Depot BRAC Environmental Coordinator was contacted as part of this Phase I ESA. A record of this communication is included in Appendix D and further discussed in Section 9.

# **6.3** Potential Vapor Encroachment Sources

ETTL reviewed federal and state regulatory databases, physical setting sources, and historical use information, in addition to conducting interviews with persons having knowledge of the property or surrounding properties to determine the potential presence of contaminated soil and/or groundwater on or near the subject property that may result in vapor migration of constituents of concern within the subsurface and into any current or future structures on-site. Potential vapor encroachment sources, if any, identified in this section are further discussed in Section 11.

ETTL did not identify any potential vapor encroachment sources.

#### 7. HISTORICAL USE INFORMATION

The table below identifies resources that ETTL reviewed for indications of past land use. See Appendix C for copies of historical use sources.

Information Resource	Dates
Aerial Photographs	1949, 1953, 1960, 1970, 1996, 2004, and 2012
Historical Topographic Maps	1909, 1954, 1970, 2010, and 2012
City Directories	2009, 2010, and 2013

Sections 7.1 through 7.4 were developed using physical setting resources, environmental records, historic use resources, interviews, and any other available information.

# 7.1 Aerial Photographs

Year(s)	Scale	Subject Property	Adjoining Property			
1949 1953 1960 1970 1996	1ö = 500ø	Wooded with an overhead electric line and sanitary sewer right of way crossing the center of the site in an east-west direction.	North ó N. Boundary Road, railroad right of way, and Highway 82 with wooded or pastureland properties located beyond the roads and railroad.  South ó Bowie Avenue, pasture and/or wooded properties located beyond Bowie Avenue  East ó Wooded  West ó Wooded			
2004	1ö = 500ø	Extreme western portion of site cleared of timber.	North ó No change  South ó No change  East ó Golf course located beyond the wooded property  West ó Cleared of timber (pasture/grass)			
2012	1ö = 500ø	Site cleared of timber except for drainage draw areas	North ó No change South ó Small parking lot/storage area located near southeast corner of the property East ó No change West ó Quail Tools and W.W. Williams (contractor)			

# 7.2 Historical Topographic Maps

No potential environmental concerns were noted for the subject site, adjacent, or nearby properties during a review of the historical topographic maps.

# 7.3 City Directories

Year	Address	Use				
Subject Site						
2009-2013	None Identified					
		North				
2009-2013	None Identified					
	South					
2009-2013	None Identified					
		East				
2009-2013	None Identified					
		West				
2009-2013	1000 N. Boundary	Quail Tools				
2013	1100 N. Boundary	W.W. Williams (contractor-equipment, supplies)				

# 7.4 Sanborn® Maps

No Sanborn® Maps were available for the subject site.

#### 8. SITE RECONNAISSANCE

ETTL conducted a visual reconnaissance of the subject property on October 30, 2014 to verify the findings from the physical setting sources, environmental data review, historical information review, and to observe whether recognized environmental conditions were present at the subject property. Mr. Daniel Richbourg conducted the site reconnaissance.

## 8.1 Methodology and Limiting Conditions

The site was visually and physically inspected by walking the estimated boundaries and interior of the property. The property boundaries were delineated via a site map provided by the user, roadways, and survey markers. The property contains grass, gravel, and leaf litter surface cover. Weather conditions at the time of the site visit were clear, cool, with light variable winds, and ambient temperature of 70 degrees Fahrenheit.

#### 8.2 Observations

The Phase I Checklist, included in Appendix A, provides details of the findings of the site reconnaissance.

ETTL observed the following during the site reconnaissance:

- The subject site is located on the south side of North Boundary Road approximately 0.6 miles west of the intersection of North Boundary Road and James Carlow Drive;
- The western portion (approximately 35 acres) of the site is utilized by American Electric Power as a lay down yard for structural steel and associated equipment used on power transmission lines. No stored transformers were observed. A small portable office is located on the northwest corner of the site. Gravel roads with culverts provide access to the interior of the lay down area. Some minor sediment migration was observed on-site within the culvert/road drainage systems employed; however, no significant sediment migration was observed leaving the property;
- A small soil pile, approximately five (5) cubic yards, is located on the northwestern portion of the site. No staining or odors were observed;
- A small gravel pile, approximately two (2) cubic yards, is located in a wooded area east of the AEP storage area. No staining or odors were observed;
- Two (2) drainage draws are located on-site. The drainage draws are located within wooded portions of the property. The westernmost drainage draw crosses the entire site

in a general north-south direction and is located immediately east of the AEP lay down area. The second drainage draw crosses the northeastern corner of the site in a general northwest-southeast direction. No water was observed within either drainage draw during the site reconnaissance;

- An area of fill material consisting of soil, asphalt, and concrete is located on the north-central portion of the site. The fill materials are situated in relatively small piles (2-3 cubic yards or smaller) in an area approximately 50 feet by 50 feet, although fill material does not cover the entire area. Vegetation was observed in the area. No significant odors or obvious stained soils were observed:
- Two (2) small concrete pads (approximately 10 feet by 10 feet) are located on the northeastern portion of the site. Three (3) yellow bollards spaced in approximately 5 foot intervals (forming an L-shape) were observed near the southernmost concrete pad;
- One (1) pole-mounted transformer is located at the northwest corner of the property. The transformer appeared to be relatively new and no evidence of leaks or staining was observed;
- Two (2) wooden electrical power poles were observed on the property. These poles were situated consistent with the former electric power line right of way which previously crossed the central portion of the site in an east-west direction;
- Three (3) aboveground storage tanks (ASTs), two (2) 55-gallon drums, and one (1) 275-gallon plastic tote container are located on the Quail Tools facility west of the site. The ASTs consisted of two (2) horizontal cylindrical tanks (estimated 500 and 1,000 gallons respectively) and a large box container (estimated 8,000 gallon capacity). The contents of the containers were not evident; however, all the containers were located in a roof-covered area with concrete secondary containment flooring and walls. No significant surface staining, external to the containment structures, was observed; and,
- Numerous fuel transport tankers are parked along Bowie Avenue immediately south of the site. No obvious leaks, staining, or odors, were observed;

#### 9. INTERVIEWS

The individuals listed below were contacted to seek information regarding past uses and possible environmental concerns related to the subject site. No environmental concerns were revealed from these interviews.

Mr. Scott Norton ó TexAmericas Center ó Current property owner

Mr. Joe Nowell ó American Electric Power ó Current tenant (western portion of site -35 acres)

Mr. Arron Plosser ó American Electric Power ó Current tenant (western portion of site -35 acres)

Mr. David Williams ó MTG Engineers and Surveyors ó

Mr. Ross Ramsauer ó Red River Army Depot ó Chief of Environmental/BRAC Environmental Coordinator

Interviews indicate the subject property was a part of Red River Army Depot (RRAD), which was initially developed in the early 1940¢s. The property was utilized as a buffer zone for the munitions storage bunkers located approximately 0.4 miles south of the site. The subject site was part of the 1995 Base Realignment and Closure (BRAC) project and was transferred from Army to civilian use between 1995 and 1997. TexAmericas Center has owned the property since 2000.

The western portion of the site has been utilized by American Electric Power since the summer of 2014 as a storage yard for structural steel and associated power line construction equipment. No transformers or any liquid materials are stored on-site. The fuel transport tankers located south of the site have been there for several years and are empty.

Records of communication are included in Appendix D.

#### 10. DATA GAPS

No data gaps exist.

#### 11. FINDINGS & OPINIONS

Based upon the information gathered from these activities, potential, known, and/or historical recognized environmental conditions related to the subject property are discussed below.

- Interviews and historical documents indicate the property has not been developed other than for timber, as well as a storage yard for American Electric Power (AEP) structural steel components. The property was part of the buffer zone area for Red River Army Depot which began operations in the approximately 1941. No military operations or other development are known to have occurred on the property. Two (2) small concrete pads were observed on-site during the site reconnaissance. The uses of these concrete pads are unknown; however, aerial photographs do not indicate any significant uses in these areas. In ETTLøs opinion, the identified uses of the subject property and adjacent properties do not indicate a potential environmental concern.
- Fill material consisting of asphalt, concrete, and soil is located on the north-central portion of the site. The source of the fill materials is unknown. No staining, odors, or distressed vegetation were observed during site reconnaissance. In ETTLøs opinion, these materials should not pose a significant threat to the subject site given the relatively innocuous nature of the materials and site observations.
- Twenty-three (23) regulated sites were identified in the database search. The database report incorrectly identified the subject site as part of Red River Army Depot (RRAD) and Lone Star Army Ammunition Plant (LSAAP); therefore, all the sites were incorrectly classified as being on the subject site.

The facilities identified on the RRAD and LSAAP properties are outside the appropriate search distances and should not pose a significant environmental threat to the subject site.

- Three (3) ASTs, two (2) 55-gallon drums, and one (1) 275-gallon plastic tote are located west of the site. All the containers are located in a covered area with concrete secondary containment provided. No staining, external to the containment area, was noted during site reconnaissance. In ETTLøs opinion, the ASTs should not pose a significant environmental threat to the subject site.
- Multiple fuel transport tanker trailers are parked on Bowie Avenue immediately south of the site. No odors, staining, or obvious leaks or spills were observed. Interviews indicate tanker trailers have been stored along the road for several years and are stored in an empty condition. No spills or leaks were reported in the interviews. In ETTLØS opinion, the practice of storing empty fuel tank trailers should not pose a significant environmental threat to the subject site.
- A closed landfill formerly utilized for disposal of wood and as a burn pit for wood products is located approximately 0.47 miles southwest of the site. Given the distance from the subject site, this closed landfill should not pose a significant environmental threat. In addition, a branch of Panther Creek located between the landfill and the subject site would act as a barrier to potential contaminant(s), if any, via groundwater migration toward the property.
- Building 726 (located approximately 0.15 miles east-southeast of the subject property) was identified in the 1996 EBS report as a storage area for solvents, degreasers, paints, and used oils. Hazardous waste drums and flammable materials were identified inside and outside of the building. The EBS report stated no documented evidence exists to conclude that any release, disposal, or migration of a hazardous substance has occurred. Based on the findings of the EBS report and the distance from the subject property, it is ETTL¢s opinion that this facility should not pose a significant environmental threat to the subject site;
- The 1996 EBS report identified visual evidence of oil staining and stressed vegetation at a golf course maintenance shed (identified as Building S-713). Oil staining was observed near a shed adjacent to Building S-713 as well. The EBS indicates additional investigation and possible removal or remedial action of stained soils will be required. This area is located approximately 0.21 miles east-southeast of the subject property. In ETTLøs opinion, given the distance from the subject site and the size and type of contaminant, this facility should not pose a significant environmental threat to the site.
- The EBS report indicated a 110-gallon underground storage tank (UST) containing diesel fuel located approximately 0.25 miles east of the site was removed from the ground in 1993. No contamination relative to this UST was discussed in the EBS. In ETTLøs opinion, the former UST should not pose a significant environmental threat to the subject

site given the distance from the site.

- A former popping furnace (Building 722) identified as a Munitions Response Site (RRAD-003-R-01) is located approximately 0.5 miles west of the site. The furnace was utilized for small arms ammunition incineration. Excavation of metal and explosive contaminated soil was conducted and the site has been remediated to commercial/industrial protective concentration levels. A deed notice and land use restrictions are in place. In ETTLøs opinion, this facility should not pose significant environmental threat to the subject site due to the distance from the property, completed remediation activities (soil removal), and local topographic conditions (i.e. Panther Creek).
- An area identified as D-Area Y-Site D060201 in the Military Munitions Response Program is located approximately 0.6 miles southwest of the site. An explosion in a former magazine storage occurred in 1954. The affected area includes approximately 411 acres. Remediation activities, including unexploded ordnance removal, were completed in 2013. In addition, land use controls have been instituted. Groundwater and soil are identified as the medias of concern; however, the facility is identified as õResponse Completeö. Given the distance from the subject site and the suspected direction of groundwater flow away from the subject site, it is ETTLøs opinion the Y-Site should not pose a significant environmental threat to the property.
- The user provided information relative to a contaminated groundwater plume management zone associated with a closed RRAD hazardous waste landfill. The landfill is located approximately 1.6 miles southwest of the property. This landfill should not pose a significant environmental concern for the subject site based upon its distance from the site and local topographic features.

#### 12. CONCLUSIONS

ETTL has performed a Phase I ESA in general conformance with the scope and limitations of ASTM Practice E-1527-13, of approximately 101.56 acres located on the south side of North Boundary Road approximately 0.6 miles west of the intersection of North Boundary Road and James Carlow Drive in New Boston (Bowie County), Texas. The property is further described in the legal description included in Appendix H. Any exceptions to, or deletions from, this practice are described in Section 13 of this report.

This assessment has revealed no recognized environmental conditions in connection with the property.

### 13. DEVIATIONS AND ADDITIONAL SERVICES

The flood and wetlands sections are additional to the standard Phase I ESA scope of work. These sections are provided for informational purposes only. This ESA did not include formal determinations for flood and wetlands issues.

#### 14. BIBLIOGRAPHY

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- Flawn, Peter T., 1979, Geologic Atlas of Texas, Texarkana Sheet; University of Texas at Austin, Bureau of Economic Geology.
- Railroad Commission of Texas, Online GIS Mapping, <a href="http://www.rrc.state.tx.us/gis/index.html">http://www.rrc.state.tx.us/gis/index.html</a>
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- United States Geological Survey, 1909, New Boston, Texas Quadrangle; United States Geological Survey.
- United States Geological Survey, 1954, Hooks, Texas Quadrangle; United States Geological Survey.
- United States Geological Survey, 1970, Hooks, Texas Quadrangle; United States Geological Survey. (photo-revision of 1954 map)
- United States Geological Survey, 2010, Hooks, Texas Quadrangle; United States Geological Survey.
- United States Geological Survey, 2012, Hooks, Texas Quadrangle; United States Geological Survey.

### 15. SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on the education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in general conformance with the standards and practices set forth in 40 CFR Part 312 as required by the environmental professional. Qualifications of each environmental professional are included in Attachment G.

**Daniel Richbourg Project Manager** 

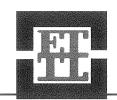
Steven R. Kennedy, CEP Principal Consultant

# Appendix A

User Information Inquiry Sheet Phase I Checklist

# **User Information Inquiry Sheet**

Date of Inquiry:    Date of Inquiry:   Date of Inqu	Client Name: Address:	TexAmericas Center 107 Chapel Lane	Phone Number: Fax Number:	90	3-2	-23-98	-41	
The type of property transaction sale, purchase, exchange, refinancing, X Other (Specify) **place** of the Texas** 5 the 6 fires**  Property Information  Location/Address:  **N.** Bosh Mary Patrol Rd**  **Property Owner:**  **N.** Bosh Mary Patrol Rd**  **Property Owner:**  **Int. Section Rd.**  **Property Owner:**  **Int. Section Rd.**  **Property Owner:**  **Tra Area is a Context - Seath Modes**  **Phone Number:**  **Phone Nu	Date of Inquiry:						americasc	entebio,
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Property Owner: Test Futurists Center - Seet Monter Phone Number: Phone								
Site Contact:  Other Provided or Available Information  I Complete and correct address for the property (including map or other documentation)?   Legal description of the property?  Are there any Activities and Land Use Limitiations (i.e. engineering controls, land use restrictions, institutional controls) in place, filed, or recorded for the property?  Do you have any specialized knowledge or experience related to the property or nearby properties?  Do you have any specialized knowledge or experience related to the property or nearby properties?  Do set the purchase price proposed for the property reflect a reasonable fair market value of the property?  As the user of this ESA, based upon your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?  Any knowledge or experience with the property that may be pertinent to the EP (Prior Phase I. documents regarding the site, Phase II Report, etc.)?  Are you aware of commonly known or reasonable ascertainable information about the property that would help ETTL to identify conditions indicative of release or threaten releases?  Any knowledge or experience with the property?  Are you aware of any environmental cleanups on the property?  Are you aware of any environmental cleanups on the property?  Land title records and lien records obtained regarding environmental liens or activities use limitations?  Seed of services (standard, other services outside a Phase I recorded land title records search and judicial records for environmental liens or activities use limitations?  Scope of services (standard, other services outside a Phase I recorded land title records search and judicial records for environmental liens or activities who will rely on the Phase I Report? Tex Americas Center type assistance.  Scope of services (standard, other services outside a Phase I recorded land title records search and judicial records for environmental liens or activities who will re	Property Owner:	· · · · · · · · · · · · · · · · · · ·		اع دوز حص	oll h	est iva	, in coute	ert
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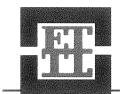
# ETTL Engineers & Consultants Inc.

GEOTECHNICAL \* MATERIALS \* ENVIRONMENTAL

#### Phase I ESA Checklist

Site Name: 101.56 Acres - New Bo	3 <del>/ Airon</del> _	Client: Tex Angues Cente		
ETTL Job Number: 22592-14		Date:		
Complete the following and indicate Yl	ES or NO if a e subject prop	Note Reconnaisance possible or realized Recognized Environments erty. Provide additional information, if necof the Phase I report.	ıl Condi essary,	tion or in the
1. Current use(s) of the subject property  AEP- Coy days York (West Side  2. Property improvements:  A 1- feapology building (	= - 35 Ac.),	Undeveloped	No	Yes
3. Describe access to property:				
N. Boundary Rd.  4. Source of potablewater: Municipal	8		~	
Type of sewage disposal:	<u> </u>		lan-	
Fuel source for HVAC System:			~	
Provider of solid waste disposal:	· · · pac · · · · · · · · ·	ita Manazamant		
	E al		-	
North: N. Boundary Rd., Wooded  East: Wood Solf Course				
South: PRAD Property, Wooder West: Buril Tools, Underclope	£ .			
West: Buril Tools, Undsoclope	ed Lot		Brann .	
6. Other adjacent property concerns: 3-ASTs - Buil Tols Property FUEL transport trukers parked	- in Zadony - Rowd	50x & fasporty - Bouse Adease		<b>.</b>
	No Yes		No	Yes
7. Storage tanks of any type		16. Evidence of wells	1	
8. Chemical containers >5 gal.		17. Stressed vegetation		
9. Hazardous substances or		18. Electrical or hydraulic equipment that		
petroleum products		possibly contains PCBs		V
10. Pools of liquid	V	19. Electrical Transmission Lines		-
11. Odors		20. Improperly disposed waste		
12. Automotive or industrial batteries		21. Pits, ponds, or lagoons		
13. Drains/sumps		22. Stained soil, flooring, or pavement	Marie Con	
14. Septic systems		23. Displaced soil/soil disturbance		
15. Pipelines		24. Improper use of storm drains		
Describe any limiting conditions encoun  Dense Vegetation / Underbruse in	<del>-</del>			

Clear, 70° F. LT. Unainble Wind during site RECON. - 10/30/14



# ETTL Engineers & Consultants Inc.

GEOTECHNICAL \* MATERIALS \* ENVIRONMENTAL

#### Phase I ESA Checklist

Site Name: 101.56 Acres - New Bosh Client: TER Angeles Centra		
ETTL Job Number: <u>E2872 - 20.4</u> Date: <u>1/4/2014</u>		
Physical Setting/ Records Review Based on a review of the following information, indicate YES or NO if the following suggest a potential Recognized Environmental Concern or Condition. Include year(s) the source material was published a supporting information if required. Write NA if the source was not reviewed during the study.		
25. USGS Topographic Map: Mooks, TR - 2012	No	Yes
26. Flood Map: FEMA - 480 370 03050 - 200		
27. Oil and Gas Map: Re Public 1515 VIEWED - 2014		
28. Potential Wetlands Map: US Find a Wildlife Suc - 1980		
29. Surface Geology: Jackson Sheet - 1993	W.	
30. Standard Historical Sources (Indicate dates and materials reviewed, at least one is required) Aerial Photographs, Fire Insurance Maps, Property Tax Files, Zoning Records, Land Title Records (can not use alone), Historical Topographic Maps, City Directories, other	No	Yes
Acrial Photos- 1949, 1953, 1962, 1970, 1996, 2004, 2010	/	
Hist. Topos- 1909 - New Boston (1:62,000), 1954, 1970, 2010, 2012 - Hooks (1:24,000)	-	
City Diserted: - 2009, 2010, 2013 SANDORN - NOT AVAILABLE		
31. Past use(s) of the subject property:		
AEP Cry Down York		
32. Environmental Database Review:		
Site identified. Since due to previously most of RRAD.		3
Site identified. FixE due to previously mut of RRAD. Loneston Amuniti- Plant Identified - But outside servede distance	<b>8</b>	
Comments: N- 32° 27' 35.9", W- 94° 20' 575"		
717- Dend/Foller trans o- property - Ho Appears Motions		***************************************
18. I pat a NWE of site - Service to march building		
19. A East to West along Northern property boundary	en Mel Malenni de ciano como como como como como como como co	e-commonwelve
23 Soil Displacement - Utst side of site in AGO undows medis, soil pile by d	mask-	elepn
28 William o- map	***************************************	
Environmental Professional who completed the checklist:		
(Print) Daniel Rich Sours (Signature)		

Note: This form is not all-inclusive or a replacement for an environmental professional. Any significant findings not detailed in this form are included within the text of the Phase I report.

# Appendix B

Site Diagram
Wetlands Map
Flood Map
Topographic Map
Surface Geology Map
Site Geology & Hydrogeology
Oil & Gas Map







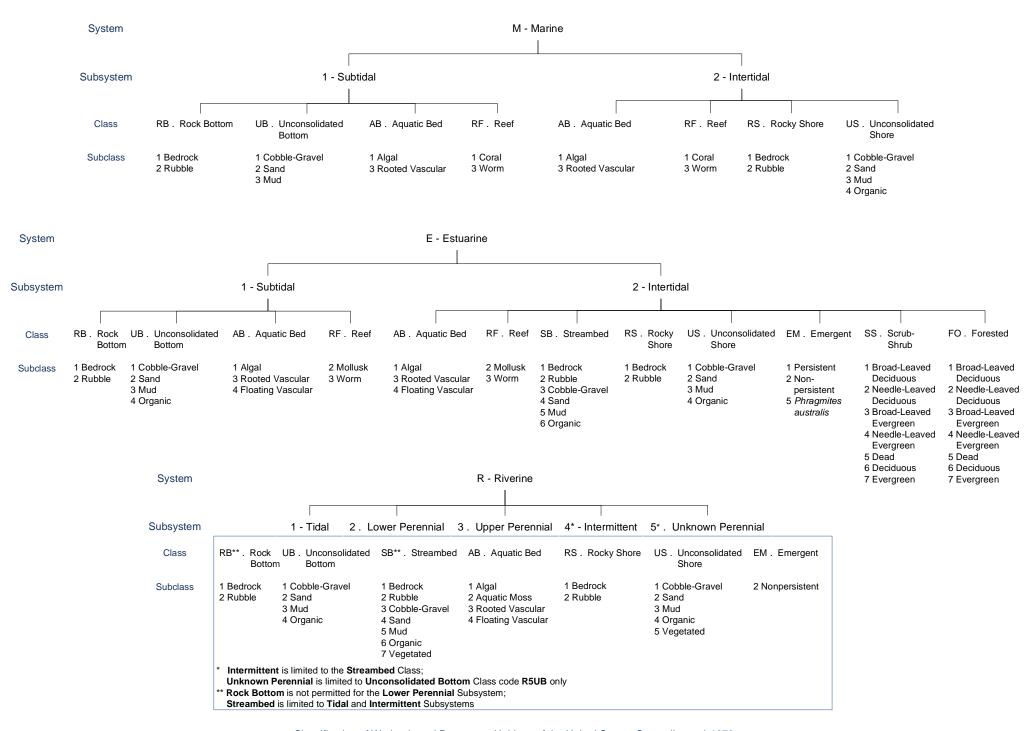


WETLANDS MAP JOB NO.: E2892-2014

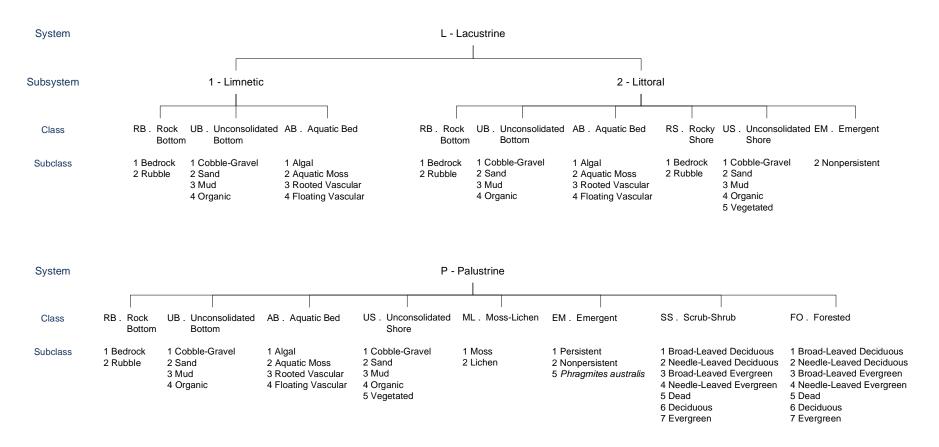
DATE: 1980

SCALE: AS SHOWN

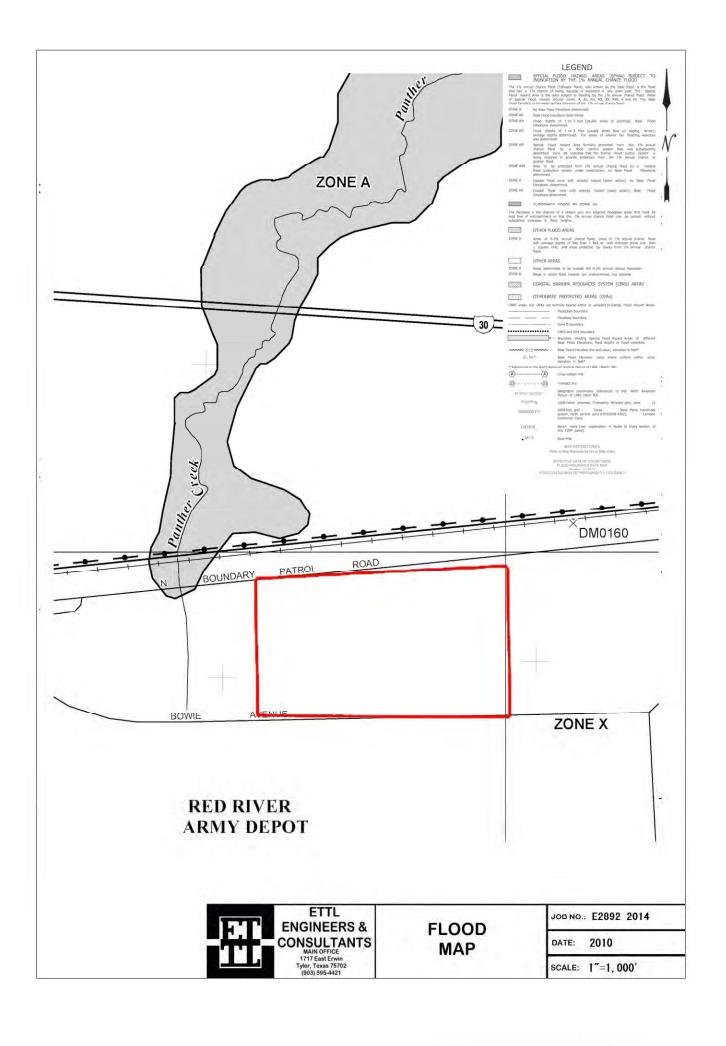
## WETLANDS AND DEEPWATER HABITATS CLASSIFICATION

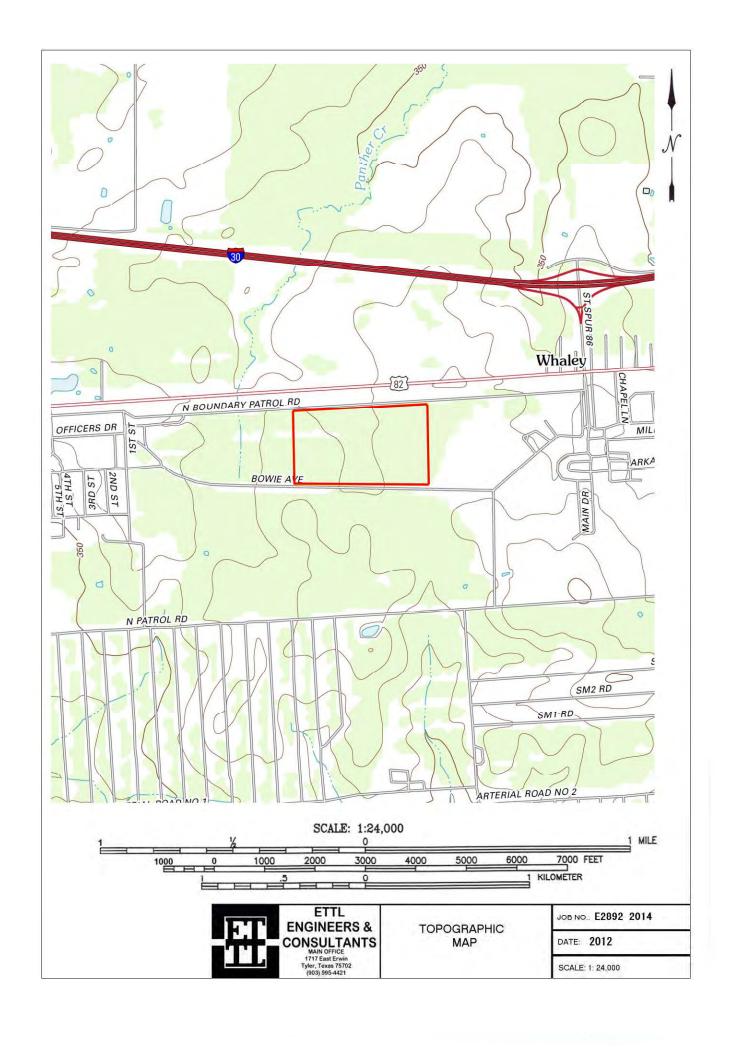


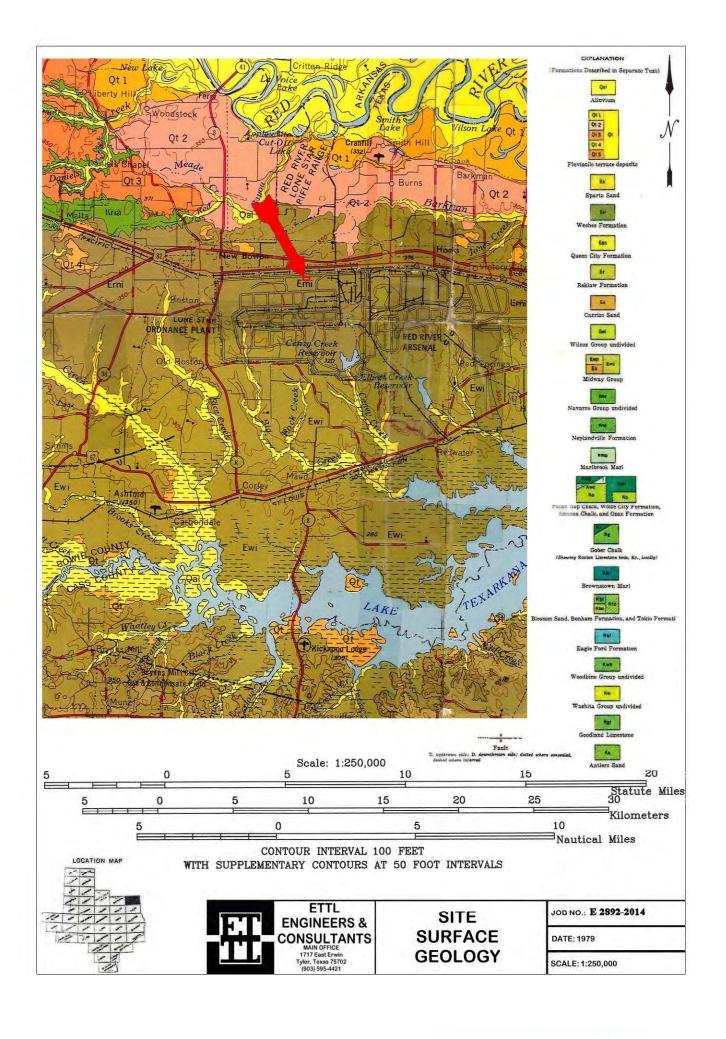
## WETLANDS AND DEEPWATER HABITATS CLASSIFICATION



s		M juately describe the wetland and deepw pplied at the class or lower level in the				stem.	
	Water Regime	3	Special Modifiers		ater Chemist	ny:	Soil
Nontidal	Saltwater Tidal	Freshwater Tidal		Coastal Halinity	Inland Salinity	pH Modifiers for all Fresh Water	
A Temporarily Flooded	LSubtidal	S:Temporarily:Flooded-Tidal	b B eaver	1 Hyperhaline	7 Hypersaline	a Acid	g Organio
B Saturated	M Irregularly Exposed	R: Seasonally Flooded-Tidal	d Partly Drained/Ditched	2 Euhaline	8 Eusaline	t Circumneutral	n Minera
C Seasonally Flooded	N Regularly Flooded	T Semipermanently Flooded-Tidal	f Farmed	3 Mixohaline (Brackish)	9 Mixosaline	i Alkaline	
E Seasonally Flooded/	P: Irregularly Flooded	V Permanently Flooded-Tidal	h Diked/Impo unded	4 Polyhaline	0 Fresh		
Saturated			r Artificial	5 Mesohaline			
F Semipermanently Flooded			s Spoil	6 Oligo haline			
G Intermittently Exposed			xExcavated	0 Fresh			
H Permanently Flooded							
J Intermittently Flooded							
K Artificially Flooded							







#### SITE GEOLOGY AND HYDROGEOLOGY

#### **Physical Setting Source Review**

Regional, local, and site-specific environmental characteristics have been identified by review of the surface, subsurface, and groundwater data gathered during the course of this study.

#### **Surface Water Characteristics**

The subject site is situated on the northern shoulder of a subtle local topographical high. The surface elevation for the site is approximately 370 feet above mean sea level (msl). A drainage draw is located on the middle of the site. The draw drains to the northnorthwest and merges with Panther Creek approximately 0.15 miles northwest of the subject site. Panther Creek is located approximately 0.1 miles west of the subject site. Flow within Panther Creek within the area of the site is primarily to the northeast. Surface water runoff from the site is expected to move to the northwest along a drainage draw leading to Panther Creek.

#### Regional Geology and Hydrogeology

Surface geology and near surface stratigraphy of Bowie County consists of the Upper Cretaceous Navarro Group, and the successively overlain Midway (Paleocene) and Wilcox (Paleocene-Eocene) Groups. Quaternary fluviatile terrace deposits and alluvium occur along the Red River and other major stream drainages.

The referenced site lies on the northeastern margin of the East Texas Basin, a negative structural feature that developed by faulting during the Triassic Period. The depression is bounded by the Mexia-Talco Fault Zone on the north and west, and by the Sabine Uplift on the east. These two features converge near the area of interest and define the eastern limits of the basin. To the south, between the referenced site and the Sabine Uplift proper, the Rodessa Fault Zone and the South Arkansas Fault Zone are coincident with the western border of the adjacent North Louisiana Salt Basin.

Within the East Texas Basin, strata generally dip toward its central axis except where the gradient has been affected by the movement of underlying, deep-seated salt into domes, ridges, or pillows. In the southern half of Bowie County the gradient is to the south-southeast at approximately 15 to 50 feet per mile.

According to the Texas Commission on Environmental Quality (TCEQ) the deepest major fresh water aquifer in Bowie County is the Carrizo-Wilcox, which is composed of the Wilcox Group and the immediately overlying Carrizo Sand. Excellent aquifer characteristics have made the Carrizo-Wilcox the most productive aquifer in East Texas.

The Wilcox is underlain by marine clays and shale of the Midway Group. In the area of interest, no freshwater is known to occur in the Midway. The Midway forms a boundary,

or aquiclude, separating fresh groundwater in the Wilcox from deeper, brackish and saline groundwater.

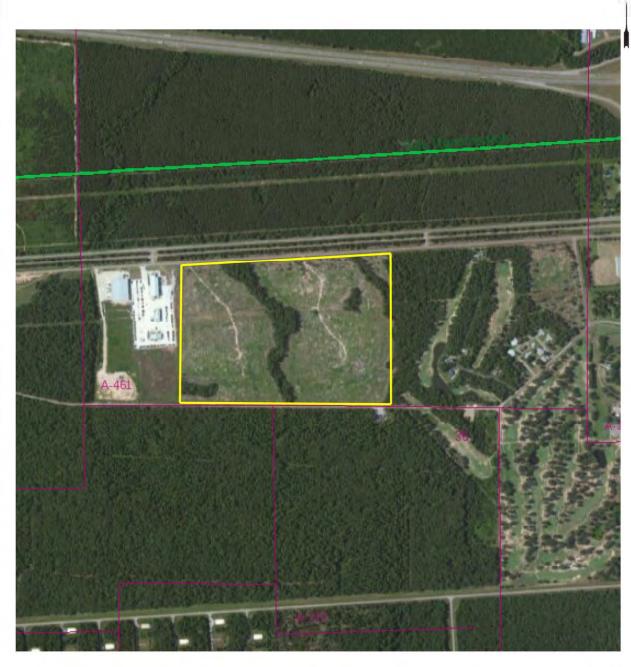
The Carrizo-Wilcox is overlain successively by the Reklaw Formation and the Queen City Sand. The Reklaw has extremely limited water-bearing characteristics and is insignificant as an aquifer. The Queen City Sand is present in the extreme southern part of the county where it caps the higher elevations. The limited aerial extent of the Queen City confines its use as a water supply to low-yield, shallow wells in the area of outcrop.

The Nacatoch Aquifer is considered to be a minor aquifer in Bowie County according to the TCEQ. The Nacatoch Aquifer occurs as a narrow wedge of terrigenous clastics which lies along, and parallel to, the west and north margins of the East Texas Basin. The concentration of total dissolved solids (TDS) in groundwater from the Nacatoch Sand range from approximately 77 to more than 3000 mg/l. The downdip limit of usable fresh water is typically placed at 3000 milligrams per liter (mg/l) TDS. Water quality in the Nacatoch generally degrades in a direction downdip and away from the zones of recharge. In some areas, faults control water quality by blocking circulation and preventing the flushing of the aquifer with fresh water recharge.

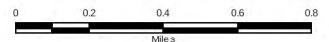
#### Site Geology and Hydrogeology

The Midway Group undivided outcrops at the subject site. The Midway Group is composed of the Wills Point and the Kincaid Formations in Bowie County. The Wills Point Formation is primarily clay. The upper portion of the formation is composed of silt, lignite, with some calcareous siltstone concretions. A thin bed of limestone is located near the middle of the formation and is glauconitic near the base of the formation. The maximum thickness of the Wills Point Formation is approximately 450 feet. The Kincaid Formation consists of predominately clay with some glauconite, selenite, and slightly calcareous. The formation is in part silty and sandy and is locally phosphatic near the base. The maximum thickness of the Kincaid Formation is approximately 150 feet.

Shallow, or near-surface, groundwater at the site is in the unconfined portion of the Midway Group. In unconfined aquifers, groundwater flow is controlled primarily by gravity, by lithology, and by the structure of the formation. Excluding anomalous conditions, groundwater is expected to move in approximately the same direction as the surface water flow at this location. Overall movement of shallow groundwater is probably towards nearby sites of discharge towards Panther Creek.



1 inch = 1,505 feet





OIL & GAS MAP DATE: 2014

SCALE: AS SHOWN

#### Oil and Gas Well Legend Plugged Storage 0 Permitted Location Service from Storage/Oil Dry Hole Plugged Storage/Oil Service from Storage/Gas Oil Plugged Storage/Gas Service from Storage/Oil/Gas Gas SYO Service Plugged Storage/Oil/Gas Oil/Gas Brine Mining from Oil Service from Oil Plugged Oil Brine Mining from Gas Service from Gas Plugged Gas Brine Mining from Oil/Gas Service from Oil/Gas Injection/Disposal from Brine Mining Canceled Location Plugged Oil/Gas Injection/Disposal from Brine Mining/Oil Injection/Disposal Injection/Disposal from Brine Mining/Gas Core Test Injection/Disposal from Brine Mining Oil/Gas Sulfur Core Test ☼ Observation from Brine Mining Storage from Oil Observation from Brine Mining/Oil Storage from Gas Observation from Brine Mining/Gas Shut-in Well (Type Oil) Observation from Brine Mining /Oil/Gas Shut-in Well (Type Gas) Service from Brine Mining Injection/Disposal from Oil Service from Brine Mining/Oil Injection/Disposal from Gas Service from Brine Mining/Gas Injection/Disposal from Oil/Gas Service from Brine Mining/Oil/Gas Plugged Brine Mining ◊ Geothermal Brine Mining Plugged Brine Mining/Oil WSO Water Supply Plugged Brine Mining/Gas Water Supply from Oil Plugged Brine Mining/Oil/Gas Water Supply from Gas BR( ) Storage/Brine Mining Water Supply from Oil/Gas Storage/Brine Mining/Oil Observation Storage/Brine Mining/Gas Observation from Oil Storage/Brine Mining/Oil/Gas Injection/Disposal from Storage/Brine Observation from Gas Mining Injection/Disposal from Storage/Brine Mining/Oil Storage Injection/Disposal from Storage/ Brine Mining/Gas Injection/Disposal from Storage/ Brine Injection/Disposal from Storage Mining/Oll/Gas Injection/Disposal from Observation from Storage/Brine Mining Storage/Oil Injection/Disposal from Observation from Storage/Brine Storage/Gas Mining /Oil Injection/Disposal from Observation from Storage/Brine Storage/Oil/Gas Mining /Gas Observation from Storage Observation from Storage/Brine Mining /Oil/Gas Observation from Storage/Oil BR Plugged Storage/Brine Mining Plugged Storage/Brine Mining/Oil Observation from Storage/Gas Plugged Storage/Brine Mining/Gas Observation from Storage/

Plugged Storage/Brine Mining/Oil/Gas

Service from Storage

Storage from Oil/Gas

Horizontal

Directional

# Appendix C

**Historical Use Resources** 





SITE: TAC-C 100 ACRE SITE SOURCE: AMS DATE: 11-03-49 COUNTY: BOWIE, TX SCALE: 1" = 500"





SITE: TAC-C 100 ACRE SITE SOURCE: USGS

SOURCE: USGS
DATE: 04-19-53
COUNTY: BOWIE, TX
SCALE: 1" = 500'



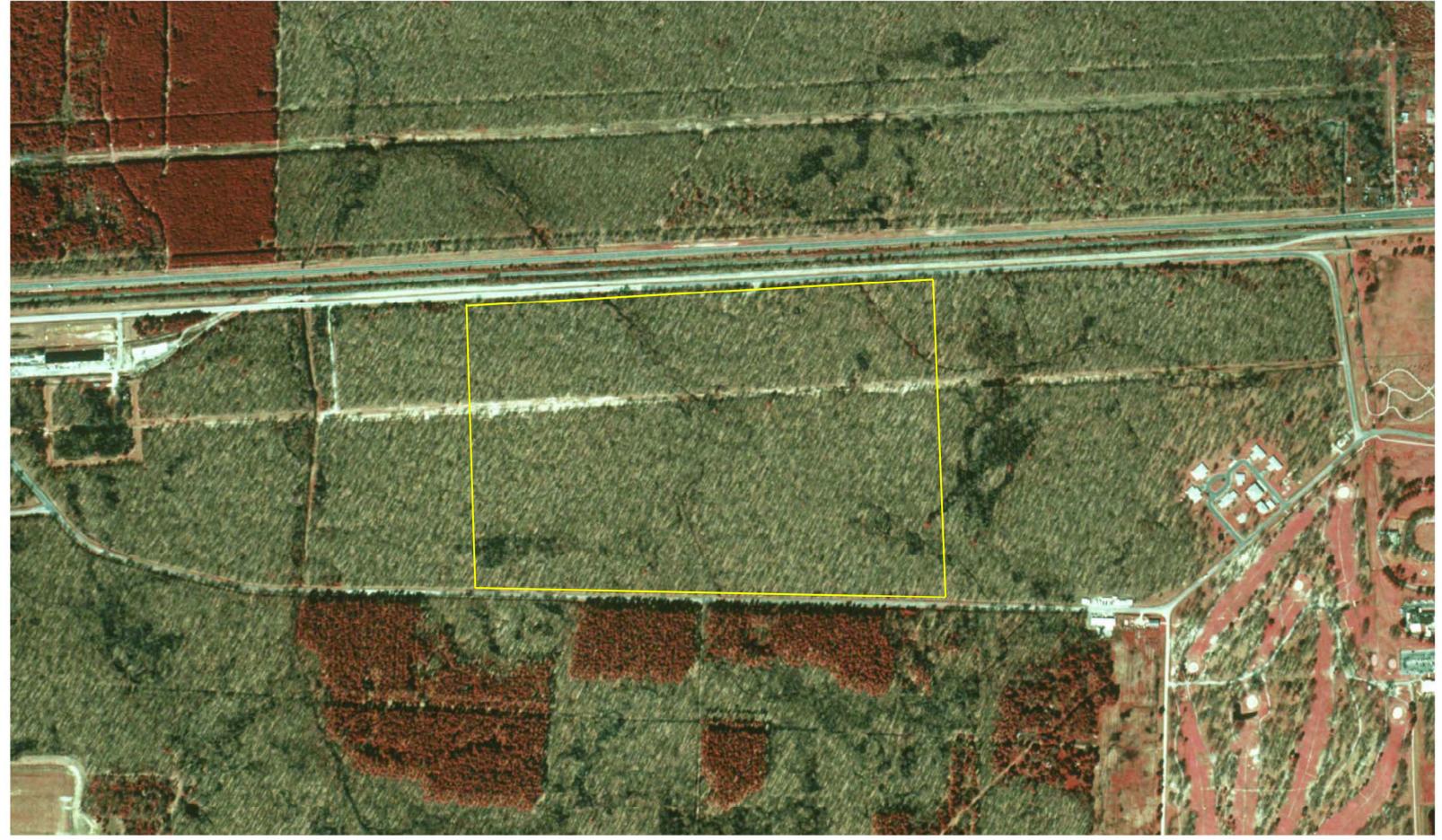


SITE: TAC-C 100 ACRE SITE SOURCE: ASCS DATE: 11-06-60 COUNTY: BOWIE, TX SCALE: 1" = 500"





SITE: TAC-C 100 ACRE SITE SOURCE: USGS DATE: 02-18-70 COUNTY: BOWIE, TX SCALE: 1" = 500'





SITE: TAC-C 100 ACRE SITE

SOURCE: USGS
DATE: 1996
COUNTY: BOWIE, TX
SCALE: 1" = 500'



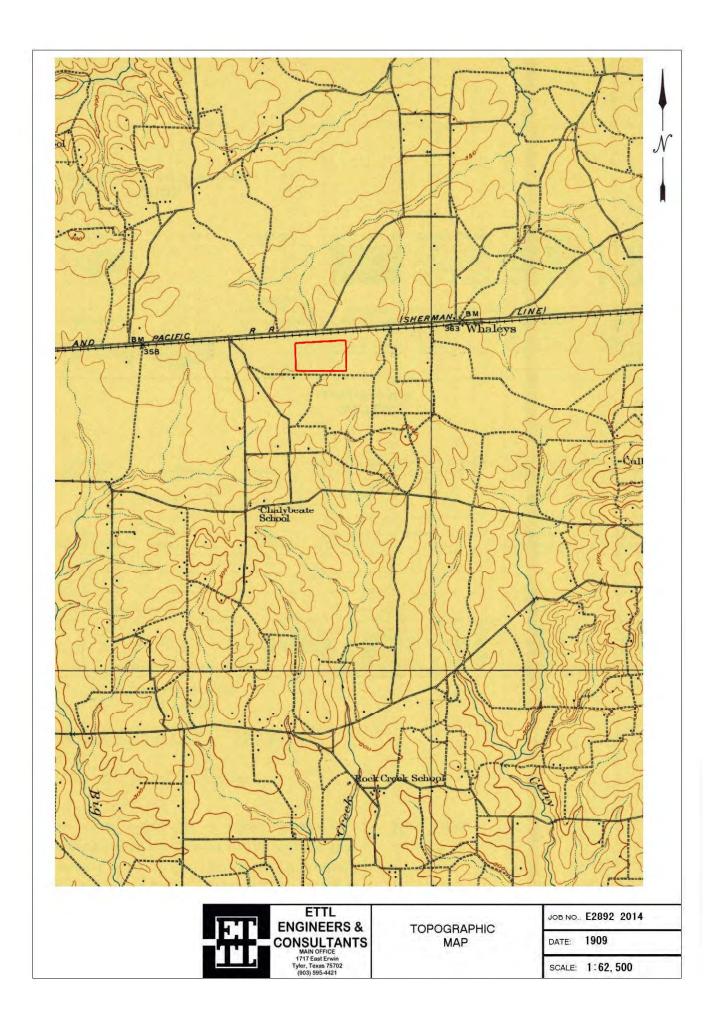


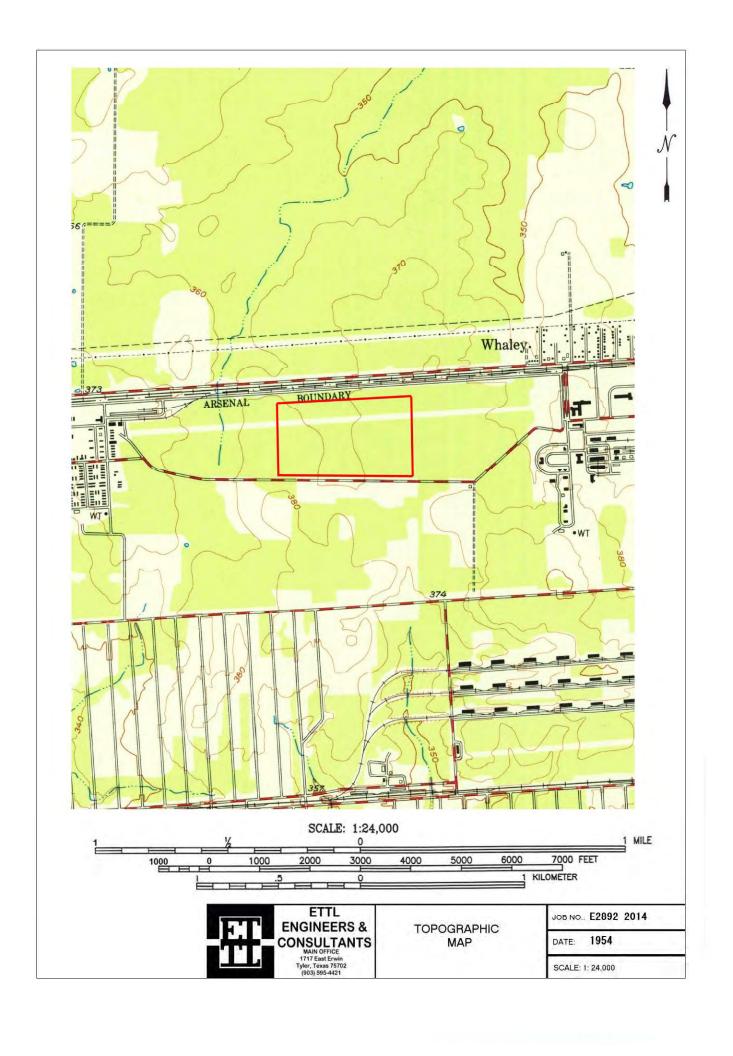
SITE: TAC-C 100 ACRE SITE SOURCE: USDA DATE: 2004 COUNTY: BOWIE, TX SCALE: 1" = 500'

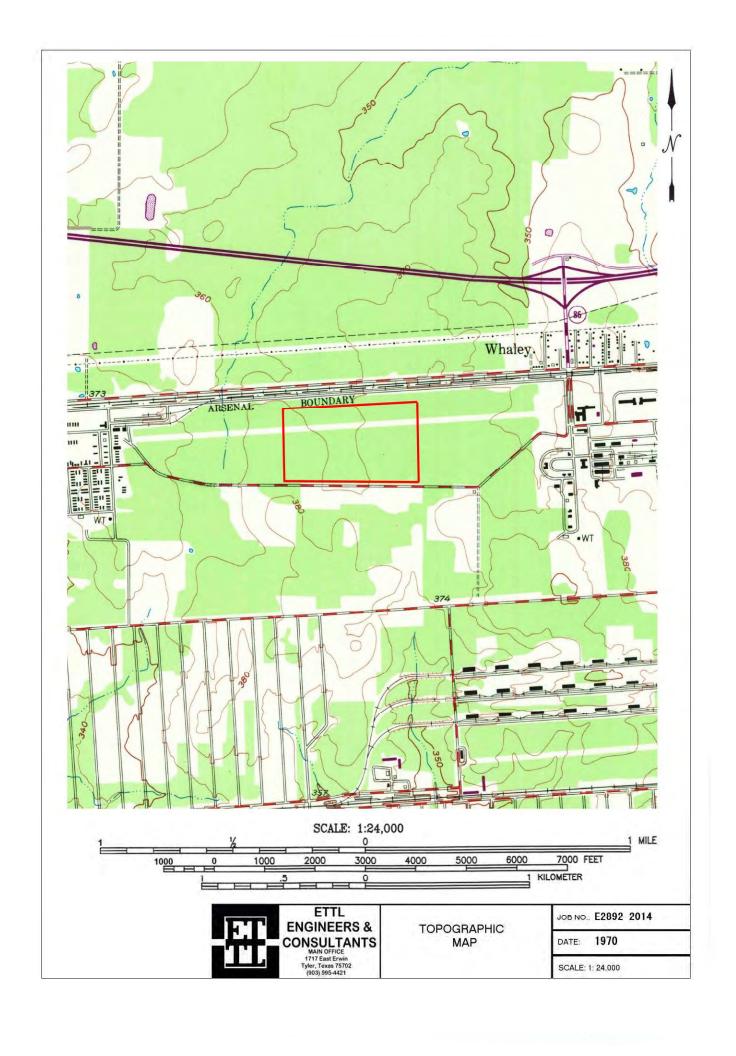


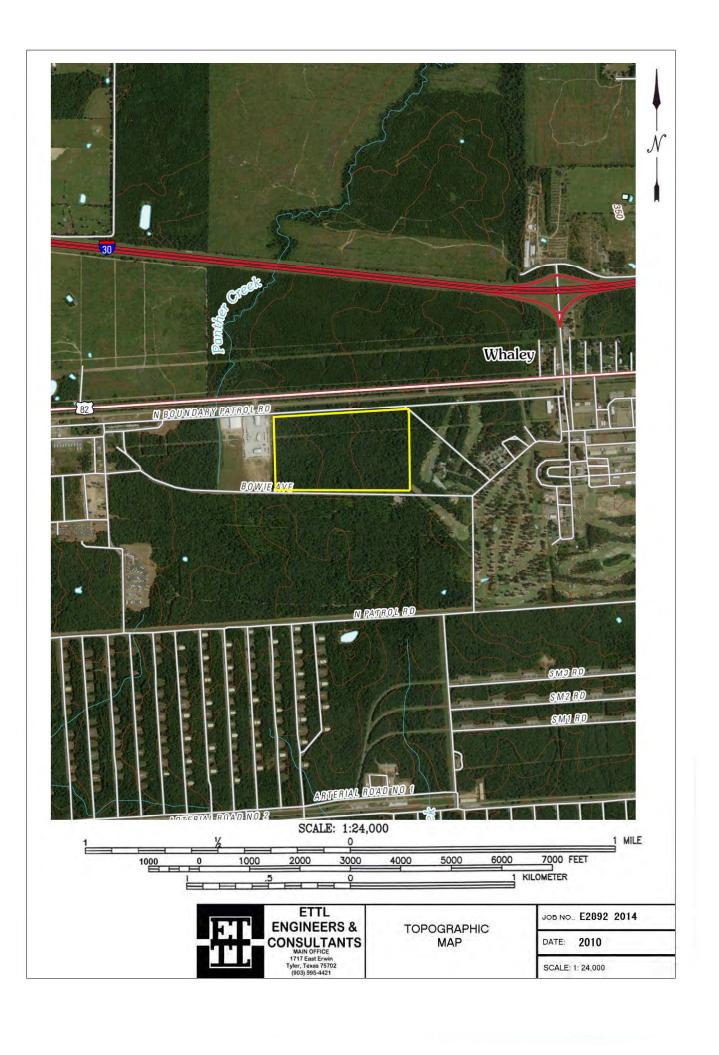


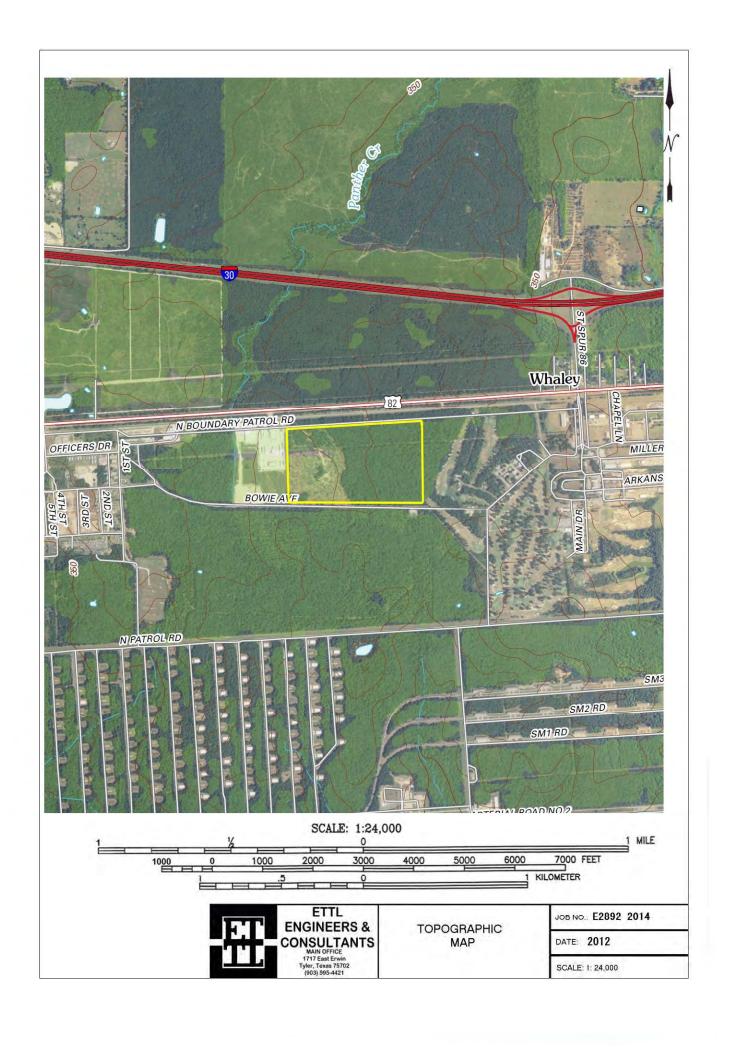
SITE: TAC-C 100 ACRE SITE SOURCE: USDA DATE: 2012 COUNTY: BOWIE, TX SCALE: 1" = 500'





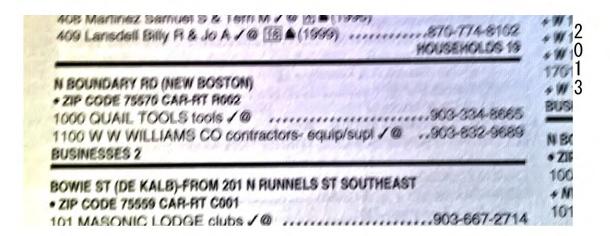






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28-0825 28-2167 28-3709	N BOUNDARY RD (NEW BOSTON)  • ZIP CODE 75570 CAR-RT R002  1000 QUAIL TOOLS tools	+1 15 + + +
:8-1676 :8-1676	BOWIE ST (DE KALB)-FROM 201 N RUNNELS ST SOUTHEAST  • ZIP CODE 75559 CAR-RT C001  101 MASONIC LODGE clubs	1

409 Lansdell Billy R & Jo A 15	
N BOUNDARY RD (NEW BOSTON)  • ZIP CODE 75570 CAR-RT R002  1000 QUAIL TOOLS tools  BUSINESSES 1	903-334-8665
BOWIE ST (DE KALB)-FROM 201 N RUNI  • ZIP CODE 75559 CAR-RT C001	NELS ST SOUTHEAST
101 MASONIC LODGE clubs	903-667-2714
THE D OVERDEDO HOME CARE INC	hama haalth sans 000 CC7 AEQ





City Directories JOB NO.: E2892-2014

DATE: Nov. 2014

# Appendix D

**Records of Communications** 

#### **Daniel Richbourg**

From: Scott Norton [scott.norton@texamericascenter.com]

Sent: Friday, November 07, 2014 4:38 PM

To: Daniel Richbourg

Subject: RE: Phase I Environmental Site Assessment - 101.56 Acres - TAC - C Property - North

**Boundary Road** 

Daniel.

Please find my answers below.

Thanks,

Scott Norton

Executive Director/CEO

TexAmericas Center 107 Chapel Lane New Boston, TX 75570 Office: (903) 223-9841 Fax: (903) 223-8742

Cell: (903) 276-2521

----Original Message----

From: Daniel Richbourg [mailto:drichbourg@ettlinc.com]

Sent: Thursday, November 06, 2014 10:32 AM

To: Scott Norton

Subject: Phase I Environmental Site Assessment - 101.56 Acres - TAC - C Property - North Boundary Road

Mr. Norton,

The Phase I ESA standard requires an interview with the current property owner as part of the ESA.

Mr. Williams with MTG Engineers indicated you were the best person with TexAmericas Center to contact in that regard.

If you could respond to the following questions at your earliest convenience that would be greatly appreciated.

- 1. TAC period of ownership? TAC acquired the property in 2000 following BRAC 1995.
- 2. Any development of the property during TAC period of ownership?--- aside from the AEP storage yard currently located on the western portion of the site. The only other development was the removal of timber.
- 3. Are you aware of the property uses prior to the TAC ownership? Other interviews indicate the property was used as a buffer zone between RRAD and the surrounding properties. That is my understanding as well.
- 4. I assume the military completed environmental assessment activities prior to the release of the property for sale or transfer, can you provide any records/documents relative to the subject site in that regard? It would be

good to have those documents in the ESA. The only documents we have are the deed documents and those don't really cover environmental issues.

- 5. Have any of the following items (or historical evidence of these items) been identified, discovered, or reported on the property during TAC ownership?
- a. Debris or waste items dumped, buried, or partially buried? Not to our knowledge ---(aside from question 7 below)
  - b. Fuel storage tanks (underground or aboveground? Not to our knowledge
  - c. Chemical containers or empty chemical containers of any size? Not to our knowledge
- d. Water wells --- either groundwater monitoring wells or groundwater recovery wells relative to monitoring of contamination from RRAD activities or historical water supply wells? Not to our knowledge
  - e. Oil/gas wells or development activities? Not to our knowledge
  - f. Military munitions or ordnance, storage, detonation, or firing range(s)? Not to our knowledge
  - g. Military bunkers or storage facilities? Not to our knowledge
  - h. Septic systems? Not to our knowledge
- i. Spills or releases of chemicals of any kind including fuels, herbicides, pesticides? Not to our knowledge
  - j. Pits, ponds, or lagoons utilized for waste storage, treatment, or disposal? Not to our knowledge
- j. Environmental concerns relative to adjacent properties- i.e. surface spills of fuel or other chemicals, contaminated groundwater migration toward the property, landfills, gas stations, dry-cleaners, photodeveloping laboratories, motor repair facilities? Not to our knowledge

The following are specific questions based upon the site reconnaissance last week.

- 6. During the site reconnaissance I saw two (2) small concrete pad areas--one at the northeast corner of the site and the other approximately 300 feet south of the first pad.

  I have attached a site diagram for your reference. They are small (10 feet by 10 feet or smaller) and relatively unfinished/unlevel. Near the southernmost concrete pad, there are 3-metal bollards filled with concrete. The bollards are situated in an L-shape and are spaced about 5 feet apart. Do you know of any small buildings previously on the site or what used to be at these locations? Maybe something related to former utilities? I have asked a few folks and no one so far knows why those items are in that location.
- 7. A relatively small area of debris piles containing asphalt, concrete, and soil are located on the northern portion of the site. Do you have any knowledge of the source of these materials (likely just illegal dumping since it is near the entrance ramp on the east side of the property)? I don't have any knowledge of where it came from and assume like you it is illegal dumping.
- 8. There are multiple tanker trailers parked along the road immediately south of the site. Are you aware of any of the contents or former contents of the trailers (i.e. fuel etc.)?

  Do you know how long the practice of parking/storing these trailers has occurred? Are you aware of any spills

Do you know how long the practice of parking/storing these trailers has occurred? Are you aware of any spills or leaks from the tanker(s)? Are you aware if the tankers are empty or full? The tankers have been there for several years and it is my understanding that all tankers are empty when they are parked on site. I assume like you that the former contents were some sort of fuel. I am not aware of any spills or leaks.

We appreciate your help and the opportunity to work with you, please let me know if you have any questions.

**Thanks** 

Daniel Richbourg ETTL Engineers and Consultants, Inc. 1717 East Erwin Street Tyler, TX 75702 903-595-4421 Ext. 232 903-595-6113- fax

#### RECORD OF COMMUNICATION

**Person interviewed:** Mr. David Williams

MTG Engineers & Surveyors ó performed worked on and near the property

903-838-8533

**Interviewed by:** Jeanie M. Odom, P.G.

**Communication type:** Telephone

**Date:** 10/27/2014 **Time:** 1413

**Subject of Communication:** Seeking information regarding site history and potential environmental problems on the site and in the area.

#### **Overview of Items Discussed:**

Mr. Williams has performed work for the subject site and nearby properties for over 10 years. The subject site is part of the BRAC 1995 project release and was transferred from the Army to civilian use between 1995 through 1997. He is not aware of any issues or spills with the subject site. The site was part of a buffer zone that was kept by the Army for the ammunition bunkers that are located approximately 0.4 miles south of the subject site. The western 35 acres of the subject site is currently leased to AEP (electrical company) as a lay down yard. AEP has occupied the subject site since May of this year. An abandoned sanitary sewer and a former electric line crossed the subject site in an east-west direction near the middle of the site.

The closest landfill to his knowledge is located approximately 2 miles southwest of the site. The landfill is closed and groundwater has been affected at the landfill facility. A plume management zone has been filed for the landfill with the Texas Commission on Environmental quality (TCEQ).

**Conclusions:** No potential environmental concerns were revealed during this interview.

#### RECORD OF COMMUNICATION

Person interviewed: Mr. Joe Nowell - AEP ó Transmission Construction Representative

Mr. Arron Plosser- AEP ó Field Services Specialist

903-720-0219 (JN) 918-200-1677 (AP)

**Interviewed by:** Daniel Richbourg

**Communication type:** Personal

**Date:** 10/30/14 **Time:** 1050, 1330

**Subject of Communication:** Seeking information regarding site history and potential environmental problems on the site and in the area.

#### **Overview of Items Discussed:**

Mr. Nowell indicated the western portion of the subject property had been used by AEP as a storage yard since June of 2014. Materials began arriving at the site in June or July 2014. No chemicals or fuel are stored on the property. No liquid containing materials are stored on-site. Mr. Plosser indicated the five (5)-gallon buckets observed on-site contain nuts/bolts and other assorted small fittings or hardware for ease of transport and handling. Mr. Nowell was not aware of any environmental concerns relative to the property. Water and sewer services are provided to the western portion of the site. The tool company (Quail Tools) has been located on adjacent property since at least 2013.

**Conclusions:** No environmental concerns were revealed during this interview.

#### RECORD OF COMMUNICATION

Person interviewed: Mr. Ross Ramsauer

BRAC Environmental Coordinator ó Red River Army Depot

john.r.ramsauer.civ@mail.mil

Interviewed by: Daniel Richbourg

Communication type: E-mail

**Date:** 11/17/14 **Time:** 1527

**Subject of Communication:** Seeking information regarding site history and potential environmental problems on the site and in the area.

#### **Overview of Items Discussed:**

Mr. Ramsauer provided the BRAC Environmental Baseline Survey Report in response to an email request for information. He also indicated that the tank trailers stored along Bowie Avenue are required to be empty before being stored on the base.

**Conclusions:** No potential environmental problems were revealed by this interview.

Appendix E

**Site Photographs** 



Looking south along the western property boundary. AEP portable office building is located in the foreground.



Looking north along the western property boundary from the southwest corner of the site.



Looking north along the western property boundary.



Looking east along southern property boundary from the southwest corner of the site.



Looking east along the southern property boundary.



Looking north along the eastern property boundary.



Looking west along the southern property boundary from the southeast corner of the site.



Looking south along the eastern property boundary.



Looking west along the northern property boundary.



AEP lay down materials on the western portion of the site.



Looking east along the northern property boundary.



AEP lay down materials on the western portion of the site.



Wooded area located on the southwestern portion of the site.



Wooded area near the drainage draw.



Drainage draw located on the central portion of the site.



Looking north across the eastern portion of the site.



Concrete pad located on the northeast portion of the site.



Fill materials observed on the northeast portion of the site.



Looking southwest across the eastern portion of the site.



Fill materials observed on the northeast portion of the site.



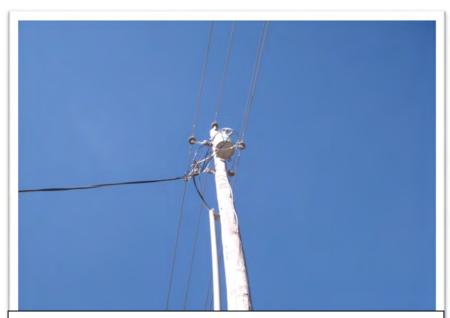
Fill materials observed on the northeast portion of the site.



Bollards located on the northeast portion of the site.



Concrete pad located at the northeast corner of the site.



Pole-mounted transformer located at the northwest corner of the site.



Quail Tools property located west of the site.



Fuel tankers parked along Bowie Avenue south of the site.



Wooded property located north of the site.



Military equipment parked along Bowie Avenue south of the site.

# Appendix F Regulatory Records Review



# Radius Report

Satellite view

Target Property:

TAC-C 100 Acre Site North Boundary Patrol Road New Boston, Bowie County, Texas 75561

Prepared For:

ETTL Engineers & Consultants Inc-Tyler

Order #: 42942 Job #: 94088

Project #: E 2892-2014

PO #: E 2892-2014 Date: 10/29/2014



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#### Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquires Rule (40 CFR §312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal, state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR §312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

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## **Target Property Summary**

TAC-C 100 Acre Site North Boundary Patrol Road New Boston, Bowie County, Texas 75561

USGS Quadrangle: **Hooks, TX**Target Property Geometry: **Area** 

Target Property Longitude(s)/Latitude(s):

(-94.353675, 33.462157), (-94.345515, 33.462703), (-94.345387, 33.457787), (-94.353836, 33.457852), (-94.353675, 33.462157)

County/Parish Covered:

Bowie (TX)

Zipcode(s) Covered: Hooks TX: 75561 New Boston TX: 75570

State(s) Covered:

TX

This report may have unlocatable records. Please see the Unlocatables Report, attached to this file.

<sup>\*</sup>Target property is located in Radon Zone 3.

Zone 3 areas have a predicted average indoor radon screening level less than 2 pCi/L (picocuries per liter).

## **FEDERAL LISTING**

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	<u>AIRSAFS</u>	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	<u>BRS</u>	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	<u>CDL</u>	0	0	TP/AP
EPA DOCKET DATA	<u>DOCKETS</u>	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	<u>EC</u>	0	0	TP/AP
EMERGENCY RESPONSE NOTIFICATION SYSTEM	<u>ERNSTX</u>	0	0	TP/AP
FACILITY REGISTRY SYSTEM	<u>FRSTX</u>	2	0	TP/AP
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR06	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	<u>ICIS</u>	0	1	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	<u>ICISNPDES</u>	0	1	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	<u>LUCIS</u>	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	<u>MLTS</u>	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR06	0	1	TP/AP
PCB ACTIVITY DATABASE SYSTEM	<u>PADS</u>	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR06	0	0	TP/AP
RCRA SITES WITH CONTROLS	<u>RCRASC</u>	0	0	TP/AP
CERCLIS LIENS	<u>SFLIENS</u>	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	<u>SSTS</u>	0	0	TP/AP
TOXICS RELEASE INVENTORY	<u>TRI</u>	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	<u>TSCA</u>	0	0	TP/AP
NO LONGER REGULATED RCRA GENERATOR FACILITIES	<u>NLRRCRAG</u>	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR FACILITIES	RCRAGR06	0	0	0.1250
HISTORICAL GAS STATIONS	<u>HISTPST</u>	0	0	0.2500
BROWNFIELDS MANAGEMENT SYSTEM	<u>BF</u>	0	0	0.5000
COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION & LIABILITY INFORMATION SYSTEM	CERCLIS	1	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	<u>DNPL</u>	0	0	0.5000
NO FURTHER REMEDIAL ACTION PLANNED SITES	<u>NFRAP</u>	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	<u>NLRRCRAT</u>	0	0	0.5000
OPEN DUMP INVENTORY	<u>ODI</u>	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	<u>DOD</u>	1	0	1.0000
FORMERLY USED DEFENSE SITES	<u>FUDS</u>	0	1	1.0000



Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
NATIONAL PRIORITIES LIST	<u>NPL</u>	1	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	<u>PNPL</u>	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	<u>RCRAC</u>	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	1	0	1.0000
SUB-TOTAL		6	4	

## STATE (TX) LISTING

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
GROUNDWATER CONTAMINATION CASES	<u>GWCC</u>	3	0	TP/AP
HISTORIC GROUNDWATER CONTAMINATION CASES	<u>HISTGWCC</u>	0	0	TP/AP
TCEQ LIENS	<u>LIENS</u>	0	0	TP/AP
MUNICIPAL SETTING DESIGNATIONS	<u>MSD</u>	0	0	TP/AP
NOTICE OF VIOLATIONS	NOV	2	0	TP/AP
STATE INSTITUTIONAL/ENGINEERING CONTROL SITES	SIEC01	0	0	TP/AP
SPILLS LISTING	<u>SPILLS</u>	0	0	TP/AP
TIER I I CHEMICAL REPORTING PROGRAM FACILITIES	<u>TIERII</u>	1	0	TP/AP
DRY CLEANER REGISTRATION DATABASE	<u>DCR</u>	0	0	0.2500
INDUSTRIAL AND HAZARDOUS WASTE SITES	<u>IHW</u>	1	0	0.2500
PERMITTED INDUSTRIAL HAZARDOUS WASTE SITES	<u>PIHW</u>	0	0	0.2500
PETROLEUM STORAGE TANKS	<u>PST</u>	1	0	0.2500
AFFECTED PROPERTY ASSESSMENT REPORTS	<u>APAR</u>	0	0	0.5000
BROWNFIELDS SITE ASSESSMENTS	<u>BSA</u>	0	0	0.5000
CLOSED & ABANDONED LANDFILL INVENTORY	CALF	0	0	0.5000
DRY CLEANER REMEDIATION PROGRAM SITES	<u>DCRPS</u>	0	0	0.5000
INNOCENT OWNER / OPERATOR DATABASE	<u>IOP</u>	0	0	0.5000
LEAKING PETROLEUM STORAGE TANKS	<u>LPST</u>	2	0	0.5000
MUNICIPAL SOLID WASTE LANDFILL SITES	<u>MSWLF</u>	2	0	0.5000
RAILROAD COMMISSION VCP AND BROWNFIELD SITES	<u>RRCVCP</u>	0	0	0.5000
RADIOACTIVE WASTE SITES	RWS	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM SITES	<u>VCP</u>	0	0	0.5000
RECYCLING FACILITIES	<u>WMRF</u>	0	0	0.5000
INDUSTRIAL AND HAZARDOUS WASTE CORRECTIVE ACTION SITES	<u>IHWCA</u>	1	0	1.0000
STATE SUPERFUND SITES	<u>SF</u>	0	0	1.0000
SUB-TOTAL		13	0	

## TRIBAL LISTING

Database	Acronym	Locatable	Uniocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	<u>USTR06</u>	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	<u>LUSTR06</u>	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	<u>ODINDIAN</u>	0	0	0.5000
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
		•		
SUB-TOTAL		0	0	
TOTAL		19	4	

## **FEDERAL LISTING**

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200		NS	NS	NS	NS	NS	0
BRS	0.0200		NS	NS	NS	NS	NS	0
CDL	0.0200		NS	NS	NS	NS	NS	0
DOCKETS	0.0200		NS	NS	NS	NS	NS	0
EC	0.0200		NS	NS	NS	NS	NS	0
ERNSTX	0.0200		NS	NS	NS	NS	NS	0
FRSTX	0.0200	2	NS	NS	NS	NS	NS	2
HMIRSR06	0.0200		NS	NS	NS	NS	NS	0
ICIS	0.0200		NS	NS	NS	NS	NS	0
ICISNPDES	0.0200		NS	NS	NS	NS	NS	0
LUCIS	0.0200		NS	NS	NS	NS	NS	0
MLTS	0.0200		NS	NS	NS	NS	NS	0
NPDESR06	0.0200		NS	NS	NS	NS	NS	0
PADS	0.0200		NS	NS	NS	NS	NS	0
PCSR06	0.0200		NS	NS	NS	NS	NS	0
RCRASC	0.0200		NS	NS	NS	NS	NS	0
SFLIENS	0.0200		NS	NS	NS	NS	NS	0
SSTS	0.0200		NS	NS	NS	NS	NS	0
TRI	0.0200		NS	NS	NS	NS	NS	0
TSCA	0.0200		NS	NS	NS	NS	NS	0
NLRRCRAG	0.1250		0	NS	NS	NS	NS	0
RCRAGR06	0.1250		0	NS	NS	NS	NS	0
HISTPST	0.2500		0	0	NS	NS	NS	0
BF	0.5000		0	0	0	NS	NS	0
CERCLIS	0.5000	1	0	0	0	NS	NS	1
DNPL	0.5000		0	0	0	NS	NS	0
NFRAP	0.5000		0	0	0	NS	NS	0
NLRRCRAT	0.5000		0	0	0	NS	NS	0
ODI	0.5000		0	0	0	NS	NS	0
RCRAT	0.5000		0	0	0	NS	NS	0
DOD	1.0000	1	0	0	0	0	NS	1
FUDS	1.0000		0	0	0	0	NS	0
NLRRCRAC	1.0000		0	0	0	0	NS	0
NPL	1.0000	1	0	0	0	0	NS	1
PNPL	1.0000		0	0	0	0	NS	0
RCRAC	1.0000		0	0	0	0	NS	0

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
RODS	1.0000	1	0	0	0	0	NS	1
SUB-TOTAL		6	0	0	0	0	0	6

## STATE (TX) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
GWCC	0.0200	3	NS	NS	NS	NS	NS	3
HISTGWCC	0.0200		NS	NS	NS	NS	NS	0
LIENS	0.0200		NS	NS	NS	NS	NS	0
MSD	0.0200		NS	NS	NS	NS	NS	0
NOV	0.0200	2	NS	NS	NS	NS	NS	2
SIEC01	0.0200		NS	NS	NS	NS	NS	0
SPILLS	0.0200		NS	NS	NS	NS	NS	0
TIERII	0.0200	1	NS	NS	NS	NS	NS	1
DCR	0.2500		0	0	NS	NS	NS	0
IHW	0.2500	1	0	0	NS	NS	NS	1
PIHW	0.2500		0	0	NS	NS	NS	0
PST	0.2500	1	0	0	NS	NS	NS	1
APAR	0.5000		0	0	0	NS	NS	0
BSA	0.5000		0	0	0	NS	NS	0
CALF	0.5000		0	0	0	NS	NS	0
DCRPS	0.5000		0	0	0	NS	NS	0
IOP	0.5000		0	0	0	NS	NS	0
LPST	0.5000	2	0	0	0	NS	NS	2
MSWLF	0.5000	2	0	0	0	NS	NS	2
RRCVCP	0.5000		0	0	0	NS	NS	0
RWS	0.5000		0	0	0	NS	NS	0
VCP	0.5000		0	0	0	NS	NS	0
WMRF	0.5000		0	0	0	NS	NS	0
IHWCA	1.0000	1	0	0	0	0	NS	1
SF	1.0000		0	0	0	0	NS	0
SUB-TOTAL		13	0	0	0	0	0	13

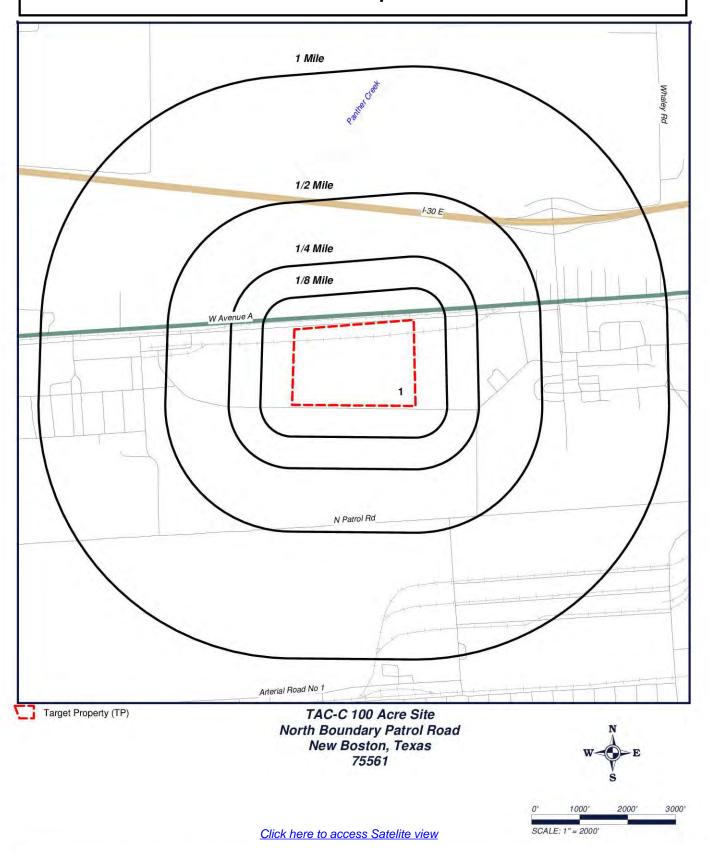
## TRIBAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR06	0.2500		0	0	NS	NS	NS	0
LUSTR06	0.5000		0	0	0	NS	NS	0
ODINDIAN	0.5000		0	0	0	NS	NS	0
INDIANRES	1.0000		0	0	0	0	NS	0
SUB-TOTAL			0	0	0	0	0	0

TOTAL	19	0	0	0	0	0	19

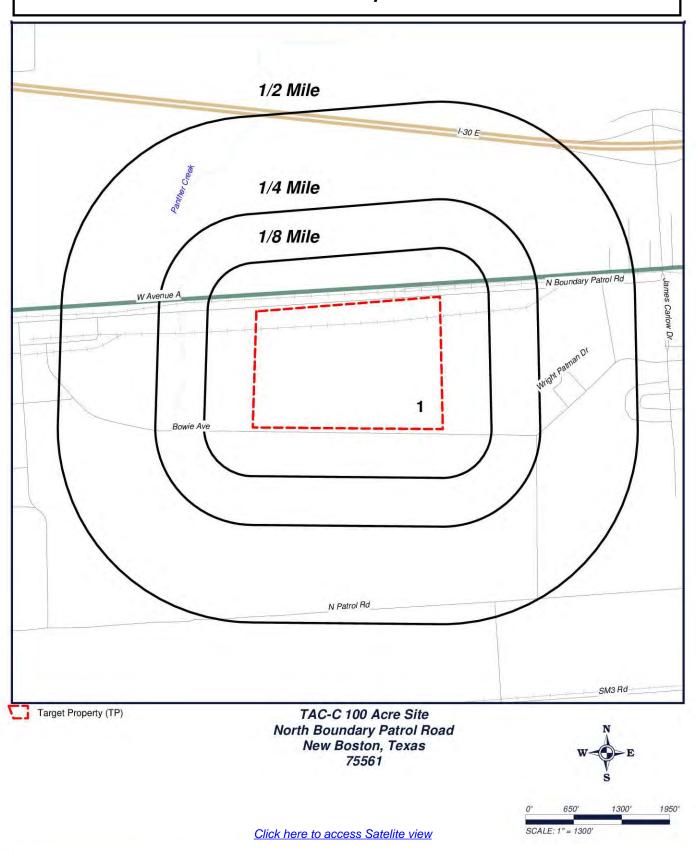
NOTES: NS = NOT SEARCHED TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

## Radius Map 1



GeoSearch www.geo-search.com 888-396-0042

## Radius Map 2



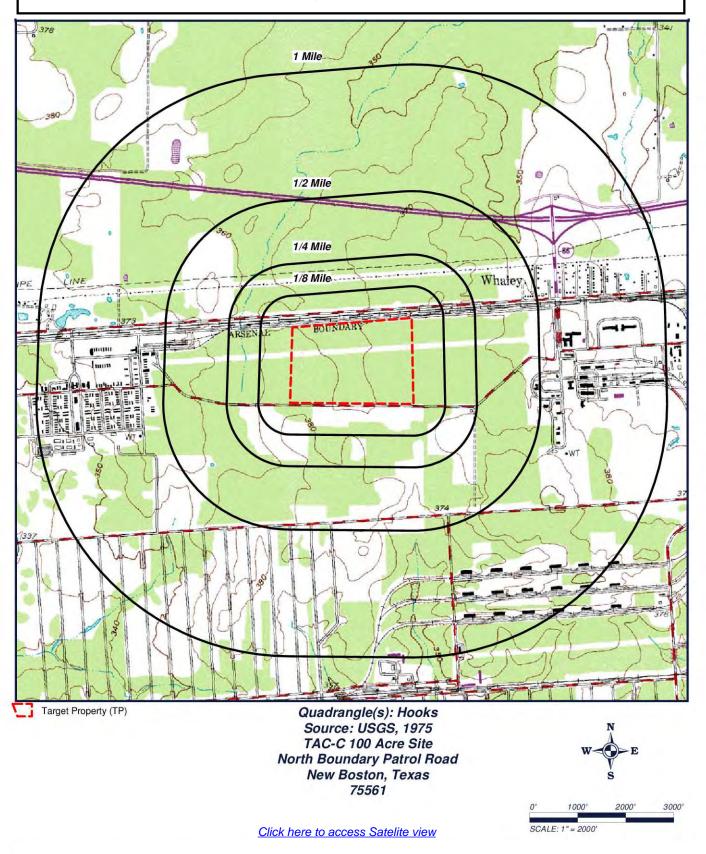
# Ortho Map



New Boston, Texas 75561

Click here to access Satelite view

# Topographic Map



# Report Summary of Locatable Sites

Map ID#	Database Name	Site ID#	Distance From Site	Site Name	Address	City, Zip Code	PAGE #
1	GWCC	1514201729	TP	LONE STAR ARMY AMMUNITION PLANT	HIGHWAY 82 W APPROXIMATELY 12 MI W	HOOKS, 75561	<u>15</u>
1	GWCC	TX7213821831	TP	LONE STAR ARMY AMMUNITION PLANT	HIGHWAY 82 W APPROXIMATELY 12 MI W	HOOKS, 75561	<u>16</u>
1	IHW	82805	TP	AMERICAN DEHYDRATED FOODS	LONE STAR AMMO DEPOT		<u>17</u>
1	IHWCA	30991	TP	LONE STAR ARMY AMMUNITION PLANT	HIGHWAY 82 W APPROXIMATELY 12 MI W		18
1	LPST	0000104	TP	LONE STAR ARMY AMMUNITIONS PLANT	W HWY 82	TEXARKANA, 75505	<u>19</u>
1	LPST	0017442	TP	LONE STAR ARMY AMMUNITION PLANT	W HWY 82	TEXARKANA, 75505	<u>40</u>
1	MSWLF	1898	TP	LONE STAR ARMY AMMUNITION PLANT LANDFILL	HWY 82 WEST	TEXARKANA, 75505	<u>41</u>
1	MSWLF	1314	TP	RED RIVER ARMY DEPOT TRANSFER STATION FA	2.5 MILES W OF HOOKS CITY LIMITS 3		<u>42</u>
1	NOV	RN101225464	TP	LONE STAR ARMY AMMUNITION PLANT			<u>43</u>
1	NOV	RN106304603	TP	AMERCIAN DEHYDRATED FOODS	LSAAP E-1	HOOKS, 75561	<u>54</u>
1	PST	21468	TP	RED RIVER ARMY DEPOT	100 MAIN ST	TEXARKANA, 75501	<u>55</u>
1	TIERII	96KPR1002WW7	TP	AMERICAN DEHYDRATED FOODS, INC.	LSAAP BUILDING E 480 OAK STREET	HOOKS, 75561	<u>86</u>
1	CERCLIS	TX7213821831	TP	LONE STAR ARMY AMMUNITION PLANT	HWY 82 W	TEXARKANA, 75501	<u>87</u>
1	DOD	46269	TP	RED RIVER ARMY DEPOT		, 75561	<u>97</u>
1	FRSTX	110041725185	TP	NEW BOSTON ARMY DEPOT SITE	APPROX 3.0 MILES EAST OF HWY 82 & N	NEW BOSTON, 75570	<u>98</u>
1	FRSTX	110035300821	TP	RED RIVER ARMY DEPOT	RED RIVER ARMY DEPOT	NEW BOSTON, 75570	<u>99</u>
1	NPL	TX7213821831	TP	LONE STAR ARMY AMMUNITION PLANT	HWY 82 W	TEXARKANA, 75501	<u>100</u>
1	RODS	TX7213821831	TP	LONE STAR ARMY AMMUNITION PLANT	HWY 82 W	TEXARKANA	<u>110</u>
1	GWCC	MSW01898	TP	LONE STAR ARMY AMMUNITION PLANT LANDFILL	LONE STAR ARMY AMMUNITION PLANT 11		<u>115</u>

### Groundwater Contamination Cases (GWCC)

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **FACILITY INFORMATION**

FILE NUMBER: 1514201729

FILE NAME: LONE STAR ARMY AMMUNITION PLANT

LOCATION: HIGHWAY 82 W APPROXIMATELY 12 MI W OF TEXARKANA, HOOKS

COUNTY: BOWIE

AGENCY: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DIVISION: **NOT REPORTED**DATE OF CONTAMINATION

CONFIRMATION BY AGENCY: 8/31/1999

CONTAMINANT(S): 2-AMINO-4, 6 DINITROTOLUENE, 4-AMINO-2, 6-DINITROTOLUENE, HIGH EXPLOSIVES, PERCHLORATE,

TRICHLOROETHYLENE, VOC

ENFORCEMENT STATUS: FEDERAL AGENCY ACTION: WHEN OTHER OPTIONS FAIL OR DO NOT APPLY, AN AGENCY CAN

LET FEDERAL AGENCIES SEEK RESOLUTION ACCORDING TO FEDERAL LAWS OR PROGRAMS.

ACTIVITY STATUS: NOT REPORTED

NEW CASE?: NO

**Back to Report Summary** 

### Groundwater Contamination Cases (GWCC)

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **FACILITY INFORMATION**

FILE NUMBER: TX7213821831

FILE NAME: LONE STAR ARMY AMMUNITION PLANT

LOCATION: HIGHWAY 82 W APPROXIMATELY 12 MI W OF TEXARKANA

COUNTY: BOWIE

AGENCY: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DIVISION: REMEDIATION DIVISION/ SUPERFUND CLEANUP PROGRAM, TCEQ

DATE OF CONTAMINATION

CONFIRMATION BY AGENCY: 08/31/99

CONTAMINANT(S): 2-AMINO-4, 6 DINITROTOLUENE, 4-AMINO-2, 6-DINITROTOLUENE

ENFORCEMENT STATUS: STATE OR FEDERAL FUNDS: THE AGENCY, BY UTILIZING SPECIAL FEDERAL FUNDS, FINANCES THE COST OF ADDRESSING CONTAMINATION INCIDENTS. THE FEDERAL "SUPERFUNDS" FOR ABANDONED WASTE SITES,

FOR EXAMPLE.

ACTIVITY STATUS: NOT REPORTED

NEW CASE?: NO

**Back to Report Summary** 

#### Industrial and Hazardous Waste Sites (IHW)

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

FACILITY INFORMATION OWNER INFORMATION

REGISTRATION#: **82805** EPA ID: **NOT REPORTED** NAME: TNRCC ID #: **99026** ADDRESS:

NAME: AMERICAN DEHYDRATED FOODS

ADDRESS: LONE STAR AMMO DEPOT PHONE:

**NOT REPORTED, TX** 

CONTACT: MARK DUNN PHONE: 903-8380366

BUSINESS DESCRIPTION: COLLECT EGG PRODUCT FROM HATCHERIES AND EXTRACT THE LIQUID EGG FOR FURTHER

PROCESSING. THIS REGISTRATION WAS INACTIVATED BECAUSE THE FACILITY WAS REGISTERED PRI

INDUSTRIAL WASTE PERMIT #: NOT REPORTED

MUNICIPAL WASTE PERMIT #: NOT REPORTED

SIC CODE: NOT REPORTED
WASTE GENERATOR: YES
WASTE RECEIVER: NO
WASTE TRANSPORTER: NO
TRANSFER FACILITY: NO

MAQUILADORA (MEXICAN FACILITY): NO

STATUS: INACTIVE

AMOUNT OF WASTE GENERATED: NOT A HW GENERATOR

GENERATOR TYPE: INDUSTRIAL THIS FACILITY IS A NOTIFIER

THIS FACILITY IS NOT A STEERS REPORTER - (STATE OF TEXAS ENVIRONMENTAL ELECTRONIC REPORTING SYSTEM)

THIS FACILITY IS NOT REQUIRED TO SUBMIT AN ANNUAL WASTE SUMMARY REPORT

THIS FACILITY IS NOT INVOLVED IN RECYCLING ACTIVITIES

LAST UPDATE TO TRACS (TCEQ REGULATORY ACTIVITIES AND COMPLIANCE SYSTEM): 08/25/2003

**ACTIVITIES** 

ACTIVITY TYPE: UNKNOWN

**ACTIVITY DESCRIPTION: NOT REPORTED** 

**WASTE** 

WASTE ID: 97197

WASTE CODE STATUS: INACTIVE
WASTE IS RADIOACTIVE: NO
WASTE IS TREATED OFF SITE: YES

GENERATOR'S DESCRIPTION OF WASTE: EGG SHELL WASTE FROM HATCHERIES AFTER THE FREE LIQUID IS EXTRACTED;

3/94

WASTE ID: 328144

WASTE CODE STATUS: NOT REPORTED

WASTE IS RADIOACTIVE: **NO**WASTE IS TREATED OFF SITE: **NO** 

GENERATOR'S DESCRIPTION OF WASTE: NOT REPORTED

**Back to Report Summary** 



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### Industrial and Hazardous Waste Corrective Action Sites (IHWCA)

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

PROGRAM ID: **30991**RN NUMBER: **RN101225464** 

NAME: LONE STAR ARMY AMMUNITION PLANT

ADDRESS: HIGHWAY 82 W APPROXIMATELY 12 MI W OF TEXARKANA

**NOT REPORTED, TX** 

STATUS: ACTIVE
STATUS DATE: 12/08/98
LOCATION DESCRIPTION:

HIGHWAY 82 W APPROXIMATELY 12 MI W OF TEXARKANA

**Back to Report Summary** 

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **FACILITY INFORMATION**

Geosearch ID: **0000104** FACILITY ID: **0000104** 

NAME: LONE STAR ARMY AMMUNITIONS PLANT

ADDRESS: W HWY 82

**TEXARKANA, TX 75505** 

FACILITY DETAILS

LPST ID#: 102748

NAME: LONE STAR ARMY AMMUNITIONS PLANT

FACILITY LOCATION: W HWY 82

PRIORITY CODE: (5) MINOR SOIL CONTAMINATION - DOES NOT REQUIRE A REMEDIAL ACTION PLAN (RAP)

STATUS CODE: (6A) FINAL CONCURRENCE ISSUED, CASE CLOSED

REPORTED DATE: 11/12/91
ENTERED DATE: 05/18/92
PRP INFORMATION

NAME: LONE STAR ARMY AMMUNITIONS

ADDRESS: W HWY 82

**TEXARKANA TX 75505** 

CONTACT: DAVID SELF PHONE: 903/334-1308

LPST ID#: 093630

NAME: LONE STAR ARMY AMMUNITION PLANT

FACILITY LOCATION: W HWY 82

PRIORITY CODE: (4.2) NO GROUNDWATER IMPACT, NO APPARENT THREATS OR IMPACTS TO RECEPTORS

STATUS CODE: (6A) FINAL CONCURRENCE ISSUED, CASE CLOSED

REPORTED DATE: 09/21/89
ENTERED DATE: 09/27/89
PRP INFORMATION

NAME: US ARMY LONE STAR AMMO PLANT ADDRESS: SIOLS TO ATTENTION DAVID

**TEXARKANA TX 75505** 

CONTACT: DAVID SELF PHONE: 903/334-1308

LPST ID#: 092366

NAME: LONE STAR ARMY AMMUNITION PLANT FACILITY LOCATION: OLD GASOLINE STATION

PRIORITY CODE: (3.5) A DISIGNATED MAJOR OR MINOR AQUIFER IS IMPACTED

STATUS CODE: (6A) FINAL CONCURRENCE ISSUED, CASE CLOSED

REPORTED DATE: 11/23/88
ENTERED DATE: 12/07/88
PRP INFORMATION

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NAME: USARMY LONE STAR AMMO PLANT ADDRESS: ATTENTIO N SOSLS TD HWY 82

**TEXARKANA TX 75505** 

CONTACT: DAVID SELF PHONE: 903/334-1308

LPST ID#: 091312

NAME: LONE STAR ARMY AMMUNITION PLT

FACILITY LOCATION: W HWY 82

PRIORITY CODE: (4.1) GROUNDWATER IMPACTED, NO APPARENT THREATES OR IMPACTS TO RECEPTORS

STATUS CODE: (6P) FINAL CONCURRENCE PENDING DOCUMENTATION OF WELL PLUGGING

REPORTED DATE: 05/21/87
ENTERED DATE: 05/21/87
PRP INFORMATION

NAME: LONE STAR AMMO PLANT ARMY ADDRESS: ATTENTIO N SOSLS TO HWY 82

**TEXARKANA TX 75505** 

CONTACT: DAVID SELF PHONE: 903/334-1308

LPST ID#: 091225

NAME: LONE STAR ARMY AMMUNITION PLANT

FACILITY LOCATION: HWY 82

PRIORITY CODE: (4A) SOIL CONTAMINATION ONLY, REQUIRES FULL SITE ASSESSMENT & REMEDIAL ACTION PLAN (RAP)

STATUS CODE: (6A) FINAL CONCURRENCE ISSUED, CASE CLOSED

REPORTED DATE: 02/09/87
ENTERED DATE: 02/09/87
PRP INFORMATION

NAME: LONE STAR AMMO PLANT ARMY ADDRESS: SIOLS TO ATTENTION DAVID

**TEXARKANA TX 75505** 

CONTACT: DAVID SELF PHONE: 903/334-1308

#### **UNDERGROUND STORAGE TANK**

TANK ID: 1 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 3000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **02/20/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS

MATERIAL:

NOT REPORTED



CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53018

TANK ID: 1

COMPARTMENT LETTER: A SUBSTANCES: GASOLINE

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 3000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 2 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 1000 EMPTY TANK: NOT EMPTY
STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 02/20/1992

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS
MATERIAL:

**NOT REPORTED** 

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53017

TANK ID: 2

COMPARTMENT LETTER: A SUBSTANCES: GASOLINE

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 1000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 3 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 1000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **02/20/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS MATERIAL:

NOT REPORTED

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53016

TANK ID: 3

COMPARTMENT LETTER: A SUBSTANCES: GASOLINE

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 1000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED



**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 4 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 1000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **02/20/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS

MATERIAL: **NOT REPORTED** 

NOT KEI OKTED

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53015

TANK ID: 4

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 1000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 5 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1935 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 10000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **02/01/1992** 

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INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO

PIPE DESIGN SINGLE WALL: NO

PIPE DESIGN DOUBLE WALL: NO

PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

NOT REPORTED

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53034

TANK ID: 5

COMPARTMENT LETTER: A SUBSTANCES: GASOLINE

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 10000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 6 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1981 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 10000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **02/01/1992**INTERNAL PROTECTION DATE: **NOT REPORTED** REGULATORY STATUS: **FULLY REGULATED** 

TANK DESIGN SINGLE WALL: NO

PIPE DESIGN SINGLE WALL: NO

PIPE DESIGN DOUBLE WALL: NO

PIPE DESIGN DOUBLE WALL: NO

**TANK DETAILS** 

MATERIAL:

**NOT REPORTED** 

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

#### **NOT REPORTED**

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53033

TANK ID: 6

COMPARTMENT LETTER: A SUBSTANCES: GASOLINE

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 10000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 7 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 10000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **02/28/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO

PIPE DESIGN SINGLE WALL: NO

PIPE DESIGN DOUBLE WALL: NO

PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS
MATERIAL:

**NOT REPORTED** 

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53032

TANK ID: 7

COMPARTMENT LETTER: A SUBSTANCES: GASOLINE

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 10000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 8 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 10000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **02/27/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

NOT REPORTED

CORROSION PROTECTION:

NOT REPORTED

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53031

TANK ID: 8

COMPARTMENT LETTER: A SUBSTANCES: GASOLINE

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 10000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 9 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 55 EMPTY TANK: **NOT EMPTY** 

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **10/01/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS

MATERIAL:

NOT REPORTED

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53030

TANK ID: 9

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 55

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 10 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 50 EMPTY TANK: **NOT EMPTY**STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **10/01/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

GeoSearch www.geo-search.com 888-396-0042

**TANK DETAILS** 

MATERIAL:

**NOT REPORTED** 

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53029

TANK ID: 10

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 50

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 11 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 55 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **10/01/1992** 

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DETAILS MATERIAL:

NOT REPORTED

CORROSION PROTECTION:

NOT REPORTED

EXTERNAL CONTAINMENT:

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

**COMPARTMENT DETAILS** 

**UST COMPARTMENT ID: 53028** 

TANK ID: 11

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 55

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 12 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 50 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: 10/01/1992

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

**TANK DETAILS** 

MATERIAL:

NOT REPORTED

NOT KEI OKTED

CORROSION PROTECTION:

NOT REPORTED

EXTERNAL CONTAINMENT:

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53027

TANK ID: 12

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 50

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 



MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 13 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 50 EMPTY TANK: NOT EMPTY

STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 10/01/1992

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS

MATERIAL: **NOT REPORTED** 

CORROSION PROTECTION:

NOT REPORTED

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53026

TANK ID: 13

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 50

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

NOT REPORTED

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 14 NUMBER OF COMPARTMENTS: 1

INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 50 EMPTY TANK: **NOT EMPTY**STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **10/01/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

**NOT REPORTED** 

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53025

TANK ID: 14

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 50

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 15 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1983 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 110 EMPTY TANK: NOT EMPTY
STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 02/14/1995

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: YES TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: YES PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS
MATERIAL:
STEEL



CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53024

TANK ID: 15

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 110

COMPARTMENT RELEASE DETECTION: WEEKLY MANUAL TANK GAUGING (TANKS <= 1000 GAL)

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

PIPING SYSTEMS

MATERIAL: STEEL

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 16 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 55 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **10/01/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS MATERIAL:

NOT REPORTED

CORROSION PROTECTION:

NOT REPORTED

EXTERNAL CONTAINMENT:

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53023

TANK ID: 16

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 55

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 17 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 50 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **10/01/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS
MATERIAL:

NOT REPORTED

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53022

TANK ID: 17

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 50

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED



**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 18 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 50 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **10/01/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

NOT REPORTED

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53021

TANK ID: 18

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 50

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 19 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 50 EMPTY TANK: NOT EMPTY

STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 10/01/1992

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INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO

PIPE DESIGN SINGLE WALL: NO

PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

**NOT REPORTED** 

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53020

TANK ID: 19

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 50

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 20 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 50 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: 10/01/1992

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

**TANK DETAILS** 

MATERIAL:

**NOT REPORTED** 

CORROSION PROTECTION:

NOT REPORTED

**EXTERNAL CONTAINMENT:** 

#### **NOT REPORTED**

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53019

TANK ID: 20

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 50

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 21 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 50 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **10/01/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS
MATERIAL:

**NOT REPORTED** 

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53037

TANK ID: 21

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 50

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 22 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1946 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 50 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **10/01/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

NOT REPORTED

CORROSION PROTECTION:

NOT REPORTED

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53036

TANK ID: 22

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 50

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 23 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1936 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 50 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **02/21/1992** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS

MATERIAL:

CONCRETE

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 53035

TANK ID: 23

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 50

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

**ABOVEGROUND STORAGE TANK INFORMATION** 

AST ID #: 150191 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 1 REGISTRATION DATE: 05/08/86

INSTALLATION DATE: 01/01/91 STATUS BEGIN DATE: 09/01/10

TANK CAPACITY (GAL): 10000 REGULATORY STATUS: FULLY REGULATED

STATUS: OUT OF USE SUBSTANCES: GASOLINE

**MATERIAL OF CONSTRUCTION** 



STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO** CONCRETE: **YES**CONTAINMENT LINER: **NO** NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 150193 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 2 REGISTRATION DATE: 05/08/86

INSTALLATION DATE: 01/01/91 STATUS BEGIN DATE: 09/01/10

TANK CAPACITY (GAL): 10000 REGULATORY STATUS: FULLY REGULATED

STATUS: OUT OF USE SUBSTANCES: GASOLINE

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO** CONCRETE: **YES**CONTAINMENT LINER: **NO** NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 150192 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 3 REGISTRATION DATE: 05/08/86

INSTALLATION DATE: 01/01/91 STATUS BEGIN DATE: 09/01/10

TANK CAPACITY (GAL): 10000 REGULATORY STATUS: FULLY REGULATED

STATUS: OUT OF USE SUBSTANCES: DIESEL

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO** CONCRETE: **YES**CONTAINMENT LINER: **NO** NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

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**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **FACILITY INFORMATION**

Geosearch ID: **0017442** FACILITY ID: **0017442** 

NAME: LONE STAR ARMY AMMUNITION PLANT

ADDRESS: W HWY 82

**TEXARKANA, TX 75505** 

FACILITY DETAILS

LPST ID#: 095655

NAME: LONE STAR ARMY AMMUNITION PLANT

FACILITY LOCATION: W HWY 82

PRIORITY CODE: (4.2) NO GROUNDWATER IMPACT, NO APPARENT THREATS OR IMPACTS TO RECEPTORS

STATUS CODE: (6A) FINAL CONCURRENCE ISSUED, CASE CLOSED

REPORTED DATE: 04/19/90
ENTERED DATE: 06/01/90
PRP INFORMATION

NAME: US ARMY LONE STAR AMMO PLANT

ADDRESS: SIOLS TD

**TEXARKANA TX 75505** 

CONTACT: DAVID SELF PHONE: 903/334-1308

#### **UNDERGROUND STORAGE TANK**

NO UNDERGROUND STORAGE TANK DATA REPORTED FOR THIS FACILITY

#### **ABOVEGROUND STORAGE TANK INFORMATION**

NO ABOVEGROUND STORAGE TANK DATA REPORTED FOR THIS FACILITY

**Back to Report Summary** 

### Municipal Solid Waste Landfill Sites (MSWLF)

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **FACILITY INFORMATION**

PERMIT#: 1898

NAME: LONE STAR ARMY AMMUNITION PLANT LANDFILL

ADDRESS: HWY 82 WEST

**TEXARKANA, TX 75505** 

COUNTY: BOWIE
FACILITY DETAILS

FACILITY TYPE #: LANDFILL FACILITY
PHYSICAL FACILITY STATUS: INACTIVE
LEGAL STATUS: ISSUED - START 04/07/1986
REFERENCE NUMBER(RN): RN102777919

REGION: REGION 05 - TYLER

**Back to Report Summary** 

### Municipal Solid Waste Landfill Sites (MSWLF)

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **FACILITY INFORMATION**

PERMIT#: 1314

NAME: RED RIVER ARMY DEPOT TRANSFER STATION FACILITY

ADDRESS: 2.5 MILES W OF HOOKS CITY LIMITS 3 MILES E OF NEW BOSTON CITY LIMITS

**NOT REPORTED, TX** 

COUNTY: BOWIE
FACILITY DETAILS

FACILITY TYPE #: PERMITTED TRANSFER STATION

PHYSICAL FACILITY STATUS: CLOSED

LEGAL STATUS: WITHDRAWN - START 06/25/1979

REFERENCE NUMBER(RN): RN102334182

REGION: REGION 05 - TYLER

**Back to Report Summary** 

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### SITE INFORMATION

REFERENCE #: **RN101225464**CUSTOMER #: **CN600126262** 

NAME: LONE STAR ARMY AMMUNITION PLANT

ADDRESS: **NOT REPORTED**CITY: **NOT REPORTED** 

STATE: TX

ZIPCODE: NOT REPORTED

COUNTY: BOWIE

**BUSINESS: AMMUNITION MANUFACTURING** 

CONTACT: ROSS RAMSAUER

SITE DETAILS

VIOLATION ISSUED: 07/20/11

CATEGORY: MINOR
MEDIA: WASTE
STATUS: RESOLVED

ALLEGATION:

DURING THE CME INVESTIGATION PERFORMED FROM MAY 9 THRU MAY 12, 2011, AT LSAAP THE FOLLOWING AREA OF CONCERN WAS OBSERVED. MONITOR WELLS, XX-7, CDG-12, CDG-15, WERE NOT SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELL BOREHOLE AND GROUNDWATER. ACCORDING TO THE COMPLIANCE PLAN (CP), EACH WELL SHALL BE SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELL BOREHOLE AND GROUNDWATER.

RESOLUTION DESCRIPTION:

ON MAY 10 AND 12, 2011, MR. ROSS RAMSAUER, BRAC ENVIRONMENTAL COORDINATOR AND MR. DAVID SELF, ENVIRONMENTAL COORDINATOR, LSAAP PROVIDED CORRECTIVE ACTION DOCUMENTATION OF THE MONITOR WELLS, XX-7, CDG-12, CDG-15, WERE SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELL BOREHOLE AND GROUNDWATER. BASED ON THE INFORMATION PROVIDED, THE AREA OF CONCERN IS RESOLVED AND NO FURTHER ACTION IS REQUIRED AT THIS TIME.

VIOLATION ISSUED: 07/20/11

CATEGORY: MINOR
MEDIA: WASTE
STATUS: RESOLVED

ALLEGATION:

FAILURE TO HAVE WATER LEVELS MEASURED FROM THE SURVEYED DATUM ON TOP OF THE WELL CASING.

RESOLUTION DESCRIPTION:

ON MAY 31, 2011, MR. ROSS RAMSAUER, BRAC ENVIRONMENTAL COORDINATOR, LSAAP PROVIDED CORRECTIVE ACTION DOCUMENTATION THAT THE WATER LEVELS WILL BE MEASURED FROM THE SURVEYED DATUM ON TOP OF THE WELL CASING. BASED ON THE INFORMATION PROVIDED, THE AREA OF CONCERN IS RESOLVED AND NO FURTHER ACTION IS REQUIRED AT THIS TIME.

VIOLATION ISSUED: 07/20/11

CATEGORY: MINOR
MEDIA: WASTE

STATUS: RESOLVED

ALLEGATION:

FAILURE TO CONDUCT SAMPLING FROM WELLS OF KNOWN OR SUSPECTED LOW CONTAMINATION TO WELLS OF HIGHER CONTAMINATION.

RESOLUTION DESCRIPTION:

ON MAY 31, 2011, MR. ROSS RAMSAUER, BRAC ENVIRONMENTAL COORDINATOR, LSAAP PROVIDED CORRECTIVE ACTION DOCUMENTATION THAT THE SAMPLING FROM WELLS OF KNOWN OR SUSPECTED LOW CONTAMINATION TO WELLS OF HIGHER CONTAMINATION WOULD BE ADDRESSED. BASED ON THE INFORMATION PROVIDED, THE AREA OF CONCERN IS RESOLVED AND NO FURTHER ACTION IS REQUIRED AT THIS TIME.

VIOLATION ISSUED: 07/20/11

CATEGORY: MINOR
MEDIA: WASTE
STATUS: RESOLVED

ALLEGATION:

FAILURE TO PERFORM PURGING AND SAMPLING OF THE MONITORING WELLS USING LOW-FLOW PUMPS AT A RATE OF 100 "300 ML/MIN UNTIL THE AQUIFER WATER QUALITY PARAMETERS STABILIZE.

**RESOLUTION DESCRIPTION:** 

ON MAY 31, 2011, MR. ROSS RAMSAUER, BRAC ENVIRONMENTAL COORDINATOR, LSAAP PROVIDED CORRECTIVE ACTION DOCUMENTATION THAT IT WILL PERFORM PURGING AND SAMPLING OF THE MONITORING WELLS USING LOW-FLOW PUMPS AT A RATE OF 100 - 300 ML/MIN UNTIL THE AQUIFER WATER QUALITY PARAMETERS STABILIZE. BASED ON THE INFORMATION PROVIDED, THE AREA OF CONCERN IS RESOLVED AND NO FURTHER ACTION IS REQUIRED AT THIS TIME.

VIOLATION ISSUED: 07/20/11

CATEGORY: MINOR
MEDIA: WASTE
STATUS: RESOLVED

ALLEGATION:

FAILURE TO HAVE ALL SAMPLING EQUIPMENT PROTECTED FROM CONTACT WITH THE GROUND SURFACE BY POLYETHYLENE PLASTIC SHEETING PLACED AROUND THE WELL HEAD.

**RESOLUTION DESCRIPTION:** 

ON MAY 31, 2011, MR. ROSS RAMSAUER, BRAC ENVIRONMENTAL COORDINATOR, LSAAP PROVIDED CORRECTIVE ACTION DOCUMENTATION THAT ALL SAMPLING EQUIPMENT WILL BE PROTECTED FROM CONTACT WITH THE GROUND SURFACE BY POLYETHYLENE PLASTIC SHEETING BEING PLACED AROUND THE WELL HEAD. BASED ON THE INFORMATION PROVIDED, THE AREA OF CONCERN IS RESOLVED AND NO FURTHER ACTION IS REQUIRED AT THIS TIME.

VIOLATION ISSUED: 07/20/11

CATEGORY: MINOR
MEDIA: WASTE
STATUS: RESOLVED
ALLEGATION:

FAILURE TO PREVENT THE CONTENTS TRANSFERRED TO THE SAMPLE CONTAINER IN A WAY THAT WILL MINIMIZE AGITATION AND AERATION.

RESOLUTION DESCRIPTION:

ON MAY 31, 2011, MR. ROSS RAMSAUER, BRAC ENVIRONMENTAL COORDINATOR, LSAAP PROVIDED CORRECTIVE ACTION DOCUMENTATION THAT ALL SAMPLING EQUIPMENT WILL PREVENT THE CONTENTS TRANSFERRED TO THE SAMPLE CONTAINER IN A WAY THAT WILL MINIMIZE AGITATION AND AERATION. BASED ON THE INFORMATION PROVIDED, THE

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#### AREA OF CONCERN IS RESOLVED AND NO FURTHER ACTION IS REQUIRED AT THIS TIME.

VIOLATION ISSUED: 07/20/11

CATEGORY: MINOR
MEDIA: WASTE
STATUS: RESOLVED

ALLEGATION:

FAILURE TO CALIBRATE MEASURING EQUIPMENT ACCORDING TO MFG. SPECIFICATIONS & CONSISTENT WITH SW-846. RESOLUTION DESCRIPTION:

ON MAY 31, 2011, MR. ROSS RAMSAUER, BRAC ENVIRONMENTAL COORDINATOR, LSAAP PROVIDED CORRECTIVE ACTION DOCUMENTATION ALL SAMPLING EQUIPMENT CALIBRATION MEASURING OF EQUIPMENT IN THE FIELD WILL BE PERFORMED ACCORDING TO MFG. SPECIFICATIONS & CONSISTENT WITH SW-846. BASED ON THE INFORMATION PROVIDED, THE AREA OF CONCERN IS RESOLVED AND NO FURTHER ACTION IS REQUIRED AT THIS TIME.

VIOLATION ISSUED: 04/04/11

CATEGORY: MINOR
MEDIA: WATER
STATUS: RESOLVED

ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 04/04/11

CATEGORY: MINOR MEDIA: WATER STATUS: RESOLVED

ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 04/04/11

CATEGORY: MINOR
MEDIA: WATER
STATUS: RESOLVED

ALLEGATION:

Order# 42942 Job# 94088 45 of 133

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 12/17/10

CATEGORY: MINOR
MEDIA: WATER
STATUS: ACTIVE
ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 12/17/10

CATEGORY: MINOR
MEDIA: WATER
STATUS: ACTIVE
ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 12/17/10

CATEGORY: MINOR
MEDIA: WATER
STATUS: ACTIVE
ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS

CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 12/17/10

CATEGORY: MINOR
MEDIA: WATER
STATUS: ACTIVE
ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 12/17/10

CATEGORY: MINOR
MEDIA: WATER
STATUS: ACTIVE
ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 12/17/10

CATEGORY: MINOR
MEDIA: WATER
STATUS: ACTIVE
ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 12/17/10

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CATEGORY: MINOR
MEDIA: WATER
STATUS: ACTIVE
ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 12/17/10

CATEGORY: MINOR
MEDIA: WATER
STATUS: ACTIVE
ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 12/17/10

CATEGORY: MINOR
MEDIA: WATER
STATUS: ACTIVE
ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 01/20/10

CATEGORY: MINOR

MEDIA: AIR

STATUS: RESOLVED

ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED



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AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 01/20/10 CATEGORY: MODERATE

MEDIA: AIR

STATUS: RESOLVED

ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 12/28/09

CATEGORY: MINOR
MEDIA: WASTE
STATUS: RESOLVED
ALLEGATION:

EAU UDE TO 1

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 12/28/09

CATEGORY: MINOR
MEDIA: WASTE
STATUS: RESOLVED

ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

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RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 12/28/09

CATEGORY: MINOR MEDIA: WASTE STATUS: RESOLVED

ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 12/28/09

CATEGORY: MINOR
MEDIA: WASTE
STATUS: ACTIVE
ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 05/23/08

CATEGORY: MINOR
MEDIA: WASTE
STATUS: RESOLVED

ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

NOT REPORTED

VIOLATION ISSUED: 05/23/08

CATEGORY: MINOR

Order# 42942 Job# 94088 50 of 133

MEDIA: WASTE STATUS: RESOLVED

ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 05/23/08

CATEGORY: MINOR MEDIA: WASTE STATUS: RESOLVED

ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 05/23/08

CATEGORY: MINOR
MEDIA: WASTE
STATUS: RESOLVED
ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

NOT REPORTED

VIOLATION ISSUED: 05/23/08

CATEGORY: MINOR
MEDIA: WASTE
STATUS: RESOLVED

ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR.

RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 05/23/08 CATEGORY: MODERATE

MEDIA: **WASTE** STATUS: **RESOLVED** 

ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 02/08/08

CATEGORY: MAJOR
MEDIA: WATER
STATUS: ACTIVE
ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:

**NOT REPORTED** 

VIOLATION ISSUED: 11/08/07

CATEGORY: MAJOR MEDIA: WATER STATUS: ACTIVE ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

RESOLUTION DESCRIPTION:



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#### **NOT REPORTED**

VIOLATION ISSUED: 11/08/07

CATEGORY: MAJOR MEDIA: WATER

STATUS: **ACTIVE** ALLEGATION:

FAILURE TO PROPERLY MAINTAIN GROUNDWATER MONITORING WELLS TO ENSURE THAT EACH WELL IS SECURED AND/OR DESIGNED TO MAINTAIN THE INTEGRITY OF THE WELLBORE AND GROUNDWATER. ON AUGUST 10, 2006, MR. RODERICK SEWELL, LSAAP, PROVIDED AN E-MAIL RESPONSE WITH ATTACHED PHOTOGRAPHS AS DOCUMENTATION THAT THE CORRODED HINGE ON WELL BG-22 HAD BEEN REPLACED AND THE OUTSIDE OF THE METAL, PROTECTIVE CASING ON WELL ESP-2 HAD BEEN PAINTED TO PREVENT CORROSION. THEREFORE, THE ALLEGED VIOLATION IS CONSIDERED TO BE RESOLVED AND NO FURTHER ACTION IS REQUIRED.

**RESOLUTION DESCRIPTION:** 

**NOT REPORTED** 

**Back to Report Summary** 

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **SITE INFORMATION**

REFERENCE #: **RN106304603**CUSTOMER #: **CN600887285** 

NAME: AMERCIAN DEHYDRATED FOODS

ADDRESS: LSAAP E-1

CITY: HOOKS

STATE: TX

ZIPCODE: 75561

COUNTY: BOWIE

BUSINESS: NOT REPORTED CONTACT: MARK DUNN

**SITE DETAILS** 

VIOLATION ISSUED: 12/22/11 CATEGORY: MODERATE

MEDIA: WATER STATUS: RESOLVED

ALLEGATION:

 ${\tt FAILURE\ TO\ OBTAIN\ AUTHORIZATION\ FOR\ DISCHARGES\ OF\ STORM\ WATER\ ASSOCIATED\ WITH\ INDUSTRIAL\ ACTIVITY.}$ 

RESOLUTION DESCRIPTION:

ADF SUBMITTED AN NOI FOR PERMIT COVERAGE TO THE TCEQ ON NOVEMBER 11, 2011. A COPY OF THE NOI WAS SENT TO THE INVESTIGATOR ON DECEMBER 16, 2011.

**Back to Report Summary** 

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **FACILITY INFORMATION**

ID#: 21468

NAME: RED RIVER ARMY DEPOT

ADDRESS: 100 MAIN ST

TEXARKANA, TX 75501

COUNTY: BOWIE

REGION: 5

TYPE: FLEET REFUELING
BEGIN DATE: 09/15/86
STATUS: ACTIVE
EXEMPT STATUS: NO
RECORDS OFF-SITE: NO

NUMBER OF ACTIVE UNDERGROUND TANKS: NOT REPORTED

NUMBER OF ACTIVE ABOVEGROUND TANKS: 17

APPLICATION INFORMATION:

RECEIVED DATE ON EARLIEST REGISTRATION FORM: 04/04/86 SIGNATURE DATE ON EARLIEST REGISTRATION FORM: 04/01/86 SIGNATURE NAME & TITLE: C R WILCOX, FACIL ENGINEER

ENFORCEMENT ACTION DATE: NOT REPORTED

**OWNER** 

OWNER NUMBER: CN600126262

NAME: US DEPARTMENT OF THE ARMY

CONTACT ADDRESS: 1733 PLEASONTON RD BLDG 622

FORT BLISS TX 79916

TYPE: FEDERAL GOVERNMENT

BEGIN DATE: 09/15/1986 CONTACT ROLE: OWNCON

CONTACT NAME: VICKI HAMILTON CONTACT TITLE: NOT REPORTED

ORGANIZATION: US DEPARTMENT OF THE ARMY

PHONE: (915) 5682774

FAX: NOT REPORTED

EMAIL: NOT REPORTED

**OPERATOR** 

OPERATOR NUMBER: CN600126262

NAME: US DEPARTMENT OF THE ARMY

CONTACT ADDRESS: 2016 S 45TH ST

MCALLEN TX 78503

TYPE: FEDERAL GOVERNMENT

BEGIN DATE: 09/15/86
CONTACT ROLE: OPRCON
CONTACT NAME: LUIS SALAS

CONTACT TITLE: PROJECT MANAGER

CONTACT INFORMATION

NAME: RON WILLIAMS
TITLE: NOT REPORTED

ORGANIZATION: RED RIVER ARMY DEPOT

MAIL ADDRESS: MAILING ADDRESS NOT REPORTED

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ORGANIZATION: US DEPARTMENT OF THE ARMY

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**SELF-CERTIFICATION** 

-NO SELF-CERTIFICATION INFORMATION REPORTED-

**CONSTRUCTION NOTIFICATION** 

NOTIFICATION CONSTRUCTION ID: 5312
APPLICATION RECEIVED DATE: 04/12/10
SCHEDULE CONSTRUCTION DATE: 04/16/10

GENERAL DESCRIPTION OF PROPOSED CONSTRUCTION:

ABANDON IN PLACE, PURGE AND CAP THE EXISTING UNDERGROUND DOUBLE-WALL 2" FIBERGLA SS-REINFORCED PLASTIC (FRP) PIPE THAT RUNS FROM ABOVEGROUND STORAGE TANKS TO DIS PENSERS. INSTALL DOUBLE WALL PERMA-PIPE SYSTEM IN ITS PLACE. PERMA-PIPE IS A DOU BLE-WAL

NOTIFICATION CONSTRUCTION ID: 5313
APPLICATION RECEIVED DATE: 11/07/07
SCHEDULE CONSTRUCTION DATE: 12/07/07

GENERAL DESCRIPTION OF PROPOSED CONSTRUCTION:

**NOT REPORTED** 

**UNDERGROUND STORAGE TANK** 

TANK ID: 158 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1942 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 5000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **05/31/1993** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: YES TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: YES PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS
MATERIAL:
STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

NOT REPORTED

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 64657

TANK ID: 158

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 5000

COMPARTMENT RELEASE DETECTION: **GROUNDWATER MONITORING** SPILL CONTAINMENT AND OVERFILL PREVENTION: **NOT REPORTED** 

**PIPING SYSTEMS** 



MATERIAL: STEEL

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 160 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1942 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 12000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **05/31/1993** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: YES TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: YES PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

**STEEL** 

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 64656

**TANK ID: 160** 

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 12000

COMPARTMENT RELEASE DETECTION: **GROUNDWATER MONITORING**SPILL CONTAINMENT AND OVERFILL PREVENTION: **NOT REPORTED** 

PIPING SYSTEMS

MATERIAL: STEEL

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 175 NUMBER OF COMPARTMENTS: 1

INSTALLATION DATE: 01/01/1985 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 1000 EMPTY TANK: NOT EMPTY
STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 06/30/1993

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: YES TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: YES PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 65337

TANK ID: 175

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 1000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

PIPING SYSTEMS

MATERIAL: STEEL

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 185 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 08/31/1987 REGISTRATION DATE: 06/30/1993

TANK CAPACITY (GAL): 2500 EMPTY TANK: NOT EMPTY
STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 06/30/1993

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**TANK DESIGN DOUBLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS

MATERIAL:

NOT REPORTED



CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 65338

**TANK ID: 185** 

COMPARTMENT LETTER: A SUBSTANCES: UNKNOWN

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 2500

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 232 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1951 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 10000 EMPTY TANK: NOT EMPTY
STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 07/30/1987

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS
MATERIAL:
STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 64665

**TANK ID: 232** 

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 10000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 234 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1951 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 5000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **07/30/1987** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 64664

**TANK ID: 234** 

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 5000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED



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**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 319 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1942 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 40000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **08/30/1987** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS

MATERIAL:

STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 64663

**TANK ID: 319** 

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 40000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 333 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1986 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 4030 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: 12/02/1993

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INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: YES TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: YES PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

**FRP** 

CORROSION PROTECTION:

FRP TANK OR PIPING (NONCORRODIBLE)

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: YES CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 64662

**TANK ID: 333** 

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 4030

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: STEEL

CORROSION PROTECTION: EXTERNAL DIELECTRIC COATING/LAMINATE/TAPE/WRAP

EXTERNAL CONTAINMENT: NOT REPORTED.

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: EXTERNAL DIELECTRIC COATING/LAMINATE/TAPE/WRAP

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 344 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1984 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 4000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: 12/02/1993

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: YES TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: YES PIPE DESIGN DOUBLE WALL: NO

**TANK DETAILS** 

MATERIAL:

FRP

CORROSION PROTECTION:

FRP TANK OR PIPING (NONCORRODIBLE)

EXTERNAL CONTAINMENT:

#### **NOT REPORTED**

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: YES CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 64661

**TANK ID: 344** 

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 4000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

PIPING SYSTEMS

MATERIAL: STEEL

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 349 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 08/31/1987 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 500 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **06/30/1993** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS MATERIAL:

NOT REPORTED

CORROSION PROTECTION:

NOT REPORTED

**EXTERNAL CONTAINMENT:** 

NOT REPORTED

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 65339

TANK ID: 349

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 500

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 354 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1981 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 4000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **06/30/1993** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: YES TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: YES PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

FRP

CORROSION PROTECTION:

FRP TANK OR PIPING (NONCORRODIBLE)

EXTERNAL CONTAINMENT:

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: YES CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 64660

TANK ID: 354

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 4000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

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PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 389 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1950 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 1050 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **07/31/1987** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS
MATERIAL:
STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS

UST COMPARTMENT ID: 64659

**TANK ID: 389** 

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 1050

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 391 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1966 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 2100 EMPTY TANK: NOT EMPTY
STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 07/01/1987

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

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**TANK DETAILS** 

MATERIAL:

**STEEL** 

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 64658

**TANK ID: 391** 

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 2100

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 404 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1942 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 6000 EMPTY TANK: NOT EMPTY

STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 09/30/1980

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

**TANK DETAILS** 

MATERIAL:

STEEL

CORROSION PROTECTION:

NOT REPORTED

EXTERNAL CONTAINMENT:

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE



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**COMPARTMENT DETAILS** 

UST COMPARTMENT ID: 64666

**TANK ID: 404** 

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 6000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 448 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1942 REGISTRATION DATE: 05/01/1987

TANK CAPACITY (GAL): 1450 EMPTY TANK: NOT EMPTY

STATUS: **PERM FILLED IN PLACE** STATUS BEGIN DATE: **05/01/1987** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS

MATERIAL:

STEEL

CORROSION PROTECTION:

NOT REPORTED

**EXTERNAL CONTAINMENT:** 

NOT REPORTED

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 64668

**TANK ID: 448** 

COMPARTMENT LETTER: A SUBSTANCES: DIESEL

OTHER SUBSTANCES: **NOT REPORTED** CAPACITY (GAL): **NOT REPORTED** 

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 



MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 560 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1981 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 110 EMPTY TANK: NOT EMPTY

STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 08/31/1993

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: YES TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: YES PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 64667

**TANK ID: 560** 

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 110

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

PIPING SYSTEMS

MATERIAL: STEEL

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 596 NUMBER OF COMPARTMENTS: 1

INSTALLATION DATE: 01/01/1954 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 10000 EMPTY TANK: NOT EMPTY
STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 08/01/1987

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 65331

**TANK ID: 596** 

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 10000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 638 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1942 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 10000 EMPTY TANK: NOT EMPTY
STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 09/01/1987

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS
MATERIAL:
STEEL



CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 65333

**TANK ID: 638** 

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 10000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 651 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1942 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 1400 EMPTY TANK: NOT EMPTY

STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 08/01/1987

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS

MATERIAL:

STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 65332

TANK ID: 651

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 1400

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 661 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1944 REGISTRATION DATE: 01/01/1983

TANK CAPACITY (GAL): 1000 EMPTY TANK: NOT EMPTY

STATUS: **PERM FILLED IN PLACE** STATUS BEGIN DATE: **01/01/1983** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 65330

TANK ID: 661

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED CAPACITY (GAL): NOT REPORTED

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED



**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 675 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1942 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 5000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **05/30/1987** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 65329

TANK ID: 675

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 5000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 718 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1974 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 110 EMPTY TANK: NOT EMPTY

STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 09/30/1993

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INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: YES TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: YES PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 65328

TANK ID: 718

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 110

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

PIPING SYSTEMS

MATERIAL: STEEL

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 911 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1942 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): **7500** EMPTY TANK: **NOT EMPTY** 

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **06/30/1987**INTERNAL PROTECTION DATE: **NOT REPORTED** REGULATORY STATUS: **FULLY REGULATED** 

TANK DESIGN SINGLE WALL: NO

PIPE DESIGN SINGLE WALL: NO

PIPE DESIGN DOUBLE WALL: NO

PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

#### **NOT REPORTED**

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 64670

**TANK ID: 911** 

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 7500

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 957 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1963 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 3000 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **06/30/1987** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS
MATERIAL:
STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 64669

TANK ID: 957

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 3000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 1542 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1942 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 11750 EMPTY TANK: NOT EMPTY

STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 06/30/1987

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

TANK DETAILS

MATERIAL:

STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

EXTERNAL CONTAINMENT:

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 65334

TANK ID: 1542

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 11750

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 1543 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1942 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 11750 EMPTY TANK: NOT EMPTY

STATUS: **REMOVED FROM GROUND** STATUS BEGIN DATE: **06/30/1987** 

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: **NO**PIPE DESIGN SINGLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO**PIPE DESIGN DOUBLE WALL: **NO** 

TANK DETAILS

MATERIAL:

STEEL

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

COMPARTMENT DETAILS
UST COMPARTMENT ID: 65336

TANK ID: 1543

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 11750

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

TANK ID: 2453 NUMBER OF COMPARTMENTS: 1
INSTALLATION DATE: 01/01/1942 REGISTRATION DATE: 05/08/1986

TANK CAPACITY (GAL): 4000 EMPTY TANK: NOT EMPTY
STATUS: REMOVED FROM GROUND STATUS BEGIN DATE: 06/30/1987

INTERNAL PROTECTION DATE: NOT REPORTED REGULATORY STATUS: FULLY REGULATED

TANK DESIGN SINGLE WALL: NO TANK DESIGN DOUBLE WALL: NO PIPE DESIGN SINGLE WALL: NO PIPE DESIGN DOUBLE WALL: NO

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#### **TANK DETAILS**

MATERIAL:

**STEEL** 

CORROSION PROTECTION:

**NOT REPORTED** 

**EXTERNAL CONTAINMENT:** 

**NOT REPORTED** 

**TANK COMPLIANCE FLAG** 

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

**COMPARTMENT DETAILS** 

UST COMPARTMENT ID: 65335

TANK ID: 2453

COMPARTMENT LETTER: A SUBSTANCES: EMPTY

OTHER SUBSTANCES: NOT REPORTED

CAPACITY (GAL): 4000

COMPARTMENT RELEASE DETECTION: NOT REPORTED

SPILL CONTAINMENT AND OVERFILL PREVENTION: NOT REPORTED

**PIPING SYSTEMS** 

MATERIAL: NOT REPORTED

CORROSION PROTECTION: NOT REPORTED EXTERNAL CONTAINMENT: NOT REPORTED

**CONNECTORS & VALVES:** 

**NOT REPORTED** 

CORROSION PROTECTION: NOT REPORTED

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: NO CORROSION PROTECTION VARIANCE: NO VARIANCE

#### **ABOVEGROUND STORAGE TANK INFORMATION**

AST ID #: 152472 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 1027 REGISTRATION DATE: 01/03/90

INSTALLATION DATE: 01/01/90 STATUS BEGIN DATE: 06/01/90

TANK CAPACITY (GAL): 4000 REGULATORY STATUS: FULLY REGULATED

STATUS: OUT OF USE SUBSTANCES: EMPTY

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO** CONCRETE: **YES**CONTAINMENT LINER: **NO** NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 213270 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 1651 REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 02/01/08 STATUS BEGIN DATE: 02/01/08

TANK CAPACITY (GAL): 2000 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: DIESEL

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO**CONTAINMENT LINER: **YES**NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152457 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 283 REGISTRATION DATE: 04/04/86

INSTALLATION DATE: 01/01/74 STATUS BEGIN DATE: 02/12/03

TANK CAPACITY (GAL): 5000 REGULATORY STATUS: FULLY REGULATED

STATUS: OUT OF USE SUBSTANCES: GASOLINE

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO**CONCRETE: **NO**CONTAINMENT LINER: **NO**NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 213268 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 343A1 REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 05/01/07 STATUS BEGIN DATE: 05/01/07

TANK CAPACITY (GAL): 1200 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: AVIATION GASOLINE

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO** CONCRETE: **YES**CONTAINMENT LINER: **NO** NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152456 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 381 REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 01/01/80

TANK CAPACITY (GAL): 12000 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: GASOLINE

**MATERIAL OF CONSTRUCTION** 



STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO** CONCRETE: **YES**CONTAINMENT LINER: **NO** NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152461 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 382 REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 01/01/80

TANK CAPACITY (GAL): 17500 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: GASOLINE

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO**CONCRETE: **NO**CONTAINMENT LINER: **NO**NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152451 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 383 REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 01/01/80

TANK CAPACITY (GAL): 12000 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: GASOLINE

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO** CONCRETE: **YES**CONTAINMENT LINER: **NO** NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152454 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 384 REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 01/01/80

TANK CAPACITY (GAL): 17500 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: GASOLINE

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT



EARTHEN DIKE: **NO**CONCRETE: **NO**CONTAINMENT LINER: **NO**NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152458 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 385 REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 01/01/80

TANK CAPACITY (GAL): 12000 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: DIESEL

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO** CONCRETE: **YES**CONTAINMENT LINER: **NO** NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152459 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 386 REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 01/01/80

TANK CAPACITY (GAL): 17500 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: GASOLINE

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: NO CONCRETE: NO
CONTAINMENT LINER: NO NONE: NO
STAGE I VAPOR RECOVERY: NOT REPORTED
STAGE I INSTALLATION DATE: NOT REPORTED

AST ID #: 152463 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 387 REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 01/01/80

TANK CAPACITY (GAL): 13000 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: DIESEL

**MATERIAL OF CONSTRUCTION** 

STEEL: YES CORRUGATED METAL: NO FIBERGLASS: NO CONCRETE: NO

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO** CONCRETE: **YES**CONTAINMENT LINER: **NO** NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 



AST ID #: 152455 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 390 REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 01/01/80

TANK CAPACITY (GAL): 9950 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: GASOLINE

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO** CONCRETE: **YES**CONTAINMENT LINER: **NO** NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152453 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 503 REGISTRATION DATE: 04/04/86

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 02/12/03

TANK CAPACITY (GAL): 10927 REGULATORY STATUS: FULLY REGULATED

STATUS: OUT OF USE SUBSTANCES: DIESEL

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO**CONCRETE: **NO**CONTAINMENT LINER: **NO**NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152464 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 504 REGISTRATION DATE: 04/04/86

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 02/12/03

TANK CAPACITY (GAL): 10038 REGULATORY STATUS: FULLY REGULATED

STATUS: OUT OF USE SUBSTANCES: DIESEL

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: NO CONCRETE: NO
CONTAINMENT LINER: NO NONE: NO
STAGE I VAPOR RECOVERY: NOT REPORTED
STAGE I INSTALLATION DATE: NOT REPORTED

AST ID #: 152469 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 512 REGISTRATION DATE: 04/04/86

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 02/12/03

TANK CAPACITY (GAL): 10039 REGULATORY STATUS: FULLY REGULATED

STATUS: OUT OF USE SUBSTANCES: DIESEL

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: NO CONCRETE: NO
CONTAINMENT LINER: NO NONE: NO
STAGE I VAPOR RECOVERY: NOT REPORTED
STAGE I INSTALLATION DATE: NOT REPORTED

AST ID #: 152466 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 513 REGISTRATION DATE: 04/04/86

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 02/12/03

TANK CAPACITY (GAL): 10046 REGULATORY STATUS: FULLY REGULATED

STATUS: OUT OF USE SUBSTANCES: DIESEL

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO**CONCRETE: **NO**CONTAINMENT LINER: **NO**NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152467 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 514 REGISTRATION DATE: 04/04/86

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 02/12/03

TANK CAPACITY (GAL): 10056 REGULATORY STATUS: FULLY REGULATED

STATUS: OUT OF USE SUBSTANCES: DIESEL

MATERIAL OF CONSTRUCTION

STEEL: YES CORRUGATED METAL: NO FIBERGLASS: NO CONCRETE: NO

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO**CONCRETE: **NO**CONTAINMENT LINER: **NO**NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152465 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 515 REGISTRATION DATE: 04/04/86

INSTALLATION DATE: 01/01/80 STATUS BEGIN DATE: 02/12/03

TANK CAPACITY (GAL): 7066 REGULATORY STATUS: FULLY REGULATED

STATUS: OUT OF USE SUBSTANCES: DIESEL

MATERIAL OF CONSTRUCTION

STEEL: YES CORRUGATED METAL: NO FIBERGLASS: NO CONCRETE: NO



ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO**CONCRETE: **NO**CONTAINMENT LINER: **NO**NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152468 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 524A REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/87 STATUS BEGIN DATE: 01/01/87

TANK CAPACITY (GAL): 5000 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: DIESEL

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO**CONCRETE: **NO**CONTAINMENT LINER: **NO**NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152452 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 524B REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/87 STATUS BEGIN DATE: 01/01/87

TANK CAPACITY (GAL): 20000 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: DIESEL

MATERIAL OF CONSTRUCTION

STEEL: YES CORRUGATED METAL: NO FIBERGLASS: NO CONCRETE: NO

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: NO CONCRETE: NO
CONTAINMENT LINER: NO NONE: NO
STAGE I VAPOR RECOVERY: NOT REPORTED
STAGE I INSTALLATION DATE: NOT REPORTED

AST ID #: 152460 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 524C REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/87 STATUS BEGIN DATE: 01/01/87

TANK CAPACITY (GAL): 5000 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: DIESEL

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO** CONCRETE: **NO**CONTAINMENT LINER: **NO** NONE: **NO** 



### Petroleum Storage Tanks (PST)

STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152470 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 524D REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/87 STATUS BEGIN DATE: 01/01/87

TANK CAPACITY (GAL): 30000 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: DIESEL

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO**CONCRETE: **NO**CONTAINMENT LINER: **NO**NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152471 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 524E REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/87 STATUS BEGIN DATE: 01/01/87

TANK CAPACITY (GAL): 5000 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: GASOLINE

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO**CONTAINMENT LINER: **NO**NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 152462 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 524F REGISTRATION DATE: 03/22/10

INSTALLATION DATE: 01/01/87 STATUS BEGIN DATE: 01/01/87

TANK CAPACITY (GAL): 10000 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: GASOLINE

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: NO CONTAINMENT

EARTHEN DIKE: **NO**CONCRETE: **NO**CONTAINMENT LINER: **NO**NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

AST ID #: 213269 MULTIPLE COMPARTMENT FLAG: NO

TANK ID: 9361 REGISTRATION DATE: 03/22/10

## Petroleum Storage Tanks (PST)

INSTALLATION DATE: 04/01/07 STATUS BEGIN DATE: 04/01/07

TANK CAPACITY (GAL): 2000 REGULATORY STATUS: FULLY REGULATED

STATUS: IN USE SUBSTANCES: DIESEL

**MATERIAL OF CONSTRUCTION** 

STEEL: **YES** CORRUGATED METAL: **NO** FIBERGLASS: **NO** CONCRETE: **NO** 

ALUMINIUM: **NO CONTAINMENT** 

EARTHEN DIKE: **NO** CONCRETE: **YES**CONTAINMENT LINER: **NO** NONE: **NO**STAGE I VAPOR RECOVERY: **NOT REPORTED**STAGE I INSTALLATION DATE: **NOT REPORTED** 

**Back to Report Summary** 

### Tier I I Chemical Reporting Program Facilities (TIERII)

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **SITE INFORMATION**

UNIQUE ID: 96KPR1002WW7

SITE ID: FATR201296KPR1002WW7

NAME: AMERICAN DEHYDRATED FOODS, INC.
ADDRESS: LSAAP BUILDING E 480 OAK STREET

**HOOKS, TX 75561** 

SIGNED DATE: 3-28-2013

VALIDATION REPORT: NOT REPORTED

MAILING ADDRESS: P.O. BOX 1359

HOOKS, TX 75561

#### **SITE DETAILS**

CHEMICAL LOCATION:

SOUTH EAST CORNER OF SHOP CHEMICAL AMOUNT: 18000 POUNDS

CHEMICAL LOCATION: CENTER OF SHOP

CHEMICAL AMOUNT: 46000 POUNDS
CHEMICAL NAME: JEFFCOOL P200
MAXIMUM AMOUNT: 18000 POUNDS

FIRE: YES GAS: NOT REPORTED LIQUID: YES SOLID: NOT REPORTED

PURE: NOT REPORTED MIXTURE: YES

CHEMICAL NAME: MOLASSES

MAXIMUM AMOUNT: 46000 POUNDS

FIRE: NOT REPORTED GAS: NOT REPORTED LIQUID: YES SOLID: NOT REPORTED

PURE: YES MIXTURE: NOT REPORTED

MIXTURE CHEMICAL: PROPYLENE GLYCOL

MIXTURE CHEMICAL: DIPOTASSIUM PHOSPHATE

MIXTURE CHEMICAL: NOT REPORTED

**Back to Report Summary** 

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **FACILITY INFORMATION**

EPA ID#: **TX7213821831** SITE ID#: **0603609** 

NAME: LONE STAR ARMY AMMUNITION PLANT

ADDRESS: HWY 82 W

**TEXARKANA, TX 5501** 

COUNTY: BOWIE

NATIONAL PRIORITY LISTING: F - CURRENTLY ON THE FINAL NPL FEDERAL FACILITY CLASSIFICATION: Y - FEDERAL FACILITY

NON-NPL STATUS DATE: NOT REPORTED

PHYSICAL CLASSIFICATION OF SITE / INCIDENT: FEDERAL FACILITY

#### FEDERAL REGISTER INFORMATION

DATE	VOLUME	PAGE #	ACTION	HRS SCORE
19870722	52	27620	PROMULGATED TO THE FINAL NPL	31.85000
19841015	49	40320	PROPOSED TO THE FINAL NPL	31.85000

#### SITE DESCRIPTION

THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED IN GROUNDWATER WELLS NEAR THE SOUTH BORDER OF THE FACILITY. THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED IN GROUND WATER WELLS NEAR THE SOUTH BORDER OF THE FACILITY. THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED IN GROUNDWATER WELLS NEAR THE SOUTH BORDER OF THE FACILITY.

THE LONE STAR ARMY AMMUNITION PLANT (LSAAP) IS A GOVERNMENT-OWNED, CONTRACTOR-OPERATED INSTALLATION WHICH PERFORMS AND MAINTAINS THE VARIOUS FUNCTIONS NECESSARY TO LOAD, ASSEMBLE, AND PACK AMMUNITION ITEMS FOR THE ARMY. THE INSTALLATION OCCUPIES APPROXIMATELY 15,546 ACRES OF LAND, OF WHICH APPROXIMATELY 12,300 ACRES ARE UNIMPROVED. LSAAP IS LOCATED IN BOWIE COUNTY IN NORTHEASTERN TEXAS, APPROXIMATELY 12 MILES WEST OF TEXARKANA, TEXAS. THE WESTERN BOUNDARY OF LSAAP ADJOINS RED RIVER ARMY DEPOT (RRAD); THE SOUTHERN BOUNDARY PARTIALLY ADJOINS RRAD, WITH THE REMAINDER ADJACENT TO TEXAS ROAD 991. THE EASTERN BOUNDARY IS BORDERED BY PRIVATELY-OWNED LAND, AND THE NORTHERN BOUNDARY ADJOINS U.S. HIGHWAY 82. A CHAIN-LINK OR BARBED-WIRE FENCE ENCLOSES THE ENTIRE INSTALLATION.

PRIOR TO ACQUISITION BY THE ARMY, THE LAND THAT COMPRISES LSAAP AND RRAD WAS USED FOR FARMING, GRAZING, AND TIMBER PRODUCTION. THE CONSTRUCTION OF BOTH LSAAP AND RRAD BEGAN DURING MID-1941 AND BOTH WERE COMPLETED DURING THE SUMMER OF 1942. MILITARY ACTIVITIES BEGAN IMMEDIATELY UPON COMPLETION, WITH LSAAP PRODUCING MUNITIONS, AND RRAD SHIPPING AND STORING MUNITIONS AND CONDUCTING MUNITIONS TRAINING OF TROOPS. THESE ACTIVITIES CONTINUED UNTIL NOVEMBER 1945, WHEN LSAAP AND RRAD WERE COMBINED AND DESIGNATED THE RED RIVER ARSENAL, WITH A JOINT MISSION OF DEMILITARIZATION AND RENOVATION.

THAT JOINT MISSION CONTINUED UNTIL EARLY 1951, WHEN LSAAP ACTIVELY RESUMED PRODUCTION OF MUNITIONS, AND RRAD RESUMED SHIPPING AND STORING MUNITIONS AND ALSO STARTED MAINTAINING V EHICLES. THE INSTALLATIONS WERE NO LONGER COMBINED, AND ADDITIONAL FACILITIES WERE CONSTRUCTED AT LSAAP. PRODUCTION CUTBACKS BEGAN IMMEDIATELY AFTER THE KOREAN WAR ENDED IN 1953 AND CONTINUED THROUGH 1960. MOST OF THE AREAS AND FACILITIES AT BOTH INSTALLATIONS WERE INACTIVE DURING THIS PERIOD. ALL ACTIVITIES INCREASED AGAIN FROM 1964 TO 1975 DURING THE VIETNAM WAR. HOWEVER, PRODUCTION HAS GRADUALLY DECLINED FROM EARLY 1969 TO

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THE PRESENT.

THE OLD DEMOLITION AREA (ODA) WAS ESTABLISHED IN 1943, AND WAS USED BRIEFLY FOR OPEN DETONATION OF OFF-SPECIFICATION MUNITIONS UNTIL IT CLOSED IN 1944. FROM 1944 UNTIL 1951, EXPLOSIVES WERE DESTROYED AT THE RRAD DEMOLITION AREA. IN 1951, A NEW DEMOLITION AREA WAS ESTABLISHED AT LSAAP ABOUT 1 MILE NORTHEAST OF THE ODA. THIS NEW DEMOLITION AREA CONTINUES TO BE USED TODAY. NO ACTIVITY OCCURRED AT THE ODA FROM 1944 TO 1986. IN 1986 THE ODA WAS CLEARED OF VEGETATION BY THE ARMY TO EXPOSE, COLLECT, AND DESTROY EXPLOSIVE DEBRIS. ADDITIONAL ORDNANCE DEBRIS HAS SINCE BEEN EXPOSED BY EROSION AND CAN BE OBSERVED ON THE SURFACE.

THE ODA WAS PLACED ON THE NATIONAL PRIORITIES LIST IN 1987. IN JULY OF 1990, EPA, THE STATE, AND THE ARMY SIGNED A FEDERAL FACILITIES AGREEMENT TO COVER THE INVESTIGATION, DEVELOPMENT, AND IMPLEMENTATION OF RESPONSE ACTIONS. A RECORD OF DECISION (ROD) WAS COMPLETED FOR THE ODA IN AUGUST 1999.

#### **OLD DEMOLITION AREA OU**

THE OLD DEMOLITION AREA (ODA), LOCATED IN THE SOUTH-CENTRAL PORTION OF LSAAP, IS ENTIRELY CONTAINED WITHIN THE INSTALLATION BOUNDARIES AND IS FENCED AND POSTED. THE FENCED AREA ENCLOSES 17.4 ACRES AND WAS USED BY THE ARMY TO DETONATE EXPLOSIVES DURING WORLD WAR II. THE ODA WAS USED BRIEFLY FOR OPEN DETONATION OF OFF-SPECIFICATION MUNITIONS FROM 1943 TO 1944. THIS ABANDONED DETONATION AREA WAS THE FINAL DISPOSAL LOCATION FOR THE DETONATED MUNITIONS (A MILITARY LANDFILL). ALTHOUGH LSAAP HAS OTHER ONGOING INDUSTRIAL ACTIVITIES, ONLY THE MUNITIONS DETONATED FROM 1943-1944 WERE DIS POSED WITHIN THE ODA. DESTRUCTION OF EXPLOSIVES NO LONGER OCCURS AT THE ODA; HOWEVER, RESIDUAL MUNITIONS AND PROPELLANT MATERIALS FROM PAST ORDNANCE DEMOLITION ACTIVITIES ARE PRESENT AT THE ODA. THIS MATERIAL IS REFERRED TO AS SOURCE MATERIAL. IT CONSISTS OF METAL FRAGMENTS AND ASSOCIATED BULK EXPLOSIVE MATERIALS FROM 20-MILLIMETER (MM) AND 37-MM ROUNDS, FUZES, AND BOOSTERS.

SITE HISTORY - NO SITE HISTORY INFORMATION AVAILABLE -

**ACTIONS** 

TYPE: PA - PRELIMINARY ASSESSMENT

START DATE: 04/01/1984
COMPLETION DATE: 04/01/1984
ACTION TYPE DEFINITION:

COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

TYPE: VY - FEDERAL FACILITY FIVE YEAR REVIEW

START DATE: NR

COMPLETION DATE: **09/27/2011**ACTION TYPE DEFINITION:

A REVIEW OF A FEDERAL FACILITY SITE THAT IS CONDUCTED AT A MINIMUM OF EVERY FIVE YEARS TO DETERMINE IF THE IMPLEMENTATION AND PERFORMANCE OF A REMEDY IS PROTECTIVE OR WILL BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

TYPE: VY - FEDERAL FACILITY FIVE YEAR REVIEW

START DATE: 11/21/2005 COMPLETION DATE: 08/31/2006

**ACTION TYPE DEFINITION:** 

A REVIEW OF A FEDERAL FACILITY SITE THAT IS CONDUCTED AT A MINIMUM OF EVERY FIVE YEARS TO DETERMINE IF THE IMPLEMENTATION AND PERFORMANCE OF A REMEDY IS PROTECTIVE OR WILL BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

TYPE: SI - SITE INSPECTION
START DATE: 04/01/1984
COMPLETION DATE: 04/01/1984
ACTION TYPE DEFINITION:

THE PROCESS OF COLLECTING SITE DATA AND SAMPLES TO CHARACTERIZE THE SEVERITY OF THE HAZARD FOR THE HAZARD RANKING SCORE AND/OR ENFORCEMENT SUPPORT.

TYPE: CM - PRELIMINARY CLOSE-OUT REPORT PREPARED

START DATE: NR

COMPLETION DATE: **09/24/2002**ACTION TYPE DEFINITION:

A REPORT PREPARED BY THE REMEDIAL PROGRAM MANAGER (RPM) VERIFYING THAT PHYSICAL CONSTRUCTION OF THE REMEDY IS COMPLETE, INDICATING MINOR PUNCH LIST ITEMS THAT REMAIN AND OUTLINING A SCHEDULE OF THE OUTSTANDING ACTIVITIES.

TYPE: RO - RECORD OF DECISION

START DATE: NR

COMPLETION DATE: **08/31/1999**ACTION TYPE DEFINITION:

THE FINAL RECORD OF DECISION (ROD) IS SIGNED BY THE APPROPRIATE AGENCY INDICATING THAT THE AGENCY HAS CHOSEN THE REMEDY FOR SITE REMEDIATION. ROD SIGNATURE IS SIGNIFIED BY THE COMPLETE DATE.

TYPE: OM - OPERATIONS AND MAINTENANCE

START DATE: 12/31/2002 COMPLETION DATE: NR ACTION TYPE DEFINITION:

SITE REQUIREMENTS ASSOCIATED WITH A REMEDY THAT MUST BE PERFORMED AFTER THE COMPLETION OF A REMEDIAL ACTION.

TYPE: NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH

START DATE: NR

COMPLETION DATE: **08/15/1984**ACTION TYPE DEFINITION:

THE NATIONAL PRIORITY LIST (NPL) POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS USED TO IDENTIFY PRPS AT A FINAL NPL OR PROPOSED NPL SITE. ACTIONS TYPICALLY INCLUDE TITLE SEARCH, FINANCIAL ASSESSMENTS, AND REVIEW OF APPLICABLE RECORDS. THE NPL PRP SEARCH SHOULD BEGIN UPON COMPLETION OF THE SCREENING SITE INVESTIGATION AND SHOULD BE CONDUCTED CONCURRENT WITH THE NATIONAL PRIORITIES LISTING PROCESS.

TYPE: NP - PROPOSAL TO NATIONAL PRIORITIES LIST

START DATE: NR

COMPLETION DATE: 10/15/1984 ACTION TYPE DEFINITION:

SITE PROPOSED FOR INCLUSION ON THE NATIONAL PRIORITY LIST BASED ON THE HAZARD RANKING SYSTEM (HRS) SCORE FOR THE SITE.

TYPE: DS - DISCOVERY

START DATE: NR

COMPLETION DATE: **09/01/1980** ACTION TYPE DEFINITION:

THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

TYPE: MA - STATE SUPPORT AGENCY COOPERATIVE AGREEMENT

START DATE: 03/07/1988

COMPLETION DATE: 03/31/2008

ACTION TYPE DEFINITION:

FEDERAL RENUMERATION OF STATE ADMINISTRATIVE COSTS OF PARTICIPATION IN SITE-SPECIFIC REMEDIAL PLANNING OR IMPLEMENTATION ACTIVITIES.

TYPE: LY - FEDERAL FACILITY REMEDIAL ACTION

START DATE: 06/29/2001 COMPLETION DATE: 06/30/2002 ACTION TYPE DEFINITION:

PROVIDES FOR OVERSIGHT OF FEDERAL FACILITY RESPONSE ACTION FOR REMEDIAL ACTION (RA), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF FEDERAL FACILITIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF SARA AND IAG OR MOA.

TYPE: LX - FEDERAL FACILITY REMEDIAL DESIGN

START DATE: 07/15/2000 COMPLETION DATE: 02/26/2001 ACTION TYPE DEFINITION:

PROVIDES FOR OVERSIGHT OF FEDERAL FACILITY RESPONSE ACTION FOR REMEDIAL DESIGN (RD), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF FEDERAL FACILITIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF SARA AND IAG OR MOA.

TYPE: LW - FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY

START DATE: 06/18/1990
COMPLETION DATE: 08/31/1999
ACTION TYPE DEFINITION:

PROVIDES FOR OVERSIGHT OF FEDERAL FACILITY RESPONSE ACTION FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF FEDERAL FACILITIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF SARA AND IAG OR MOA.

TYPE: IN - INTERAGENCY AGREEMENT NEGOTIATIONS

START DATE: 08/11/1988
COMPLETION DATE: 07/17/1990
ACTION TYPE DEFINITION:

NEGOTIATIONS BETWEEN EPA, AND A FEDERAL AGENCY, AND/OR THE STATE FOR CONDUCTING RESPONSE ACTIONS UNDER CERCLA (RI/FS, RD/RA, ETC.).

TYPE: HR - HAZARD RANKING SYSTEM PACKAGE

START DATE: NR

COMPLETION DATE: 10/15/1984
ACTION TYPE DEFINITION:

A NUMERIC ESTIMATE OF THE RELATIVE SEVERITY OF A HAZARDOUS SUBSTANCE RELEASE OR POTENTIAL RELEASE BASED ON: (1) THE RELATIVE POTENTIAL OF SUBSTANCES TO CAUSE HAZARDOUS SITUATIONS; (2) THE LIKELIHOOD AND RATE AT WHICH THE SUBSTANCES MAY AFFECT HUMAN AND ENVIRONMENTAL RECEPTORS; AND (3) THE SEVERITY AND MAGNITUDE OF POTENTIAL EFFECTS. THE SCORE IS COMPUTED USING THE HAZARD RANKING SYSTEM (HRS).

TYPE: FI - FEDERAL INTERAGENCY AGREEMENT

START DATE: 06/18/1990 COMPLETION DATE: 07/17/1990 ACTION TYPE DEFINITION:

AGREEMENT BETWEEN THE FEDERAL FACILITY, EPA, AND WHENEVER POSSIBLE, THE STATE REQUIRING THE FEDERAL

FACILITY TO CONDUCT CERCLA RESPONSE ACTIONS AT THE FACILITY OR PORTION OF THE FACILITY ON OR PROPOSED TO THE NATIONAL PRIORITY LIST (NPL).

TYPE: NF - FINAL LISTING ON NATIONAL PRIORITIES LIST

START DATE: NR

COMPLETION DATE: **07/22/1987**ACTION TYPE DEFINITION:

SITE MOVED FROM PROPOSED LIST TO FINAL NATIONAL PRIORITY LIST.

TYPE: RS - REMOVAL ASSESSMENT

START DATE: 05/01/1990 COMPLETION DATE: 05/23/1990 ACTION TYPE DEFINITION:

COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

**CONTAMINANTS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: BENZYL ALCOHOL CONTAMINANT GROUP NAME: BASE NEUTRAL ACIDS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: COBALT AND COMPOUNDS

CONTAMINANT GROUP NAME: INORGANICS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED HAZARDOUS SUBSTANCE NAME: ALUMINUM (FUME OR DUST)

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **ARSENIC** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **BARIUM** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CALCIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CHROMIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **COPPER** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **IRON**CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: MAGNESIUM

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: MANGANESE

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **NICKEL**CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: POTASSIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **SODIUM** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: VANADIUM (FUME OR DUST)

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: ZINC

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **2,4-DINITROTOLUENE**CONTAMINANT GROUP NAME: **NITROAROMATICS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: 2-A-4,6-DNT
CONTAMINANT GROUP NAME: NITROAROMATICS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: NITROGLYCERIN CONTAMINANT GROUP NAME: NITROAROMATICS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED HAZARDOUS SUBSTANCE NAME: BIS(2-ETHYLHEXYL)PHTHALATE

CONTAMINANT GROUP NAME: PAH

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CARBON TETRACHLORIDE

CONTAMINANT GROUP NAME: VOC

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CHLOROFORM

CONTAMINANT GROUP NAME: VOC

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CHLOROMETHANE

CONTAMINANT GROUP NAME: VOC

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: METHYL ISOBUTYL KETONE

CONTAMINANT GROUP NAME: VOC

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: METHYLENE CHLORIDE

CONTAMINANT GROUP NAME: VOC

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: COBALT AND COMPOUNDS

CONTAMINANT GROUP NAME: INORGANICS

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: BARIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CALCIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: COPPER CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: MERCURY CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **NICKEL**CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **SELENIUM** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **SODIUM** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **ZINC**CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: ACETONE

CONTAMINANT GROUP NAME: VOC

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: COBALT AND COMPOUNDS

CONTAMINANT GROUP NAME: INORGANICS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED HAZARDOUS SUBSTANCE NAME: ALUMINUM (FUME OR DUST)

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: BARIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CALCIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CHROMIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: COPPER CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: IRON CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **LEAD** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: MANGANESE

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: MERCURY CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **NICKEL** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: POTASSIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **SELENIUM** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED HAZARDOUS SUBSTANCE NAME: VANADIUM (FUME OR DUST)

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **ZINC**CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: NITROGLYCERIN CONTAMINANT GROUP NAME: NITROAROMATICS

LISTING OF PUBLISHED INSTITUTIONAL CONTROL SITE REPORT

REPORT TYPE: ICS REQUIRED AND IMPLEMENTED

URL LINK: <a href="http://www.epa.gov/ictssw07/public/export/06/TX7213821831/TX7213821831\_report.HTM">http://www.epa.gov/ictssw07/public/export/06/TX7213821831/TX7213821831\_report.HTM</a>

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## Department of Defense Sites (DOD)

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

ID#: 46269

NAME: **RED RIVER ARMY DEPOT**DOD BRANCH: **ARMY DOD** 

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## Facility Registry System (FRSTX)

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **FACILITY INFORMATION**

REGISTRY ID: 110041725185

NAME: **NEW BOSTON ARMY DEPOT SITE** 

LOCATION ADDRESS: APPROX 3.0 MILES EAST OF HWY 82 & N MCCOY BLVD INT

**NEW BOSTON, TX 75570** 

COUNTY: **BOWIE** EPA REGION: **6** 

FEDERAL FACILITY: NOT REPORTED
TRIBAL LAND: NOT REPORTED

**ALTERNATIVE NAME/S:** 

NEW BOSTON ARMY DEPOT SITE

PROGRAM/S LISTED FOR THIS FACILITY

TX-TCEQ ACR - TEXAS COMMISSION ON EVIRONMENTAL QUALITY - AGENCY CENTRAL REGISTRY

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

3273 - READY-MIXED CONCRETE

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

**NO NAICS DATA REPORTED** 

**Back to Report Summary** 

## Facility Registry System (FRSTX)

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **FACILITY INFORMATION**

REGISTRY ID: 110035300821
NAME: RED RIVER ARMY DEPOT

LOCATION ADDRESS: RED RIVER ARMY DEPOT

**NEW BOSTON, TX 75570** 

COUNTY: **BOWIE** EPA REGION: **6** 

FEDERAL FACILITY: NOT REPORTED
TRIBAL LAND: NOT REPORTED

ALTERNATIVE NAME/S:
RED RIVER ARMY DEPOT

PROGRAM/S LISTED FOR THIS FACILITY

TX-TCEQ ACR - TEXAS COMMISSION ON EVIRONMENTAL QUALITY - AGENCY CENTRAL REGISTRY

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

4225 - GENERAL WAREHOUSING AND STORAGE

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

**NO NAICS DATA REPORTED** 

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**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **FACILITY INFORMATION**

EPA ID#: **TX7213821831**SITE ID#: **0603609** 

NAME: LONE STAR ARMY AMMUNITION PLANT

ADDRESS: HWY 82 W

**TEXARKANA, TX 75501** 

COUNTY: BOWIE

NATIONAL PRIORITY LISTING: F - CURRENTLY ON THE FINAL NPL FEDERAL FACILITY CLASSIFICATION: Y - FEDERAL FACILITY

NON-NPL STATUS: **NOT REPORTED -**NON-NPL STATUS DATE: **NOT REPORTED** 

PHYSICAL CLASSIFICATION OF SITE / INCIDENT: FEDERAL FACILITY

**FEDERAL REGISTER INFORMATION** 

 DATE
 VOLUME
 PAGE #
 ACTION
 HRS SCORE

 07/22/1987
 52
 27620
 PROMULGATED TO THE FINAL NPL
 31.85000

 10/15/1984
 49
 40320
 PROPOSED TO THE FINAL NPL
 31.85000

#### SITE DESCRIPTION

THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED IN GROUNDWATER WELLS NEAR THE SOUTH BORDER OF THE FACILITY. THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED IN GROUND WATER WELLS NEAR THE SOUTH BORDER OF THE FACILITY. THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED IN GROUNDWATER WELLS NEAR THE SOUTH BORDER OF THE FACILITY.

THE LONE STAR ARMY AMMUNITION PLANT (LSAAP) IS A GOVERNMENT-OWNED, CONTRACTOR-OPERATED INSTALLATION WHICH PERFORMS AND MAINTAINS THE VARIOUS FUNCTIONS NECESSARY TO LOAD, ASSEMBLE, AND PACK AMMUNITION ITEMS FOR THE ARMY. THE INSTALLATION OCCUPIES APPROXIMATELY 15,546 ACRES OF LAND, OF WHICH APPROXIMATELY 12,300 ACRES ARE UNIMPROVED. LSAAP IS LOCATED IN BOWIE COUNTY IN NORTHEASTERN TEXAS, APPROXIMATELY 12 MILES WEST OF TEXARKANA, TEXAS. THE WESTERN BOUNDARY OF LSAAP ADJOINS RED RIVER ARMY DEPOT (RRAD); THE SOUTHERN BOUNDARY PARTIALLY ADJOINS RRAD, WITH THE REMAINDER ADJACENT TO TEXAS ROAD 991. THE EASTERN BOUNDARY IS BORDERED BY PRIVATELY-OWNED LAND, AND THE NORTHERN BOUNDARY ADJOINS U.S. HIGHWAY 82. A CHAIN-LINK OR BARBED-WIRE FENCE ENCLOSES THE ENTIRE INSTALLATION.

PRIOR TO ACQUISITION BY THE ARMY, THE LAND THAT COMPRISES LSAAP AND RRAD WAS USED FOR FARMING, GRAZING, AND TIMBER PRODUCTION. THE CONSTRUCTION OF BOTH LSAAP AND RRAD BEGAN DURING MID-1941 AND BOTH WERE COMPLETED DURING THE SUMMER OF 1942. MILITARY ACTIVITIES BEGAN IMMEDIATELY UPON COMPLETION, WITH LSAAP PRODUCING MUNITIONS, AND RRAD SHIPPING AND STORING MUNITIONS AND CONDUCTING MUNITIONS TRAINING OF TROOPS. THESE ACTIVITIES CONTINUED UNTIL NOVEMBER 1945, WHEN LSAAP AND RRAD WERE COMBINED AND DESIGNATED THE RED RIVER ARSENAL, WITH A JOINT MISSION OF DEMILITARIZATION AND RENOVATION.

THAT JOINT MISSION CONTINUED UNTIL EARLY 1951, WHEN LSAAP ACTIVELY RESUMED PRODUCTION OF MUNITIONS, AND RRAD RESUMED SHIPPING AND STORING MUNITIONS AND ALSO STARTED MAINTAINING V EHICLES. THE INSTALLATIONS WERE NO LONGER COMBINED, AND ADDITIONAL FACILITIES WERE CONSTRUCTED AT LSAAP. PRODUCTION CUTBACKS BEGAN IMMEDIATELY AFTER THE KOREAN WAR ENDED IN 1953 AND CONTINUED THROUGH 1960. MOST OF THE AREAS AND FACILITIES AT BOTH INSTALLATIONS WERE INACTIVE DURING THIS PERIOD. ALL ACTIVITIES INCREASED AGAIN FROM

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1964 TO 1975 DURING THE VIETNAM WAR. HOWEVER, PRODUCTION HAS GRADUALLY DECLINED FROM EARLY 1969 TO THE PRESENT.

THE OLD DEMOLITION AREA (ODA) WAS ESTABLISHED IN 1943, AND WAS USED BRIEFLY FOR OPEN DETONATION OF OFF-SPECIFICATION MUNITIONS UNTIL IT CLOSED IN 1944. FROM 1944 UNTIL 1951, EXPLOSIVES WERE DESTROYED AT THE RRAD DEMOLITION AREA. IN 1951, A NEW DEMOLITION AREA WAS ESTABLISHED AT LSAAP ABOUT 1 MILE NORTHEAST OF THE ODA. THIS NEW DEMOLITION AREA CONTINUES TO BE USED TODAY. NO ACTIVITY OCCURRED AT THE ODA FROM 1944 TO 1986. IN 1986 THE ODA WAS CLEARED OF VEGETATION BY THE ARMY TO EXPOSE, COLLECT, AND DESTROY EXPLOSIVE DEBRIS. ADDITIONAL ORDNANCE DEBRIS HAS SINCE BEEN EXPOSED BY EROSION AND CAN BE OBSERVED ON THE SURFACE.

THE ODA WAS PLACED ON THE NATIONAL PRIORITIES LIST IN 1987. IN JULY OF 1990, EPA, THE STATE, AND THE ARMY SIGNED A FEDERAL FACILITIES AGREEMENT TO COVER THE INVESTIGATION, DEVELOPMENT, AND IMPLEMENTATION OF RESPONSE ACTIONS. A RECORD OF DECISION (ROD) WAS COMPLETED FOR THE ODA IN AUGUST 1999.

#### **OLD DEMOLITION AREA OU**

THE OLD DEMOLITION AREA (ODA), LOCATED IN THE SOUTH-CENTRAL PORTION OF LSAAP, IS ENTIRELY CONTAINED WITHIN THE INSTALLATION BOUNDARIES AND IS FENCED AND POSTED. THE FENCED AREA ENCLOSES 17.4 ACRES AND WAS USED BY THE ARMY TO DETONATE EXPLOSIVES DURING WORLD WAR II. THE ODA WAS USED BRIEFLY FOR OPEN DETONATION OF OFF-SPECIFICATION MUNITIONS FROM 1943 TO 1944. THIS ABANDONED DETONATION AREA WAS THE FINAL DISPOSAL LOCATION FOR THE DETONATED MUNITIONS (A MILITARY LANDFILL). ALTHOUGH LSAAP HAS OTHER ONGOING INDUSTRIAL ACTIVITIES, ONLY THE MUNITIONS DETONATED FROM 1943-1944 WERE DIS POSED WITHIN THE ODA. DESTRUCTION OF EXPLOSIVES NO LONGER OCCURS AT THE ODA; HOWEVER, RESIDUAL MUNITIONS AND PROPELLANT MATERIALS FROM PAST ORDNANCE DEMOLITION ACTIVITIES ARE PRESENT AT THE ODA. THIS MATERIAL IS REFERRED TO AS SOURCE MATERIAL. IT CONSISTS OF METAL FRAGMENTS AND ASSOCIATED BULK EXPLOSIVE MATERIALS FROM 20-MILLIMETER (MM) AND 37-MM ROUNDS, FUZES, AND BOOSTERS.

SITE HISTORY - NO SITE HISTORY INFORMATION AVAILABLE -

**ACTIONS** 

TYPE: PA - PRELIMINARY ASSESSMENT

START DATE: 04/01/1984
COMPLETION DATE: 04/01/1984
ACTION TYPE DEFINITION:

COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

TYPE: VY - FEDERAL FACILITY FIVE YEAR REVIEW

START DATE: NR

COMPLETION DATE: **09/27/2011**ACTION TYPE DEFINITION:

A REVIEW OF A FEDERAL FACILITY SITE THAT IS CONDUCTED AT A MINIMUM OF EVERY FIVE YEARS TO DETERMINE IF THE IMPLEMENTATION AND PERFORMANCE OF A REMEDY IS PROTECTIVE OR WILL BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

TYPE: VY - FEDERAL FACILITY FIVE YEAR REVIEW

START DATE: 11/21/2005 COMPLETION DATE: 08/31/2006 ACTION TYPE DEFINITION:

A REVIEW OF A FEDERAL FACILITY SITE THAT IS CONDUCTED AT A MINIMUM OF EVERY FIVE YEARS TO DETERMINE IF THE IMPLEMENTATION AND PERFORMANCE OF A REMEDY IS PROTECTIVE OR WILL BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.



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TYPE: SI - SITE INSPECTION

START DATE: 04/01/1984

COMPLETION DATE: **04/01/1984**ACTION TYPE DEFINITION:

THE PROCESS OF COLLECTING SITE DATA AND SAMPLES TO CHARACTERIZE THE SEVERITY OF THE HAZARD FOR THE HAZARD RANKING SCORE AND/OR ENFORCEMENT SUPPORT.

TYPE: CM - PRELIMINARY CLOSE-OUT REPORT PREPARED

START DATE: NR

COMPLETION DATE: **09/24/2002**ACTION TYPE DEFINITION:

A REPORT PREPARED BY THE REMEDIAL PROGRAM MANAGER (RPM) VERIFYING THAT PHYSICAL CONSTRUCTION OF THE REMEDY IS COMPLETE, INDICATING MINOR PUNCH LIST ITEMS THAT REMAIN AND OUTLINING A SCHEDULE OF THE OUTSTANDING ACTIVITIES.

TYPE: RO - RECORD OF DECISION

START DATE: NR

COMPLETION DATE: **08/31/1999**ACTION TYPE DEFINITION:

THE FINAL RECORD OF DECISION (ROD) IS SIGNED BY THE APPROPRIATE AGENCY INDICATING THAT THE AGENCY HAS CHOSEN THE REMEDY FOR SITE REMEDIATION. ROD SIGNATURE IS SIGNIFIED BY THE COMPLETE DATE.

TYPE: OM - OPERATIONS AND MAINTENANCE

START DATE: 12/31/2002 COMPLETION DATE: NR ACTION TYPE DEFINITION:

SITE REQUIREMENTS ASSOCIATED WITH A REMEDY THAT MUST BE PERFORMED AFTER THE COMPLETION OF A REMEDIAL ACTION.

TYPE: NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH

START DATE: NR

COMPLETION DATE: **08/15/1984** ACTION TYPE DEFINITION:

THE NATIONAL PRIORITY LIST (NPL) POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS USED TO IDENTIFY PRPS AT A FINAL NPL OR PROPOSED NPL SITE. ACTIONS TYPICALLY INCLUDE TITLE SEARCH, FINANCIAL ASSESSMENTS, AND REVIEW OF APPLICABLE RECORDS. THE NPL PRP SEARCH SHOULD BEGIN UPON COMPLETION OF THE SCREENING SITE INVESTIGATION AND SHOULD BE CONDUCTED CONCURRENT WITH THE NATIONAL PRIORITIES LISTING PROCESS.

TYPE: NP - PROPOSAL TO NATIONAL PRIORITIES LIST

START DATE: NR

COMPLETION DATE: 10/15/1984 ACTION TYPE DEFINITION:

SITE PROPOSED FOR INCLUSION ON THE NATIONAL PRIORITY LIST BASED ON THE HAZARD RANKING SYSTEM (HRS) SCORE FOR THE SITE.

TYPE: DS - DISCOVERY

START DATE: NR

COMPLETION DATE: **09/01/1980** ACTION TYPE DEFINITION:

THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY

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#### ANOTHER GOVERNMENT AGENCY.

TYPE: MA - STATE SUPPORT AGENCY COOPERATIVE AGREEMENT

START DATE: 03/07/1988

COMPLETION DATE: 03/31/2008 ACTION TYPE DEFINITION:

FEDERAL RENUMERATION OF STATE ADMINISTRATIVE COSTS OF PARTICIPATION IN SITE-SPECIFIC REMEDIAL PLANNING OR IMPLEMENTATION ACTIVITIES.

TYPE: LY - FEDERAL FACILITY REMEDIAL ACTION

START DATE: 06/29/2001 COMPLETION DATE: 06/30/2002 ACTION TYPE DEFINITION:

PROVIDES FOR OVERSIGHT OF FEDERAL FACILITY RESPONSE ACTION FOR REMEDIAL ACTION (RA), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF FEDERAL FACILITIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF SARA AND IAG OR MOA.

TYPE: LX - FEDERAL FACILITY REMEDIAL DESIGN

START DATE: **07/15/2000**COMPLETION DATE: **02/26/2001**ACTION TYPE DEFINITION:

PROVIDES FOR OVERSIGHT OF FEDERAL FACILITY RESPONSE ACTION FOR REMEDIAL DESIGN (RD), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF FEDERAL FACILITIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF SARA AND IAG OR MOA.

TYPE: LW - FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY

START DATE: 06/18/1990 COMPLETION DATE: 08/31/1999 ACTION TYPE DEFINITION:

PROVIDES FOR OVERSIGHT OF FEDERAL FACILITY RESPONSE ACTION FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF FEDERAL FACILITIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF SARA AND IAG OR MOA.

TYPE: IN - INTERAGENCY AGREEMENT NEGOTIATIONS

START DATE: 08/11/1988 COMPLETION DATE: 07/17/1990 ACTION TYPE DEFINITION:

NEGOTIATIONS BETWEEN EPA, AND A FEDERAL AGENCY, AND/OR THE STATE FOR CONDUCTING RESPONSE ACTIONS UNDER CERCLA (RI/FS, RD/RA, ETC.).

TYPE: HR - HAZARD RANKING SYSTEM PACKAGE

START DATE: NR

COMPLETION DATE: 10/15/1984 ACTION TYPE DEFINITION:

A NUMERIC ESTIMATE OF THE RELATIVE SEVERITY OF A HAZARDOUS SUBSTANCE RELEASE OR POTENTIAL RELEASE BASED ON: (1) THE RELATIVE POTENTIAL OF SUBSTANCES TO CAUSE HAZARDOUS SITUATIONS; (2) THE LIKELIHOOD AND RATE AT WHICH THE SUBSTANCES MAY AFFECT HUMAN AND ENVIRONMENTAL RECEPTORS; AND (3) THE SEVERITY AND MAGNITUDE OF POTENTIAL EFFECTS. THE SCORE IS COMPUTED USING THE HAZARD RANKING SYSTEM (HRS).

TYPE: FI - FEDERAL INTERAGENCY AGREEMENT

START DATE: 06/18/1990 COMPLETION DATE: 07/17/1990 ACTION TYPE DEFINITION:

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AGREEMENT BETWEEN THE FEDERAL FACILITY, EPA, AND WHENEVER POSSIBLE, THE STATE REQUIRING THE FEDERAL FACILITY TO CONDUCT CERCLA RESPONSE ACTIONS AT THE FACILITY OR PORTION OF THE FACILITY ON OR PROPOSED TO THE NATIONAL PRIORITY LIST (NPL).

TYPE: NF - FINAL LISTING ON NATIONAL PRIORITIES LIST

START DATE: NR

COMPLETION DATE: **07/22/1987** ACTION TYPE DEFINITION:

SITE MOVED FROM PROPOSED LIST TO FINAL NATIONAL PRIORITY LIST.

TYPE: RS - REMOVAL ASSESSMENT

START DATE: 05/01/1990 COMPLETION DATE: 05/23/1990 ACTION TYPE DEFINITION:

COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

**CONTAMINANTS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: BENZYL ALCOHOL CONTAMINANT GROUP NAME: BASE NEUTRAL ACIDS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: COBALT AND COMPOUNDS

CONTAMINANT GROUP NAME: INORGANICS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: ALUMINUM (FUME OR DUST)

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: ARSENIC CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **BARIUM** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CALCIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED



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CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CHROMIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: COPPER CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **IRON**CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: MAGNESIUM

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: MANGANESE

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: NICKEL CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: POTASSIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **SODIUM** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: VANADIUM (FUME OR DUST)

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

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HAZARDOUS SUBSTANCE NAME: **ZINC**CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **2,4-DINITROTOLUENE**CONTAMINANT GROUP NAME: **NITROAROMATICS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: 2-A-4,6-DNT
CONTAMINANT GROUP NAME: NITROAROMATICS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: NITROGLYCERIN CONTAMINANT GROUP NAME: NITROAROMATICS

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED** HAZARDOUS SUBSTANCE NAME: **BIS(2-ETHYLHEXYL)PHTHALATE** 

CONTAMINANT GROUP NAME: PAH

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CARBON TETRACHLORIDE

CONTAMINANT GROUP NAME: VOC

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CHLOROFORM

CONTAMINANT GROUP NAME: VOC

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CHLOROMETHANE

CONTAMINANT GROUP NAME: VOC

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: METHYL ISOBUTYL KETONE

CONTAMINANT GROUP NAME: VOC

WASTE SOURCE MEDIA CONTAMINATED NAME: GROUNDWATER

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: METHYLENE CHLORIDE



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CONTAMINANT GROUP NAME: VOC

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: COBALT AND COMPOUNDS

CONTAMINANT GROUP NAME: INORGANICS

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **BARIUM** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CALCIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: COPPER CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: MERCURY CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **NICKEL** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **SELENIUM** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **SODIUM** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: ZINC CONTAMINANT GROUP NAME: METALS



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WASTE SOURCE MEDIA CONTAMINATED NAME: SEDIMENT

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: ACETONE

CONTAMINANT GROUP NAME: VOC

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: COBALT AND COMPOUNDS

CONTAMINANT GROUP NAME: INORGANICS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: ALUMINUM (FUME OR DUST)

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: BARIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CALCIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: CHROMIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **COPPER** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **IRON** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: LEAD CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL



CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: MANGANESE

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: MERCURY
CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **NICKEL** CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: POTASSIUM CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **SELENIUM**CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED HAZARDOUS SUBSTANCE NAME: VANADIUM (FUME OR DUST)

CONTAMINANT GROUP NAME: METALS

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: **ZINC**CONTAMINANT GROUP NAME: **METALS** 

WASTE SOURCE MEDIA CONTAMINATED NAME: SOIL

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: NOT REPORTED

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: NOT REPORTED

HAZARDOUS SUBSTANCE NAME: NITROGLYCERIN CONTAMINANT GROUP NAME: NITROAROMATICS

LISTING OF PUBLISHED INSTITUTIONAL CONTROL SITE REPORT

REPORT TYPE: ICS REQUIRED AND IMPLEMENTED

URL LINK: http://www.epa.gov/ictssw07/public/export/06/TX7213821831/TX7213821831\_report.HTM

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**MAP ID# 1** 

Distance from Property: 0.00 mi. X

EPA ID: TX7213821831

NAME: LONE STAR ARMY AMMUNITION PLANT

ADDRESS: HWY 82 W, TEXARKANA, TX

COUNTY: BOWIE

ROD DATE: 08/31/99

ROD TYPE: RECORD OF DECISION
ROD ID: 06036091999ROD165

LONE STAR ARMY AMMUNITION PLANT

ABSTRACT SITE NAME: LONE STAR ARMY AMMUNITION PLANT

ADDRESS: HWY 82 W

**CITY & STATE: TEXARKANA TX 75501** 

**COUNTY: BOWIE** 

EPA ID: TX7213821831 EPA REGION: 06

NPL STATUS: CURRENTLY ON THE FINAL NPL

**ROD TYPE: RECORD OF DECISION** 

ROD ID: EPA/541/R-99/165 ROD DATE: 08/31/1999 OPERABLE UNIT(S): 01

#### ABSTRACT:

THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED IN GROUNDWATER WELLS NEAR THE SOUTH BORDER OF THE FACILITY.

THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED IN GROUND WATER WELLS NEAR THE SOUTH BORDER OF THE FACILITY. THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED IN GROUNDWATER WELLS NEAR THE SOUTH BORDER OF THE FACILITY.

THE LONE STAR ARMY AMMUNITION PLANT (LSAAP) IS A GOVERNMENT-OWNED, CONTRACTOR-OPERATED INSTALLATION WHICH PERFORMS AND MAINTAINS THE VARIOUS FUNCTIONS NECESSARY TO LOAD, ASSEMBLE, AND PACK AMMUNITION ITEMS FOR THE ARMY. THE INSTALLATION OCCUPIES APPROXIMATELY 15,546 ACRES OF LAND, OF WHICH APPROXIMATELY 12,300 ACRES ARE UNIMPROVED. LSAAP IS LOCATED IN BOWIE COUNTY IN NORTHEASTERN TEXAS, APPROXIMATELY 12 MILES WEST OF TEXARKANA, TEXAS. THE WESTERN BOUNDARY OF LSAAP ADJOINS RED RIVER ARMY DEPOT (RRAD); THE SOUTHERN BOUNDARY PARTIALLY ADJOINS RRAD, WITH THE REMAINDER ADJACENT TO TEXAS ROAD 991. THE EASTERN BOUNDARY IS BORDERED BY PRIVATELY-OWNED LAND, AND THE NORTHERN BOUNDARY ADJOINS U.S. HIGHWAY 82. A CHAIN-LINK OR BARBED-WIRE FENCE ENCLOSES THE ENTIRE INSTALLATION.

PRIOR TO ACQUISITION BY THE ARMY, THE LAND THAT COMPRISES LSAAP AND RRAD WAS USED FOR FARMING, GRAZING, AND TIMBER PRODUCTION. THE CONSTRUCTION OF BOTH LSAAP AND RRAD BEGAN DURING MID-1941 AND

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BOTH WERE COMPLETED DURING THE SUMMER OF 1942. MILITARY ACTIVITIES BEGAN IMMEDIATELY UPON COMPLETION, WITH LSAAP PRODUCING MUNITIONS, AND RRAD SHIPPING AND STORING MUNITIONS AND CONDUCTING MUNITIONS TRAINING OF TROOPS. THESE ACTIVITIES CONTINUED UNTIL NOVEMBER 1945, WHEN LSAAP AND RRAD WERE COMBINED AND DESIGNATED THE RED RIVER ARSENAL, WITH A JOINT MISSION OF DEMILITARIZATION AND RENOVATION.

THAT JOINT MISSION CONTINUED UNTIL EARLY 1951, WHEN LSAAP ACTIVELY RESUMED PRODUCTION OF MUNITIONS, AND RRAD RESUMED SHIPPING AND STORING MUNITIONS AND ALSO STARTED MAINTAINING VEHICLES. THE INSTALLATIONS WERE NO LONGER COMBINED, AND ADDITIONAL FACILITIES WERE CONSTRUCTED AT LSAAP. PRODUCTION CUTBACKS BEGAN IMMEDIATELY AFTER THE KOREAN WAR ENDED IN 1953 AND CONTINUED THROUGH 1960. MOST OF THE AREAS AND FACILITIES AT BOTH INSTALLATIONS WERE INACTIVE DURING THIS PERIOD. ALL ACTIVITIES INCREASED AGAIN FROM 1964 TO 1975 DURING THE VIETNAM WAR. HOWEVER, PRODUCTION HAS GRADUALLY DECLINED FROM EARLY 1969 TO THE PRESENT.

THE OLD DEMOLITION AREA (ODA) WAS ESTABLISHED IN 1943, AND WAS USED BRIEFLY FOR OPEN DETONATION OF OFF-SPECIFICATION MUNITIONS UNTIL IT CLOSED IN 1944. FROM 1944 UNTIL 1951, EXPLOSIVES WERE DESTROYED AT THE RRAD DEMOLITION AREA. IN 1951, A NEW DEMOLITION AREA WAS ESTABLISHED AT LSAAP ABOUT 1 MILE NORTHEAST OF THE ODA. THIS NEW DEMOLITION AREA CONTINUES TO BE USED TODAY. NO ACTIVITY OCCURRED AT THE ODA FROM 1944 TO 1986. IN 1986 THE ODA WAS CLEARED OF VEGETATION BY THE ARMY TO EXPOSE, COLLECT, AND DESTROY EXPLOSIVE DEBRIS. ADDITIONAL ORDNANCE DEBRIS HAS SINCE BEEN EXPOSED BY EROSION AND CAN BE OBSERVED ON THE SURFACE.

THE ODA WAS PLACED ON THE NATIONAL PRIORITIES LIST IN 1987. IN JULY OF 1990, EPA, THE STATE, AND THE ARMY SIGNED A FEDERAL FACILITIES AGREEMENT TO COVER THE INVESTIGATION, DEVELOPMENT, AND IMPLEMENTATION OF RESPONSE ACTIONS. A RECORD OF DECISION (ROD) WAS COMPLETED FOR THE ODA IN AUGUST 1999.

#### **OLD DEMOLITION AREA OU**

THE OLD DEMOLITION AREA (ODA), LOCATED IN THE SOUTH-CENTRAL PORTION OF LSAAP, IS ENTIRELY CONTAINED WITHIN THE INSTALLATION BOUNDARIES AND IS FENCED AND POSTED. THE FENCED AREA ENCLOSES 17.4 ACRES AND WAS USED BY THE ARMY TO DETONATE EXPLOSIVES DURING WORLD WAR II. THE ODA WAS USED BRIEFLY FOR OPEN DETONATION OF OFF-SPECIFICATION MUNITIONS FROM 1943 TO 1944. THIS ABANDONED DETONATION AREA WAS THE FINAL DISPOSAL LOCATION FOR THE DETONATED MUNITIONS (A MILITARY LANDFILL). ALTHOUGH LSAAP HAS OTHER ONGOING INDUSTRIAL ACTIVITIES, ONLY THE MUNITIONS DETONATED FROM 1943-1944.

#### REMEDY:

THE SELECTED REMEDY IS BASED ON THE PRESUMPTIVE REMEDY FOR CERCLA MUNICIPAL LANDFILLS. THIS PRESUMPTIVE REMEDY INCLUDES: A LANDFILL CAP (SOIL COVER), LEACHATE COLLECTION AND TREATMENT, SOURCE AREA GROUNDWATER CONTROL TO CONTAIN THE PLUME, LANDFILL GAS COLLECTION AND TREATMENT, AND INSTITUTIONAL CONTROLS TO SUPPLEMENT ENGINEERING CONTROLS. OF THESE FIVE CONTAINMENT PRESUMPTIVE REMEDY COMPONENTS, ONLY THE SOIL COVER AND INSTITUTIONAL CONTROLS ARE APPLICABLE FOR ADDRESSING THE SOURCE MATERIAL REMEDIAL ACTION OBJECTIVES (RAOS) FOR THE OLD DEMOLITION AREA (ODA). LEACHATE COLLECTION AND TREATMENT IS NOT REQUIRED BECAUSE LEACHING OF CHEMICALS FROM THE SOURCE MATERIAL DOES NOT PRODUCE A

HIGHLY CONCENTRATED LEACHATE, WHICH REQUIRES COLLECTION AND TREATMENT. SOURCE AREA GROUNDWATER CONTROL TO CONTAIN A PLUME IS NOT REQUIRED BECAUSE CHEMICALS LEACHED FROM THE SOURCE MATERIAL DO NOT FORM DEFINABLE CHEMICAL PLUMES IN THE GROUNDWATER BENEATH THE ODA. LANDFILL GAS COLLECTION AND TREATMENT IS NOT REQUIRED BECAUSE LANDFILL GAS DOES NOT, NOR IS EXPECTED TO, RESULT FROM THE ODA DUE TO THE NATURE OF THE SOURCE MATERIAL, WHICH DOES NOT DEGRADE INTO GAS.

THE SELECTED REMEDY IS DIVIDED INTO THREE PARTS: ENGINEERING CONTROLS, INSTITUTIONAL CONTROLS, AND MONITORING CONTROLS.

ENGINEERING CONTROLS THE ENGINEERING CONTROLS INCLUDE THE FOLLOWING: REMOVING EXPOSED ORDNANCE DEBRIS WITHIN THE EXISTING FENCED AREA BY EXPLOSIVE ORDNANCE SPECIALISTS; REGRADING AND LEVELING THE ODA AS NEEDED; PLACING A SOIL COVER OVER THE AREA CONSISTING OF 18 INCHES OF CLAYEY SOIL AND 6 INCHES OF TOP SOIL; CONSTRUCTING EROSION CONTROL BERMS ALONG THE NORTHERN AND EASTERN BOUNDARIES OF THE ODA AND WITHIN THE ODA'S INTERIOR TO PREVENT EROSION OF THE SOIL COVER; REVEGETATING THE SOIL COVER AND BERMS; AND POSTING NEW WARNING SIGNS ALONG A SINGLE STRAND CABLE TO MARK THE ODA BOUNDARIES.

INSTITUTIONAL CONTROLS THE INSTITUTIONAL CONTROLS INCLUDE THE FOLLOWING: RESTRICTING FUTURE LAND USE OF THE ODA USING THE DEED RECORDATION PROCEDURES IN THE STATE REQUIREMENTS; AND PREVENTING FUTURE INGESTION OF GROUNDWATER WITHIN THE STUDY AREA BY THE ARMY CONTROLLING GROUNDWATER WELL PERMITS.

MONITORING CONTROLS THE MONITORING CONTROLS INCLUDE THE FOLLOWING: CONDUCTING PERIODIC INSPECTIONS OF THE SOIL COVER, BERMS, AND CABLE THAT MARKS THE ODA BOUNDARIES TO IDENTIFY IF MAINTENANCE IS REQUIRED; PERFORMING PREVENTIVE MAINTENANCE AND REPAIRS; INSTALLING ADDITIONAL MONITORING WELLS AS DETERMINED DURING THE REMEDY DESIGN PHASE; PERFORMING QUARTERLY GROUNDWATER AND SURFACE WATER MONITORING FOR 3 YEARS TO DETERMINE IF CONTAMINATION IS MOVING OFF OF THE ODA AT INCREASED CONCENTRATIONS; PERFORMING ANNUAL GROUNDWATER AND SURFACE WATER MONITORING AFTER THE THIRD YEAR; AND EVALUATING THE EFFECTIVENESS OF THIS REMEDIAL ACTION EVERY 5 YEARS BY ANALYZING DATA COLLECTED OVER THE PERVIOUS 5-YEAR PERIOD AND WRITING A REPORT SUMMARIZING THIS EVALUATION.

ESTIMATED CAPITAL COST: \$968,000 ESTIMATED ANNUAL O&M COST: \$99,300 ESTIMATED PRESENT WORTH COST: \$1,664,650

ROD DATE: 08/31/1999

ROD TYPE: RECORD OF DECISION

ROD ID: EPA/541/R-99/165

ABSTRACT: THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED IN GROUNDWATER WELLS NEAR THE SOUTH BORDER OF THE FACILITY.

THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED IN GROUND WATER WELLS NEAR THE SOUTH BORDER OF THE FACILITY. THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED IN GROUNDWATER WELLS NEAR THE SOUTH BORDER OF THE FACILITY.

THE LONE STAR ARMY AMMUNITION PLANT (LSAAP) IS A GOVERNMENT-OWNED, CONTRACTOR-OPERATED INSTALLATION WHICH PERFORMS AND MAINTAINS THE VARIOUS FUNCTIONS NECESSARY TO LOAD, ASSEMBLE, AND PACK AMMUNITION ITEMS FOR THE ARMY. THE INSTALLATION OCCUPIES APPROXIMATELY 15,546 ACRES OF LAND, OF WHICH APPROXIMATELY 12,300 ACRES ARE UNIMPROVED. LSAAP IS LOCATED IN BOWIE COUNTY IN NORTHEASTERN TEXAS, APPROXIMATELY 12 MILES WEST OF TEXARKANA, TEXAS. THE WESTERN BOUNDARY OF LSAAP ADJOINS RED RIVER ARMY DEPOT (RRAD); THE SOUTHERN BOUNDARY PARTIALLY ADJOINS RRAD, WITH THE REMAINDER ADJACENT TO TEXAS ROAD 991. THE EASTERN BOUNDARY IS BORDERED BY PRIVATELY-OWNED LAND, AND THE NORTHERN BOUNDARY ADJOINS U.S. HIGHWAY 82. A CHAIN-LINK OR BARBED-WIRE FENCE ENCLOSES THE ENTIRE INSTALLATION.

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PRIOR TO ACQUISITION BY THE ARMY, THE LAND THAT COMPRISES LSAAP AND RRAD WAS USED FOR FARMING, GRAZING, AND TIMBER PRODUCTION. THE CONSTRUCTION OF BOTH LSAAP AND RRAD BEGAN DURING MID-1941 AND BOTH WERE COMPLETED DURING THE SUMMER OF 1942. MILITARY ACTIVITIES BEGAN IMMEDIATELY UPON COMPLETION, WITH LSAAP PRODUCING MUNITIONS, AND RRAD SHIPPING AND STORING MUNITIONS AND CONDUCTING MUNITIONS TRAINING OF TROOPS. THESE ACTIVITIES CONTINUED UNTIL NOVEMBER 1945, WHEN LSAAP AND RRAD WERE COMBINED AND DESIGNATED THE RED RIVER ARSENAL, WITH A JOINT MISSION OF DEMILITARIZATION AND RENOVATION.

THAT JOINT MISSION CONTINUED UNTIL EARLY 1951, WHEN LSAAP ACTIVELY RESUMED PRODUCTION OF MUNITIONS, AND RRAD RESUMED SHIPPING AND STORING MUNITIONS AND ALSO STARTED MAINTAINING VEHICLES. THE INSTALLATIONS WERE NO LONGER COMBINED, AND ADDITIONAL FACILITIES WERE CONSTRUCTED AT LSAAP. PRODUCTION CUTBACKS BEGAN IMMEDIATELY AFTER THE KOREAN WAR ENDED IN 1953 AND CONTINUED THROUGH 1960. MOST OF THE AREAS AND FACILITIES AT BOTH INSTALLATIONS WERE INACTIVE DURING THIS PERIOD. ALL ACTIVITIES INCREASED AGAIN FROM 1964 TO 1975 DURING THE VIETNAM WAR. HOWEVER, PRODUCTION HAS GRADUALLY DECLINED FROM EARLY 1969 TO THE PRESENT.

THE OLD DEMOLITION AREA (ODA) WAS ESTABLISHED IN 1943, AND WAS USED BRIEFLY FOR OPEN DETONATION OF OFF-SPECIFICATION MUNITIONS UNTIL IT CLOSED IN 1944. FROM 1944 UNTIL 1951, EXPLOSIVES WERE DESTROYED AT THE RRAD DEMOLITION AREA. IN 1951, A NEW DEMOLITION AREA WAS ESTABLISHED AT LSAAP ABOUT 1 MILE NORTHEAST OF THE ODA. THIS NEW DEMOLITION AREA CONTINUES TO BE USED TODAY. NO ACTIVITY OCCURRED AT THE ODA FROM 1944 TO 1986. IN 1986 THE ODA WAS CLEARED OF VEGETATION BY THE ARMY TO EXPOSE, COLLECT, AND DESTROY EXPLOSIVE DEBRIS. ADDITIONAL ORDNANCE DEBRIS HAS SINCE BEEN EXPOSED BY EROSION AND CAN BE OBSERVED ON THE SURFACE.

THE ODA WAS PLACED ON THE NATIONAL PRIORITIES LIST IN 1987. IN JULY OF 1990, EPA, THE STATE, AND THE ARMY SIGNED A FEDERAL FACILITIES AGREEMENT TO COVER THE INVESTIGATION, DEVELOPMENT, AND IMPLEMENTATION OF RESPONSE ACTIONS. A RECORD OF DECISION (ROD) WAS COMPLETED FOR THE ODA IN AUGUST 1999.

#### **OLD DEMOLITION AREA OU**

THE OLD DEMOLITION AREA (ODA), LOCATED IN THE SOUTH-CENTRAL PORTION OF LSAAP, IS ENTIRELY CONTAINED WITHIN THE INSTALLATION BOUNDARIES AND IS FENCED AND POSTED. THE FENCED AREA ENCLOSES 17.4 ACRES AND WAS USED BY THE ARMY TO DETONATE EXPLOSIVES DURING WORLD WAR II. THE ODA WAS USED BRIEFLY FOR OPEN DETONATION OF OFF-SPECIFICATION MUNITIONS FROM 1943 TO 1944. THIS ABANDONED DETONATION AREA WAS THE FINAL DISPOSAL LOCATION FOR THE DETONATED MUNITIONS (A MILITARY LANDFILL). ALTHOUGH LSAAP HAS OTHER ONGOING INDUSTRIAL ACTIVITIES, ONLY THE MUNITIONS DETONATED FROM 1943-1944.

REMEDY: THE SELECTED REMEDY IS BASED ON THE PRESUMPTIVE REMEDY FOR CERCLA MUNICIPAL LANDFILLS. THIS PRESUMPTIVE REMEDY INCLUDES: A LANDFILL CAP (SOIL COVER), LEACHATE COLLECTION AND TREATMENT, SOURCE AREA GROUNDWATER CONTROL TO CONTAIN THE PLUME, LANDFILL GAS COLLECTION AND TREATMENT, AND INSTITUTIONAL CONTROLS TO SUPPLEMENT ENGINEERING CONTROLS. OF THESE FIVE CONTAINMENT PRESUMPTIVE REMEDY COMPONENTS, ONLY THE SOIL COVER AND INSTITUTIONAL CONTROLS ARE APPLICABLE FOR ADDRESSING THE SOURCE MATERIAL REMEDIAL ACTION OBJECTIVES (RAOS) FOR THE OLD DEMOLITION AREA (ODA). LEACHATE COLLECTION AND TREATMENT IS NOT REQUIRED BECAUSE LEACHING OF CHEMICALS FROM THE SOURCE MATERIAL DOES NOT PRODUCE A

HIGHLY CONCENTRATED LEACHATE, WHICH REQUIRES COLLECTION AND TREATMENT. SOURCE AREA GROUNDWATER CONTROL TO CONTAIN A PLUME IS NOT REQUIRED BECAUSE CHEMICALS LEACHED FROM THE SOURCE MATERIAL DO NOT FORM DEFINABLE CHEMICAL PLUMES IN THE GROUNDWATER BENEATH THE ODA. LANDFILL GAS COLLECTION AND



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TREATMENT IS NOT REQUIRED BECAUSE LANDFILL GAS DOES NOT, NOR IS EXPECTED TO, RESULT FROM THE ODA DUE TO THE NATURE OF THE SOURCE MATERIAL, WHICH DOES NOT DEGRADE INTO GAS.

THE SELECTED REMEDY IS DIVIDED INTO THREE PARTS: ENGINEERING CONTROLS, INSTITUTIONAL CONTROLS, AND MONITORING CONTROLS.

ENGINEERING CONTROLS THE ENGINEERING CONTROLS INCLUDE THE FOLLOWING: REMOVING EXPOSED ORDNANCE DEBRIS WITHIN THE EXISTING FENCED AREA BY EXPLOSIVE ORDNANCE SPECIALISTS; REGRADING AND LEVELING THE ODA AS NEEDED; PLACING A SOIL COVER OVER THE AREA CONSISTING OF 18 INCHES OF CLAYEY SOIL AND 6 INCHES OF TOP SOIL; CONSTRUCTING EROSION CONTROL BERMS ALONG THE NORTHERN AND EASTERN BOUNDARIES OF THE ODA AND WITHIN THE ODA'S INTERIOR TO PREVENT EROSION OF THE SOIL COVER; REVEGETATING THE SOIL COVER AND BERMS; AND POSTING NEW WARNING SIGNS ALONG A SINGLE STRAND CABLE TO MARK THE ODA BOUNDARIES.

INSTITUTIONAL CONTROLS THE INSTITUTIONAL CONTROLS INCLUDE THE FOLLOWING: RESTRICTING FUTURE LAND USE OF THE ODA USING THE DEED RECORDATION PROCEDURES IN THE STATE REQUIREMENTS; AND PREVENTING FUTURE INGESTION OF GROUNDWATER WITHIN THE STUDY AREA BY THE ARMY CONTROLLING GROUNDWATER WELL PERMITS.

MONITORING CONTROLS THE MONITORING CONTROLS INCLUDE THE FOLLOWING: CONDUCTING PERIODIC INSPECTIONS OF THE SOIL COVER, BERMS, AND CABLE THAT MARKS THE ODA BOUNDARIES TO IDENTIFY IF MAINTENANCE IS REQUIRED; PERFORMING PREVENTIVE MAINTENANCE AND REPAIRS; INSTALLING ADDITIONAL MONITORING WELLS AS DETERMINED DURING THE REMEDY DESIGN PHASE; PERFORMING QUARTERLY GROUNDWATER AND SURFACE WATER MONITORING FOR 3 YEARS TO DETERMINE IF CONTAMINATION IS MOVING OFF OF THE ODA AT INCREASED CONCENTRATIONS; PERFORMING ANNUAL GROUNDWATER AND SURFACE WATER MONITORING AFTER THE THIRD YEAR; AND EVALUATING THE EFFECTIVENESS OF THIS REMEDIAL ACTION EVERY 5 YEARS BY ANALYZING DATA COLLECTED OVER THE PERVIOUS 5-YEAR PERIOD AND WRITING A REPORT SUMMARIZING THIS EVALUATION.

ESTIMATED CAPITAL COST: \$968,000 ESTIMATED ANNUAL O&M COST: \$99,300 ESTIMATED PRESENT WORTH COST: \$1,664,650

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## **Groundwater Contamination Cases (GWCC)**

**MAP ID# 1** 

Distance from Property: 0.00 mi. X

#### **FACILITY INFORMATION**

FILE NUMBER: MSW01898

FILE NAME: LONE STAR ARMY AMMUNITION PLANT LANDFILL

LOCATION: LONE STAR ARMY AMMUNITION PLANT 11 MILES W OF TEXARKANA CITY LIMIT

COUNTY: BOWIE

AGENCY: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DIVISION: WASTE PERMITS DIVISION/MUNICIPAL SOLID WASTE (TCEQ)

DATE OF CONTAMINATION

CONFIRMATION BY AGENCY: 12/31/2005 CONTAMINANT(S): NOT REPORTED

ENFORCEMENT STATUS: STAFF ACTION: THE AGENCY INITIATES AN ACTION TO ADDRESS A CONTAMINATION INCIDENT

BY APPROVAL OF A WORK PLAN (E.G., ASSESSMENT CORRECTIVE ACTION, ETC.).

ACTIVITY STATUS: ACTION COMPLETED: THE REMEDY IS CONSIDERED COMPLETE AND NO FURTHER REGULATORY

ACTION IS REQUIRED.

NEW CASE?: NO

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## Groundwater Contamination Cases (GWCC)



## Unlocatable Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

Database Name	Site ID#	Site Name	Address	City/State/Zip/County
FUDS	K06TX0139	RED RIVER ARS RIF RANGE		Hooks 75561 Bowie
ICIS	551120120	RED RIVER REDEVELOPMENT AUTH.	RED RV ARSENAL 19000 ACRES S	NEW BOSTON 75570-9554 Bowie
ICISNPDES	TX0126098*INPD ES	RED RIVER REDEVELOPMENT AUTH.	RED RV ARSENAL 19000 ACRES S	NEW BOSTON 755709554 Bowie
NPDESR06	TX0126098*NPD ES	RED RIVER REDEVELOPMENT AUTHOR	RED RV ARSENAL, 19000 ACRES S ADJ USHWY 82 S, BOWIE COUNTY	NEW BOSTON 755709554 Bowie

#### Environmental Records Definitions - FEDERAL

AIRSAFS Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 04/28/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance.

BRS Biennial Reporting System

VERSION DATE: 12/31/11

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 09/06/13

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

**DOCKETS** EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC Federal Engineering Institutional Control Sites

**VERSION DATE: 01/14/14** 

This database includes site locations where Engineering and/or Institutional Controls have been identified as part



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#### **Environmental Records Definitions - FEDERAL**

of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

**ERNSTX** 

**Emergency Response Notification System** 

VERSION DATE: 07/27/14

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

**FRSTX** 

Facility Registry System

VERSION DATE: 08/04/13

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRSR06

Hazardous Materials Incident Reporting System

VERSION DATE: 01/10/14

The HMIRS database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

ICIS

Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 08/01/12

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

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ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 08/01/12

In 2006, the Integrated Compliance Information System (ICIS) - National Pollutant Discharge Elimination System (NPDES) became the NPDES national system of record for select states, tribes and territories. ICIS-NPDES is an information management system maintained by the United States Environmental Protection Agency's Office of Compliance to track permit compliance and enforcement status of facilities regulated by the NPDES under the Clean Water Act. ICIS-NPDES is designed to support the NPDES program at the state, regional, and national levels.

**LUCIS** Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 01/30/13

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States Nuclear Regulatory Commission (NRC) licensing requirements.

NPDESR06 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Information in this database is extracted from the Water Permit Compliance System (PCS) database which is used by United States Environmental Protection Agency to track surface water permits issued under the Clean Water Act. This database includes permitted facilities located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. The NPDES database was collected from December 2002 until April 2007. Refer to the PCS and/or ICIS-NPDES database as source of current data.

PADS PCB Activity Database System

VERSION DATE: 06/01/13

The PCB Activity Database System (PADS) is used by the United States Environmental Protection Agency to monitor the activities of polychlorinated biphenyls (PCB) handlers.

PCSR06 Permit Compliance System

VERSION DATE: 08/01/12

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The Permit Compliance System is used in tracking enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act and is maintained by the United States Environmental Protection Agency's Office of Compliance. PCS is designed to support the NPDES program at the state, regional, and national levels. This database includes permitted facilities located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

RCRASC RCRA Sites with Controls

VERSION DATE: 01/14/14

This list of Resource Conservation and Recovery Act sites with institutional controls in place is provided by the U.S. Environmental Protection Agency.

SFLIENS CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete.

SSTS Section Seven Tracking System

**VERSION DATE: 12/31/09** 

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

TRI Toxics Release Inventory

VERSION DATE: 12/31/12

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/06

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The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site.

**NLRRCRAG** 

No Longer Regulated RCRA Generator Facilities

VERSION DATE: 04/10/14

This database includes RCRA Generator facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly generated hazardous waste.

Large Quantity Generators: Generate 1,000 kg or more of hazardous waste during any calendar month; or Generate more than 1 kg of acutely hazardous waste during any calendar month; or Generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month; or Generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1kg of acutely hazardous waste at any time; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

Small Quantity Generators: Generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or Generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.

Conditionally Exempt Small Quantity Generators: Generate 100 kilograms or less of hazardous waste per calendar month, and accumulate 1000 kg or less of hazardous waste at any time; or Generate one kilogram or less of acutely hazardous waste per calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste.

RCRAGR06

Resource Conservation & Recovery Act - Generator Facilities

VERSION DATE: 04/10/14

This database includes sites listed as generators of hazardous waste (large, small, and exempt) in the RCRAInfo system. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the



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data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). This database includes sites located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

Large Quantity Generators: Generate 1,000 kg or more of hazardous waste during any calendar month; or Generate more than 1 kg of acutely hazardous waste during any calendar month; or Generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month; or Generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1kg of acutely hazardous waste at any time; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

Small Quantity Generators: Generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or Generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.

Conditionally Exempt Small Quantity Generators: Generate 100 kilograms or less of hazardous waste per calendar month, and accumulate 1000 kg or less of hazardous waste at any time; or Generate one kilogram or less of acutely hazardous waste per calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste.

HISTPST Historical Gas Stations

VERSION DATE: 07/01/30

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

BF Brownfields Management System

VERSION DATE: 04/15/14

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment.

CERCLIS Comprehensive Environmental Response, Compensation & Liability Information System

VERSION DATE: 10/25/13



CERCLIS is the repository for site and non-site specific Superfund information in support of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This United States Environmental Protection Agency database contains an extract of sites that have been investigated or are in the process of being investigated for potential environmental risk.

**DNPL** Delisted National Priorities List

VERSION DATE: 10/25/13

This database includes sites from the United States Environmental Protection Agency's Final National Priorties List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

NFRAP No Further Remedial Action Planned Sites

VERSION DATE: 10/25/13

This database includes sites which have been determined by the United States Environmental Protection Agency, following preliminary assessment, to no longer pose a significant risk or require further activity under CERCLA. After initial investigation, no contamination was found, contamination was quickly removed or contamination was not serious enough to require Federal Superfund action or NPL consideration.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 04/10/14

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

**ODI** Open Dump Inventory

VERSION DATE: 06/01/85

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

RCRAT Resource Conservation & Recovery Act - Treatment, Storage & Disposal Facilities

VERSION DATE: 04/10/14

This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste in the RCRAInfo system. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource



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Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

**DOD** Department of Defense Sites

VERSION DATE: 12/01/05

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

**FUDS** Formerly Used Defense Sites

VERSION DATE: 06/01/14

The 2012 Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. DISCLAIMER: This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 04/10/14

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

NPL National Priorities List

VERSION DATE: 10/25/13

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

PNPL Proposed National Priorities List

VERSION DATE: 10/25/13

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This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 04/10/14

This database includes hazardous waste sites listed with corrective action activity in the RCRAInfo system. The Corrective Action Program requires owners or operators of RCRA facilities (or treatment, storage, and disposal facilities) to investigate and cleanup contamination in order to protect human health and the environment. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

RODS Record of Decision System

VERSION DATE: 07/01/13

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

**GWCC** Groundwater Contamination Cases

VERSION DATE: 12/31/12

This report contains a listing of groundwater contamination cases which were documented for the 2012 calendar year. Texas Water Code, Section 26.406 requires the annual report to describe the current status of groundwater monitoring activities conducted or required by each agency at regulated facilities or associated with regulated activities. The agencies reporting these contamination cases include the Texas Commission on Environmental Quality, Railroad Commission of Texas, Texas Alliance of Groundwater Districts, and Department of State Health Services.

HISTGWCC Historic Groundwater Contamination Cases

VERSION DATE: NR

This historic report contains all agency groundwater contamination cases documented from 1994 to 2011. The agencies that reported these contamination cases included the Texas Commission on Environmental Quality, Railroad Commission of Texas, Texas Alliance of Groundwater Districts, and Department of State Health Services.

LIENS TCEQ Liens

VERSION DATE: 07/14/14

Liens filed upon State and/or Federal Superfund Sites by the Texas Commission on Environmental Quality.

MSD Municipal Setting Designations

**VERSION DATE: 08/18/14** 

The Texas Commission on Environmental Quality defines an MSD as an official state designation given to property within a municipality or its extraterritorial jurisdiction that certifies that designated groundwater at the property is not used as potable water, and is prohibited from future use as potable water because that groundwater is contaminated in excess of the applicable potable-water protective concentration level. The prohibition must be in the form of a city ordinance, or a restrictive covenant that is enforceable by the city and filed in the property records. The MSD property can be a single property, multi-property, or a portion of property.

NOV Notice of Violations

VERSION DATE: 08/14/14

This database containing Notice of Violations (NOV) is maintained by the Texas Commission on Environmental Quality. An NOV is a written notification that documents and communicates violations observed during an inspection to the business or individual inspected.

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SIEC01 State Institutional/Engineering Control Sites

VERSION DATE: 08/19/14

The Texas Risk Reduction Program (TRRP) requires the placement of institutional controls (e.g., deed notices or restrictive covenants) on affected property in different circumstances as part of completing a response action. In its simplest form, an institutional control (IC) is a legal document that is recorded in the county deed records. In certain circumstances, local zoning or ordinances can serve as an IC. This listing may also include locations where Engineering Controls are in effect, such as a cap, barrier, or other engineering device to prevent access, exposure, or continued migration of contamination. The sites included on this list are regulated by various programs of the Texas Commission on Environmental Quality (TCEQ).

SPILLS Spills Listing

VERSION DATE: 08/13/14

This Texas Commission on Environmental Quality database includes releases of hazardous or potentially hazardous materials into the environment.

TIERII Tier I I Chemical Reporting Program Facilities

**VERSION DATE: 12/31/12** 

The Texas Tier II Chemical Reporting Program in the Department of State Health Services (DSHS) is the state repository for EPCRA-required Emergency Planning Letters (EPLs), which are one-time notifications to the state from facilities that have certain extremely hazardous chemicals in specified amounts. The Program is also the state repository for EPCRA/state-required hazardous chemical inventory reports called Texas Tier Two Reports. This data contains those facility reports for the 2005 through the 2012 calendar years.

DCR Dry Cleaner Registration Database

VERSION DATE: 10/01/14

The database includes dry cleaning drop stations and facilities registered with the Texas Commission on Environmental Quality.

IHW Industrial and Hazardous Waste Sites

VERSION DATE: 08/01/14

Owner and facility information is included in this database of permitted and non-permitted industrial and hazardous waste sites. Industrial waste is waste that results from or is incidental to operations of industry, manufacturing, mining, or agriculture. Hazardous waste is defined as any solid waste listed as hazardous or possesses one or more hazardous characteristics as defined in federal waste regulations. The IHW database is maintained by the Texas Commission on Environmental Quality.

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PIHW Permitted Industrial Hazardous Waste Sites

VERSION DATE: 08/01/14

Owner and facility information is included in this database of all permitted industrial and hazardous waste sites. Industrial waste is waste that results from or is incidental to operations of industry, manufacturing, mining, or agriculture. Hazardous waste is defined as any solid waste listed as hazardous or possesses one or more hazardous characteristics as defined in federal waste regulations. Permitted IHW facilities are regulated under 30 Texas Administrative Code Chapter 335 in addition to federal regulations. The IHW database is maintained by the Texas Commission on Environmental Quality.

PST Petroleum Storage Tanks

VERSION DATE: 08/01/14

The Petroleum Storage Tank database is administered by the Texas Commission on Environmental Quality (TCEQ). Both Underground storage tanks (USTs) and Aboveground storage tanks (ASTs) are included in this report. Petroleum Storage Tank registration has been a requirement with the TCEQ since 1986.

APAR Affected Property Assessment Reports

VERSION DATE: 09/16/14

As regulated by the Texas Commission on Environmental Quality, an Affected Property Assessment Report is required when a person is addressing a release of chemical of concern (COC) under 30 TAC Chapter 350, the Texas Risk Reduction Program (TRRP). The purpose of the APAR is to document all relevant affected property information to identify all release sources and COCs, determine the extent of all COCs, identify all transport/exposure pathways, and to determine if any response actions are necessary. The Texas Administrative Code Title 30 §350.4(a)(1) defines affected property as the entire area (i.e. on-site and off-site; including all environmental media) which contains releases of chemicals of concern at concentrations equal to or greater than the assessment level applicable for residential land use and groundwater classification.

BSA Brownfields Site Assessments

VERSION DATE: 08/19/14

The Brownfields Site Assessments database is maintained by the Texas Commission on Environmental Quality (TCEQ). The TCEQ, in close partnership with the U.S. Environmental Protection Agency (EPA) and other federal, state, and local redevelopment agencies, and stakeholders, is facilitating cleanup, transferability, and revitalization of brownfields through the development of regulatory, tax, and technical assistance tools.

CALF Closed & Abandoned Landfill Inventory

VERSION DATE: 11/01/05

The Texas Commission on Environmental Quality, under a contract with Texas State University, and in cooperation with the 24 regional Council of Governments (COGs) in the State, has located over 4,000 closed



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and abandoned municipal solid waste landfills throughout Texas. This listing contains "unauthorized sites". Unauthorized sites have no permit and are considered abandoned. The information available for each site varies in detail and this historical information is not updated. Please refer to the specific regional COG for the most current information.

**DCRPS** Dry Cleaner Remediation Program Sites

VERSION DATE: 09/01/14

This list of DCRP sites is provided by the Texas Commission on Environmental Quality (TCEQ). According to the TCEQ, the Dry Cleaner Remediation Program (DCRP) establishes a prioritization list of dry cleaner sites and administers the Dry Cleaning Remediation fund to assist with remediation of contamination caused by dry cleaning solvents.

IOP Innocent Owner / Operator Database

VERSION DATE: 08/19/14

Texas Innocent Owner / Operator (IOP), created by House Bill 2776 of the 75th Legislature, provides a certificate to an innocent owner or operator if their property is contaminated as a result of a release or migration of contaminants from a source or sources not located on the property, and they did not cause or contribute to the source or sources of contamination. The IOP database is maintained by the Texas Commission on Environmental Quality.

LPST Leaking Petroleum Storage Tanks

VERSION DATE: 12/01/13

The Leaking Petroleum Storage Tank listing is derived from the Petroleum Storage Tank (PST) database and is maintained by the Texas Commission on Environmental Quality. This listing includes aboveground and underground storage tank facilities with reported leaks.

MSWLF Municipal Solid Waste Landfill Sites

VERSION DATE: 10/10/14

The municipal solid waste landfill database is provided by the Texas Commission on Environmental Quality. This database includes active landfills and inactive landfills, where solid waste is treated or stored.

RRCVCP Railroad Commission VCP and Brownfield Sites

VERSION DATE: 04/18/14

According to the Railroad Commission of Texas, their Voluntary Cleanup Program (RRC-VCP) provides an incentive to remediate Oil & Gas related pollution by participants as long as they did not cause or contribute to the contamination. Applicants to the program receive a release of liability to the state in exchange for a successful cleanup.



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RWS Radioactive Waste Sites

VERSION DATE: 07/11/06

This Texas Commission on Environmental Quality database contains all sites in the State of Texas that have been designated as Radioactive Waste sites.

VCP Voluntary Cleanup Program Sites

VERSION DATE: 08/19/14

The Texas Voluntary Cleanup Program (VCP) provides administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in Texas. Since all non-responsible parties, including future lenders and landowners, receive protection from liability to the state of Texas for cleanup of sites under the VCP, most of the constraints for completing real estate transactions at those sites are eliminated. As a result, many unused or underused properties may be restored to economically productive or community beneficial uses. The VCP database is maintained by the Texas Commission on Environmental Quality.

WMRF Recycling Facilities

VERSION DATE: 11/01/12

This listing of recycling facilities is provided by the Texas Commission on Environmental Quality's Recycle Texas Online service. The company information provided in this database is self-reported. Since recyclers post their own information, a facility or company appearing on the list does not imply that it is in compliance with TCEQ regulations or other applicable laws. This database is no longer maintained and includes the last compilation of the program participants before the Recycle Texas Online program was closed.

IHWCA Industrial and Hazardous Waste Corrective Action Sites

VERSION DATE: 08/19/14

This database is provided by the Texas Commission on Environmental Quality (TCEQ). According to the TCEQ, the mission of the industrial and hazardous waste corrective action program is to oversee the cleanup of sites contaminated from industrial and municipal hazardous and industrial nonhazardous wastes. The goals of this program are to: Ensure that sites are assessed and remediated to levels that protect human health and the environment; Verify that waste management units or facilities are taken out of service and closed properly; and to Facilitate revitalization of contaminated properties.

SF State Superfund Sites

VERSION DATE: 03/01/14

The state Superfund program mission is to remediate abandoned or inactive sites within the state that pose an unacceptable risk to public health and safety or the environment, but which do not qualify for action under the federal Superfund program (NPL - National Priority Listing). As required by the Texas Solid Waste Disposal Act, Texas Health and Safety Code, Chapter 361, the Texas Commission on Environmental Quality identifies and



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evaluates these facilities for inclusion on the state Superfund registry. This registry includes any recent developments and the anticipated action for these sites.

USTR06 Underground Storage Tanks On Tribal Lands

**VERSION DATE: 10/30/13** 

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

LUSTR06 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/30/13

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

INDIANRES Indian Reservations

VERSION DATE: 01/01/00

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

# Appendix G

**Resumes of Environmental Professionals** 

# **AREAS OF EXPERTISE** Environmental Consulting

#### REGISTRATION

Certified Environmental Professional: CEP No. 93034512

#### **EDUCATION**

B.S. Biology, Texas A&M 1980

# PROFESSIONAL MEMBERSHIPS

National Association of Environmental Professionals

Water Environment Association of Texas

The Academy of Board Certified Environmental Professionals

#### **PROFESSIONAL HISTORY**

Manager of Environmental Services, ETTL Engineers and Consultants Inc. 1993-present

Sr. Project Manager, ETTL Engineers and Consultants Inc. 1990-1993

Project Manager, ETTL Engineers and Consultants Inc. 1989-1990

Quality/Environmental Control Officer, Robroy Industries-Texas, Inc. 1981-1989

Quality/Environmental Technician, Robroy Industries-Texas, Inc. 1980-1981



**Steven R. Kennedy, CEP Manager of Environmental Services** 

#### **EXPERIENCE**

Mr. Kennedy has over 30 years of experience on environmental projects. Areas of experience include waste management, industrial wastewater treatment, hazardous waste landfills, hazardous waste treatment, aboveground and underground storage tanks, groundwater monitoring and remediation systems, environmental assessments; development of response actions, and the management of the environmental department for an engineering/consulting firm, including the oversight of an analytical laboratory.

Mr. Kennedy has managed large environmental projects for the U.S. Forest Service, U.S. Army Corps of Engineers, Texas Department of Transportation, counties, cities, and pubic school systems, as well as a wide variety of private-sector clients that include large industries. He has managed several multi-million dollar projects. He and his staff have completed thousands of Phase I environmental site assessments, hundreds of Phase II investigations, and hundreds of Phase III site remediations. These investigations have been performed on complex industrial facilities, various commercial properties, agricultural properties, wholesale and retail fuel facilities, refineries, oil and gas exploration sites, and on public lands.



## AREAS OF EXPERTISE

**Environmental Science** 

#### **EDUCATION**

B.S. Environmental Science, Minor - Biology Stephen F. Austin State University, 2001 Cum Laude

40-Hour HAZWOPER

ASTM - Phase I ESA

# PROFESSIONAL MEMBERSHIPS

Water Environment Association of Texas

#### PROFESSIONAL HISTORY

Environmental Specialist/ Project Manager ETTL Engineers and Consultants Inc. 2005-present

Southwest Region Special Waste Manager- Republic Services 2002-2005



**Daniel J. Richbourg Environmental Specialist/Project Manager** 

#### **EXPERIENCE**

Mr. Richbourg oversees field sampling of all media utilizing various sampling methods. Mr. Richbourg's sampling experience includes environmental sampling for landfills, refineries, service stations, dry-cleaners, voluntary cleanup (VCP), and other various sites.

Mr. Richbourg operates and maintains remediation systems and provides assistance on special projects. Mr. Richbourg's experience includes Phase I and II Environmental Site Assessments, Transaction Screen Questionnaires, Stormwater Pollution Prevention Plans (SWP3), and Spill Prevention, Control, and Countermeasure Plans (SPCC).

While with Republic Services, Mr. Richbourg served as Special Waste Manager for the Southwest Region. His responsibilities included review of special waste profiles for landfill acceptance.



# Appendix H Other Information

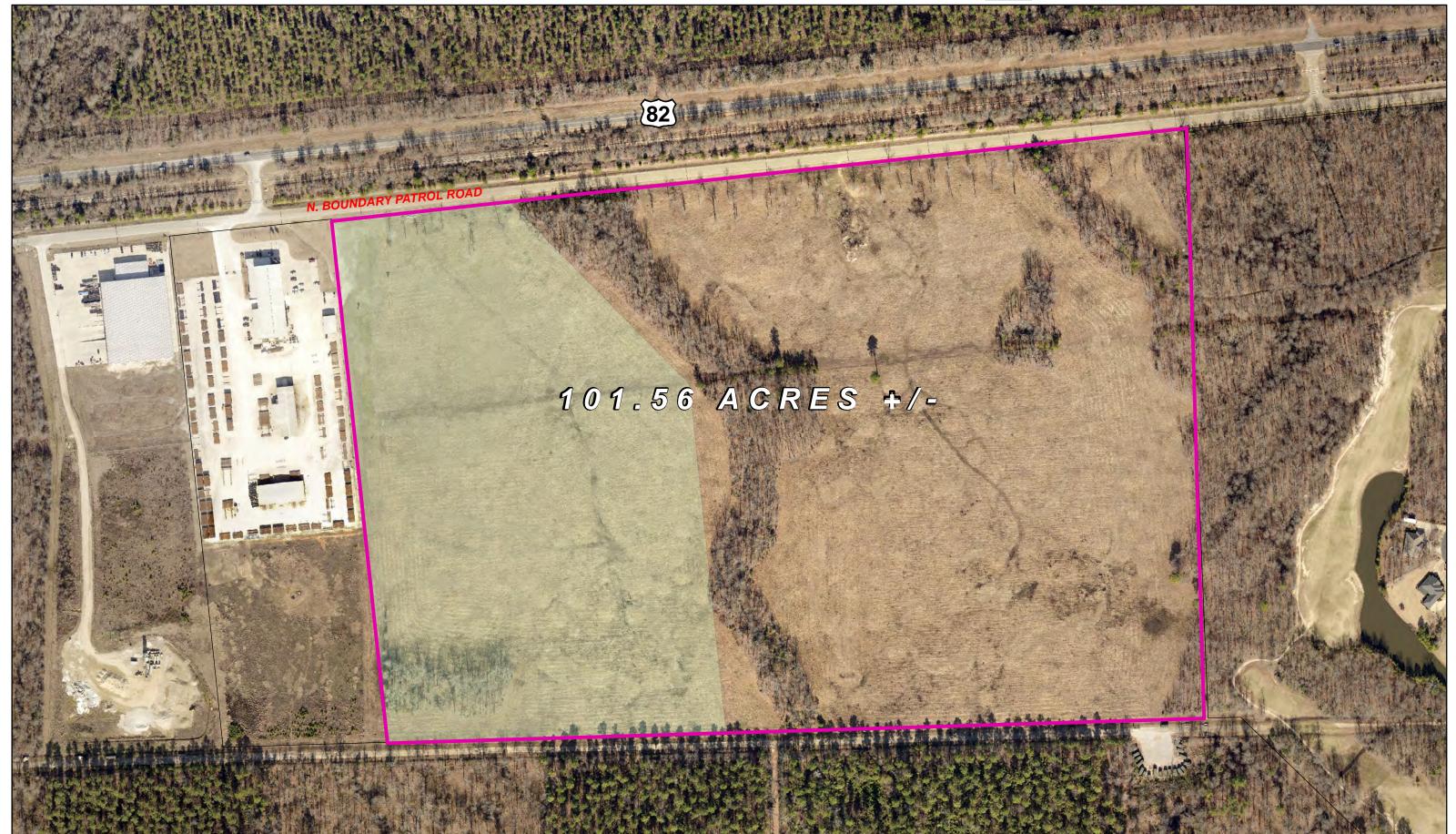


TEXAMERICAS CENTER
CENTRAL CAMPUS
PHASE I ESA SITE MAP

Legend

Phase I ESA Limits
AEP Lease Area







# Legend

TexAmericas Center Central Campus

Phase I ESA Limits

# TEXAMERICAS CENTER CENTRAL CAMPUS PHASE I ESA LOCATION MAP





Drawn Bu

Checked By

J.A.M.

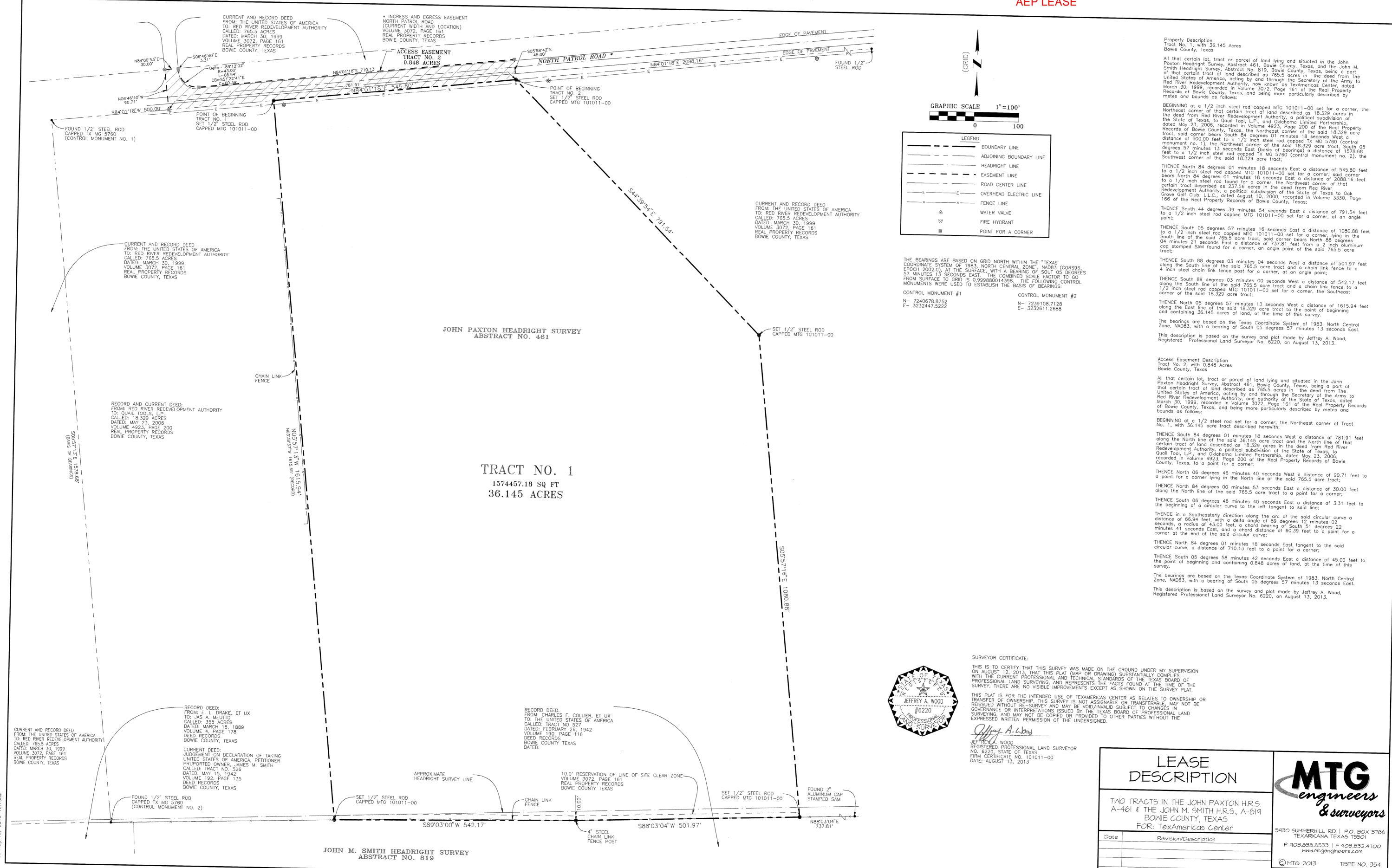
Project No. | Dwg. Date

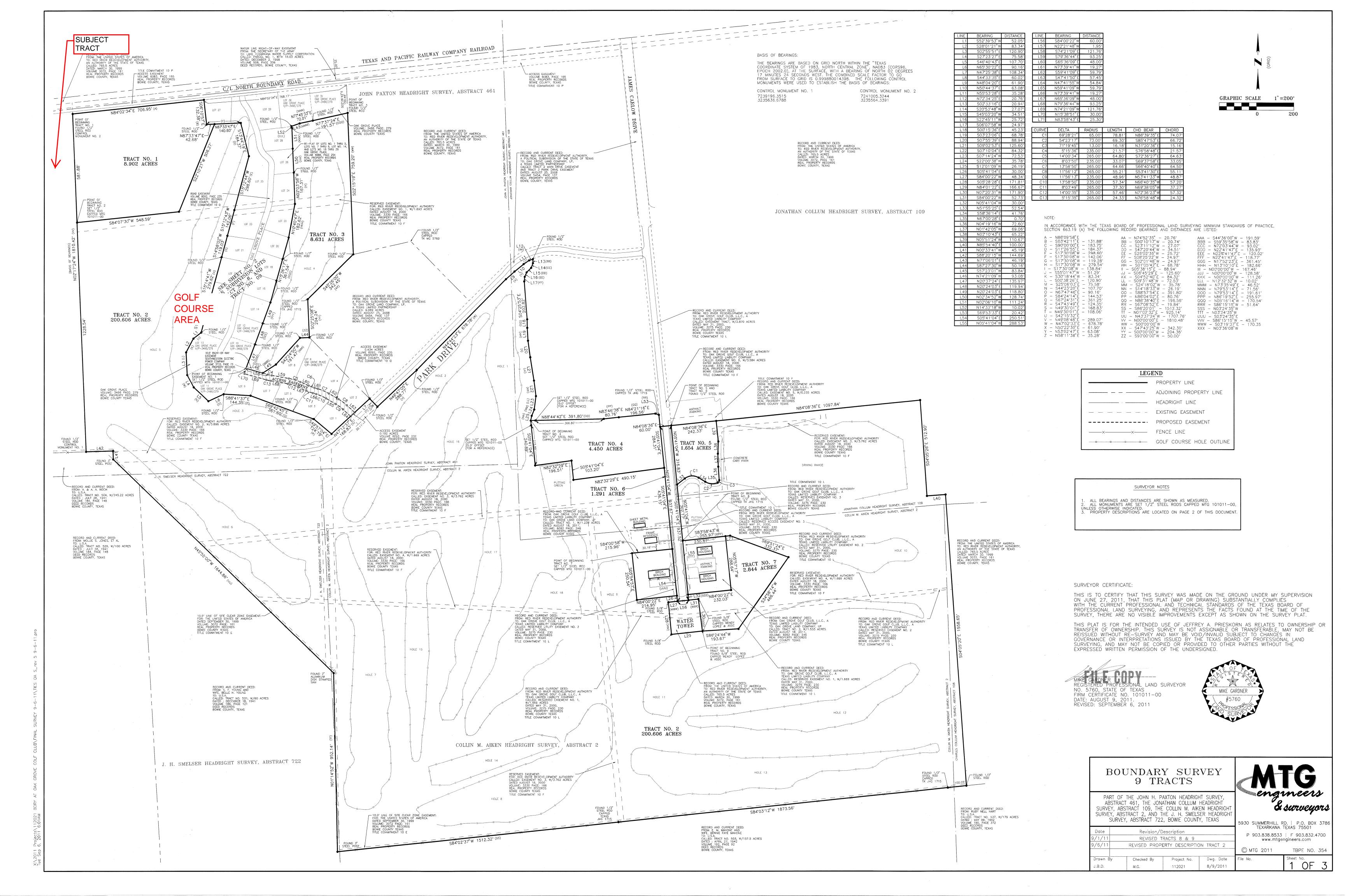
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Sheet No.

1 of





BEGINNING ot a 1/2 inch steel rod found for a corner (control monument

no. 2), the Northwest carner of the said 237.56 acre tract, and the Southwest corner of an access easement recorded in Volume 6083, Page 165 of the Real Property Records of Bowie County, Texas; THENCE North 84 degrees 02 minutes 34 seconds East a distance of 706.95 feet along the North line of the said 237.56 acre tract and the South line of the said access easement to a 1/2 inch steel rod set corner, capped MTG 101011-00, the Narthwest corner of the Re-Plat of Lots No. 1 thru 5, Lots No. 7 thru 9, Lot No. 14, and Lots No. 16 thru 29 Ook Grove Place, a subdivision of a part of the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, according to the plat recorded in Volume 6086, Page 254 of the Real Property Records of Bowie County,

THENCE South 06 degrees 10 minutes 57 seconds East a distance of 132.38 feet along the West line of the said subdivision to a 1/2 inch steel rod found for a corner, an autside ell corner of the said subdivision; THENCE North 87 degrees 33 minutes 47 seconds East a distance of 42.68 feet along the South line of the said subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE South 22 degrees 10 minutes 21 seconds West a distance of 506.27 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00 THENCE South 84 degrees 07 minutes 30 seconds West a distance of 548.59 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying in the West line of he said 237.56 acre tract said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1228.54 feet from a 1/2 inch steel rod found for a corner

THENCE North 02 degrees 17 minutes 24 seconds West a distance of 581.88 feet along the West line of the said 237.56 acre tract to the point of beginning and containing 8.902 acres of land, more or less. The bearings are bosed on Texas Coordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds This description is based on the survey and plot made by Mike Gordner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

## Property Description Tract No. 2, with 200.606 Acres Bowie County, Texas

All that certain lot, tract or parcel of land lying and situated in th John Paxton Headright Survey, Abstract 461, the J. H. Smelser Headright Survey, Abstract 722, the Collin M. Aiken Headright Survey, Abstract 2, the Charles Collum Headright Survey, Abstract 108, and the Jonathan Collum Headright Survey, Abstract 109 Bowie County, Texas, being all of that certain tract of land described in the deed from TexAmericas Center to Oak Grove Golf Club, LLC, dated June 28, 2011, recorded in Volume 6064, Page 219 of the Real Property Records of Bowie County, Texas, a part of that certain tract of land deścribed as 237.56 ocres in the Correction Specia Warranty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Poge 166 of the Real Property Records of Bowie County, Texas, the Original Deed is doted June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Recards of Bawie County, Texos, a part of that certain tract of land described as Tract No. 1, with 2.676 acres, Tract No. 2, with 3.123 acres, and all of Tract No. 4, with 3.578 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie Texas, and being more particularly described by metes and bounds

BEGINNING at a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying in the West line of the said 237.56 acre tract, said corner bears South 02 degrees 17 minutes 24 seconds East a distance of 581.88 feet from a 1/2 inch steel rod found for a corner (control monument no. 2), the THENCE North 84 degrees 07 minutes 30 seconds East a distance of 548.59 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an

THENCE North 22 degrees 10 minutes 21 seconds East a distance of 506.27 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point, lying in the South line of Re-Plat of Lots No. 1 thru 5, Lots No. 7 thru 9, Lot No. 14, and Lots No. 16 thru 29 Oak Grove Place, a subdivision of a part of the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, according to the plat recorded in Volume 6086, Page 254 of the Reol Property Records of Bowie County, Texas; THENCE North 87 degrees 33 minutes 47 seconds East a distance of 140.60

set for a corner, copped MTG 101011—00, at an angle point of the soid THENCE South 13 degrees 44 minutes 19 seconds East a distance of 184.37 feet along the West line of the said subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011—00, at an angle point; THENCE South 15 degrees 12 minutes 44 seconds West a distance of 298.60 feet along the West line of the sold subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE South 15 degrees 12 minutes 43 seconds West a distance of 142.06 feet along the West line of the said subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an ongle point;

THENCE South 14 degrees 58 minutes 02 seconds West a distance of 119.03 feet along the West line of the said subdivision to a 1/2 inch steel rod THENCE South 15 degrees 14 minutes 41 seconds West a distance of 279.62 feet along the West line of the said subdivision to a 1/2 inch steel rad found for a corner, the Southwest corner of Lot No. 17 of the said subdivision, the Northwest corner of that certain tract of land described as Lot No. 15 of Oak Grove Place, a subdivision of a part of the John Paxton Headright Survey, Abstract 461, Bowie County, Texos, according to

Bowie County, Texos; feet along the West line of the said Oak Grove Place subdivision to a 1/2

inch steel rod set for a corner, capped MTG 101011-00, ot an angle point; THENCE South 28 degrees 01 minutes 21 seconds West a distance of 83.34 feet along the West line of the said Ook Grove Place subdivision to a 1/2inch steel rad set for a corner, capped MTG 101011-00, at an ongle point; THENCE South 02 degrees 55 minutes 51 seconds East a distance of 120.90 feet along the West line of the said Oak Grove Place subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle paint; THENCE South 27 degrees 23 minutes 27 seconds East a distance of 75.58 feet along the West line of the said Ook Grove Place subdivision to a 1/2 inch steel rad set for a corner, capped MTG 101011-00, at an angle paint; THENCE South 46 degrees 40 minutes 43 seconds East a distance of 107.70 feet olong the West line of the soid Oak Grove Place subdivision to a 1/2 inch steel rod set for a corner, copped MTG 101011-00, the Southwest

THENCE North 65 degrees 30 minutes 22 seconds East a distance of 90.16 feet along the South line of the said Ook Grove Place subdivision to a 1/2 inch steel rad found far a carner, the Sautheast corner of Lot No. 11 c the said Oak Grove Place Subdivision, the Southwest Corner of Lot Na. 9 of

THENCE South 86 degrees 41 minutes 37 seconds East a distance of 144.35 feet along the South line of the said Re-Plat to a 1/2 inch steel rod set for a corner, copped MTG 101011-00, at an angle point; THENCE South 69 degrees 42 minutes 45 seconds East a distance of 361.60 feet along the South line of the said Re—Plot to a 1/2 inch steel rod found for a corner, at an angle paint; THENCE South 49 degrees 57 minutes 04 seconds East a distance of 124.19 feet along the South line of the said Re—Plat to a 1/2 inch steel rod set for a corner, capped MTG 101011—00, the Southeast corner of the said

THENCE North 47 degrees 12 minutes 37 seconds East a distance of 168.83 feet along the East line of the said Re-Plat to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE North 47 degrees 25 minutes 38 seconds East a distance af 108.34 feet along the East line of the said Re—Plat to a 1/2 inch steel rad found far a corner, lying in the East line of the said 237.56 acre tract, an outside ell corner of the said Re-Plat, the Southwest corner of certain tract of land described as 9.089 acres in the deed from Red River

Redevelopment Authority to Oak Grove Land Company, LP, dated August 25, 2008, recarded in Volume 5454, Page 137 of the Real Property Recards of Bowie County, Texas, the Northwest carner of an access easement called ract 3 Park Drive Easement, recorded in Valume 5454, Page 137 of the Real Property Records of Bowie Caunty, Texas: THENCE South 44 degrees 33 minutes 35 seconds East a distance of 60.02 feet along the East line af the said 237.56 acre tract and the West line af the said easement to a 1/2 inch steel rod found for a corner, an inside ell corner of the said 237.56 acre tract, the Southeast corner of the said

THENCE North 46 degrees 47 minutes 05 seconds East a distance of 288.77 feet along the North line of the soid 237.56 acre tract and the South line of the soid eosement to o 1/2 inch steel rod found for a corner, at an THENCE North 44 degrees 44 minutes 23 seconds East a distance of 678.78 feet along the North line of the said 237.56 acre tract and the South line of the said easement to a 1/2 inch steel rod found for a corner, at an

THENCE North 48 degrees 04 minutes 20 seconds East a distance of 61.90 feet along the North line of the said 237.56 acre tract and the Sauth line of the said easement to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE North 50 degrees 44 minutes 37 seconds East a distance of 63.08 feet along the North line of the said 237.56 acre tract and the South line of the said easement to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE North 55 degrees 53 minutes 28 seconds East a distance of 35.28 feet along the North line of the said 237.56 acre tract and the South line of the said eosement to a 1/2 inch steel rod set for a corner, capped MTG

101011-00, at an angle point; THENCE North 72 degrees 34 minutes 25 seconds East a distance of 20.76 feet along the North line of the said 237.56 ocre tract and the Sauth line of the said easement to a 1/2 inch steel rod found for a corner, an outside ell corner of the said 237.56 ocre tract lying in a drainage

THENCE with the drainage ditch the following courses: South 02 degrees 33 minutes 16 seconds East a distance of 20.94 feet along the East line of the said 237.56 acre tract to a point for a corner, at an South 20 degrees 53 minutes 48 seconds West o distance of 27.07 feet along the East line of the said 237.56 acre tract to a point for a corner, at an South 45 degrees 03 minutes 20 seconds West a distance of 34.51 feet alang the East line of the said 237.56 acre tract to a point for a corner, at an South 22 degrees 45 minutes 11 seconds West a distance of 25.72 feet along the East line of the said 237.56 acre tract to a point for a corner, at an South 06 degrees 07 minutes 58 seconds West a distance of 24.97 feet along the East line of the said 237.56 acre tract to a paint for a corner, at an angle point, South 04 degrees 25 minutes 53 seconds East o distance of 202.82 feet along the East line of the said 237.56 acre tract to a point for a corner, at an angle paint, South 00 degrees 15 minutes 36 seconds East a distance of 45.23 feet along the East line of the said 237.56 acre tract to a point for a corner, at an

THENCE North 01 degrees 14 minutes 52 seconds West a distance of 952.14 feet along the West line of the said 237.56 acre tract, the West line of the said 765.5 acre tract, and generally along a fence to a 2 inch South 03 degrees 23 minutes 06 seconds East a distance of 68.78 feet along the East line of the said 237.56 acre tract to a point for a corner, at an aluminum disk found for a corner, stamped SAM, at an angle paint; THENCE Narth 45 degrees 55 minutes 00 seconds West a distance of 1644.86 feet along the West line of the said 237.56 acre tract, the West line of the said 765.5 acre tract, and generally along a fence to a 3 inch steel post found for a corner, at an angle point; South 07 degrees 55 minutes 39 secands East a distance of 88.94 feet along the East line of the said 237.56 acre tract to a paint for a corner, at an THENCE North 00 degrees 33 minutes 41 seconds West a distance of 45.19 feet along the West line of the said 237.56 acre tract, the West line of the said 765.5 acre tract, and generally along a fence to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, an inside ell corner of the South 09 degrees 02 minutes 53 seconds East a distance of 125.60 feet along the East line of the soid 237.56 ocre tract to a point for a corner, said 237.56 acre tract, an inside ell corner of the said 765.5 acre tract; South 07 degrees 10 minutes 04 seconds East a distance of 84.32 feet along the East line of the said 237.56 acre tract to a point for a corner, at an THENCE South 88 degrees 20 minutes 15 seconds West o distance of 144.69 feet along the South line of the said 237.56 acre tract, the South line of the said 765.5 acre tract, and generally along a fence to a 1/2 inch steel South 07 degrees 14 minutes 24 seconds West a distance of 72.53 feet along the Eost line of the said 237.56 ocre tract to a point for a corner, at an

THENCE North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1228.54 feet along the West line of the said 237.56 acre tract to the point of beginning and cantaining 200.606 acres of land, at the South 22 degrees 00 minutes 38 seconds West a distance of 35.78 feet along the Eost line of the soid 237.56 acre troct to a point for a corner, at an South 12 degrees 01 minutes 09 seconds West a distance of 26.19 feet along the East line of the said 237.56 acre troct to a point for a corner, at an THENCE South 05 degrees 41 minutes 04 seconds East at a distance of 25.00 feet passing a 1/2 inch steel rod set for a reference, copped MTG 101011—

The bearings are bosed on Texas Coordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds This description is based on the survey and plot made by Mike Gordner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

THENCE in a Northeasterly direction along the arc of the said circular curve a distance of 78.81 feet, with a delta angle of 69 degrees 28

the said circular curve:

MTG 101011-00, at an angle point;

said 3.578 acre tract;

in the North line of the said 237.56 acre tract;

minutes 21 seconds, a radius of 65.00 feet, a chord bearing of North 86 degrees 39 minutes 35 seconds East, and a chord distance of 74.07 feet t

THENCE South 58 degrees 36 minutes 14 seconds East tangent to said curve, a distance of 41.76 feet to a 1/2 inch steel rod set far a corner, capped

degrees 47 minutes 53 seconds East, and a chord distance of 66.72 feet to a 1/2 inch steel rad set for a corner, capped MTG 101011-00, at the end of

THENCE North 67 degrees 00 minutes 28 seconds East tongent to said curve, a distance of 0.70 feet to a 1/2 inch steel rod set for a carner, capped

degrees 20 minutes 36 secands East, and a chord distance of 15.16 feet to a 1/2 inch steel rad set for a corner, capped MTG 101011-00, at the end of

THENCE North 04 degrees 19 minutes 16 seconds West tangent to said curve, a distance of 72.60 feet to a 1/2 inch steel rod set for a corner, capped

THENCE North 01 degrees 42 minutes 05 seconds West a distance of 69.06 feet to a 1/2 inch steel rod set for a carner, capped MTG 101011-00, at an

THENCE North 02 degrees 10 minutes 43 seconds East a distance of 65.22 feet to a 1/2 inch steel rod set far a corner, capped MTG 101011-00, at an

THENCE North 05 degrees 51 minutes 24 seconds West a distance of 110.67

feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying

THENCE North 84 degrees 08 minutes 36 seconds East a distance of 1097.84 feet along the North line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Northeast corner of

THENCE South 04 degrees 05 minutes 26 secands East a distance of 512.90 feet along the East line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011—00, the Northwest corner of the

THENCE North 85 degrees 54 minutes 40 seconds East a distance of 100.00 feet along the North line of the said 3.578 ocre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Northeast corner of the

THENCE South 04 degrees 05 minutes 20 secands East a distance of 1558.65 feet along the East line of the said 3.578 acre tract to a 1/2 inch steel

THENCE South 84 degrees 03 minutes 12 seconds West a distance of 1873.56

THENCE South 84 degrees 02 minutes 37 seconds West a distance of 1512.32 feet along the South line of the said 237.56 acre tract, the South line of the said 765.5 acre tract, and generally along a fence to a 3 inch steel post found for a corner, the Southwest corner of the said 237.56 acre

America, to Red River Redevelopment Authority, dated March 30, 1999, recorded in Volume 3072, Page 161 of the Real Property Records of Bawie

feet along the Sauth line of the said 237.56 acre tract, the South line of the said 765.5 acre tract, and generally along a fence to a 1/2 inch steel rod found for a corner, capped TEXAS JHG 1715, at an angle point;

rod found for a corner, lying in the South line of that certain tract of land described as 765.5 acre in the deed from the United States of

County, Texas, the Sautheast carner of the said 237.56 acre tract;

tract, the Southwest corner of the said 765.5 acre track

rod found for a corner (control monument no. 1);

MTG 101011-00, at the beginning of a circular curve to the left, tangent

THENCE in a Northeasterly direction along the arc of the said circula

curve a distance of 16.18 feet, with a delta angle of 71 degrees 19 minutes 45 seconds, a radius of 13.00 feet, a chord bearing of No

MTG 101011-00, at the beginning of a circular curve to the left, tangent

curve a distance of 69.30 feet, with a delta angle of 54 degrees 23 minutes 17 seconds, a radius of 73.00 feet, a chord bearing of Sou

All that certain lot, tract or parcel of land lying and situated in the John Poxton Headright Survey, Abstract 461, Bowie County, Texas, being a part of that certain tract of land described as 237.56 acres in the Correction Special Warranty Deed from Red River Redevelopment Authority to Ook Grove Golf Club, LLC, dotted August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Records of Bowie Caunty, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Reol Property Records of Bowie County, Texas, and being more particularly described by metes and bounds as follows:

REGINNING at a 1/2 inch steel rod found for a corner, lying in the East BEGINNING at a 1/2 inch steel rod found for a corner, lying in the East line of the said 237.56 acre tract, the Southeast corner of Lot No. 31 of Oak Grove Place, a subdivision of a part of the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, according to the plat recorded in Volume 3466, Page 279 of the Real Property Records of Bowie County, Texas, said carner bears Narth 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 inch steel rod found for the Northwest corner of the said 237.56 acre tract (control manufact as 2) North 84 degrees 02 minutes 34 seconds Fast a distance

2008, recorded\_in Volume 5454, Page 137 of the Real Property Records of

THENCE South 45 degrees 26 minutes 00 seconds West a distance of 342.45 feet along the East line of the said 237.56 ocre tract and the West line of the said 9.089 acre tract to a 1/2 inch steel rod found for a corner, capped Texas JHG 1715, at an angle point; THENCE South 02 degrees 25 minutes 08 seconds East a distance of 204.24 feet along the East line of the said 237.56 acre tract and the West line of the said 9.089 acre tract to a 1/2 inch steel rod found for a corner, an angle point for that certain tract of land described as Lot No. 8 o the Re—Plat of Lots No. 1 thru 5, Lots No. 7 thru 9, Lot No. 14, and l No. 16 thru 29 Oak Grove Place, a subdivision of a part of the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, according to the plat recorded in Volume 6086, Page 254 of the Real Property Records of Bowie County, Texas;

THENCE South 42 degrees 24 minutes 50 seconds West a distance of 191.47 feet along the West line of the said Re-Plat to a 1/2 inch steel rod found for a corner, at an angle point; THENCE South 57 degrees 23 minutes 01 seconds West a distance of 83.84 feet along the West line of the said Re—Plat to a 1/2 inch steel rod set for a corner, capped MTG 101011—00, at an angle point;

THENCE North 74 degrees 21 minutes 09 seconds West a distance of 93.08 feet along the North line of the said Re-Plat to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, an inside ell corner of the said

THENCE North 20 degrees 37 minutes 24 seconds East a distance of 135.97 feet along the East line of the said Re-Plat to a 1/2 inch steel rod found for a corner, at an angle point; THENCE North 20 degrees 24 minutes 03 secands East a distance of 119.94 feet along the East line of the said Re-Plat to a 1/2 inch steel rod found for a corner, at an angle point THENCE North 20 degrees 24 minutes 03 seconds East a distance of 118.80 feet along the East line of the said Re-Plot to a 1/2 inch steel rod found for a corner, at an angle point; THENCE North 15 degrees 36 minutes 17 seconds East a distance of 361.54 feet along the East line of the soid Re—Plat to a 1/2 inch steel rod

THENCE North 10 degrees 40 minutes 47 seconds East a distance of 182.62 feet along the East line of the said Re-Plat to a 1/2 inch steel rod set THENCE North 02 degrees 03 minutes 58 seconds West a distance of 167.31 feet along the East line of the said Replat to a 1/2 inch steel rod found

for a corner, at an angle point; THENCE North 02 degrees 34 minutes 52 seconds West o distance of 128.74 feet along the East line of the said Re—Plat to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE North 02 degrees 06 minutes 10 seconds West a distance of 111.24 feet along the East line of the said Re—Plat to a 1/2 inch steel rod found for a corner, at an angle point; THENCE North 14 degrees 33 minutes 18 seconds West a distance of 10.02

THENCE North 71 degrees 06 minutes 01 secands East o distance of 46.19 feet along the South line of the said Oak Grove Place to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE North 77 degrees 45 minutes 33 seconds East a distance of 72.01 feet along the South line of the said Oak Grove Place to a 1/2 inch steel rod found for a corner, at an angle point;

THENCE North 77 degrees 37 minutes 24 seconds East a distance of 191.57 feet along the South line of the said Oak Grove Place to the point of beginning and containing 8.631 acres of land, at the time of this survey The bearings are based on Texas Coordinate System of 1983, North Central Zone, NAD83, with o bearing of North 02 degrees 17 minutes 24 seconds

#### Property Description ract No. 4, with 4.450 Acres

All that certain lot, tract or parcel of land lying and situated in the Jonathan Collum Headright Survey, Abstract 109, Bowie County, Texas, being a part of that certain tract of land described as 237.56 acres in he Correction Special Warranty Deed fram Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, Volume 3330, Page 166 of the Reol Property Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Recards of Bowie County, Texas, and being more particularly described by metes and bounds as follows:

BEGINNING at a point for a corner, being an inside ell corner of the said 237.56 acre tract, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 inch seconds west (usis of bearings) a distance of 1010.42 leet to 4 1/2 limits steel rod found for the Northwest corner of the said 237.56 acre troct (control monument no. 2), North 90 degrees 00 minutes 00 seconds East a distance of 2453.96 feet, and South 00 degrees 00 minutes 00 seconds West a distance of 1645.57 feet from a 1/2 inch steel rod found for a corner

THENCE North 88 degrees 44 minutes 42 seconds East at a distance of 25.00 feet passing a 1/2 inch steel rod set for a reference, copped MTG 101011-00, continuing in all a distance of 391.80 feet along the North line of 37.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point;

THENCE North 83 degrees 46 minutes 38 seconds East a distance of 80.76 feet along the North line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE North 84 degrees 21 minutes 16 seconds East a distance of 196.56 feet along the North line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle paint; THENCE South 69 degrees 53 minutes 33 seconds East a distance of 20.42 feet along the North line of the said 237.56 acre tract to a 1/2 inch steel rod found for a corner, copped Texas JHG 1715, lying in the West line of at Access Easement called Tract 2 Main Drive Easement, recorded n Volume 5454, Page 137 of the Real Property Records of Bowie County,

THENCE South 05 degrees 41 minutes 04 seconds East a distance of 284.31 feet along the East line of the said 237.56 acre tract, the West line of the said easement, and the West line of that certain tract of land described as Tract No. 3, with 1.293 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, to a 1/2 inch steel rod set for a corner, capped MTG 101011-00;

THENCE South 82 degrees 32 minutes 29 seconds West a distance of 490.15 feet to a 1/2 inch steel rod set for a corner. capped MTG 101011-00: THENCE North 05 degrees 41 minutes 04 seconds West a distance of 103.20 feet to a 1/2 inch steel rod set far a corner, capped MTG 101011-00; THENCE South 82 degrees 32 minutes 29 seconds West a distance of 196.51 feet to a 1/2 inch steel rod set for a corner, copped MTG 101011-00; THENCE North 05 degrees 41 minutes 04 seconds West at a distance of 215.89 feet passing a 1/2 inch steel rod set for a reference, capped MTG 101011-00, continuing in all a distance of 240.89 feet to the point of beginning and containing 4.450 acres of land, at the time of this survey. The bearings are based on Texas Coordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds This description is based on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

Property Description
Tract No. 5, with 1.654 Acres

All that certain lot, tract or parcel of land lying and situated in the Jonathan Collum Headright Survey, Abstract 109, Bowie County, Texas, being a part of that certain tract of land described as 237.56 acres in the Carrection Special Warranty Deed from Red River Redevelopment
Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in
Volume 3330, Page 166 of the Real Property Records of Bowie County,
Texas, the Original Deed is dated June 11, 1999, recorded in Valume 3078, Page 218 of the Real Property Records of Bowie Caunty, Texas, and being mare particularly described by metes and bounds as follows:

BFGINNING at a 1/2 inch steel rod found for a corner, being an outside certain tract of land described as Troct No. 3, with 1.293 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, dated May 31, 2000, recorded in Valume 3275, Page 230 of the Real Property Records of Bowie County, Texas, and the Southeast corner of an Access Easement called Tract 2 Main Drive Easement, recorded in Volume 5454, Page 137 of the Real Property Recards of Bowie County, Texas, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 inch steel rod found for the Northwest corner of the said 237.56 acre tract (control manument no. 2), North 90 degrees 00 minutes 00 seconds East a distance of 3206.69 1672.69 feet from a 1/2 inch steel rod found for a corner (control

THENCE North 84 degrees 08 minutes 36 seconds East a distance of 242.33 feet along the North line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE Sauth 05 degrees 51 minutes 24 seconds East a distance of 110.67 feet to a 1/2 inch steel rad set for a corner, capped MTG 101011-00, at

THENCE South 02 degrees 10 minutes 43 seconds West a distance of 65.22 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE South 01 degrees 42 minutes 05 seconds East a distance of 69.06 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE South 04 degrees 19 minutes 16 seconds East a distance of 72.60 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, ot the beginning of a circular curve to the right, tangent to said line; THENCE in a Southwesterly direction along the arc of the said circular curve a distance of 16.18 feet, with a delta angle of 71 degrees 19 minutes 45 seconds, a radius of 13.00 feet, a chord bearing of South 31 degrees 20 minutes 36 seconds West, and a chord distance of 15.16 feet to /2 inch steel rod set for a corner, capped MTG 101011-00, at the end

THENCE South 67 degrees 00 minutes 28 seconds West tangent to said curve, a distance of 0.70 feet to a 1/2 inch steel rod set for a carner, capped MTG 101011-00, at the beginning of a circular curve to the right, tangent THENCE in a Northwesterly direction along the arc of the said circula curve a distance of 69.30 feet, with a delta angle of 54 degrees 23 minutes 17 seconds, a radius of 73.00 feet, a chord bearing of North 85

degrees 47 minutes 53 seconds West, and a chord distance of 66.72 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at the end THENCE North 58 degrees 36 minutes 14 seconds West tangent to said curve, a distance of 41.76 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at the beginning of a circular curve to the left, tangent

THENCE in a Southwesterly direction along the arc of the said circular curve a distance of 78.81 feet, with a delta angle of 69 degrees 28 minutes 21 seconds, a radius of 65.00 feet, a chord bearing of South 86 degrees 39 minutes 35 seconds West, and a chord distance of 74.07 feet 1/2 inch steel rod set for a carner, capped MTG 101011-00, at the end of the said circular curve;

THENCE South 51 degrees 55 minutes 25 seconds West tongent to said curve, a distance of 52.54 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying in the West line of the said 237.56 acre tract and the East line of the said 1.293 acre tract; THENCE North 05 degrees 41 minutes 04 seconds West a distance of 316.83

feet olong the West line of the said 237.56 acre tract and the East line of the said 1.293 acre tract to the point of beginning and containing 1.654 ocres of land, at the time of this survey. The bearings are based on Texos Coordinate System af 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds

This description is based on the survey ond plat mode by Mike Gardner, Registered Professional Lond Surveyor No. 5760, on August 9, 2011.

# Property Description Tract No. 6, with 1.291 Acres

All that certain lot, tract or parcel of land lying and situated in the Collin M. Aiken Heodright Survey, Abstract 2 and the Jonathan Collum Headright Survey, Abstract 109, Bowie County, Texas, being a part of that certain tract of land described as Tract No. 3, with 1,293 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, L dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, and being more particularly described by metes and bounds as follows:

BEGINNING at a 1/2 inch steel rod found for a corner, the Northeast corner of that certain tract of land described as Tract No. 3, with 1.293 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated Moy 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, an outside ell corner of that certain tract of land described as 237.56 acres in the Correction Special Warranty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, doted August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texas, and the Southeast corner of an Access Easement called Tract 2 Main Drive Easement, recorded in Volume 5454, Page 137 of the Real Property Records of Bowie County, Texas, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 inch steel rod found for the Northwest corner of the said 237.56 acre tract (control monument no. North 90 degrees 00 minutes 00 seconds East a distance of 3206.69 et, and South 00 degrees 00 minutes 00 seconds West a distance of 1672.69 feet from a 1/2 inch steel rod found far a corner (control monument no. 1);

THENCE North 05 degrees 41 minutes 04 seconds West a distance of 937.67 feet along the West line of the said 1.293 acre tract, the East line of the said 3.123 acre tract, and the East line of the said 237.56 acre tract to 0 1/2 inch steel rad set for a corner, capped MTG 101011-00, the thwest corner of the said 1.293 acre tract, the Southwest corner of

This description is based on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

Property Description Tract No. 7, with 2.844 Acres

All that certain lot, tract or parcel of land lying and situated in the Collin M. Aiken Headright Survey, Abstract 2, Bowie County, Texas, beir a port of that certain troct of land described as Tract No. 1, with 2.676 acres in the deed from Red River Redevelopment Authority to Ook Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, a part of that certain tract of land described as 237.56 acres in the Correction Special Warranty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Recards of Bowie County, Texas, the Original Deed is doted June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texas, and being more particularly

BEGINNING at a 5/8 inch steel rod found for a corner, capped WENDY LOPEZ & ASSC, lying in the North line of the said 237.56 acre tract, the Southwest corner of the said 2.676 acre tract, said corner bears North 02 dearees 17 minutes 24 seconds West (basis of bearings) a distance of 810.42 feet to a 1/2 inch steel rod found for the Northwest carner of the said 237.56 acre tract (control monument no. 2), North 90 degrees 00 minutes 00 seconds East a distance of 3373.95 feet, and South 00 degrees 00 minutes 00 seconds West a distance of 2770.68 feet from a 1/2 inch steel rod found for a corner (control monument no. 1);

feet along the West line of the said 2.676 acre tract and generally along a fence to a 5/8 inch steel rod found for a carner, capped WENDY LOPEZ & ASSC, on inside ell corner of the soid 2.676 ocre tract; THENCE South 84 degrees 00 minutes 22 seconds West a distance of 52.73 feet along the South line of the said 2.676 ocre tract and generally along a fence to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, an outside ell corner of the said 2.676 acre tract, the outheast corner of that certain tract of land described as Tract N with 1.293 acres in the deed from Red River Redevelopment Authority Oak Grave Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275 Page 230 of the Real Praperty Records of Bowie County, Texas; THENCE North 05 degrees 41 minutes 04 seconds West o distance of 30.00 feet along the West line of the said 2.676 acre tract and the East line of the said 1.293 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00;

THENCE North 84 degrees 00 minutes 22 seconds East a distance of 232.03 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE North 05 degrees 57 minutes 17 seconds West a distance of 288.64 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying in the North line of the said 2.676 acre tract and the South line of the said 237.56 acre tract, the Northeost corner of the said 2.676

THENCE North 83 degrees 58 minutes 43 seconds East a distance of 25.30 feet along the North line of the said 2.676 acre tract and the South line of the said 237.56 acre tract to a 1/2 inch steel rad set for a corner, capped MTG 101011-00, at an angle point, the Northeast corner of th4e said 2.676 acre tract, an outside ell corner of the said 237.56 acre

THENCE South 69 degrees 51 minutes 24 seconds East a distance of 332.37 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point;

THENCE South 34 degrees 58 minutes 14 seconds West a distance of 466.44 feet to a 1/2 inch steel rod set for a corner, copped MTG 101011-00; THENCE South 86 degrees 24 minutes 44 secands West a distance of 193.67 feet to the point of beginning and cantaining 2.844 acres of land, more

The bearings are based on Texas Coordinate System af 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds This description is based on the survey and plot made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

# Property Description Tract No. 8, with 9.824 Acres

Being all of Lots No. 1 thru 5, Lots No. 7 thru 9, Lat No. 14 and Lots No. 16 thru 28 of the Re-plat of Lots No. 1 thru 5, Lots No. 7 thru 9, subdivision of a part of the John H. Paxton Headright Survey, Abstroct 461, Bowie County, Texas, according to the Re-Plot recorded in Volume 6086, Page 254 of the Real Property Records

Property Description Troct No. 9, with 0.359 Acres Bowie County, Texas

All that certain lot, tract or parcel of lond lying and situated in the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, being a part of that certain tract of land described as the Re-Plat of Lats No. 1 thru 5, lots no. 7 thru 9, Lot No. 14, and Lots No. 16 thru 29, Oak Grove Ploce, a subdivision of a part of the John Poxton Heodright Survey, Abstroct 461, Bowie County, Texas, according to the plat recorded in Volume 6086, Page 254 of the Real Property Records of Bowie County, Texas, and being more particularly described by metes and bounds as follows:

BEGINNING at a 1/2 inch steel rod found for a corner, capped MTG 101011-00 lying in the North line of that certoin tract of land described as 237.56 ocres in the Correction Special Warronty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Records of Bowie County, Texos, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texas, the North line of the said Re—Plat, and the South line of on Access Easement, recorded in Volume Northeast corner of Lat No. 27 of the said Re-Plat, said corner bears North 84 degrees 02 minutes 34 seconds East (basis of bearings) a distance of 150.03 feet from a 1/2 inch steel rod found for the Northwest corner of the said Re-Plat and the Northwest corner of Lot No. 27 of the said Re-Plat

THENCE North 84 degrees 02 minutes 34 seconds East a distance of 40.76 feet along the North line of the said Re-Plat, the North line of the said 237.56 acre tract, and the South line of the said easement to a 1/2 inch steel rod faund for a corner, capped MTG 101011-00, the Northwest corner of Oak Grove Place Road (private), said corner bears South 84 degrees 02 minutes 34 seconds West o distance of 577.38 feet from a 1/2 inch steel rod found for a corner (control monument no. 2), the Northeast corner of the Oak Grove Place, a subdivision of a part of the John Paxton Headright Survey, Abstract 46 Bowie County, Texos, according to the plat recorded in Volume 3466, Page 279 of the Real Property Records of Bowie County, Texas, and the Northeast corner at No. 31 of the said subdivision, the Northeast corner of the said

THENCE the following courses along the West side of the soid roadway: South 05 degrees 59 minutes 01 seconds East a distance of 9.78 feet to a 1/2 inch steel rod found for a corner, capped MTG 101011-00, at the beginning of a circular curve to the left, tangent ta said line, In a Southeasterly direction along the arc of the said circular curve o distance of 49.60 feet, with a delta angle of 31 degrees 01 minutes 00 seconds, a radius of 91.63 feet, a chord bearing of South 21 degrees 29 minutes 32 seconds East, and a chord distance of 49.00 feet to a 1/2 inch steel rod found for a corner, capped MTG 101011—00, at the end of the said

circular curve, and the beginning of a circular curve to the right, distance of 70.49 feet, with a delta angle of 17 degrees 11 minutes 14 seconds, a radius of 235.00 feet, a chard bearing of South 28 degrees 24 minutes 16 seconds East, and a chord distance of 70.23 feet to a 1/2 inch steel rod found for a corner, capped MTG 101011-00, at the end of the said

THENCE South 19 degrees 48 minutes 45 seconds Eost tongent to said circular curve, a distance of 69.82 feet to a 1/2 inch steel rod found for a corner, capped MTG 101011-00, ot the beginning of a circular curve to the right, tongent to said line,

In a Southeasterly direction along the arc of the said circular curve a distance of 17.89 feet, with a delta angle of 4 degrees 21 minutes 41 seconds, a radius of 235.00 feet, a chard bearing of South 17 degrees 3 minutes 47 seconds East, and a chord distance of 17.88 feet ta a 1/2 inch steel rod found for a corner, capped MTG 101011-00, at the end of the said

circular curve, the Northeast corner of Lot No. 25 af the said Re-Plat; THENCE in a Southwesterly direction along the orc of the said circular curve and the North line of the said Lat No. 25 a distance of 53.67 feet, with a delta angle of 70 degrees 51 minutes 58 seconds, a radius of 43.40 feet, a

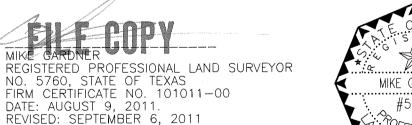
chord bearing of South 39 degrees 00 minutes 43 seconds West, and o chord distance of 50.32 feet to a 1/2 inch steel rod found for a corner, capped MTG 101011-00, at the end of the soid circular curve; THENCE South 01 degrees 06 minutes 13 seconds East a distance of 83.81 feet along the Narth line of the said Lot Na. 25 to a 1/2 inch steel rod found for a corner, capped MTG 101011—00, lying in the West line of the said Re—Plat, the Northwest corner of the said Lot No. 25;

THENCE North 13 degrees 44 minutes 19 seconds West a distance of 184.37 feet olong the West line of the soid Re-Plot to a 1/2 inch steel rod found for a carner, capped MTG 101011-00, an inside ell corner af the said Re-Plat; THENCE South 87 degrees 33 minutes 47 seconds West a distance of 53.01 feet alang the South line af the said Re-Plot to a 1/2 inch steel rod found for a corner, capped MTG 101011-00, the Sautheast carner of the said Lot No. 27; THENCE North 01 degrees 56 minutes 43 seconds East a distance of 141.73 feet olong the East line of the soid Lot No. 27 to the point of beginning and containing 0.359 acres of land, at the time of this survey. This description is based on the survey and plat mode by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 17, 2011.

SURVEYOR CERTIFICATE:

THIS IS TO CERTIFY THAT THIS SURVEY WAS MADE ON THE GROUND UNDER MY SUPERVISION ON JUNE 27, 2011, THAT THIS PLAT (MAP OR DRAWING) SUBSTANTIALLY COMPLIES WITH THE CURRENT PROFESSIONAL AND TECHNICAL STANDARDS OF THE TEXAS BOARD OF PROFESSIONAL LAND SURVEYING, AND REPRESENTS THE FACTS FOUND AT THE TIME OF THE SURVEY, THERE ARE NO VISIBLE IMPROVEMENTS EXCEPT AS SHOWN ON THE SURVEY PLAT.

THIS PLAT IS FOR THE INTENDED USE OF JEFFREY A. PRIESKORN AS RELATES TO OWNERSHIP OR TRANSFER OF OWNERSHIP. THIS SURVEY IS NOT ASSIGNABLE OR TRANSFERABLE, MAY NOT BE REISSUED WITHOUT RE-SURVEY AND MAY BE VOID/INVALID SUBJECT TO CHANGES IN GOVERNANCE OR INTERPRETATIONS ISSUED BY THE TEXAS BOARD OF PROFESSIONAL LAND SURVEYING, AND MAY NOT BE COPIED OR PROVIDED TO OTHER PARTIES WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE UNDERSIGNED.



MIKE GARDNER #5760

# BOUNDARY SURVEY 9 TRACTS

PART OF THE JOHN H. PAXTON HEADRIGHT SURVEY, ABSTRACT 461, THE JONATHAN COLLUM HEADRIGHT SURVEY, ABSTRACT 109, THE COLLIN M. AIKEN HEADRIGH SURVEY, ABSTRACT 2, AND THE J. H. SMELSER HEADRIGH

SURVEY, ABSTRACT 722, BOWIE COUNTY, TEXAS Revision/Description REVISED TRACTS 8 & 9 REVISED PROPERTY DESCRIPTION TRACT 2

5930 SUMMERHILL RD. | P.O. BOX 3786 TEXARKANA TEXAS 75501 P 903.838.8533 | F 903.832.4700 www.mtgengineers.com

TBPE NO. 354

engineers

& surveyors

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112021

8/9/2011

3 OF 3

THENCE South 05 degrees 41 minutes 04 seconds East a distance of 436.15 feet along the East line of the said 237.56 acre tract, the East line of the said 3.123 acre tract and the West line of the said 1.293 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; the plat recorded in Volume 3466, Page 279 of the Real Property Records of THENCE South 84 degrees 00 minutes 58 seconds West o distance of 215.96 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011—00, lying in the East line of the soid 237.56 acre tract and the West line of the THENCE South 15 degrees 11 minutes 18 seconds West a distance of 138.37 THENCE South 05 degrees 54 minutes 57 seconds East a distance of 250.54 feet along the East line of the said 237.56 acre tract and the West line inch steel rod found far a corner, ot an angle point; THENCE South 52 degrees 39 minutes 53 seconds West a distance of 52.05 feet along the West line of the said Oak Grove Place subdivision to a 1/2

ot an angle point,

Records of Bowie County, Texas;

of the said 3.123 acre tract to a 1/2 inch steel rod set for a corner, THENCE North 84 degrees 00 minutes 22 seconds East a distance of 214.95 feet to a 1/2 inch steel rod\_set\_for a corner, capped MTG 101011-00, lying the East line of the said 3.123 acre tract and the West line of the THENCE South 05 degrees 41 minutes 04 seconds East a distance of 30.00

00, continuing in all o distance of 240.89 feet to o 1/2 inch steel rod set for a corner, capped MTG 101011-00, at on angle point;

feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00

certain tract of land described as Tract No. 3, with 1.293 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC

THENCE North 82 degrees 32 minutes 29 seconds East a distance of 196.51

THENCE South 05 degrees 41 minutes 04 seconds East a distance of 103.20 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00;

THENCE North 82 degrees 32 minutes 29 seconds East a distance of 490.15 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying in the East line of the said 237.56 ocre tract and the West line of that

, 2000, recorded in Volume 3275, Page 230 of the Real Property

G 101011-00, an outside ell carner of the said 3.123 acre tract, the Southwest carner of the said 1.293 acre tract: THENCE South 84 degrees 00 minutes 22 seconds West o distonce of 48.34 feet olong the South line of the soid 3.123 ocre tract and generolly along a fence to a 5/8 inch steel rod found for a corner, an inside ell corner THENCE South 05 degrees 28 minutes 28 seconds Eost a distance of 171.81 feet along the East line of the said 3.123 acre tract and generally along a fence to a 5/8 inch steel rod found for a corner, lying in the North

feet along the East line of the said 3.123 acre tract and the West line of the said 1.293 acre tract to a 1/2 inch steel rod set for a corner, capped

line of the said 237.56 acre tract, the Southeast corner of the said 3.123 THENCE North 84 degrees 01 minutes 22 seconds East a distance of 166.67 feet along the North line of the said 237.56 acre tract and generally along a fence to a 5/8 inch steel rod found far a corner, capped WENDY along a fence ta a 5/8 inch steel rod tound far a corner, copped LOPEZ & ASSC, the Southwest corner of the said 2.676 acre tract; THENCE North 86 degrees 24 minutes 44 seconds East a distance of 193.67 feet to a 1/2 inch šteel rod set far a corner, capped MTG 101011-00, at an THENCE North 34 degrees 58 minutes 14 seconds East a distance of 466.44 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011—00, at an angle point; THENCE North 69 degrees 51 minutes 24 seconds West a distance of 332.37 feet to a 1/2 inch steel rod set far a corner, capped MTG 101011-00, at an angle point; THENCE South 83 degrees 58 minutes 43 seconds West a distance of 255.97 feet along the South line of the said 237.56 acre troct and the North line of the said 2.676 ocre tract to a 1/2 inch steel rod found for a corner, copped Texas JHG 1715 lying in the West line of the said 237.56 acre tract and the East line of the said 1.293 acre tract; THENCE North 05 degrees 41 minutes 04 seconds West a distance of 302.17 feet along the West line of the said 237.56 acre tract and the East line

of the said 1.293 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE North 51 degrees 55 minutes 25 seconds East a distance of 52.54 feet to a 1/2 inch steel rod set far a corner, capped MTG 101011-00, at the beginning of a circular curve to the right, tangent to said line;

# Property Description Tract No. 3, with 8.631 Acres

Bowie County, Texas

monument no. 2), North 84 degrees 02 minutes 34 seconds East a distance of 1457.12 feet, and South 02 degrees 26 minutes 42 seconds East a distance of 150.48 feet from a 1/2 inch steel rod found for a corner (control monument na. 1);

THENCE South 02 degrees 15 minutes 19 seconds East a distance of 759.20 feet olong the East line of the said 237.56 acre tract to a 1/2 inch steel rod found for a corner, at an angle point, an angle paint of that certain tract of land described as 9.089 acres in the deed from Red River Redevelopment Authority to Oak Grove Land Company, LP, dated August 25,

THENCE South 87 degrees 27 minutes 30 seconds West a distance of 50.16 feet along the North line of the said Re-Plat to a 1/2 inch steel rod found for a corner, at an angle point;

found for a corner, at an angle point; for a corner, capped MTG 101011-00, at an angle point;

feet along the East line of the soid Replat to a 1/2 inch steel rod found for a corner, lying in the South line of that certain tract of land described as Lot 30 of the said Oak Grave Place, an outside ell corner of

This description is based on the survey and plat made by Mike Gardner, Registered Professional Lond Surveyor No. 5760, on August 9, 2011.

THENCE South 05 degrees 41 minutes 04 seconds East a distance of 937.52 feet along the East line of the said 1.293 acre tract, the West line of the said 237.56 ocre tract, and the West line af that certain tract of land described as Tract Na. 1, with 2.676 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated Moy 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records o Bowie County, Texas, to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Southeast corner of the said 1.293 acre tract, an outside ell corner of the said 2.676 acre tract

THENCE South 84 degrees 00 minutes 22 seconds West a distance of 60.00 feet along the South line of the said 1.293 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Southwest corner of the soid 1.293 acre troct, an outside ell corner of certain tract of land described as Tract No. 2, with 3.123 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie

the said easement: THENCE North 84 degrees 08 minutes 36 seconds East a distance of 60.00 feet along the North line of the said 1.293 acre tract and the South line of the said easement to the point of beginning and containing 1.291 acres The bearings are based on Texas Coardinate System of 1983, North Central Zone, NAD83, with a beoring of North 02 degrees 17 minutes 24 seconds

SURVEYOR NOTES

DRAWINGS FOR THE PROPERTY DESCRIPTIONS ON THIS PAGE LOCATED N PAGES 1 AND 2 OF THIS DOCUMENT.

no. 2), the Northwest corner of the said 237.56 acre tract, and the Southwest corner of an occess easement recorded in Volume 6083, Page 165

THENCE North 84 degrees 02 minutes 34 seconds East a distance of 706.95 feet along the North line of the soid 237.56 acre tract and the South line of the said occess easement to a 1/2 inch steel rod set for a corner, copped MTG 101011-00, the Northwest corner of the Re-Plat of Lots Grave Place, a subdivision of a port of the John Paxton Headright Survey, Volume 6086, Page 254 of the Real Property Records of Bowie County,

THENCE South 06 degrees 10 minutes 57 seconds East o distance of 132.38 feet along the West line of the said subdivision to a 1/2 inch steel rod found for a corner, an outside ell corner of the said subdivision; THENCE North 87 degrees 33 minutes 47 seconds East a distance of 42.68 feet along the South line of the said subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00;

THENCE South 22 degrees 10 minutes 21 seconds West a distance of 506.27 feet to a 1/2 inch steel rod set for a corner, copped MTG 101011—00; THENCE South 84 degrees 07 minutes 30 seconds West a distance of 548.59 feet to a 1/2 inch steel rod set for a corner, copped MTG 101011-00, lying in the West line of he said 237.56 acre tract said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1228.54 feet from a 1/2 inch steel rod found for a corner (second property and 1).

THENCE North 02 degrees 17 minutes 24 seconds West a distance of 581.88 feet along the West line of the soid 237.56 acre tract to the point of beginning and containing 8.902 ocres of land, more or less. The bearings ore bosed on Texos Coordinate System of 1983, North Centrol Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds This description is based on the survey and plot made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

# Property Description Troct No. 2, with 200.606 Acres Bowie County, Texas

All that certain lot, tract or parcel of lond lying and situated in the John Paxton Headright Survey, Abstract 461, the J. H. Smelser Heodright Survey, Abstract 722, the Collin M. Aiken Headright Survey, Abstract 2, the Charles Callum Headright Survey, Abstract 108, and the Jonathan Collum Headright Survey, Abstract 109 Bowie County, Texas, being all of that certain tract of land described in the deed from TexAmericas Center to Oak Grove Golf Club, LLC, dated June 28, 2011, recorded in Volume 6064, Page 219 of the Real Property Records of Bowie County, Texas, a part of that certain tract of land described as 237.56 acres in the Correction Special Warronty Deed from Red River Redevelopment Authority to Oak Grove Galf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Page 166 of the Reol Property Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Poge 218 of the Real Property described as Troct No. 1, with 2.676 acres, Tract No. 2, with 3.123 acres, and all of Tract No. 4, with 3.578 acres in the deed from Red Rive Redevelopment Authority to Oak Grove Golf Club, LLC, dated Moy 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, and being more porticularly described by metes and bounds

BEGINNING at a 1/2 inch steel rad set for a corner, capped MTG 101011-00, lying in the West line of the said 237.56 acre tract, said corner bears Sauth 02 degrees 17 minutes 24 secands East a distance of 581.88 feet from THENCE North 84 degrees 07 minutes 30 seconds East a distance of 548.59 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an

THENCE North 22 degrees 10 minutes 21 seconds East o distance of 506.27 angle point, lying in the South line of Re-Plat of Lots No. 1 thru 5, Lots No. 7 thru 9, Lot No. 14, and Lots No. 16 thru 29 Oak Grove Place, a subdivision of a part of the Jahn Paxton Headright Survey, Abstract 461, Bowie County, Texas, according to the plat recorded in Volume 6086, Page 254 of the Real Property Records of Bowie County, Texas;

Oak Grove Place, a subdivision of a part of the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, according to the plat recorded in Volume 3466, Page 279 of the Reol Property Records of Bowie County,

THENCE North 87 degrees 33 minutes 47 seconds East a distance of 140.60 feet along the South line of the said subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point of the said THENCE South 13 degrees 44 minutes 19 secands East a distance of 184.37 feet along the West line of the said subdivision to a 1/2 inch steel rod

set for a carner, capped MTG 101011-00, at an angle point; THENCE South 15 degrees 12 minutes 44 seconds West a distance of 298.60 feet along the West line of the soid subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE South 15 degrees 12 minutes 43 seconds West a distance of 142.06 feet along the West line of the said subdivision to a 1/2 inch steel rad set for a corner, capped MTG 101011-00, at an angle point;

THENCE South 14 degrees 58 minutes 02 seconds West a distance of 119.03 feet olong the West line of the said subdivision to a 1/2 inch steel rod found for a corner, at an angle point; THENCE South 15 degrees 14 minutes 41 seconds West a distance of 279.62 feet along the West line of the said subdivision to a 1/2 inch steel rod found for a corner, the Southwest corner of Lot No. 17 of the said

subdivision the Northwest corner of that certain tract of land described as Lot No. 15 of Oak Grove Place, a subdivision of a part of the John Paxton Headright Survey, Abstract 461, Bowie County, Texos, according to the plat recorded in Volume 3466, Poge 279 of the Real Property Records of THENCE South 15 degrees 11 minutes 18 seconds West a distance of 138.37 feet along the West line of the said Oak Grove Place subdivision to a 1/2

inch steel rod found for a corner, at an angle point; THENCE South 52 degrees 39 minutes 53 seconds West a distance of 52.05 feet along the West line of the said Oak Grove Place subdivision to a 1/2 inch steel rod set for a corner, copped MTG 101011-00, at on ongle point; THENCE South 28 degrees 01 minutes 21 seconds West o distance of 83.34 feet along the West line of the soid Oak Grove Place subdivision to a 1/2inch steel rod set for a corner, capped MTG 101011-00, at an ongle point; THENCE South 02 degrees 55 minutes 51 seconds East a distance of 120.90 feet along the West line of the said Ook Grove Place subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE South 27 degrees 23 minutes 27 seconds East a distance of 75,58 feet along the West line of the said Ook Grove Place subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE South 46 degrees 40 minutes 43 seconds East a distance of 107.70 feet along the West line of the said Ook Grove Place subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Southwest

THENCE North 65 degrees 30 minutes 22 seconds East a distance of 90.16 feet along the South line of the said Ook Grove Place subdivision to a 1/2 inch steel rod found for a corner, the Southeast corner of Lot No. 11 the soid Oak Grove Place Subdivision, the Southwest Corner of Lot No. 9 of

THENCE South 86 degrees 41 minutes 37 seconds Eost a distance of 144.35 feet along the South line of the said Re-Plat to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE South 69 degrees 42 minutes 45 seconds East a distance of 361.60 feet along the South line of the said Re-Plat to a 1/2 inch steel rod found for a corner, at an angle point THENCE South 49 degrees 57 minutes 04 seconds East a distance of 124.19 feet along the South line of the said Re—Plot to a 1/2 inch steel rod set far a corner, capped MTG 101011—00, the Southeast corner of the said

THENCE North 47 degrees 12 minutes 37 seconds East a distance of 168.83 feet along the East line of the said Re-Plat to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE North 47 degrees 25 minutes 38 seconds East a distance of 108.34 feet along the Eost line of the soid Re-Plot to a 1/2 inch steel rod found for a corner, lying in the East\_line of the said 237.56 acre tract, an outside ell corner of the said Re-Plat, the Southwest corner of the certain troct of lond described as 9.089 ocres in the deed from Red River Redevelopment Authority to Ook Grove Land Company, LP, dated August 25, 2008, recorded in Volume 5454, Page 137 of the Real Property Records of Bowie County, Texas, the Northwest corner of an access easement called Tract 3 Park Drive Easement, recorded in Volume 5454, Page 137 of the Reol Property Records of Bowie County, Texas:

THENCE South 44 degrees 33 minutes 35 seconds East a distance of 60.02 feet along the East line of the said 237.56 acre tract and the West line af the soid easement to a 1/2 inch steel rod found for a corner, on inside ell corner of the soid 237.56 acre troct, the Southeast corner of the said THENCE North 46 degrees 47 minutes 05 seconds East a distance of 288.77 feet along the North line of the said 237.56 acre tract and the South line of the said easement to a 1/2 inch steel rod found for a carner, at a

THENCE North 44 degrees 44 minutes 23 seconds East a distance of 678.78 feet along the North line of the soid 237.56 acre tract and the Sauth line of the said easement to a 1/2 inch steel rod found for a corner, at an THENCE North 48 degrees 04 minutes 20 seconds East a distance of 61.90 feet along the North line of the soid 237.56 acre tract and the South line of the said easement to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, ot an angle point; THENCE North 50 degrees 44 minutes 37 seconds East a distance of 63.08 feet along the North line of the soid 237.56 acre tract and the South line of the soid easement to a 1/2 inch steel rod set for a corner, capped MTG

101011-00, at an angle point; THENCE North 55 degrees 53 minutes 28 seconds East a distance of 35.28 feet along the North line of the said 237.56 acre tract and the South line of the said easement to a 1/2 inch steel rod set for a corner, capped MTG THENCE North 72 degrees 34 minutes 25 seconds East a distance of 20.76 feet along the North line of the said 237.56 acre tract ond the South line of the said easement to a 1/2 inch steel rod found for a corner, an outside ell corner of the said 237.56 acre tract lying in a drainage

THENCE with the droinoge ditch the following courses: South 02 degrees 33 minutes 16 seconds East o distance of 20.94 feet along the East line of the said 237.56 acre tract to a point for a corner, at an South 20 degrees 53 minutes 48 seconds West a distance of 27.07 feet along the East line of the said 237.56 acre tract to a point far a corner, at an

South 45 degrees 03 minutes 20 seconds West a distance of 34.51 feet along the East line of the said 237.56 acre tract to a point for a corner, at an South 22 degrees 45 minutes 11 seconds West a distance of 25.72 feet along the East line of the said 237.56 acre tract to a point for a corner, at an South 06 degrees 07 minutes 58 seconds West a distance of 24.97 feet along the East line of the said 237.56 acre tract to a point for a corner, at on South 04 degrees 25 minutes 53 seconds East a distance of 202.82 feet along the East line of the said 237.56 acre tract to a point for a corner, South 00 degrees 15 minutes 36 seconds East a distance of 45.23 feet along the East line of the said 237.56 acre tract to a point for a corner, at an

South 03 degrees 23 minutes 06 secands East a distance of 68.78 feet along the East line of the said 237.56 acre tract to a point for a corner, at an South 07 degrees 55 minutes 39 seconds East a distance of 88.94 feet along the East line of the said 237.56 acre tract to a point far a corner, at an

Sauth 09 degrees 02 minutes 53 seconds East a distance of 125.60 feet along the East line of the said 237.56 acre tract to a point for a corner, at an angle point, South 07 degrees 10 minutes 04 seconds East a distance of 84.32 feet along the East line of the said 237.56 acre tract to a point for a corner, at an South 07 degrees 14 minutes 24 seconds West a distance of 72.53 feet along the East line of the said 237.56 acre tract to a point for a corner, at an South 22 degrees 00 minutes 38 seconds West a distance of 35.78 feet along the East line of the said 237.56 acre tract to a point for a corner, at an South 12 degrees 01 minutes 09 seconds West a distance of 26.19 feet along the East line of the said 237.56 ocre troct to a point for a corner, at an

THENCE South 05 degrees 41 minutes 04 seconds East at a distance of 25.00 feet passing a 1/2 inch steel rod set for a reference, capped MTG 101011-00, continuing in all a distance of 240.89 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE North 82 degrees 32 minutes 29 seconds East a distance of 196.51 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE South 05 degrees 41 minutes 04 seconds East a distance of 103.20 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE North 82 degrees 32 minutes 29 seconds East a distance of 490.15 feet to a 1/2 inch steel rod set for a corner, copped MTG 101011-00, lying in the Eost line of the said 237.56 acre tract and the West line of that certain tract of land described as Tract No. 3, with 1.293 acres in the leed fram Red River Redevelopment Authority to Oak Grove Golf Club, dated Moy 31, 2000, recorded in Volume 3275, Page 230 of the Real Property

THENCE South 05 degrees 41 minutes 04 seconds East a distance of 436.15 feet along the East line of the said 237.56 acre tract, the East line of the said 3.123 acre tract and the West line of the said 1.293 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE South 84 degrees 00 minutes 58 seconds West a distance of 215.96 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying in the East line of the said 237.56 acre tract and the West line of the

THENCE South 05 degrees 54 minutes 57 seconds East a distance of 250.54 feet along the East line of the said 237.56 acre troct and the West line af the said 3.123 acre tract to a 1/2 inch steel rod set for a corner, THENCE North 84 degrees 00 minutes 22 seconds East a distance of 214.95 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying in the East line of the said 3.123 acre tract and the West line of the

THENCE South 05 degrees 41 minutes 04 seconds East a distance of 30.00 feet along the East line of the said 3.123 acre tract and the West line of the said 1.293 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, on outside ell corner of the said 3.123 acre tract, the Southwest corner of the said 1.293 ocre tract; THENCE South 84 degrees 00 minutes 22 seconds West a distance of 48.34 feet along the South line of the said 3.123 acre tract and generally along a fence to a 5/8 inch steel rod found for a corner, on inside ell corner of the said 3.123 acre tract;

said 1.293 acre tract;

THENCE South 05 degrees 28 minutes 28 seconds Eost a distance of 171.81 feet olong the East line of the said 3.123 ocre troct and generally along a fence to a 5/8 inch steel rod found for a corner, lying in the North line of the soid 237.56 acre tract, the Southeost cornér of the said 3.123

THENCE North 84 degrees 01 minutes 22 seconds East a distance of 166.67 feet along the North line of the said 237.56 acre tract and generally fence to a 5/8 inch steel rod found for a corner, capped WENDY LOPEZ & ASSC, the Southwest corner of the said 2.676 acre tract; THENCE North 86 degrees 24 minutes 44 seconds East a distance of 193.67 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an THENCE North 34 degrees 58 minutes 14 seconds East a distance of 466.44 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an THENCE North 69 degrees 51 minutes 24 seconds West a distance of 332.37 feet to a 1/2 inch steel rod set for a corner, copped MTG 101011-00, at an THENCE South 83 degrees 58 minutes 43 seconds West a distance of 255.97 feet along the South line of the said 237.56 acre tract and the North line of the said 2.676 acre tract to a 1/2 inch steel rad found for a corner, capped Texas JHG 1715 lying in the West line of the said 237.56 acre tract and the East line of the said 1.293 acre tract; THENCE North 05 degrees 41 minutes 04 seconds West a distance of 302.17 feet along the West line of the said 237.56 acre tract and the East line of the said 1.293 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE North 51 degrees 55 minutes 25 seconds East a distance of 52.54

eet to a 1/2 inch steel rod set far a corner, capped MTG 101011-00, at

the beginning of a circular curve to the right, tangent to said line;

THENCE in a Northeasterly direction along the arc of the said circular curve a distance of 78.81 feet, with a delta angle of 69 degrees 28 minutes 21 seconds, a radius of 65.00 feet, a chord bearing of North 86 degrees 39 minutes 35 seconds East, and a chord distance of 74.07 feet to a 1/2 inch steel rod set for a corner, copped MTG 101011—00, at the end of

THENCE South 58 degrees 36 minutes 14 seconds East tangent to said curve, a distance of 41.76 feet to a 1/2 inch steel rod set for a corner, copped MTG 101011-00, at the beginning af a circular curve to the left, tangent

THENCE in a Southeasterly direction along the arc of the said circular curve a distance of 69.30 feet, with a delta angle of 54 degrees 23 minutes 17 secands, a rodius of 73.00 feet, a chard bearing of South 85 degrees 47 minutes 53 seconds East, and a chord distance of 66.72 fe 1/2 inch steel rod set for a corner, capped MTG 101011-00, at the end of

THENCE North 67 degrees 00 minutes 28 seconds East tangent to said curve, a distance of 0.70 feet to o 1/2 inch steel rod set for o corner, capped MTG 101011-00, ot the beginning of a circular curve to the left, tangent THENCE in a Northeasterly direction along the arc of the said circular curve a distance of 16.18 feet, with a delta angle of 71 degrees 19 minutes 45 seconds, a radius of 13.00 feet, a chard bearing of North 31 degrees 20 minutes 36 seconds East, and a chard distance of 15.16 feet to 1/2 inch steel rod set for a corner, capped MTG 101011-00, at the end of

the said circular curve;

THENCE North 04 degrees 19 minutes 16 seconds West tangent to said curve, a distance of 72.60 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an ongle point; THENCE North 01 degrees 42 minutes 05 seconds West a distance of 69.06 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, ot an THENCE North 02 degrees 10 minutes 43 seconds East a distance of 65.22 feet ta a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an

THENCE North 05 degrees 51 minutes 24 seconds West a distance of 110.67 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011—00, lying in the North line of the soid 237.56 ocre troct; THENCE North 84 degrees 08 minutes 36 seconds East a distance of 1097.84 feet along the North line of the soid 237.56 ocre troct to a 1/2 inch steel rod set for a corner, copped MTG 101011-00, the Northeast corner of

THENCE South 04 degrees 05 minutes 26 seconds Eost a distance of 512.90 feet along the Eost line of the soid 237.56 acre tract to a 1/2 inch steel rad set for a corner, capped MTG 101011-00, the Northwest corner of the THENCE North 85 degrees 54 minutes 40 seconds East a distance of 100.00 feet along the North line of the said 3.578 acre tract to a 1/2 inch steel for a carner, capped MTG 101011-00, the Nartheast carner of the

THENCE South 04 degrees 05 minutes 20 seconds East a distance of 1558.65 feet along the East line of the said 3.578 acre tract to a 1/2 inch steel rod found for a corner, lying in the South line of that certain tract of land described as 765.5 acre in the deed from the United States of America, to Red River Redevelopment Authority, doted March 30, 1999 County, Texas, the Southeast corner of the said 237.56 acre tract; THENCE South 84 degrees 03 minutes 12 seconds West a distance of 1873.56 feet along the South line of the said 237.56 acre tract, the South line of the said 765.5 ocre tract, and generally along a fence to a 1/2 inch steel rod found for a corner, copped TEXAS JHG 1715, at an angle point; THENCE South 84 degrees 02 minutes 37 seconds West a distance of 1512.32

feet along the South line of the soid 237.56 acre tract, the South line of the said 765.5 acre tract, and generally along a fence to a 3 inch steel post found for a corner, the Southwest corner of the said 237.56 ocre tract, the Southwest corner of the said 765.5 acre tract; THENCE North 01 degrees 14 minutes 52 seconds West a distance of 952.14 feet along the West line of the said 237.56 acre tract, the West line of the said 765.5 acre tract, and generally along a fence to a 2 inch aluminum disk found for a corner, stamped SAM, at an angle point; THENCE North 45 degrees 55 minutes 00 seconds West a distance of 1644.86 feet along the West line of the said 237.56 acre tract, the West line of the said 765.5 acre tract, and generally along a fence to a 3 inch steel post found for a carner, at an angle point;

THENCE North 00 degrees 33 minutes 41 seconds West a distance of 45.19 feet along the West line of the said 237.56 acre tract, the West line of the said 765.5 acre tract, and generally along a fence to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, an inside ell corner of the said 237.56 acre tract, an inside ell corner of the said 765.5 acre tract; THENCE South 88 degrees 20 minutes 15 seconds West a distance of 144.69 feet along the South line of the said 237.56 acre tract, the South line of the said 765.5 acre tract, and generally along a fence to a 1/2 inch steel rod found for a corner (control monument no. 1);

THENCE North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1228.54 feet along the West line of the said 237.56 acre tract the point of beginning and containing 200.606 acres of lond, ot the The beorings are based on Texas Coordinate System of 1983, North Central Zone, NADŠ3, with a bearing of North 02 degrees 17 minutes 24 seconds This description is based on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

# Property Description Tract No. 3, with 8.631 Acres

All that certain lat, tract or parcel of land lying and situated in the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, being a part of that certain troct of land described as 237.56 acres in the Correction Special Warranty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, doted August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Records of Bowie County, Texas, the Original Deed is doted June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texos, and being more particularly described by metes and bounds as follows: BEGINNING at a 1/2 inch steel rod found for a corner, lying in the East line of the said 237.56 acre tract, the Southeast corner of Lot No. 31 Oak Grove Place, a subdivision of a part of the John Poxton Headright Survey, Abstroct 461, Bowie County, Texos, according to the plot recorded in Volume 3466, Page 279 of the Real Property Records of Bowie County, Texas, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 inch steel rod monument no. 2), North 84 degrees 02 minutes 34 seconds East a distance of 1457.12 feet, and South 02 degrees 26 minutes 42 seconds East a distance of 150.48 feet from a 1/2 inch steel rod found for a corner THENCE South 02 degrees 15 minutes 19 seconds East a distance of 759.20 feet along the East line of the said 237.56 acre tract to a 1/2 inch steel rad found for a corner, at an angle paint, an angle point of that certain tract of land described as 9.089 acres in the deed fram Red River Redevelopment Authority to Oak Grave Land Company, LP, dated August 25, 2008, recorded in Valume 5454, Page 137 of the Real Property Records of THENCE South 45 degrees 26 minutes 00 seconds West a distance of 342.45 feet along the East line of the said 237.56 acre tract and the West line of the said 9.089 acre tract to a 1/2 inch steel rod found for a corner, capped Texas JHG 1715, at an angle point; THENCE South 02 degrees 25 minutes 08 seconds East a distance of 204.24 feet along the East line of the said 237.56 acre tract and the West line of the said 9.089 acre tract to a 1/2 inch steel rod found for a corne an angle point for that certain tract of land described os Lot No. 8 of the Re-Plat of Lots No. 1 thru 5, Lots No. 7 thru 9, Lot No. 14, and Lats No. 16 thru 29 Ook Grove Place, a subdivision of a part of the John Poxton Headright Survey, Abstract 461, Bowie County, Texas, according to the plat recorded in Volume 6086, Page 254 of the Real Property Records

THENCE South 87 degrees 27 minutes 30 seconds West o distance of 50.16 feet along the North line of the soid Re-Plot to a 1/2 inch steel rod found for a corner, at on angle point THENCE South 42 degrees 24 minutes 50 seconds West o distance of 191.47 feet along the West line of the said Re-Plot to a 1/2 inch steel rod found for a corner, at an angle point; THENCE South 57 degrees 23 minutes 01 seconds West a distance of 83.84 feet along the West line of the said Re-Plat to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point;

THENCE North 74 degrees 21 minutes 09 seconds West a distance of 93.08 feet along the North line of the said Re-Plat to a 1/2 inch steel rod set or a corner, capped MTG 101011-00, an inside ell corner of the said

THENCE North 20 degrees 37 minutes 24 seconds East o distance of 135.97 feet along the East line of the said Re-Plat to a 1/2 inch steel rod found for a corner, at an angle point; THENCE North 20 degrees 24 minutes 03 seconds East a distance of 119.94 feet along the East line of the said Re-Plat to a 1/2 inch steel rod found for a corner, at an angle point; THENCE North 20 degrees 24 minutes 03 seconds East a distance of 118.80 feet along the East line of the said Re-Plat to a 1/2 inch steel rod found for a carner, at an angle point; THENCE North 15 degrees 36 minutes 17 seconds Eost o distance of 361.54 feet along the East line of the said Re-Plat to a 1/2 inch steel rod found for a carner, at an angle point; THENCE North 10 degrees 40 minutes 47 seconds East a distance of 182.62 feet along the East line of the said Re—Plot to a 1/2 inch steel rod set for a corner, capped MTG 101011—00, at an angle point; THENCE North 02 degrees 03 minutes 58 seconds West a distance of 167.31 et olong the East line of the said Replat to a 1/2 inch steel rod found

for a corner, at an angle point; THENCE North 02 degrees 34 minutes 52 seconds West a distance of 128.74 feet along the East line of the said Re-Plat ta a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE North 02 degrees 06 minutes 10 seconds West a distance of 111.24 feet along the East line of the said Re-Plat to a 1/2 inch steel rod found for a corner, at an angle point; THENCE North 14 degrees 33 minutes 18 seconds West a distance of 10.02 feet along the East line of the said Replat to a 1/2 inch steel rod found for a corner, lying in the South line of that certain tract of land described as Lot 30 of the said Oak Grove Place, an outside ell corner of the said Replot, an ongle point of the said Lot No. 30; THENCE North 71 degrees 06 minutes 01 seconds East a distance of 46.19 feet along the South line of the said Ook Grove Place to a 1/2 inch steel rod set for a corner, copped MTG 101011-00, at an angle point; rod found far a carner, at an angle point;

THENCE North 77 degrees 45 minutes 33 seconds East a distance of 72.01 feet along the South line of the said Oak Grove Place to a 1/2 inch steel THENCE North 77 degrees 37 minutes 24 seconds East a distance of 191.57 feet along the South line of the said Oak Grove Place to the point of beginning and containing 8.631 ocres of lond, at the time of this survey. The bearings are based on Texas Coordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds

This description is based on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

#### Property Description ract No. 4, with 4.450 Acres

All that certain lot, tract or parcel of land lying and situated in the Jonathan Collum Headright Survey, Abstract 109, Bowie County, Texas, being a part of that certain tract of land described as 237,56 acres in he Correction Special Warranty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texas, and being

more particularly described by metes and bounds as follows: BEGINNING at a point far a corner, being an inside ell corner of the said 237.56 acre tract, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 inch steel rod found far the Narthwest carner of the said 237.56 acre tract (control monument no. 2), North 90 degrees 00 minutes 00 seconds East a distance of 2453.96 feet, and South 00 degrees 00 minutes 00 seconds West o distance of 1645.57 feet from a 1/2 inch steel rod found far a carner control manument no. 1);

THENCE Narth 88 degrees 44 minutes 42 seconds East at a distance of 25.00 feet passing a 1/2 inch steel rod set for a reference, capped MTG 101011-00, continuing in all a distance of 391.80 feet along the North line of the said 237.56 ocre tract to 0 1/2 inch steel rod set for a corner,

THENCE North 83 degrees 46 minutes 38 seconds East a distance of 80.76 feet along the North line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE North 84 degrees 21 minutes 16 seconds East a distance of 196.56 feet olong the North line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle paint; THENCE South 69 degrees 53 minutes 33 seconds East a distance of 20.42 feet along the North line of the said 237.56 acre tract to a 1/2 inch steel rod found for a corner, capped Texas JHG 1715, lying in the West line of at Access Easement called Tract 2 Main Drive Eosement, recorded in Volume 5454, Page 137 of the Real Property Records of Bowie County,

THENCE South 05 degrees 41 minutes 04 seconds East a distance of 284.31 feet along the East line of the said 237.56 acre tract, the West line of the said easement, and the West line of that certain tract of land described as Tract No. 3, with 1.293 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, to a 1/2 inch steel rod set for a corner, capped MTG 101011-00;

THENCE South 82 degrees 32 minutes 29 seconds West a distance of 490.15 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE North 05 degrees 41 minutes 04 seconds West a distance of 103.20 feet ta a 1/2 inch šteel rod set for a corner, capped MTG 101011-THENCE South 82 degrees 32 minutes 29 seconds West o distance of 196.51 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE Narth 05 dearees 41 minutes 04 seconds West at a distance of 215.89 feet passing a 1/2 inch steel rod set for a reference, capped MTG 101011-00, continuing in all a distance of 240.89 feet to the point of beginning and containing 4.450 acres of land, at the time of this survey. The bearings are based on Texas Coordinate System of 1983, North Central Zone, NADŠ3, with a bearing of North 02 degrees 17 minutes 24 seconds This description is based on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011

Property Description Tract No. 5, with 1.654 Acres Bowie County, Texos

All that certain lot, troct or parcel of land lying and situated in the Jonathan Collum Headright Survey, Abstract 109, Bawie County, Texas, being a part of that certain tract of land described as 237.56 acres in the Correction Special Warranty Deed from Red River Redevelopment Authority to Oak Grave Galf Club, LLC, dated August 10, 2000, recarded in Volume 3330, Page 166 of the Real Property Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texos, and being more particularly described by metes and bounds as follows:

BEGINNING at a 1/2 inch steel rod found for a corner, being on outside ell corner of the soid 237.56 ocre tract, the Northeast corner of that certain troot of land described as Tract No. 3, with 1.293 ocres in the deed from Red River Redevelopment Authority to Ook Grove Golf Club, LLC, doted May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, and the Southeast corner of an Access Easement called Tract 2 Main Drive Easement, recorded in Volume 5454, Page 137 of the Real Property Records of Bowie County, Texas, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 inch steel rod found for ne Northwest corner of the said 237.56 acre tract (control monument no ), North 90 degrees 00 minutes 00 seconds East a distance of 3206.69 feet, and South 00 degrees 00 minutes 00 seconds West a distance of 1672.69 feet from a 1/2 inch steel rod found for a corner (control

THENCE North 84 degrees 08 minutes 36 seconds East a distance of 242.33 feet along the North line of the said 237.56 ocre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE South 05 degrees 51 minutes 24 seconds East a distance of 110.67 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at

on ongle point; THENCE South 02 degrees 10 minutes 43 seconds West a distance of 65.22 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at THENCE South 01 degrees 42 minutes 05 seconds East a distance of 69.06 feet to a 1/2 inch steel rod set for a corner, copped MTG 101011-00, at an angle póint; THENCE South 04 degrees 19 minutes 16 seconds East a distance of 72.60 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at the beginning of a circular curve to the right, tangent to said line; THENCE in a Southwesterly direction along the arc of the said circular curve a distance of 16.18 feet, with a delta angle of 71 degrees 19 minutes 45 seconds, a radius of 13.00 feet, a chord bearing of South egrees 20 minutes 36 seconds West, and a chard distance of 15.16 feet to 1/2 inch steel rod set for a corner, copped MTG 101011-00, at the end

THENCE South 67 degrees 00 minutes 28 seconds West tongent to said curve, a distance of 0.70 feet to a 1/2 inch steel rad set for a corner, copped MTG 101011-00, at the beginning of a circular curve to the right, tongent to soid line; THENCE in a Northwesterly direction along the arc of the said circula curve a distance of 69.30 feet, with a delta angle of 54 degrees 23 minutes 17 seconds, a radius of 73.00 feet, a chord bearing of North 85 degrees 47 minutes 53 seconds West, and a chord distance of 66.72 feet to a 1/2 inch steel rod set for a carner, capped MTG 101011-00, at the end of the said circular curve:

of the said circular curve; THENCE North 58 degrees 36 minutes 14 seconds West tangent to said curve, a distance of 41.76 feet to a 1/2 inch steel rod set for a corner, capped ITG 101011—00, at the beginning of a circular curve to the left, tangent

THENCE in a Southwesterly direction along the arc of the said circular curve a distance of 78.81 feet, with a delta angle of 69 degrees 28 minutes 21 seconds, a radius of 65.00 feet, a chard bearing of South 86 degrees 39 minutes 35 seconds West, and a chord distance of 74.07 feet to 1/2 inch steel rod set for a corner, capped MTG 101011-00, at the end of the said circular curve:

THENCE South 51 degrees 55 minutes 25 seconds West tangent to said curve, a distance of 52.54 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying in the West line of the said 237.56 acre tract and the East line of the said 1.293 acre tract; THENCE North 05 degrees 41 minutes 04 seconds West a distance of 316.83 feet along the West line of the soid 237.56 acre tract and the East line of the said 1.293 acre tract to the point of beginning and containing

The bearings are based on Texas Coardinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds This description is based on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

#### Praperty Description Tract No. 6, with 1.291 Acres Bowie County, Texas

1.654 acres of land, at the time of this survey.

of the soid circular curve:

All that certain lot, tract or parcel of land lying and situated in the Collin M. Aiken Headright Survey, Abstroct 2 and the Jonathan Collum Headright Survey, Abstract 109, Bowie County, Texas, being a part of that certain tract of land described as Tract No. 3, with 1.293 ocres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Valume 3275, Page 230 of the Real Property Records of Bowie County, Texas, and being more particularly described by metes and bounds as follows:

REGINNING at a 1/2 inch steel rod found for a corner, the Northeas corner of that certain tract of land described as Tract No. 3, with 1.293 acres in the deed from Red River Redevelapment Authority to Oak Grov Solf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 o the Real Property Records of Bowie County, Texas, on outside ell corner of that certain tract of land described as 237.56 acres in the Correction of that certain tract of land described as 237.56 acres in the Correction Special Warranty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texas, and the Southeost corner of an Access Easement called Tract 2 Main Drive Easement, recorded in Volume 5454, Page 137 of the Real Property Records of Bowie County, Texas, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 inch steel rod found for the Northwest corner of the said 237.56 acre tract (control monument no. 2) North 90 degrees 00 minutes 00 seconds Fast a distance of 3206.69 North 90 degrees 00 minutes 00 seconds East a distance of 3206.69 st, and South 00 degrees 00 minutes 00 seconds West a distance of 1672.69 feet from a 1/2 inch steel rod found for a corner (control

monument no. 1); THENCE South 05 degrees 41 minutes 04 seconds East a distance of 937.52 feet along the Eost line of the said 1.293 acre tract, the West line of the said 237.56 acre tract, and the West line of that certain tract of land described as Tract No. 1, with 2.676 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records o Bowie County, Texas, to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Southeast corner of the said 1.293 acre tract, an outside

THENCE South 84 degrees 00 minutes 22 seconds West a distance of 60.00 feet along the South line of the said 1.293 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Southwest corner af the said 1.293 acre tract, an outside ell corner of certain tract of land described as Tract No. 2, with 3.123 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie

THENCE North 05 degrees 41 minutes 04 seconds West a distance of 937.67 feet along the West line of the said 1.293 acre tract, the East line af the said 3.123 acre tract, and the East line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Northwest corner of the said 1.293 acre tract, the Southwest corner of the said easement: THENCE North 84 degrees 08 minutes 36 seconds East a distance of 60.00 feet along the North line of the said 1.293 acre tract and the South line of the said easement to the point of beginning and containing 1.291 acres of land, at the time of this survey. The bearings are based on Texas Coordinate System of 1983, North Central Zone, NAD&3, with a bearing of North 02 degrees 17 minutes 24 seconds

This description is based on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

1. DRAWINGS FOR THE PROPERTY DESCRIPTIONS ON THIS PAGE LOCATED ON PAGES 1 AND 2 OF THIS DOCUMENT.

Property Description Tract No. 7, with 2.844 Acres Bawie Caunty, Texas

All that certain lot, tract ar parcel of land lying and situated in the Collin M. Aiken Headright Survey, Abstract 2, Bowie\_Caunty, Texas, being a part of that certain tract of land described as Tract No. 1, with 2.676 acres in the deed from Red River Redevelopment Authority to Oak Grave Golf Club, LLC, doted Moy 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, a port of that certain tract of land described as 237.56 acres in the Correction Special Warranty Deed from Red River Redevelopment Authority to Ook Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Rec Property Records of Bowie County, Texas, and being more particularly

BEGINNING at a 5/8 inch steel rad found for o corner, capped WENDY LOPEZ & ASSC, lying in the North line of the said 237.56 acre tract, the Southwest corner of the said 2.676 acre tract, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 inch steel rod found for the Northwest corner of the said 237.56 ocre troct (control monument no. 2), North 90 degrees 00 minutes 00 seconds Eost o distance of 3373.95 feet, and South 00 degrees 00 minutes 00 seconds West o distance of 2770.68 feet from a 1/2 inch steel rod found for a corner (control manument no. 1 THENCE North 07 degrees 20 minutes 31 seconds West a distance of 171.90 feet along the West line of the said 2.676 acre tract and generally along a fence to a 5/8 inch steel rod faund far a corner, capped WENDY LOPEZ & ASSC, an inside ell corner of the said 2.676 acre trac THENCE South 84 degrees 00 minutes 22 secands West a distance of 52.73 feet along the South line of the soid 2.676 acre tract and generally olong o fence to a 1/2 inch steel rod set for a corner, capped M70 101011-00, an outside ell corner of the said 2.676 acre tract, the Southeast corner of that certain tract of land described as Tract N with 1.293 ocres in the deed from Red River Redevelopment Authority Ook Grove Galf Club, LLC, doted May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas; THENCE North 05 degrees 41 minutes 04 seconds West a distance of 30.00 feet along the West line of the said 2.676 acre tract and the East line of the said 1.293 acre tract to o 1/2 inch steel rod set for a corner, THENCE North 84 degrees 00 minutes 22 seconds East o distance of 232.03 feet to a 1/2 inch šteel rod set for a corner, capped MTG 101011-00;

lying in the North line of the said 2.676 acre tract and the South line of the said 2.37.56 acre tract, the Northeost corner of the said 2.676 THENCE North 83 degrees 58 minutes 43 seconds East a distance of 25.30 feet along the North line of the said 2.676 acre troct and the South line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point, the Northeast corner of th4e THENCE South 69 degrees 51 minutes 24 seconds East a distance of 332.37 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, ot

THENCE North 05 degrees 57 minutes 17 seconds West a distance of 288.64

feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00,

an angle point; THENCE South 34 degrees 58 minutes 14 seconds West a distance of 466.44 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE South 86 degrees 24 minutes 44 seconds West a distance of 193.67 feet to the point of beginning and containing 2.844 acres of land, more The bearings ore based on Texas Coordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds

This description is based on the survey ond plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

## Property Description Tract No. 8, with 9.824 Acres Bowie County, Texas

Being all of Lots No. 1 thru 5, Lots No. 7 thru 9, Lot No. 14 and Lots No. 16 thru 28 of the Re—plot of Lots No. 1 thru 5, Lots No. 7 thru 9, Lat No. 14, and Lots No. 16 thru 29 of Oak Grove Place, a subdivision of a part of the John H. Paxton Headright Surve Abstract 461, Bawie Caunty, Texas, according to the Re-Pla recorded in Valume 6086, Page 254 af the Real Property Records of Bowie Caunty, Texas.

Property Description Tract No. 9, with 0.359 Acres Bowie County, Texas

All that certain lot, tract ar parcel of land lying and situated in the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, being a part of that certain tract of land described as the Re-Plat of Lots No. 1 thru 5, lots no. 7 thru 9, Lot No. 14, and Lots No. 16 thru 29, Oak Grove Place, a subdivision of a part of the John Paxton Heodright Survey, Abstract 461, Bowie County, Texas, according to the plat recorded in Volume 6086, Page 254 of the Reol Property Records of Bowie County, Texas, and being more particularly described by metes and bounds os follows:

lying in the North line of that certain tract of lond described as 237.56 cres in the Correction Special Warranty Deed from Red River Redevelopment Authority to Ook Grove Golf Club, LLC, doted August 10, 2000, recorded in Volume 3330, Poge 166 of the Real Property Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texas, the North line of the said Re—Plot, and the South line of an Access Easement, recorded in Valum 6083, Page 165 of the Real Praperty Records of Bowie County, Texos, the 84 degrees 02 minutes 34 seconds East (basis of bearings) a distance of 150.03 feet from a 1/2 inch steel rod found for the Northwest corner of the said Re-Plat and the Northwest corner of Lot No. 27 of the said Re-Plat

THENCE Narth 84 degrees 02 minutes 34 secands East a distance of 40.76 feet along the North line of the said Re-Plat, the North line of the soid 237.56 acre tract, and the South line of the soid easement to a 1/2 inch steel rad found for a corner, capped MTG 101011-00, the Northwest corner of Ook Grove Place Road (private), said corner bears South 84 degrees 02 minutes 34 seconds West a distance of 577.38 feet from a 1/2 inch steel rad found for a a subdivision of a part of the John Poxton Heodright Survey. Abstract 46 Bowie County, Texas, occording to the plat recorded in Volume 3466, Poge 279 of the Real Property Records of Bowie County, Texas, and the Northeast corner of Lot No. 31 of the said subdivision, the Northeast corner of the said THENCE the following courses along the West side of the soid roadway:

South 05 degrees 59 minutes 01 seconds Eost o distance of 9.78 feet to a 1/2 inch steel rod found for a carner, capped MTG 101011-00, at the beginning of distance of 49.60 feet, with a delta angle of 31 degrees 01 minutes 00 seconds, a radius of 91.63 feet, a chord bearing of South 21 degrees 29 minutes 32 seconds East, and a chord distance of 49.00 feet to a 1 steel rod found for o corner, copped MTG 101011-00, ot the end of the soid circular curve, and the beginning of a circular curve to the right,

In a Southeasterly direction along the arc of the said circular curve a distance of 70.49 feet, with a delta angle of 17 degrees 11 minutes 14 seconds, a radius of 235.00 feet, a chard bearing of South 28 degrees 24 minutes 16 seconds East, and a chard distance of 70.23 feet to a 1/2 inch steel rod found for a corner, capped MTG 101011-00, at the end of the soic circular curve,

THENCE South 19 degrees 48 minutes 45 seconds East tangent to soid circular curve, a distance of 69.82 feet to a 1/2 inch steel rod found far a carner, capped MTG 101011—00, ot the beginning of a circular curve to the right,

In a Southeasterly direction along the arc of the said circular curve a distance of 17.89 feet, with a delta angle of 4 degrees 21 minutes 41 seconds, a radius af 235.00 feet, a chord bearing of South 17 degrees 37 minutes 47 seconds East, and a chord distance of 17.88 feet to a 1/2 inch steel rod found for a corner, capped MTG 101011-00, at the end of the soid circular curve, the Northeast corner of Lot No. 25 of the said Re-Plat THENCE in a Southwesterly direction along the orc of the soid circular curve and the North line of the said Lat No. 25 a distance of 53.67 feet, with o delta angle of 70 degrees 51 minutes 58 seconds, a radius of 43.40 feet, a chord bearing of South 39 degrees 00 minutes 43 seconds West, and a chord distance of 50.32 feet to a 1/2 inch steel rad found for a corner, capped MTG THENCE South 01 degrees 06 minutes 13 seconds East a distance of 83.81 feet

along the North line of the said Lot No. 25 to a 1/2 inch steel rod found fo a corner, copped MTG 101011-00, lying in the West line of the said Re-Plat, the Northwest corner of the soid Lot No. 25; THENCE North 13 degrees 44 minutes 19 seconds West a distance of 184.37 feet along the West line of the said Re-Plot to a 1/2 inch steel rod found for a corner, capped MTG 101011-00, an inside ell corner of the said Re-Plat; THENCE South 87 degrees 33 minutes 47 seconds West a distance of 53.01 feet along the South line of the said Re-Plot to a 1/2 inch steel rod found for a corner, capped MTG 101011-00, the Southeast corner of the soid Lot No. 27; THENCE North 01 degrees 56 minutes 43 seconds East a distance of 141.73 feet along the East line of the said Lot No. 27 to the paint of beginning and cantaining 0.359 acres of land, at the time of this survey. This description is based on the survey and plat made by Mike Gardner Registered Professional Land Surveyor No. 5760, on August 17, 2011.

SURVEYOR CERTIFICATE:

THIS IS TO CERTIFY THAT THIS SURVEY WAS MADE ON THE GROUND UNDER MY SUPERVISION ON JUNE 27, 2011, THAT THIS PLAT (MAP OR DRAWING) SUBSTANTIALLY COMPLIES WITH THE CURRENT PROFESSIONAL AND TECHNICAL STANDARDS OF THE TEXAS BOARD OF PROFESSIONAL LAND SURVEYING. AND REPRESENTS THE FACTS FOUND AT THE TIME OF THE SURVEY, THERE ARE NO VISIBLE IMPROVEMENTS EXCEPT AS SHOWN ON THE SURVEY PLAT.

THIS PLAT IS FOR THE INTENDED USE OF JEFFREY A. PRIESKORN AS RELATES TO OWNERSHIP OR TRANSFER OF OWNERSHIP. THIS SURVEY IS NOT ASSIGNABLE OR TRANSFERABLE, MAY NOT BE REISSUED WITHOUT RE-SURVEY AND MAY BE VOID/INVALID SUBJECT TO CHANGÉS IN GOVERNANCE OR INTERPRETATIONS ISSUED BY THE TEXAS BOARD OF PROFESSIONAL LAND SURVEYING, AND MAY NOT BE COPIED OR PROVIDED TO OTHER PARTIES WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE UNDERSIGNED.

REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5760, STATE OF TEXAS FIRM CERTIFICATE NO. 101011-00 DATE: AUGUST 9, 2011. REVISED: SEPTEMBER 1, 2011



# BOUNDARY SURVEY 9 TRACTS

PART OF THE JOHN H. PAXTON HEADRIGHT SURVEY, ABSTRACT 461, THE JONATHAN COLLUM HEADRIGHT SURVEY, ABSTRACT 109, THE COLLIN M. AIKEN HEADRIGH SURVEY, ABSTRACT 2, AND THE J. H. SMELSER HEADRIGHT

SURVEY, ABSTRACT 722, BOWIE COUNTY, TEXAS Revision/Description REVISED TRACTS 8 & 9 Dwg. Date Project No. 112021

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TBPE NO. 354 3 OF 3

5930 SUMMERHILL RD. | P.O. BOX 3786 TEXARKANA TEXAS 75501

& surveyors

BEGINNING at a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying in the North line of the Road Access and Utility Easement of the said subdivision, the Southeast corner of Lot 10 of Oak Grove Place, a subdivision of a part of the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, according to the plat recorded in Volume 3466, Page 279 of the Real Property Records of Bowie County, Texas, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to o 1/2 inch steel rod found for o corner (control monument no. 2), the Northwest corner of that certain tract of land described 237.56 acres in the Correction Special Warranty Deed fram Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Poge 166 of the Real Property Records of Bowie County, Texos, the Or Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of Property Records of Bowie County, Texas, North 90 degrees 00 minutes 00 seconds East a distance of 935.54 feet, and South 00 degrees 00 minutes 00 seconds West a distance of 1363.91 feet fram a 1/2 inch steel rod found for a

THENCE the following courses along the North side of the said roadway: South 74 degrees 21 minutes 09 seconds East tangent to said curve, a distance of 121.76 feet to a point for a corner, at the beginning of a

In a Southeasterly direction along the arc of the said circular curve a distance of 21.57 feet, with a delta angle of 05 degrees 15 minutes 36 seconds, a radius of 235.00 feet, a chard bearing of South 76 degrees 58 minutes 48 seconds East, and a chard distance of 21.57 feet to a point for a corner, at the end of the said circular curve, South 79 degrees 36 minutes 44 seconds East a distance of 93.25 feet to a point for a corner, at the beginning of a circular curve to the right,

distance of 64.80 feet, with a delta angle of 14 degrees 00 minutes 34 seconds, a radius of 265.00 feet, a chord bearing of South 72 degrees 36 minutes 27 seconds East, and a chord distance of 64.63 feet to a point

South 65 degrees 36 minutes 09 seconds East tangent to said curve, a distance of 48.00 feet to a point for a corner, at the beginning of a

In a Southeasterly direction along the arc of the said circular curve a distance of 33.07 feet, with a delta ongle of 08 degrees 03 minutes 50 seconds, a radius of 33.07 feet, a chord bearing of South 69 degrees 37 minutes 58 seconds East, and a chord distance of 33.05 feet to a point for a corner, at the end of the soid circular curve South 73 degrees 39 minutes 41 seconds East a distance of 19.27 feet to a point for a corner, at the beginning of a circular curve ta the right, In a Southeasterly direction along the orc of the said circular curve of distance of 64.66 feet, with a delta ongle of 13 degrees 58 minutes 50 seconds, a radius of 265.00 feet, a chard bearing of South 66 degrees 40 minutes 40 seconds East, and a chard distance of 64.50 feet to a point South 59 degrees 41 minutes 09 seconds East a distance of 59.79 feet to a point for a corner, capped MTG 101011-00, at the beginning of a circular

distance of 55.21 feet, with a delta angle of 11 degrees 56 minutes 12 seconds, a rodius of 265.00 feet, a chord bearing of South 53 degrees 41 minutes 30 seconds East, and o chord distance of 55.11 feet to a point for a corner, at the end of the said circular curve South 47 degrees 41 minutes 50 seconds East a distance of 57.45 feet to a

point for a corner, lying in the Eost line of the said subdivision, the Southeost corner of Lot 2 of the soid subdivision; THENCE South 47 degrees 12 minutes 37 seconds West a distance of 30.11 feet along the East line of the said subdivision to a point for a corner, the Northeast corner of Lot 1 of the said subdivision; THENCE the following courses along the South side of the said roadway: North 47 degrees 41 minutes 55 seconds West a distance of 54.84 feet to a

point for a corner, at the beginning of a circular curve to the left, distance of 48.96 feet, with a delta angle of 11 degrees 56 minutes 13 seconds, a radius of 235.00 feet, a chard bearing of North 53 degrees 41 minutes 33 seconds West, and a chord distance of 48.87 feet to a point for a corner, at the end of the said circular curve, North 59 degrees 41 minutes 09 seconds West a distance of 59.79 feet to a point for a corner, at the beginning of a circular curve to the left,

In a Northwesterly direction along the arc of the said circular curve of distance of 57.34 feet, with a delta angle of 13 degrees 58 minutes 50 seconds, a rodius of 235.00 feet, o chord bearing of North 66 degrees 40 minutes 35 seconds West, and a chord distance of 57.20 feet to a point for a corner, at the end of the said circular curve, North 73 degrees 39 minutes 41 seconds West a distance

point for a corner, at the beginning of a circular curve to the right, distance of 37.30 feet, with a delta angle of 08 degrees 03 minutes 49 seconds, a rodius of 265.00 feet, a chord bearing of North 69 degrees 38 minutes 05 seconds West, and a chord distance of 37.27 feet to a point for a corner, at the end of the said circular curve,

North 65 degrees 36 minutes 09 seconds West tongent to said curve, a distance of 48.00 feet to a point for a corner, at the beginning of a circular curve to the left, tangent to said line, In a Northwesterly direction along the arc of the said circular curve o

distance of 57.46 feet, with a delta angle of 14 degrees 00 minutes 35 seconds, a radius of 235.00 feet, a chord bearing of North 72 degrees 36 minutes 23 seconds West, and a chord distance of 57.32 feet to a point for a corner, at the end of the said circular curve,

North 79 degrees 36 minutes 44 seconds West tangent to said curve, o distance of 93.25 feet to a point for a corner, capped MTG 101011-00, at the beginning of a circular curve to the right, In a Northwesterly direction along the arc of the said circular curve a distance of 24.33 feet, with a delta angle of 05 degrees 15 minutes 35 seconds, a radius of 265.00 feet, a chord bearing of North 76 degrees 58

minutes 48 seconds West, and o chord distance of 24.32 feet to a point for a corner, at the end of the said circular curve, North 74 degrees 21 minutes 09 seconds West a distance of 121.76 feet to a point for a corner, at the beginning of a circular curve to the right,

THENCE North 15 degrees 38 minutes 51 seconds East a distance of 30.00 feet to the point of beginning and containing 0.434 acres of land, at the The bearings are based on Texos Coordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds

This description is based on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor Na. 5760, on August 9, 2011.

# Property Description Tract No. 1, with 8.902 Acres

(control monument no. 1);

Bowie County, Texas All that certain lot, tract or parcel of land lying and situated in the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, being a port of that certain tract of land described as 237.56 acres in the Correction Special Warranty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Page 166 of the Real Praperty Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bawie County, Texas, and being mare particularly described by metes and bounds as follows:

BEGINNING at a 1/2 inch steel rod found for a corner (control monument no. 2), the Northwest corner of the said 237.56 acre tract, and the outhwest corner of an access easement recorded in Volume 6083, Page 165 of the Real Property Records of Bowie County, Texas; feet along the North line af the said 237.56 acre tract and the South line of the said access easement to a 1/2 inch steel rad set for a

THENCE North 84 degrees 02 minutes 34 seconds East a distance of 706.95 corner, copped MTG 101011-00, the Northwest corner of the Re-Plat of Lots No. 1 thru 5, Lots No. 7 thru 9, Lot No. 14, and Lots No. 16 thru 29 Ook Grove Place, a subdivision of a part of the John Paxton Headright Survey, Abstract 461. Bowie County. Texas, according to the plat recorded in Volume 6086, Page 254 of the Real Property Records of Bowie County,

THENCE South 06 degrees 10 minutes 57 seconds East a distance of 132.38 feet along the West line of the soid subdivision to a 1/2 inch steel rod found for a corner, an outside ell corner of the said subdivision; THENCE North 87 degrees 33 minutes 47 seconds Eost a distance of 42.68 feet along the South line of the said subdivision to a 1/2 inch steel rod THENCE South 22 degrees 10 minutes 21 seconds West a distance of 506.27

feet to o 1/2 inch steel rod set for o corner, capped MTG 101011-00; THENCE South 84 degrees 07 minutes 30 seconds West a distance of 548.59 lying in the West line of he said 237.56 acre tract said corner bears North 02 degrees 17 minutes 24 secands West (basis of bearings) a distance of 1228.54 feet from a 1/2 inch steel rod found for a corner

THENCE North 02 degrees 17 minutes 24 seconds West o distance of 581.88 feet along the West line of the said 237.56 acre tract to the point of beginning and containing 8.902 acres of land, more or less. The bearings are based on Texas Coordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds

Property Description Tract No. 2, with 200.606 Acres

Bowie County, Texas

All that certain lot, tract or parcel of land lying and situated in the John Paxton Headright Survey, Abstract 461, the J. H. Smelser Headright Survey, Abstract 722, the Collin M. Aiken Headright Survey, Abstract 2, the Charles Collum Headright Survey, Abstract 108 and the Jonathan Collum Headright Survey, Abstract 109 Bowie County, Texas, being all of that certain tract of land described in the deed from TexAmericas Center to Oak Grove Golf Club, LLC, dated June 28, 2011, recorded in Volume 6064, Page 219 of the Real Property Records of Bowie County, Texas, a part of that certain tract of land described as 237.56 acres in the Correction Special Warranty Deed from Red River Redevelonment Authority to Oak Grove Golf Warranty Deed from Red River Redevelopment Authority ta Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texos, a part of that certain tract of land described as Tract No. 1, with 2.676 acres, Tract No. 2, with 3.123 ocres, and all of Tract No. 4, with 3.578 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, and being more particularly described by metes and bounds

at an angle point,

South 22 degrees 00 minutes 38 seconds West a distance of 35.78 feet along the Eost line of the said 237.56 acre tract to a point for a corner, at an

South 12 degrees 01 minutes 09 seconds West a distance of 26.19 feet along the East line of the said 237.56 acre troct to a point for a corner, at an

THENCE South 05 degrees 41 minutes 04 seconds East at a distance of 25.00 feet possing a 1/2 inch steel rod set for a reference, capped MTG 101011-00, continuing in all a distance of 240.89 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point;

THENCE North 82 degrees 32 minutes 29 seconds Eost a distance of 196.51 feet to a 1/2 inch steel rod set far a carner, capped MTG 101011-00;

THENCE South 05 degrees 41 minutes 04 seconds East o distance of 103.20

THENCE North 82 degrees 32 minutes 29 seconds East a distance of 490.15

feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying in the East line of the said 237.56 acre tract and the West line of that

THENCE South 05 degrees 41 minutes 04 seconds East a distance of 436.15 feet along the East line of the said 237.56 occe tract, the East line of

THENCE South 84 degrees 00 minutes 58 seconds West a distance of 215.96 feet to a 1/2 inch steel rod set for a carner, capped MTG 101011-00, lying in the East line of the said 237.56 acre tract and the West line of the

THENCE South 05 degrees 54 minutes 57 seconds East a distance of 250.54 feet along the East line of the said 237.56 acre tract and the West line of the said 3.123 acre tract to a 1/2 inch steel rod set for a corner,

THENCE North 84 degrees 00 minutes 22 seconds East a distance of 214.95 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011—00, lying in the East line of the 3.123 acre tract and the West line of the

THENCE South 05 degrees 41 minutes 04 seconds East a distance of 30.00 feet along the East line of the said 3.123 acre tract and the West line of

the said 1.293 ocre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, on outside ell corner of the said 3.123 acre tract, the

THENCE South 84 degrees 00 minutes 22 seconds West a distance of 48.34 feet along the South line of the said 3.123 acre tract and generally along a fence to a 5/8 inch steel rod found for a corner, an inside ell corner

THENCE South 05 degrees 28 minutes 28 seconds East a distance of 171.81 feet along the East line of the said 3.123 acre tract and generally along

THENCE North 84 degrees 01 minutes 22 seconds East a distance of 166.67 feet along the North line of the said 237.56 acre tract and generally along a fence to a 5/8 inch steel rod found for a corner, capped WENDY

THENCE North 86 degrees 24 minutes 44 seconds East a distance of 193.67

THENCE North 34 degrees 58 minutes 14 seconds East a distance of 466.44

THENCE North 69 degrees 51 minutes 24 seconds West a distance of 332.37

THENCE South 83 degrees 58 minutes 43 seconds West a distance of 255.97

feet along the South line of the said 237.56 acre tract and the North line of the said 2.676 acre tract to a 1/2 inch steel rod found for a corner, capped Texas JHG 1715 lying in the West line of the said 237.56 acre tract

THENCE North 05 degrees 41 minutes 04 seconds West a distance of 302.17 feet along the West line of the said 237.56 acre tract and the Eost line of the said 1.293 ocre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00;

THENCE North 51 degrees 55 minutes 25 seconds East a distance of 52.54 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at

degrees 39 minutes 35 seconds East, and a chord distance of 74.07 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at the end of

THENCE South 58 degrees 36 minutes 14 seconds East tangent to soid curve, o distance of 41.76 feet to a 1/2 inch steel rod set for a corner, capped

degrees 47 minutes 53 seconds East, and a chord distance of 66.72 feet to

THENCE North 67 degrees 00 minutes 28 seconds East tongent to said curve, a distance of 0.70 feet to a 1/2 inch steel rod set for a corner, capped

curve a distance of 16.18 feet, with a delta angle of 71 degrees 19 minutes 45 seconds, a radius of 13.00 feet, a chord bearing of North 31 degrees 20 minutes 36 seconds East, and a chord distance of 15.16 feet to

THENCE North 04 degrees 19 minutes 16 seconds West tongent to said curve, a distance of 72.60 feet to a 1/2 inch steel rod set for a corner, capped

THENCE North 01 degrees 42 minutes 05 seconds West a distance of 69.06

THENCE North 02 degrees 10 minutes 43 seconds East o distance of 65.22

feet to a 1/2 inch steel rod set far a corner, capped MTG 101011-00, at an

THENCE North 05 degrees 51 minutes 24 seconds West a distance of 110.67 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying

THENCE North 84 degrees 08 minutes 36 seconds East a distance of 1097.84 feet along the North line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011—00, the Northeast corner of

THENCE South 04 degrees 05 minutes 26 seconds Eost a distance of 512.90 feet along the East line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Northwest corner of the

THENCE North 85 degrees 54 minutes 40 seconds East a distance of 100.00 feet along the North line of the said 3.578 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Northeast corner of the

THENCE South 04 degrees 05 minutes 20 seconds East a distance of 1558.65 feet along the East line of the said 3.578 acre tract to a 1/2 inch steel

THENCE South 84 degrees 03 minutes 12 seconds West a distance of 1873.56 feet along the South line of the said 237.56 acre tract, the South line of

THENCE South 84 degrees 02 minutes 37 seconds West a distance of 1512.32 feet along the South line of the said 237.56 acre tract, the South line of the said 765.5 acre tract, and generally along a fence to a 3 inch steel post found far a corner, the Southwest corner of the said 237.56 acre

THENCE North 01 degrees 14 minutes 52 seconds West a distance of 952.14 feet along the West line of the said 237.56 acre tract, the West line of the said 765.5 acre tract, and generally along a fence to a 2 inch aluminum disk found for a corner, stamped SAM, at on angle point;

THENCE North 45 degrees 55 minutes 00 seconds West a distance of 1644.86 feet along the West line of the said 237.56 acre tract, the West line of the said 765.5 acre tract, and generally along a fence to a 3 inch steel

THENCE North 00 degrees 33 minutes 41 seconds West a distance of 45.19 feet along the West line of the said 237.56 acre tract, the West line of the said 765.5 acre tract, and generally along a fence to a 1/2 inch steel rod set far a corner, capped MTG 101011-00, an inside ell corner of the

THENCE South 88 degrees 20 minutes 15 seconds West a distance of 144.69 feet along the South line of the said 237.56 acre tract, the South line of the said 765.5 acre tract, and generally along a fence to a 1/2 inch steel

said 237.56 acre tract, an inside ell corner of the said 765.5 acre tract;

tract, the Southwest corner of the said 765.5 acre tract;

post found for a corner, at on angle point;

rod found for a corner (control monument no. 1);

the said 765.5 acre tract, and generally along a fence to a 1/2 inch steel rod found for a corner, capped TEXAS JHG 1715, at an angle point;

rod found for a corner, lying in the South line of that certain tract of land described as 765.5 acre in the deed from the United States of

America, to Red River Redevelopment Authority, dated March 30, 1999, recorded in Volume 3072, Page 161 of the Real Property Recards of Bowie

feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an

inch steel rod set for a corner, capped MTG 101011-00, at the end of

MTG 101011-00, ot the beginning of a circular curve to the left, tangent

THENCE in a Northeasterly direction along the arc of the said circulor

1/2 inch steel rod set for a corner, copped MTG 101011-00, at the end of

MTG 101011-00, at the beginning of a circulor curve to the left, tangent

THENCE in a Southeasterly direction along the arc of the said circular curve a distance of 69.30 feet, with a delta angle of 54 degrees 23 minutes 17 seconds, a radius of 73.00 feet, a chord bearing of South

the said circular curve;

the said circular curve;

the said 237,56 acre tract;

MTG 101011-00, ot on angle point;

in the North line of the soid 237.56 acre tract;

the beginning of a circular curve to the right, tangent to said line;

THENCE in a Northeasterly direction along the orc of the said circular curve a distance of 78.81 feet, with a delto angle of 69 degrees 28

feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an

feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an

feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an

LOPEZ & ASSC, the Southwest corner of the said 2.676 acre tract;

a fence to a 5/8 inch steel rod found for a corner, lying in the North line of the said 237.56 ocre tract, the Southeost corner of the said 3.123

of the said 3.123 acre tract;

the said 3.123 acre tract and the West line of the said 1.293 acre tract

to a 1/2 inch steel rod set for a corner, capped MTG 101011-00;

certain troct of land described as Tract No. 3, with 1.293 acres in the deed from Red River Redevelopment Authority to Oak Grave Golf Club, LLC, dated Moy 31, 2000, recorded in Volume 3275, Page 230 of the Real Property

feet to a 1/2 inch steel rod set far a corner, capped MTG 101011-00;

BEGINNING at a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying in the West line of the soid 237.56 acre tract, said corner bears South 02 degrees 17 minutes 24 seconds East o distonce of 581.88 feet from n 1/2 inchesteel rod found for a corner (control monument no. 2), the Northwest corner of the said 237.56 acre tract; THENCE North 84 degrees 07 minutes 30 seconds East a distance of 548.59 feet to o 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an

THENCE North 22 degrees 10 minutes 21 seconds East a distance of 506.27 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point, lying in the South line of Re-Plat of Lots No. 1 thru 5, Lots No. 7 thru 9, Lot No. 14, and Lats No. 16 thru 29 Oak Grove Place, a subdivision of a part of the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, according to the plat recorded in Volume 6086, Page 254 of the Real Property Records of Bowie County, Texas;

Oak Grove Place, a subdivision of a part of the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, according to the plat recorded in Volume 3466, Page 279 of the Real Property Records of Bowie County, THENCE North 87 degrees 33 minutes 47 seconds East a distance of 140.60 feet along the Sauth line of the said subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point of the said subdivision:

THENCE South 13 degrees 44 minutes 19 seconds East a distance of 184.37 feet along the West line of the said subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE South 15 degrees 12 minutes 44 seconds West a distance of 298.60 feet along the West line of the said subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE South 15 degrees 12 minutes 43 seconds West a distance of 142.06 feet along the West line of the said subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an ongle point; THENCE South 14 degrees 58 minutes 02 seconds West a distance of 119.03 along the West line of the said subdivision to a 1/2 inch steel rod found for a corner, at an angle point;

THENCE South 15 degrees 14 minutes 41 seconds West a distance of 279.62 feet along the West line of the said subdivision to a 1/2 inch steel rod found for a corner, the Southwest corner of Lot No. 17 of the said as Lot No. 15 of Oak Grove Place, a subdivision of a part of the John Paxton Headright Survey, Abstract 461, Bowie Caunty, Texas, according to the plot recorded in Volume 3466, Page 279 of the Real Property Records of

THENCE South 15 degrees 11 minutes 18 seconds West a distance of 138.37 feet along the West line of the said Oak Grove Place subdivision to a 1/2inch steel rod found for a corner, at an angle point; THENCE South 52 degrees 39 minutes 53 seconds West a distance of 52.05 feet along the West line of the said Oak Grove Place subdivision to a 1/2 inch steel rod set for a carner, capped MTG 101011-00, at an angle point; THENCE South 28 degrees 01 minutes 21 seconds West a distance of 83,34 feet along the West line of the said Oak Grove Place subdivision to a 1/2 inch steel rod set for a corner, copped MTG 101011-00, ot an angle point; THENCE South 02 degrees 55 minutes 51 seconds East a distance of 120.90 feet along the West line of the said Oak Grove Place subdivision to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE South 27 degrees 23 minutes 27 seconds East a distance of 75.58 feet along the West line of the said Oak Grove Place subdivision to a 1/2 inch steel rod set for a carner, capped MTG 101011-00, at an angle point; THENCE South 46 degrees 40 minutes 43 seconds East a distance of 107.70 feet along the West line of the said Oak Grove Place subdivision to a 1/2

THENCE North 65 degrees 30 minutes 22 seconds East a distance of 90.16 feet along the South line of the said Oak Grove Place subdivision to a 1/2 inch steel rod found for a carner, the Southeast corner of Lot No. 11 of the said Oak Grove Place Subdivision, the Southwest Corner of Lot No. 9 of THENCE South 86 degrees 41 minutes 37 seconds East a distance of 144.35 feet along the South line of the said Re-Plat to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point;

inch steel rod set for a corner, capped MTG 101011-00, the Southwest

corner of the said subdivision:

THENCE South 69 degrees 42 minutes 45 seconds East a distance of 361.60 feet along the South line of the said Re-Plat to a 1/2 inch steel rod found for a corner, at an angle point; THENCE South 49 degrees 57 minutes 04 seconds East a distance of 124.19 feet along the South line of the said Re—Plat to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Southeast corner of the soid

THENCE North 47 degrees 12 minutes 37 seconds East a distance of 168.83 feet along the East line of the said Re—Plat to a 1/2 inch steel rod set for a corner, capped MTG 101011—00, at an angle point; THENCE North 47 degrees 25 minutes 38 seconds East a distance of 108.34 feet along the East line of the said Re-Plat to a 1/2 inch steel rod found for a corner, lying in the East line of the said 237.56 acre tract, an outside ell corner of the said Re-Plat, the Southwest corner of that certain tract of land described as 9.089 acres in the deed from Red River Redevelopment Authority to Oak Grove Land Compony, LP, dated August 25, 2008, recorded in Volume 5454, Page 137 of the Real Property Records of Bowie County, Texos, the Northwest corner of an access easement called Tract 3 Pork Drive Easement, recorded in Volume 5454, Page 137 of the Real

Property Records of Bowie County, Texas; THENCE South 44 degrees 33 minutes 35 seconds East a distance of 60.02 feet olong the East line of the said 237.56 acre tract and the West line of the said easement to a 1/2 inch steel rod found for a carner, an inside ell corner of the said 237.56 acre tract, the Southeast corner of the said

THENCE North 46 degrees 47 minutes 05 seconds East a distance of 288.77 feet along the North line of the said 237.56 acre tract and the South line of the said eosement to a 1/2 inch steel rod found for a corner, at an angle point;

THENCE North 44 degrees 44 minutes 23 seconds East a distance of 678.78 feet along the North line of the said 237.56 acre tract and the South line of the soid easement to a 1/2 inch steel rod found far a corner, at an THENCE North 48 degrees 04 minutes 20 seconds East a distance of 61.90 feet along the North line of the said 237.56 acre tract and the South line the said easement to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE North 50 degrees 44 minutes 37 seconds East a distance of 63.08 feet along the North line of the said 237.56 acre tract and the South line of the said easement to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at on angle point;

THENCE North 55 degrees 53 minutes 28 seconds East a distance of 35.28 feet along the North line of the said 237.56 acre tract and the South line of the said easement to a 1/2 inch steel rod set for o corner, capped MTG 101011-00, at an angle point; THENCE North 72 degrees 34 minutes 25 seconds East a distance of 20.76 feet along the North line of the said 237.56 acre tract and the South line of the said easement to a 1/2 inch steel rod found for a corner, an outside ell corner of the said 237.56 acre tract lying in a drainage

THENCE with the drainage ditch the following courses: South 02 degrees 33 minutes 16 seconds East a distance of 20,94 feet along the East line of the said 237.56 acre tract to a point for a corner, at an

South 20 degrees 53 minutes 48 seconds West a distance of 27.07 feet along the East line of the said 237.56 acre tract to a point for a corner, at an angle point, South 45 degrees 03 minutes 20 secands West a distance of 34.51 feet along the East line of the said 237.56 acre tract to a point for a corner, at an South 22 degrees 45 minutes 11 seconds West a distance of 25.72 feet alang the East line of the said 237.56 acre tract to a point for a corner, at an South 06 degrees 07 minutes 58 seconds West a distance of 24.97 feet along the East line of the said 237.56 acre tract to a point for a corner, at an South 04 degrees 25 minutes 53 seconds East a distance of 202.82 feet along the East line of the said 237.56 acre tract to a point for a corner, South 00 degrees 15 minutes 36 seconds East a distance of 45.23 feet along the East line of the said 237.56 acre tract to a point for a corner, at an South 03 degrees 23 minutes 06 seconds East a distance of 68.78 feet along the East line of the said 237.56 acre tract to a point for a corner, at an

South 07 degrees 55 minutes 39 seconds East a distance of 88.94 feet along the East line of the said 237.56 acre tract to a point for a corner, at an

THENCE North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1228.54 feet along the West line of the said 237.56 acre tract to the point of beginning and containing 200.606 acres of land, at the South 09 degrees 02 minutes 53 secands East a distance of 125.60 feet along the East line of the said 237.56 ocre tract to a point for a corner, South 07 degrees 10 minutes 04 seconds East a distance of 84.32 feet along the East line of the said 237.56 acre tract to a point for a corner, at an The bearings are based on Texas Coordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds South 07 degrees 14 minutes 24 seconds West a distance of 72.53 feet along the East line of the said 237.56 acre tract to a point for a corner, at an This description is based on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

Property Description Tract No. 3, with 8.631 Acres

All that certain lot, tract or porcel of land lying and situated in the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, being a part of that certain tract of land described as 237.56 acres in the correction Special Warranty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Poge 166 of the Reol Property Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Poge 218 of the Real Property Records of Bowie County, Texas, and being mare particularly described by metes and bounds as follows BEGINNING at a 1/2 inch steel rod found for a corner, lying in the East line of the said 237.56 acre tract, the Southeast corner of Lot No. 31 of Oak Grove Place, a subdivision of a part of the John Poxton Headright Survey, Abstract 461, Bawie County, Texas, according to the plat recorded in Volume 3466, Page 279 of the Real Property Records of Bowie County, Texas, according to the plat recorded in Volume 3466, Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, Texas, according to the Page 279 of the Real Property Records of Bowie County, according to the Page 279 of the Real Property Records of Bowie County, according to the Page 279 of the Real Property Records of Bowie County, according to the Page 279 of the Real Property Records of Bowie County, according to the Texas, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 inch steel rod found for the Northwest corner of the said 237.56 acre tract (control monument no. 2), North 84 degrees 02 minutes 34 secands East a distance of 1457.12 feet, and South 02 degrees 26 minutes 42 seconds East a distance of 150.48 feet from a 1/2 inch steel rod found for a corner (control monument no. 1);

feet along the East line of the said 237.56 acre tract to a 1/2 inch steel rod found for a corner, at an angle point, an angle point of that certain tract of land described as 9.089 acres in the deed from Red River Redevelopment Authority to Oak Grove Land Company, LP, dated August 25, 2008, recorded in Volume 5454, Page 137 of the Real Property Records of of the said 9.089 acre tract to a 1/2 inch steel rod found far a corner n angle point for that certain tract of land described as Lot N

THENCE South 02 degrees 15 minutes 19 seconds East a distance of 759.20

found for a corner, at on angle point; THENCE South 42 degrees 24 minutes 50 seconds West a distance of 191.47 feet olong the West line of the soid Re—Plat to a 1/2 inch steel rod found for a corner, at an angle point; THENCE South 57 degrees 23 minutes 01 seconds West o distance of 83.84 feet along the West line of the said Re-Plat to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE North 74 degrees 21 minutes 09 seconds West o distance of 93.08 feet along the North line of the said Re-Plat to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, an inside ell corner of the said

found for a corner, at an angle point; found for a corner, at an angle point found for a corner, at an angle point; found for a corner, at an angle point; for a corner, capped MTG 101011-00, at an angle point; for a corner, at an angle point; for a corner, capped MTG 101011-00, at an angle point; THENCE North 02 degrees 06 minutes 10 seconds West o distance of feet along the Fast line of the said Re-Plat to a 1/2 inch steel rod found for a corner, at an angle point; feet along the East line of the said Replat ta a 1/2 inch steel rod found for a corner, lying in the South line of that certain tract of land escribed as Lot 30 of the said Oak Grove Place, an outside ell corner of

the said Replot, an angle point of the said Lot No. 30; THENCE North 71 degrees 06 minutes 01 seconds East a distance of 46.19 feet along the South line of the said Oak Grove Place to a 1/2 inch steel rod set for a corner, copped MTG 101011-00, at on angle point; THENCE North 77 degrees 45 minutes 33 seconds East a distance of 72.01 g the South line of the said Oak Grove Place to a 1/2 inch steel rod found for a corner, at an ongle point; THENCE North 77 degrees 37 minutes 24 seconds East a distance of 191.57 et along the South line of the said Ook Grove Place to the point of beginning and containing 8.631 acres of land, at the time of this survey.

THENCE South 45 degrees 26 minutes 00 seconds West a distance of 342.45 feet along the East line of the said 237.56 acre tract and the West line of the said 9.089 acre tract to a 1/2 inch steel rod found for a corner, THENCE South 02 degrees 25 minutes 08 seconds East a distance of 204.24 feet along the East line of the said 237.56 acre tract and the West line the Re—Plat of Lots Na. 1 thru 5, Lots No. 7 thru 9, Lot No. 14, and Lots No. 16 thru 29 Oak Grove Ploce, a subdivisian of a part of the John Paxton Headright Survey, Abstract 461, Bowie County, Texas, according to the plat recorded in Volume 6086, Page 254 of the Real Property Records

THENCE South 87 degrees 27 minutes 30 seconds West a distance of 50.16 feet along the North line of the soid Re-Plat to a 1/2 inch steel rod

THENCE North 20 degrees 37 minutes 24 seconds East a distance of 135.97 feet along the East line of the said Re-Plat to a 1/2 inch steel rod THENCE North 20 degrees 24 minutes 03 seconds Eost a distance of 119.94 feet along the East line of the said Re-Plat to a 1/2 inch steel rod THENCE North 20 degrees 24 minutes 03 seconds East a distance of 118.80 feet along the East line of the said Re-Plat to a 1/2 inch steel rod THENCE North 15 degrees 36 minutes 17 seconds East a distance of 361.54 feet along the East line of the said Re-Plat to a 1/2 inch steel rod THENCE North 10 degrees 40 minutes 47 seconds East a distance of 182.62 feet along the East line af the said Re-Plat to a 1/2 inch steel rod set THENCE North 02 degrees 03 minutes 58 seconds West a distance of 167.31 feet along the East line of the said Replat to a 1/2 inch steel rod found THENCE North 02 degrees 34 minutes 52 secands West a distance of 128.74 feet along the East line of the said Re—Plat to a 1/2 inch steel rod set THENCE North 14 degrees 33 minutes 18 seconds West a distance of 10.02

The bearings are based on Texas Coordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds This description is based on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

Property Description Tract No. 4, with 4.450 Acres

All that certain lot, troct or parcel of land lying and situated in the Jonathan Collum Headright Survey, Abstract 109, Bowie County, Texas, being a part of that certain tract of land described as 237.56 acres in the Correction Special Warranty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Values 73.70 Rese, 166 of the Pool Property Records of Bowie County Volume 3330, Page 166 of the Real Property Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texas, and being more particularly described by metes and bounds as follows

BEGINNING ot a point for a corner, being an inside ell corner of the said 237.56 acre tract, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 incl steel rod found for the Northwest corner of the said 237.56 acre tract (control monument no. 2), North 90 degrees 00 minutes 00 seconds East a distance of 2453.96 feet, and South 00 degrees 00 minutes 00 seconds West a distance of 1645.57 feet from a 1/2 inch steel rod found for a corner

THENCE North 88 degrees 44 minutes 42 seconds East at a distance of 25.00 feet possing o 1/2 inch steel rod set for a reference, capped MTG 101011—00, continuing in all a distance of 391.80 feet along the North line of the said 237.56 acre troct to a 1/2 inch steel rod set for a corner, capped MTG 101011—00, at an angle point;

THENCE North 83 degrees 46 minutes 38 seconds East a distance of 80.76 feet along the North line af the soid 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point; THENCE North 84 degrees 21 minutes 16 seconds East a distance of 196.56 feet along the North line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point THENCE South 69 degrees 53 minutes 33 seconds East a distance of 20.42 feet along the North line of the said 237.56 acre tract to a 1/2 inch steel rod found for a corner, capped Texas JHG 1715, lying in the West in Volume 5454, Page 137 of the Reol Property Records of Bowie County,

THENCE South 05 degrees 41 minutes 04 seconds Eost a distance of 284.31 feet along the East line of the said 237.56 acre tract, the West line of the said easement, and the West line of that certain tract of land described as Tract No. 3, with 1.293 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, to a 1/2 inch steel rod set for a corner, capped MTG 101011-00;

THENCE South 82 degrees 32 minutes 29 seconds West a distance of 490.15 feet to a 1/2 inch steel rad set for a corner, capped MTG 101011-00; THENCE North 05 degrees 41 minutes 04 seconds West a distance of 103.20 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE South 82 degrees 32 minutes 29 seconds West a distance of 196.51 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE North 05 degrees 41 minutes 04 seconds West at a distance of 215.89 feet passing a 1/2 inch steel rod set for a reference, capped MTG 101011-00, continuing in all a distance of 240.89 feet to the point of beginning and containing 4.450 acres of land, at the time of this survey. The bearings are based on Texas Coordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds

This description is based on the survey and plat made by Mike Gordner, Registered Professionol Land Surveyor No. 5760, on August 9, 2011.

Property Description Tract No. 5, with 1.654 Acres

All that certain lot, tract or parcel of land lying and situated in the Jonathan Collum Headright Survey, Abstract 109, Bowie County, Texas, being a part of that certain tract of land described os 237.56 acres in the Correction Special Warronty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texas, and being more particularly described by metes and bounds os follows: BEGINNING at a 1/2 inch steel rod found for a corner, being an outside ell carner of the said 237.56 acre tract, the Northeast corner of that certain tract of land described as Tract No. 3, with 1.293 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, L dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, and the Southeast corner of an 5454, Page 137 of the Real Property Records of Bawie County, Texas, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 inch steel rod found for the Northwest corner of the said 237.56 acre tract (control manument , North 90 degrees 00 minutes 00 seconds East o distance of 3206.69 et, and South 00 degrees 00 minutes 00 seconds West a distance of 1672.69 feet fram a 1/2 inch steel rod found for a corner (contral

THENCE North 84 degrees 08 minutes 36 seconds East a distance of 242.33 feet along the North line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE South 05 degrees 51 minutes 24 seconds East a distance of 110.67 eet to o 1/2 inch steel rod set for a corner, capped MTG 101011-00, at THENCE South 02 degrees 10 minutes 43 seconds West a distance of 65.22 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, ot THENCE South 01 degrees 42 minutes 05 seconds East a distance of 69.06 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at THENCE South 04 degrees 19 minutes 16 seconds East a distance of 72.60 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at

the beginning of o circular curve to the right, tangent to said line; THENCE in a Southwesterly direction along the arc of the said circula curve a distance of 16.18 feet, with a delta angle of 71 degrees 19 minutes 45 seconds, a radius of 13.00 feet, a chord bearing of South 31 degrees 20 minutes 36 seconds West, and a chord distance of 15.16 feet to /2 inch steel rod set for a corner, capped MTG 101011-00, at the end of the said circular curve: THENCE South 67 degrees 00 minutes 28 seconds West tongent to said curve,

a distance of 0.70 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at the beginning of a circular curve to the right, tangent THENCE in a Northwesterly direction along the arc of the said circular curve a distance of 69.30 feet, with a delta angle of 54 degrees 23 minutes 17 seconds, a radius of 73.00 feet, a chard bearing of Nar legrees 47 minutes 53 seconds West, and a chord distance of 66.72 feet to 1/2 inch steel rod set for a corner, capped MTG 101011-00, at the end

THENCE North 58 degrees 36 minutes 14 seconds West tangent to said curve, a distance of 41.76 feet to a 1/2 inch steel rod set for a corner, capped ATG 101011-00, at the beginning of a circular curve to the left, tangent

THENCE in a Southwesterly direction along the arc of the said circula curve a distance of 78.81 feet, with a delta angle of 69 degrees 28 minutes 21 seconds, a radius of 65.00 feet, a chard bearing of South 86 degrees 39 minutes 35 seconds West, and a chord distance of 74.07 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at the end THENCE South 51 degrees 55 minutes 25 seconds West tangent to said curve, a distance of 52.54 feet to a 1/2 inch steel rod set for a corner, capped 01011-00, lying in the West line of the said 237.56 acre tract and THENCE North 05 degrees 41 minutes 04 seconds West a distance of 316.83

The bearings are based an Texas Coordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds This description is based on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

feet along the West line of the said 237.56 acre tract and the East line

of the said 1.293 acre tract to the point of beginning and containing

1.654 acres of land, at the time of this survey.

SURVEYOR NOTES

N PAGE 1 OF THIS DOCUMENT.

DRAWINGS FOR THE PROPERTY DESCRIPTIONS ON THIS PAGE LOCATED

Tract No. 6, with 1.291 Acres

All that certain lot, troct or parcel of land lying and situated in the Collin M. Aiken Headright Survey, Abstract 2 and the Jonathan Collum Headright Survey, Abstract 109, Bowie County, Texas, being a part of that certain tract of land described as Tract No. 3, with 1.293 acres in the deed from Red River Redevelopment Authority to Oak Grove Colf Club, LL doted May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, and being more particularly described by metes and bounds as follows:

BEGINNING at a 1/2 inch steel rod found for a corner, the Northeost corner of that certain tract of lond described as Tract No. 3, with 1.293 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, an outside ell carner of that certain tract of land described as 237.56 acres in the Correction Special Warranty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Records of Bowie Caunty, Texas, the Originol Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texas, and the Southeast corner of an Access Easement called Tract 2 Main Drive Easement, recorded in Volume 5454, Page 137 of the Real Property Records of Bowie County, Texas, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) o distance of 1810.42 feet to a 1/2 inch steel rod found for the Northwest corner of the said 237.56 acre tract (control monument no 2), North 90 degrees 00 minutes 00 seconds East a distance of 3206.66 and South 00 degrees 00 minutes 00 seconds West a distance of 1672.69 feet from a 1/2 inch steel rod found for a corner (control

THENCE South 05 degrees 41 minutes 04 seconds East a distance of 937.52 feet along the East line of the said 1.293 acre tract, the West line of the said 237.56 acre tract, and the West line of that certain tract o land described as Tract No. 1, with 2.676 acres in the deed from R River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas, to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Southeast corner of the said 1.293 ocre tract, an outside ell corner of the said 2.676 acre tract

THENCE South 84 degrees 00 minutes 22 seconds West a distance of 60.00 feet along the South line of the said 1.293 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Southwest corner of the said 1.293 ocre tract, an outside ell corner of certain tract of land described os Tract No. 2, with 3.123 acres in the deed from Red River Redevelopment Authority to Ook Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie

THENCE North 05 degrees 41 minutes 04 seconds West a distance of 937.67 feet along the West line of the said 1.293 acre tract, the East line of the said 3.123 acre tract, and the East line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, the Narthwest corner of the said 1.293 acre tract, the Southwest corner of

THENCE North 84 degrees 08 minutes 36 seconds East a distance of 60.00 feet along the North line of the said 1.293 acre tract and the South line of the said easement to the point of beginning and containing 1.291 acres The bearings are based on Texas Coordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds This description is based on the survey and plat mode by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

Property Description Tract No. 7, with 1.239 Acres Bowie County, Texas

All that certain lat, tract or parcel of land lying and situated in the Collin M. Aiken Headright Survey, Abstract 2, Bowie County, Texos, being a part of that certain tract of land described as Tract No. 2, with 3.123 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated Moy 31, 2000, recorded in Volume 3275, Page 230 of particularly described by metes and bounds as follows:

REGINNING at a 1/2 inch steel rod set for a corner, capped MTG 101011-0 lying in the West line of the said 3.123 acre tract and the East line of that certain tract of land described as 237.56 acres in the Correction Special Warranty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Records of Bowie County, Texas, the Original Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texas, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 inch steel rod found for the Northwest corner o the said 237.56 acre tract (control monument no. 2), North 90 degrees 00 minutes 00 seconds East a distance of 2997.30 feet, and South 00 degrees 00 minutes 00 seconds West a distance of 2355.35 feet from a 1/2 inch steel rad found for a corner (cantrol manument na. 1) THENCE North 84 degrees 00 minutes 58 seconds East a distance of 215.96

feet to a 1/2 inch steel rod set for a carner, capped MTG 101011-00, lying in the East line of the said 3.123 acre tract and the West line of that certain tract of land described as Tract No. 3, with 1.293 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recarded in Volume 3275, Page 230 of the Real Property Records of Bowie County, Texas;

THENCE South 05 degrees 41 minutes 04 seconds East a distance of 250.51 feet along the East line of the said 3.123 acre tract and the West line of the said 1.293 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE South 84 degrees 00 minutes 22 seconds West a distance of 214.95 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE North 05 degrees 54 minutes 57 seconds West a distance of 250.54 feet to the point of beginning and containing 1.239 acres of land, at the

The bearings are based on Texas Caordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds This description is based on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

1/2 inch steel rod found for a corner (control monument no. 1) THENCE North 83 degrees 58 minutes 43 seconds East o distance of 230.67 feet along the North line of the said 2.676 acre troct and the South line of the said 2.37.56 acre tract to a 1/2 inch steel rod set for a corner, THENCE South 05 degrees 57 minutes 17 seconds East a distance of 288.64

All that certain lot, tract or parcel of land lying and situated in the Collin M. Aiken Headright Survey, Abstract 2, Bowie County, Texas, being a part of that certain tract of land described as Tract No. 1, with 2.676

BEGINNING at a 1/2 inch steel rod set for a corner, capped TEXAS JHG

1715, lying in the East line of that certain tract of land described as Tract No. 3, with 1.293 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Property Records of Bowie County,

Texas, the Northwest corner of the said 2.676 acre troct, an outside el

corner of that certain tract of land described as 237.56 acres in the Correction Special Warranty Deed fram Red River Redevelopment Authorit

of the Real Property Records of Bowie County, Texas, said corner bears North 02 degrees 17 minutes 24 seconds West (basis of bearings) a distance of 1810.42 feet to a 1/2 inch steel rod found for the Northwest

corner of the said 237.56 acre tract (control monument no. 2), North 90 degrees 00 minutes 00 seconds East a distance of 3267.99 feet, and Sout

degrees 00 minutes 00 seconds West o distance of 2288.73 feet from a

o Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Records of Bowie County, Texas, the Driginal Deed is dated June 11, 1999, recorded in Volume 3078, Page 218

the Real Property Records of Bowie County, Texas, and being more

particularly described by metes and bounds as follows:

acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of

feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE South 84 degrees 00 minutes 22 seconds West a distance of 232.03 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying in the West line of the said 2.676 acre tract and the Eost line of THENCE North 05 degrees 41 minutes 04 seconds West a distance of 288.53 feet along the West line of the said 2.676 acre tract and the East line of the said 1.293 acre tract to the point of beginning and containing

The bearings are based on Texas Caordinate System of 1983, North Central Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds This description is based an the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

Property Description Tract No. 9, with 2.844 Acres

Property Description Tract No. 8, with 1.533 Acres

All that certain lot, tract or parcel of land lying and situated in the Collin M. Aiken Headright Survey, Abstract 2, Bowie County, Texas, being o part of that certain tract of land described as Tract No. 1, with 2.676 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275, Page 230 of the Real Praperty Records of Bowie County, Texas, a port of that certain tract of land described as 237.56 acres in the Correction Special Warranty Deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated August 10, 2000, recorded in Volume 3330, Page 166 of the Real Property Records of Royle County Tayas the Original Deed in the Real Property Records of Bowie County, Texas, the Originol Deed is dated June 11, 1999, recorded in Volume 3078, Page 218 of the Real Property Records of Bowie County, Texas, and being more porticularly

BEGINNING at a 5/8 inch steel rod faund for a corner, capped WENDY LOPEZ & ASSC, lying in the North line of the said 237.56 acre tract, the Southwest corner of the said 2.676 ocre tract, said corner bears North 02 degrees 17 minutes 24 seconds West (bosis of bearings) a distance of 1810.42 feet to a 1/2 inch steel rod found far the Northwest corner of the said 237.56 acre tract (control monument no. 2), North 90 degrees 00 minutes 00 seconds East a distance of 3373.95 feet, and South 00 degrees steel rod found for a corner (control monument no. 1);

THENCE North 07 degrees 20 minutes 31 seconds West a distance of 171.90 feet along the West line of the said 2.676 acre tract and generally along o fence to a 5/8 inch steel rod found for a corner, copped WENDY LOPEZ & ASSC, an inside ell corner of the said 2.676 acre tract; THENCE South 84 degrees 00 minutes 22 seconds West a distance of 52.73 feet along the South line of the said 2.676 acre tract and generally olong a fence to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, an outside ell carner of the said 2.676 acre tract, the Southeast corner of that certain tract of lond described as Tract No. 3, with 1.207 acres in the dead from Ped River Redeplement Authority to with 1.293 acres in the deed from Red River Redevelopment Authority to Oak Grove Golf Club, LLC, dated May 31, 2000, recorded in Volume 3275 Page 230 of the Real Property Records of Bowie County, Texas; THENCE North 05 degrees 41 minutes 04 seconds West a distance of 30.00 feet along the West line of the said 2.676 acre tract and the East line of the said 1.293 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00;

THENCE North 84 degrees 00 minutes 22 seconds East a distance of 232.03 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE North 05 degrees 57 minutes 17 seconds West a distance of 288.64 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, lying in the North line of the said 2.676 acre tract and the Sauth line of the said 237.56 acre tract, the Northeast corner of the said 2.676

THENCE North 83 degrees 58 minutes 43 seconds East a distance of 25.30 feet along the North line of the said 2.676 acre tract and the South line of the said 237.56 acre tract to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at an angle point, the Northeast corner of the said 2.676 ocre tract, an outside ell corner of the said 237.56 acre

THENCE South 69 degrees 51 minutes 24 seconds East a distance of 332.37 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00, at

THENCE South 34 degrees 58 minutes 14 seconds West a distance of 466.44 feet to a 1/2 inch steel rod set for a corner, capped MTG 101011-00; THENCE South 86 degrees 24 minutes 44 seconds West a distance of 193.67 feet to the point of beginning and containing 2.844 acres of land, more

The bearings are based on Texos Coordinate System of 1983, North Centrol Zone, NAD83, with a bearing of North 02 degrees 17 minutes 24 seconds This description is bosed on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on August 9, 2011.

SURVEYOR CERTIFICATE:

THIS IS TO CERTIFY THAT THIS SURVEY WAS MADE ON THE GROUND UNDER MY SUPERVISION ON JUNE 27, 2011, THAT THIS PLAT (MAP OR DRAWING) SUBSTANTIALLY COMPLIES WITH THE CURRENT PROFESSIONAL AND TECHNICAL STANDARDS OF THE TEXAS BOARD OF PROFESSIONAL LAND SURVEYING, AND REPRESENTS THE FACTS FOUND AT THE TIME OF THE SURVEY, THERE ARE NO VISIBLE IMPROVEMENTS EXCEPT AS SHOWN ON THE SURVEY PLAT.

THIS PLAT IS FOR THE INTENDED USE OF JEFFREY A. PRIESKORN AS RELATES TO OWNERSHIP OR TRANSFER OF OWNERSHIP. THIS SURVEY IS NOT ASSIGNABLE OR TRANSFERABLE, MAY NOT BE RFISSUED WITHOUT RE-SURVEY AND MAY BE VOID/INVALID SUBJECT TO CHANGES IN GOVERNANCE OR INTERPRETATIONS ISSUED BY THE TEXAS BOARD OF PROFESSIONAL LAND SURVEYING, AND MAY NOT BE COPIED OR PROVIDED TO OTHER PARTIES WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE UNDERSIGNED.

REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5760, STATE OF TEXAS FIRM CERTIFICATE NO. 101011-00 DATE: AUGUST 9, 2011.



# BOUNDARY SURVEY 9 TRACTS

PART OF THE JOHN H. PAXTON HEADRIGHT SURVEY, ABSTRACT 461, THE JONATHAN COLLUM HEADRIGHT SURVEY, ABSTRACT 109, THE COLLIN M. AIKEN HEADRIGHT SURVEY, ABSTRACT 2, AND THE J. H. SMELSER HEADRIGHT

SÚRVEY, ABSTRÁCT 722, BOWIE COUNTY, TEXAS Revision/Description

Project No. Dwg. Date

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TBPE NO. 354

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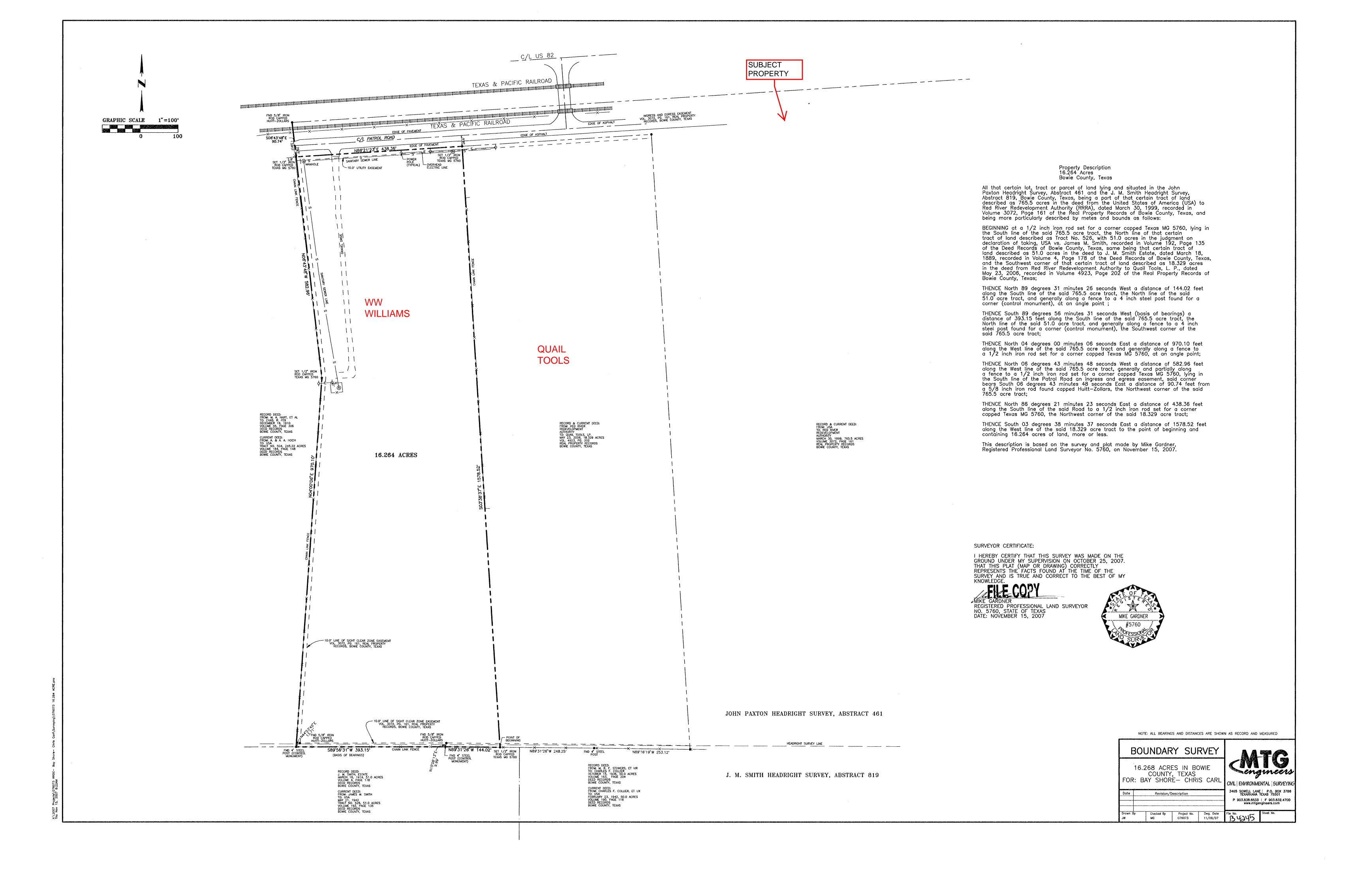
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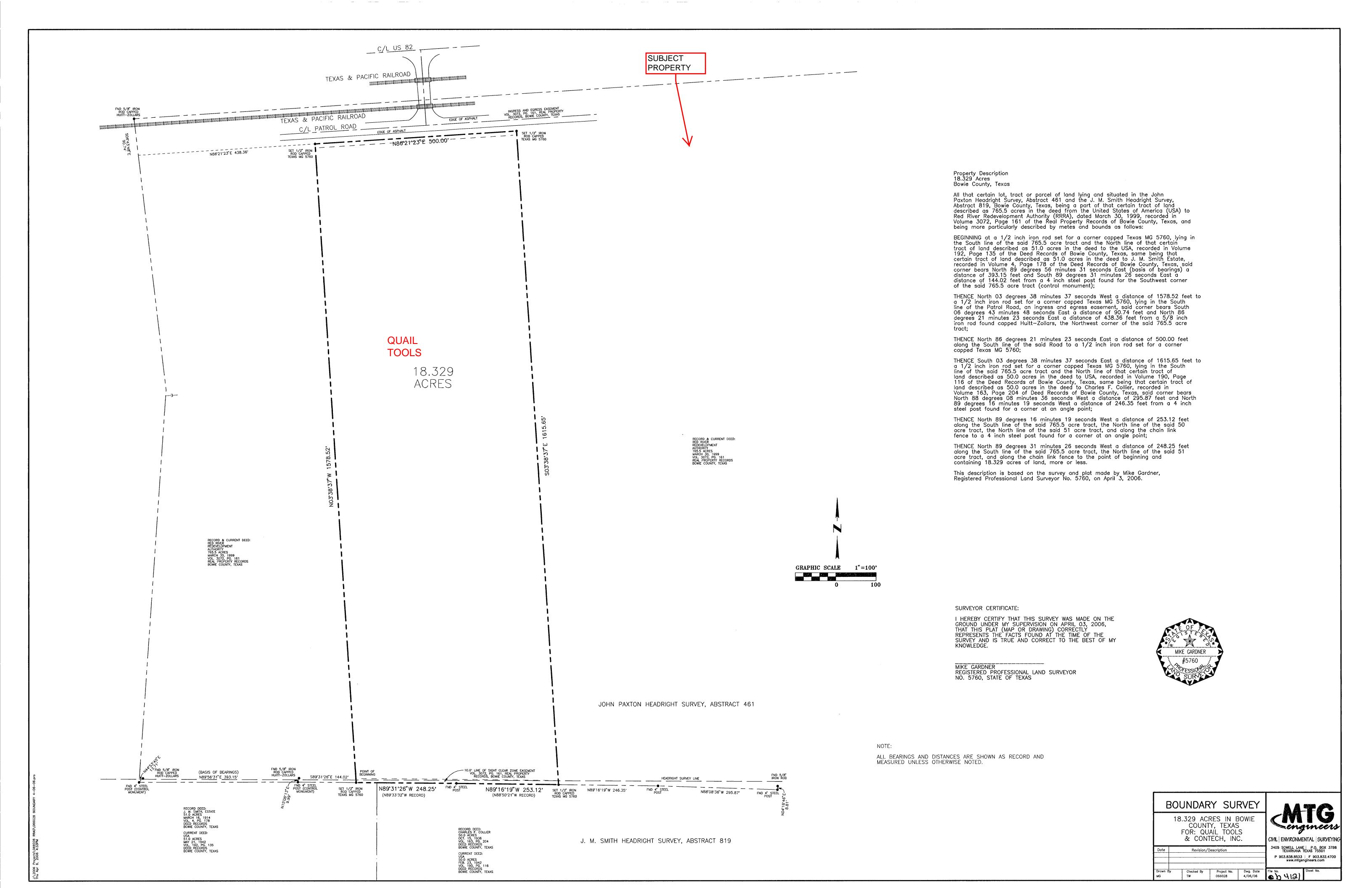
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2 OF 2

This description is based on the survey and plat made by Mike Gardner, Registered Professional Lond Surveyor No. 5760, on August 9, 2011.





U.S. ARMY BASE

REALIGNMENT AND

CLOSURE 95 PROGRAM

Environmental Baseline Survey Report

Red River Army Depot, Texas

Prepared for U.S. Army Corps of Engineers Fort Worth District Seattle District

October 22, 1996

# Woodward-Clyde

Woodward-Clyde Federal Services 4582 S. Ulster Street Stanford Place 3, Suite 1200 Denver, Colorado 80237

Contract No. DACA67-95-D-1001

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## **EXECUTIVE SUMMARY**

The Red River Army Depot, located in Bowie County, Texas, has been selected for realignment under the 1995 Base Realignment and Closure (BRAC) process. The purpose of this Environmental Baseline Survey (EBS) is to classify discrete areas of real property associated with the Red River Army Depot, subject to transfer or lease, into one of the seven standard environmental condition of property area types as defined by Community Environmental Response Facilitation Act (CERFA) guidance and the Department of Defense (DOD) BRAC Cleanup Plan (BCP) Guidebook (DOD 1993). This is achieved by identifying, characterizing, and documenting the obviousness of the presence or likely presence of a release or threatened release of hazardous substances or petroleum products associated with the historical and current use of the Red River Army Depot. Releases at properties adjacent to the Red River Army Depot that could affect the environmental condition of the installation property are also identified, characterized, and documented. Additionally, areas containing or suspected of containing non-Comprehensive Environmental Response Compensation and Liability Act (CERCLA) contamination substances (e.g., asbestos, lead-based paint) that may limit or preclude the transfer or lease of the property for unrestricted use are delineated separately as qualified.

The seven standard environmental condition of property area types (categories) are presented in Section 1.3. Areas that are designated Category 1, 2, 3, or 4 are suitable for transfer or lease, subject to consideration of the qualifiers. Areas that are currently designated as Category 5, 6, or 7 are not suitable for transfer.

The Red River Army Depot encompasses 19,081 acres; however, most of the installation has been designated as a reserve enclave and will remain Army property.

The real property evaluated under this investigation of the Red River Army Depot consists of four geographic areas that together encompass approximately 576 acres. All 576 acres were identified as BRAC property, subject to transfer or lease.

The Red River Army Depot was established in 1941 and was originally intended to serve as an Army ammunition storage installation. Farms, ranches, and a few sawmills occupied the area prior to the purchase of the land. In 1942, the Army purchased the majority of the land (14,000 acres) from several landowners in Bowie County (Red River Army Depot 1996a). In late 1942,

#### **EXECUTIVE SUMMARY**

the installation's role was expanded and it became a major Army maintenance site for the rebuilding of all types of Army tracked vehicles. At about the same time, the depot was given a general supply storage mission, and construction of 46 modern warehouses plus a number of secondary sheet metal buildings began (Red River Army Depot 1978). From 1943 to March 1944, the adjacent Lone Star Army Ammunition Plant became loosely associated with the Red River Army Depot as the Texarkana Ordnance Center. In 1945, the Lone Star Army Ammunition Plant was made part of the Red River Army Depot and remained as such until 1951. During World War II and the Korean War, the depot served as an Ordnance Training Center (OTC) for the purpose of training officers in ordnance support. The OTC was deactivated after the Korean War, but continued to provide training to reserve units (Red River Army Depot 1996a). The depot today has the same missions: ammunition supply, modification, demilitarization, and storage; maintenance, modification, and rebuilding of Army light-tracked vehicles; and tenant-operated supply of soldier-oriented items for the middle eighteen contiguous states.

To prepare the Draft EBS Report, Woodward-Clyde reviewed existing installation documents; federal, state, and local government records; and aerial photographs. A site visit was conducted from January 22 to February 12, 1996 that included visual inspections of the property and surrounding properties, and interviews with installation personnel. Additionally, reasonably obtainable federal, state, and local government records for adjacent properties were reviewed. No sampling activities were associated with this EBS.

The Draft Final EBS Report incorporates comments received from installation personnel and the regulatory community on the Draft EBS Report, as appropriate. The information provided in this report is current as of June 1996.

The survey and parcelization of the Red River Army Depot identified BRAC parcels based on the environmental condition of the property. Tables 5-1a and 5-1b and Figures 5-1 through 5-3 present the BRAC parcels and corresponding categorizations. Of the approximately 579 acres identified for transfer or lease, 521 acres are designated as Categories 1 through 4, as shown in the BRAC Acreage Summary Table. The remaining 58 acres of BRAC property are designated as Categories 5 through 7. Additionally, approximately 10 acres of the categorized parcels were

## **EXECUTIVE SUMMARY**

designated qualified for asbestos, lead-based paint (LBP), and/or radionuclides. Table 5-1b and Figures 5-1, 5-2, and 5-3 present the qualified parcels.

# BRAC ACREAGE SUMMARY TABLE RED RIVER ARMY DEPOT, TEXAS

ENVIRONMENTAL CONDITION CATEGORY NUMBER	TOTAL ACREAGE	ACREAGE MINUS QUALIFIED AREAS	TOTAL GUALIFIED ACREAGE	ASBESTOS- QUALIFIED ACREAGE	LBP- QUALIFIED ACREAGE	RADIONUCLIDE- QUALIFIED ACREAGE
1	513.60	508.75	4.81	4.31	4.81	1.10
2	3.90	1.39	2.51	2.50	2.46	1.88
3	3.60	3.50	0.10	0.04	0.10	0
4	0.12	0.11	0.01	0	0.01	0
5	48.50	48.49	0.01	0.01	0.01	0
6	3.80	3.00	0.80	0.80	0.80	0
7	6.10	4.25	1.85	0.96	1.85	0
Total	579.60	569.50	10.10	8.62	10.04	2.98

Note: Acreage figures are approximate; calculated using AutoCad 12.

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# LIST OF ACRONYMS

<b>ACRONYM</b>	DEFINITION
°F	degrees Fahrenheit
1,1,1-TCA	1,1,1-trichloroethane
ACM	asbestos-containing material
AR	Army Regulation
ARDC	Armaments Research and Development Center
AST	aboveground storage tank
BCP	BRAC Cleanup Plan
BEC	BRAC Environmental Coordinator
BRAC	Base Realignment and Closure
BTEX	benzene, toluene, ethylbenzene, and xylene
CDC	Central Distribution Center
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CERCLIS -	Comprehensive Environmental Response Compensation and Liability Information System
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
cm/sec	centimeter per second
CMS	Corrective Measures Study
DDRT	Defense Distribution Depot Region Texarkana
DDT	dichlorodiphenyltrichloroethane
DLA	Defense Logistics Agency
DOD	Department of Defense
DOIM	Department of Information Management
DPW	Directorate of Public Works
DRMO	Defense Reutilization Marketing Office
DSERTS	Defense Site Environmental Restoration Tracking System
EAP	Environmental Action Plan
EBS	Environmental Baseline Survey
EI/AA	Environmental Investigation/Alternatives Assessment
ЕМО	Environmental Management Office

### LIST OF ACRONYMS

EPA U.S. Environmental Protection Agency

ERNS Emergency Response Notification System

FAA Federal Aviation Administration

FINDS Facility Index System

FY Fiscal Year

GPM gallons per minute

HP horsepower

HVAC heating, ventilation, air conditioning

IRA Interim Removal Action

IRP Installation Restoration Program

IWTP Industrial Waste Treatment Plant

LBP lead-based paint

LF linear feet

mgd million gallons per day

MHE Material Handling Equipment

mph miles per hour msl mean sea level

MWR Morale, Welfare, and Recreation

NAF Non-Appropriated Funds

NFA No Further Action

NPDES National Pollutant Discharge Elimination System

NPL National Priorities List

NRC Nuclear Regulatory Commission

OTC Ordnance Training Center

PA/SI Preliminary Assessment and Site Investigation

PCBs polychlorinated biphenyls

PCCA Parts Chemical Cleaning Area

pCi/cm<sup>3</sup> picocuries per cubic centimeter

PDO Property Disposal Office

PL Public Law

ppb parts per billion

## LIST OF ACRONYMS

ppm parts per million

RA Remedial Action

RCRA Resource Conservation and Recovery Act

RCRIS Resource Conservation and Recovery Information System

RFA RCRA Facility Assessment
RFI RCRA Facility Investigation

RMIS Resource Management Information System

RPM revolutions per minute
RRR Red River Regulations

SCAPS Site Characterization and Analysis Penetrometer System

SPL State Superfund Promulgated Sites List

STP Sewage Treatment Plant

SVOC semi-volatile organic compound

SWLF solid waste landfills

SWMU - Solid Waste Management Unit

TCE trichloroethylene

TDH Total Dynamic Head

TNRCC Texas Natural Resource Conservation Commission

TPWD Texas Parks and Wildlife Department

TRPH Total Recoverable Petroleum Hydrocarbon

TSD treatment, storage, and disposal

TWC Texas Water Commission

USACE U.S. Army Corps of Engineers

USACHPPM U.S. Army Center for Health Promotion and Preventive Medicine (Provisional)

USAEHA U.S. Army Environmental Hygiene Agency

USGS U.S. Geological Survey

UST underground storage tank

UXO unexploded ordnance

VOCs volatile organic compounds

WWT wastewater treatment

#### 1.0 INTRODUCTION

The Environmental Baseline Survey (EBS) report for the Red River Army Depot was prepared by Woodward-Clyde Federal Services (Woodward-Clyde) for the U.S. Army Corps of Engineers (USACE) under Contract No. DACA67-95-D-1001, Delivery Order No. 0010. This section describes the purpose and scope of the work conducted in preparing the U.S. Army Base Realignment and Closure (BRAC) 95 Environmental Baseline Survey (EBS) report.

The Draft Final EBS Report for the Red River Army Depot incorporates comments received from installation personnel and the regulatory community on the Draft EBS Report, as appropriate. The comments and corresponding responses have been compiled in a Comment Response Package that is included as Appendix A. The information provided in this report is current as of June 1996.

The Red River Army Depot, located in Bowie County, Texas, is a U.S. government property selected for realignment by the BRAC 95 Commission (Figure 1-1). The Red River Army Depot encompasses 19,081 acres; however, only approximately 576 acres have been identified as BRAC 95 property to be excessed by transfer or lease (Red River Army Depot, BRAC Office 1995).

The Red River Army Depot was activated as an ordnance depot in 1941. In early 1942, the U.S. Army purchased the majority of the land for the installation from several land owners in Bowie County. Originally, the installation was intended to serve only as an ammunition storage depot, but its responsibilities soon expanded to include maintaining, repairing, and overhauling tank, artillery pieces, and other heavy weapons. By 1943, the depot's mission included general supply. Additionally, in 1943, the Red River Army Depot became loosely associated with the Lone Star Army Ammunition Plant to form the Texarkana Ordnance Center. The Texarkana Ordnance Center existed until 1944, when the Lone Star Army Ammunition Plant obtained its own identity; however, the Lone Star Army Ammunition Plant was still part of the Red River Army Depot until 1951. In 1951, the Red River Army Depot employed a record 11,500 workers, as the facility prepared to support U.S. troops in the Korean War. During the Vietnam conflict, the depot again responded to increased requirements for maintenance and supply support. With a

# **SECTIONONE**

reputation for efficiency and quality in the overhaul of combat vehicles, the depot was chosen to rebuild the M113 armored family of track vehicles in 1977. In the 1980s, the Bradley fighting vehicle system was added to the list of personnel carriers rebuilt at the depot.

The current mission of the Red River Army Depot is to support the major operational facilities on site. These operations include maintenance and rebuilding of light tracked vehicles; demilitarization of out-of-specification ordnance; ammunition storage; maintenance, modification, and recertification of the Hawk, Chaparral, and Patriot missiles; rebuilding tank track and road wheels; and rubber products research.

# 1.1 BRAC PROGRAM OVERVIEW

Prior to the late 1980s, base closure was a time-consuming and inconsistent process. The Secretary of Defense, in cooperation with Congress, proposed a base closure law to create a process to close bases and bring base infrastructure in line with force structure. Public Law (PL) 100-526, enacted in 1988, created the Commission on Base Realignment and Closure. The law charged the Commission with recommending installations for closure or realignment based on an independent study of the domestic military base structure.

The closure process was refined in PL 101-510, in which Congress created the Defense Base Closure and Realignment Commission. The process identified installations based on eight criteria, including four military value criteria; savings and return-on-investment; and the economic and environmental impacts of closure. The Commission met in 1991, 1993, and 1995, and its recommendations are currently being implemented by the Department of Defense (DOD).

The BRAC environmental restoration program is similar to DOD's Installation Restoration Program (IRP), but it has been expanded to include non-Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) contamination substances that are not normally addressed under the IRP, including asbestos, lead-based paint (LBP), polychlorinated biphenyls (PCBs), radon, unexploded ordnance (UXO), radionuclides, and pesticides.

The Community Environmental Response Facilitation Act (CERFA) (PL 102-426) was enacted in 1992 and amends Section 120 of CERCLA. CERFA directs federal agencies to evaluate all base closure and realignment property to identify uncontaminated parcels and allows the transfer or lease of remediated parcels when the successful operation of an approved remedy has been demonstrated. The CERFA identification process considers hazardous substances and petroleum products.

#### 1.2 PURPOSE AND SCOPE OF ENVIRONMENTAL BASELINE SURVEY

The BRAC 95 environmental restoration program for the Red River Army Depot was initiated by conducting an EBS. The EBS included the review of existing installation documents; federal, state, and local government records; and aerial photographs. A site visit, which included visual inspections and interviews with installation personnel, was conducted from January 22 to February 12, 1996. Additionally, reasonably obtainable federal, state, and local government records for adjacent properties were reviewed. The EBS report describes the environmental condition of the property and will be used to support determination of the suitability to transfer or lease.

The purpose of the EBS is to classify discrete areas at the Red River Army Depot into one of seven standard environmental condition of property area types as defined by CERFA guidance and the DOD *BRAC Cleanup Plan* (BCP) *Guidebook* (DOD 1993). This is achieved by:

- Identifying, characterizing, and documenting the obviousness of the presence or likely presence of a release or threatened release of a hazardous substance or petroleum product associated with the historical and current use of the Red River Army Depot.
- Identifying, characterizing, and documenting the obviousness of the presence or likely presence of a release or threatened release of a hazardous substance or petroleum product from an adjacent property that is likely to cause or contribute to contamination at the Red River Army Depot.

No sampling or analysis activities were conducted during this survey.

#### 1.3 **DEFINITIONS**

The following definitions are used in this report:

- **BRAC property:** The installation real property that is subject to transfer or lease. Real property includes land and rights in land, ground improvements, utility distribution systems, pipes or pipelines, buildings, and other structures located on the property and affixed to the land.
- Adjacent properties: Those properties, on or off the installation, contiguous to
  or nearby the property boundaries being surveyed that are likely to cause or
  contribute to contamination and affect the results of the EBS or the classification
  of the BRAC property into standard environmental condition of property area
  types.
- **BRAC parcel:** An area of BRAC property that can be segregated from its surrounding areas based on the environmental condition of the area.
- Hazardous substances: Substances listed in 40 Code of Federal Regulations
   (CFR) 302.4, CERCLA Hazardous Substance Table.
- **Petroleum:** Any petroleum product or its derivatives, including aviation fuel and motor oil.
- Environmental condition of the property area type: Any of the seven standard environmental condition of property area types (categories) as defined in the CERFA guidance and the DOD BCP Guidebook (DOD 1993) and presented in Table 1-1.

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Geographic Area: An area of BRAC property that has been segregated from the surrounding area based on the general character of existing facilities and past uses of the property that together may have impacted the current environmental condition(s) of the area. The geographic areas at the Red River Army Depot are Geographic Areas A, B, C, and D. These were identified in consultation with the BRAC Environmental Coordinator (BEC). The purpose of the geographic area designations was to expedite the identification of information sources, whether records or personnel, for those portions of the BRAC property. Additionally, this segregation facilitated the gathering and processing of environmental records by members of the EBS field and report writing teams.

# Table 1-1 ENVIRONMENTAL CONDITION OF PROPERTY DEFINITIONS

#### CATEGORY I

Areas where no storage for one year or longer, release, or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent properties). Additionally, includes areas where no evidence exists for the release, disposal, or migration of hazardous substances or petroleum products; however, the area has been used to store less than reportable quantities of hazardous substances (40 CFR 302.4) or 600 or fewer gallons of petroleum products.

#### CATEGORY 2

Areas where only storage of hazardous substances in amounts exceeding their reportable quantity or petroleum products exceeding 600 gallons has occurred, but no release, disposal, or migration has occurred.

#### **CATEGORY 3**

Areas where storage, release, disposal, or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or remedial action.

#### CATEGORY 4

Areas where storage, release, disposal, or migration of hazardous substances or petroleum products has occurred, and all removal or remedial actions to protect human health and the environment have been taken.

#### **CATEGORY 5**

Areas where storage, release, disposal, or migration of hazardous substances or petroleum products has occurred, and removal or remedial actions are underway, but all required actions have not yet been implemented.

#### CATEGORY 6

Areas where storage, release, disposal, or migration of hazardous substances or petroleum products has occurred, but required removal or remedial actions have not yet been initiated.

#### CATEGORY 7

Areas that are not evaluated or require additional evaluation.

- Suitable for transfer: BRAC parcels that are designated as Category 1, 2, 3, or 4 are suitable for transfer or lease, subject to consideration of the non-CERCLA qualifiers.
- Not suitable for transfer: BRAC parcels that are currently designated as Category 5, 6, or 7 are not suitable for transfer.
- Reserve enclave: An area of the installation real property that will be retained by DOD and, therefore, is not categorized into standard environmental condition of property area types under the EBS.
- Parcel labels: Each BRAC parcel has been given a number to which appropriate descriptive labels are attached. The numbers consist of a unique parcel
   identification number and an environmental condition of the property category number. The labels consist of a designation describing the type of contamination or storage, if applicable. The following designations are used to indicate the type of contamination or storage present in a parcel.

PS = Petroleum storage

PR = Petroleum release or disposal

HS = Hazardous substance storage

HR = Hazardous substance release or disposal

Examples of this identification system follow:

2(1) indicates that the second BRAC parcel is designated as a Category
 1 parcel.

# **SECTIONONE**

INTRODUCTION

- 12(3)HR indicates that the twelfth BRAC parcel is designated as a Category 3 because of a documented hazardous substance release, but the concentrations do not warrant remediation.
- Qualified parcels: Areas containing or suspected of containing non-CERCLA contamination substances that may limit or preclude the transfer or lease of the property for unrestricted use. These parcels will be delineated separately and labeled with the letter "Q" for "qualified." Qualified parcels overlay all environmental condition of the property categories (i.e., Categories 1 through 7). The qualified parcel labels are identified with the following designator, as applicable:

A = Asbestos-containing material (ACM)

L = Lead-based paint (LBP)

P = Polychlorinated biphenyls (PCBs)

R = Radon

X = Unexploded ordnance (UXO) and/or ordnance fragments

RD = Radionuclides

For all parcels, "(P)" is used to indicate that the presence of a contaminant is possible, but that data are unavailable for verification.

For example, the fifth BRAC parcel with the presence of asbestos-containing material and the possible presence of lead-based paint will be labeled 5Q-A/L(P).

#### 1.4 LIMITATIONS

Although this investigation was performed professionally, no investigation may be considered so comprehensive as to guarantee complete information regarding the possible presence of materials on the installation that currently or in the future may be considered hazardous. The conclusions presented in this EBS report are based on information that was reasonably available from the designated installation contacts and other public sources at the time the EBS was conducted. In addition, information obtained from the records review and interviews has been assumed to be correct and complete, unless contradictory information was obtained through other sources.

#### 1.5 GENERAL GEOGRAPHIC AND ENVIRONMENTAL SETTINGS

The Red River Army Depot encompasses 19,081 total acres (Figure 1-1). The northern boundary for the installation is U.S. Highway 82, and the main gate is approximately 18 miles west of Texarkana, Texas/Arkansas, the nearest major city. The installation lies immediately south of Hooks, Texas; approximately three miles east of New Boston, Texas; immediately north of Redwater, Texas; and approximately 15 miles east of Dekalb, Texas. The installation is four miles south of the Red River, which forms the boundary between the states of Texas and Arkansas. The geographic location of the installation makes the work force unique by the fact that people commute daily from four states: Arkansas, Louisiana, Oklahoma, and Texas (Red River Army Depot 1978).

The Red River Army Depot 1995 BRAC property has been divided into four geographic areas that together comprise approximately 576 acres. A description of the four geographic areas and their approximate size is provided in Section 3.2. Figure 1-1 illustrates each of these geographic areas and their relative location.

#### 1.5.1 Demographics

The Red River Army Depot is located in Bowie County, Texas, approximately 17 miles west of Texarkana, Texas. The depot is bounded on the north by U.S. Highway 82 and on the south by U.S. Highway 67. U.S. Interstate 30 runs parallel to and about ½-mile north of the depot (Painter and Spitz Consultants, Inc. 1985a).

According to the 1992-1993 Texas Almanac, the city of Texarkana, located approximately 18 miles east of the Red River Army Depot, has a population of 31,656 within the state of Texas and 22,631 within the state of Arkansas. The town of New Boston, located approximately five miles west of the Red River Army Depot, has a population of 5,057. The town of Hooks, located approximately one mile northeast of the Red River Army Depot, has a population of 2,684. The population for the town of Whaley, located approximately two miles north of the Red River Army Depot, was not available. However, Whaley is considerably smaller than the other area towns (Red River Army Depot 1995f).

In 1991, the authorized personnel strength for the Red River Army Depot was approximately 4,500 civilian personnel and 50 military personnel. As of 1995, the Red River Army Depot employed between 2,500 and 3,500 individuals total (Red River Army Depot 1995f).

# 1.5.2 Physical Setting

The land area of the Red River Army Depot is relatively flat, ranging in elevation from 270 to 408 feet above sea level. The topography of the installation is very flat to the north and develops into slightly rolling terrain to the south. It is estimated that 75 percent of the installation has a slope between 1 and 6 percent. The remaining 25 percent of the area is estimated to have a slope of less than 1 percent. Occasionally, slopes near streams range up to 12 percent, but these steep slopes are rare. Slopes greater than 12 percent do not occur (Red River Army Depot and USACE 1995).

# 1.5.3 Climatology

The Red River Army Depot is in a transitional zone between the subtropical humid climate prevalent further south and the continental climate of the Great Plains and Midwest. Winters are normally mild with freezing temperatures occurring on an average of 35 days per year, while summers are hot and humid with temperatures exceeding 90 degrees Fahrenheit (°F) on an average of 89 days per year.

Typically, humidity ranges from 50 percent in the pre-dawn hours to 60 percent in the afternoon. Rainfall is abundant, with normal annual totals near 45 inches. The heaviest rainfall occurs in association with frontal systems that pass through during the winter months. Snowfall is rare, with an average of one to two inches per year. Prevailing winds are out of the south during all months except September, when they are predominantly from the east (Red River Army Depot and USACE 1995).

Severe local storms, including hailstorms and tornadoes, are most frequent in the spring, with a secondary peak from late November through early January. Hurricanes usually dissipate before

they reach the area, with the greatest damage caused by heavy rainfall rather than winds (Red River Army Depot and USACE 1995).

# 1.5.4 Hydrology

The Red River Army Depot is geographically located on a divide of two different watersheds; therefore, flooding is not a significant concern (Red River Army Depot 1978). Minor flood damage has occurred at Panther Creek and Big Creek; however, no damage was reported to any material or facilities at the installation (USACE 1994). Small areas in the northern portions of the Red River Army Depot are within the Red River watershed. Surface drainage within most of the installation is primarily toward the south-southeast in a typical dendritic pattern characteristic of the Sulphur River basin. Several small streams flow within the boundaries of the Red River Army Depot. The largest tributaries are the East Fork of Elliott Creek and Nettles Creek. The East Fork of Elliott Creek drains the eastern portion of the installation and flows south into Wright Patman Lake. Nettles Creek drains the western portion of the installation. Except during high flows after heavy rainfall, all streams within the installation generally carry less than 5 cubic feet per second of flow (Red River Army Depot and USACE 1995). North of the topographic ridge, stormwater flows predominantly north through Panther Creek, an un-named tributary, and various other creeks and ditches that empty into the Red River.

# 1.5.5 Geology and Soils

The geologic strata of the Red River area consists of clay, sandy clay, siltstone, and sand deposited during Upper Cretaceous, Eocene, and Pleistocene periods. Exposures of Midway and Wilcox Groups are common in Bowie County. Areas of recent age alluvium and Pleistocene terrace deposits are found along the Red and Sulphur Rivers and their tributaries. Outcrops of the Marlbrook Marl Formation and the Navarro Group are found in the northwest part of Bowie County (Dames and Moore 1990).

The geologic formations outcropping at the Red River Army Depot are the Tertiary Eocene Midway and Wilcox Groups, the Quaternary Pleistocene Fluviatile Terrace Deposits, and the Quaternary Recent Alluvium Deposits, in ascending order. These formations outcrop in rough east-west parallel bands with the Midway Group underlying the central and northern sides of the installation and the Wilcox Group underlying a smaller area on the south side.

The Midway Group is characterized by gray to yellowish gray silty clay, under gently rolling terrain. The total thickness of the Midway Group may be as much as 600 feet. The Wilcox Group consists of buff to gray carbonaceous sands, silts, and clays under sloping topography. The Wilcox Group is mostly silty and sandy clay, with local cross beddings. It can have carbonaceous layers, calcareous siltstone layers, and ironstone concretions. Reports indicate that the thickness can be approximately 700 feet where the entire section is found, but probably does not exceed 100 feet at its thickest interval under the southern boundary of the installation (Dames and Moore 1990).

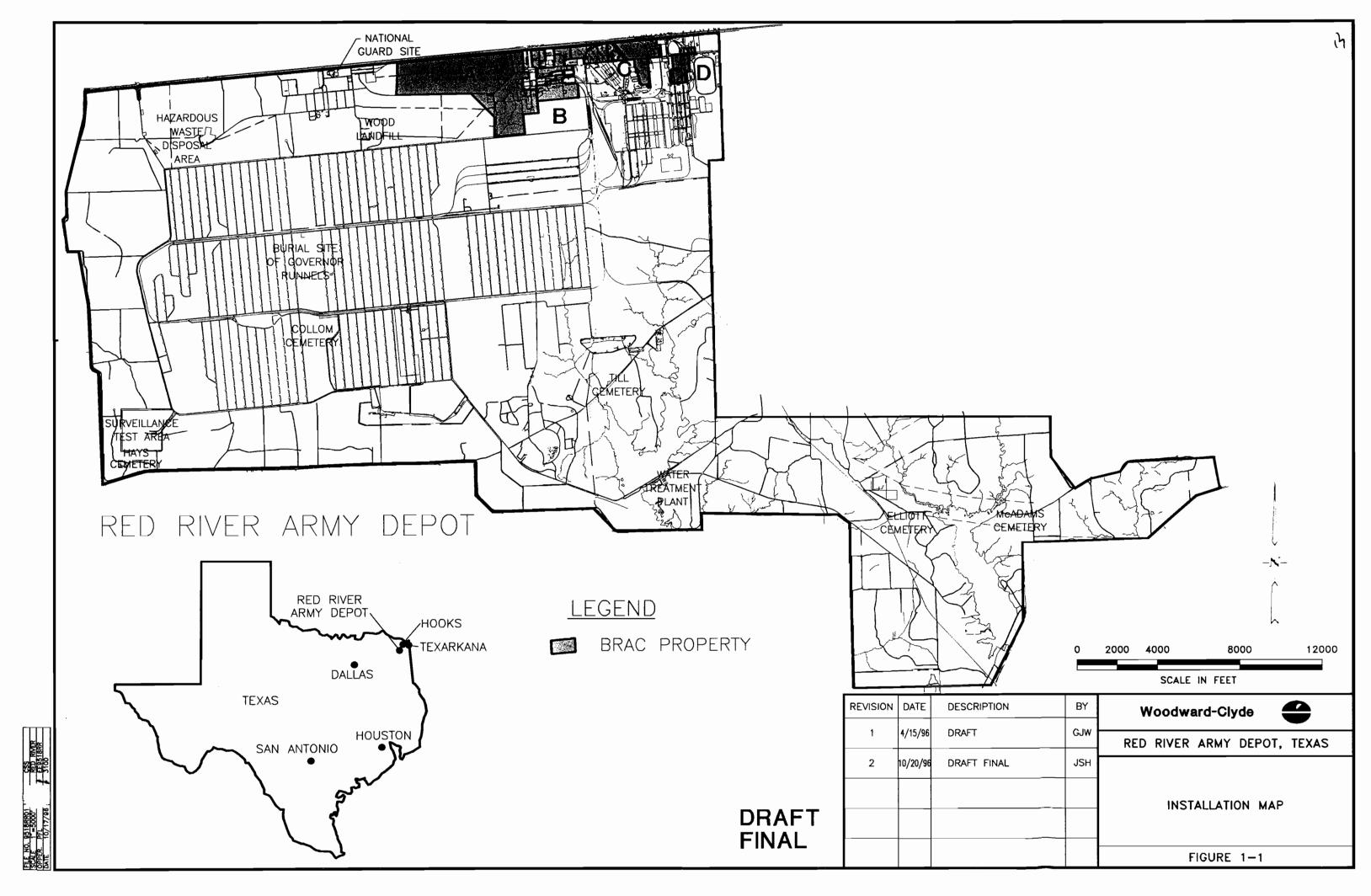
Red River Army Depot has three major soil associations within its boundaries (USACE 1993a).

- Sawyer-Eylau-Woodtell Association: gently sloping soils on uplands; moderately
  well drained; loamy soils with a low permeability. These soils are found along
  the southern side of the Red River Army Depot.
- Annona-Alusa Association: nearly level soils on uplands; somewhat poorly
  drained; loamy soils with a very low permeability. These soils are the most
  extensive on the installation and are found on level upland areas on the northcentral and northeast end of the installation. The developed area is underlain by
  this soil association.
- Sardis-Thenas Association: deep, poorly to moderately well drained; loamy soils
  formed in alluvial sediments in floodplains. These soils are found along the
  principal stream bottoms on the Red River Army Depot along Rock, Big Caney,
  and Panther Creeks.

# 1.5.6 Hydrogeology

Groundwater flow is generally in the same direction as surface water at areas underlain by the Midway or Wilcox Groups. Depth to groundwater is usually shallow, ranging from near ground surface along creek bottoms to approximately 25 feet along ridge lines (Dames and Moore 1990). Vertical permeabilities of the soil are low and vary with location and depth. The permeability of the Midway Group has been calculated to be between  $8.2 \times 10^{-7}$  and  $1.08 \times 10^{-8}$  centimeter per second (cm/sec) (Dames and Moore 1990). The permeability of the Wilcox Group is estimated to range from  $1.0 \times 10^{-5}$  to  $3.4 \times 10^{-6}$  cm/sec. These permeabilities correlate well with the recorded geology; the Midway Group is mostly clay, and the Wilcox Group has a mix of sand, silt, and clay (Dames and Moore 1990).

Groundwater flow through the Quaternary terrace deposits is toward areas of discharge, such as excavations or streams. Hydraulic conductivities within these coarse-grained terrace deposit soils range from  $4 \times 10^{-4}$  to  $6 \times 10^{-5}$  cm/sec, much higher than those found in the Midway Group and similar to or slightly greater than those for the Wilcox Group (Dames and Moore 1990).





# 2.0 SOURCES OF INFORMATION

This EBS investigation meets the requirements of CERCLA (1980) Section 120(h), as amended by CERFA and implemented by DOD. This section describes the sources of information that were used to support the determination of the environmental condition of the Red River Army Depot BRAC property.

#### 2.1 INSTALLATION/BRAC PROPERTY

Relevant information and documents that were used to conduct the Red River Army Depot EBS are identified in the following sections. This information includes environmental studies; federal, state, and local regulatory records; interviews of installation personnel; and visual inspections within a ¼-mile distance from the installation.

## 2.1.1 Existing Documents

Existing documents were reviewed to evaluate the environmental conditions at the Red River Army Depot. The 10 documents presented in Table 2-1 are the primary documents used in the preparation of this EBS report. Each document has a document identification number, which is referenced in the CERFA map tables (Tables 5-1a and 5-1b) in Section Five. These documents are the primary source of evidence for the resulting environmental condition of property categorization. A complete list of references is included in Section Six.

Table 2-1
EBS PRIMARY DOCUMENTS

DOCUMENT TITLE	AUTHOR	DATE	EBS SOURCE OF EVIDENCE DOCUMENT IDENTIFICATION NUMBER
Red River Army Depot Installation Action Plan	Red River Army Depot and U.S. Army Corps of Engineers	January 1995	1
RCRA Facility Investigation, Panther Creek and Big Creek, Interim Status Report	U.S. Army Corps of Engineers	February 1991	2

Table 2-1 (Continued)

DOCUMENT TITLE	AUTHOR	DATE	EBS SOURCE OF EVIDENCE DOCUMENT IDENTIFICATION NUMBER
RCRA Facility Investigation	U.S. Army Corps of	September 1995	3
for SWMU, Building 348	Engineers		
RCRA Facility Investigation for SWMU, Building 333	U.S. Army Corps of Engineers	April 1995	4
Red River Army Depot	U.S. Army Corps of	April 1992	5
RCRA Facility Investigation	Engineers		
Final Report			
Request to Conduct Outdoor	Red River Army	February 1996	6
Burning at Red River Army	Depot Base		
Depot	Transition Office		
BRAC 95 Environmental	Red River Army	1996	7
Action Plan for Red River	Depot		
Army Depot			<u> </u>
BRAC 95 Preliminary	Red River Army	1995	8
Report of Excess	Depot, BRAC		
	Office		
Building Survey Report	ACM	1995	9
Lead Paint Survey	Red River Army Depot	1995	10

# 2.1.2 Federal, State, and Local Government Regulatory Records

A search of federal, state, and local records pertaining to the Red River Army Depot and a search of reasonably obtainable records of adjacent (within an eight-mile radius of the installation) properties was performed. In addition, a search of the environmental databases listed in Table 2-2 was conducted.

Table 2-2 ENVIRONMENTAL DATABASES

DATABASE	CONTENTS
National Priorities List	The NPL lists Superfund sites, which are sites that are determined
(NPL)	by Environmental Protection Agency (EPA) to pose an immediate
	public health hazard requiring immediate cleanup response.
Comprehensive	The EPA CERCLIS database contains information on CERCLIS
Environmental Response,	sites, and is updated periodically.
Compensation and Liability	
Information System (CERCLIS)	
Emergency Response	EPA maintains ERNS, which is a repository for information on
Notification System	hazardous spills nationwide. This information is based on reports
(ERNS)	filed by local agencies (e.g., municipal fire, police, or
	environmental departments), county agencies, state entities, and
	federal agencies (e.g., U.S. Coast Guard, National Response
1	Center, and EPA).
Resource Conservation and	Facilities listed in this EPA database are RCRA facilities for
Recovery Act (RCRA)	which a Corrective Action has been issued to address waste
Facilities Database	handling problems.
Resource Conservation and	This database contains information on all RCRA facilities. The
Recovery Information	facility types include: large quantity generators; small quantity
System (RCRIS)	generators; conditionally exempt facilities; transporter facilities;
ľ	and treatment, storage, and disposal (TSD) facilities. Large
	quantity generators generate over 1,000 kilograms (kg) hazardous waste/month, or greater than 1 kg acutely hazardous waste as
	defined by RCRA. Small quantity generators generate more than
	100 and less than 1,000 kg of hazardous waste during any
	calendar month.
Facility Index System	EPA references any facility or event that has been issued an EPA
(FINDS)	identification number; the EPA program office that issued the
	identification number is also listed. These listings do not
<u>_</u>	necessarily reflect releases.
State Solid Waste Landfills	This state of Texas database was searched to identify solid waste
(SWLF) Database	landfills, incinerators, and transfer stations within an eight-mile
	radius of the Red River Army Depot.
Texas State Registered	This database contains information on all known and registered
Underground Storage	USTs in the state of Texas, and is updated periodically.
Tanks (USTs) Database	This detakes contains in 6 asis on HOT- was and 4 as 1
Leaking Underground Storage Tanks (LUSTs)	This database contains information on USTs reported to the state of Texas as leaking.
Database	of Texas as leaking.
Database	<u> </u>

The complete database search report, including a map indicating locations of sites identified below, is provided in Appendix B. The database search has identified the following information:

- The Red River Army Depot is listed as a RCRA large waste generator.
- The Red River Army Depot is listed on ERNS for a petroleum, oil, and lubricants (POL) spill of unknown quantity.
- The Red River Army Depot has one sanitary landfill listed on the state or local SWLF list.

# 2.1.2.1 Permits and Permit Applications

The following permits and permit information are maintained by the Red River Army Depot:

Table 2-3
INSTALLATION PERMITS

PERMIT TYPE	DATE ISSUED	PERMIT AND EPA IDENTIFICATION NO.	DESCRIPTION
RCRA Part B for municipal hazardous waste management	December 13, 1988	HW-50178-000 and TX3213820738	RCRA permit as amended by the Hazardous and Solid Waste Amendments of 1984.
Part B permit for municipal hazardous waste management	April 1, 1995	HW-50178-000 and TX3213820738	This permit superseded and replaced previous Permit Number HW-50178, approved December 13, 1988 and expires on midnight August 2, 1998. This permit authorizes the Red River Army Depot to store, process, and dispose of hazardous wastes and to conduct post-closure activities (Texas Natural Resource Conservation Commission [TNRCC] 1995d).

# Table 2-3 (Continued)

		PERMIT AND EPA	
PERMIT TYPE	DATE ISSUED	IDENTIFICATION NO.	DESCRIPTION
National Pollutant	Unknown	TX0000132	Applicable for the Final
Discharge Elimination			Holding Lagoon and the
System (NPDES)			Intermediate Lagoon
			associated with the chromate
1			and phosphate collection
			treatment facility
		•	(Wastewater Treatment
			[WWT] Area) and the
			internal Outfall No. 103.
Texas Natural Resource	October 8, 1988	02206	The Red River Army Depot
Conservation Commission			proposes to renew this
(TNRCC) permit to			permit for the following
dispose of wastes under	·		outfall locations: Outfall
provisions of Chapter 26 of			No. 001 to East Fork Elliot
the Texas Water Code		·	Creek; Outfall No. 002, a
			ditch to the Rock Creek part
:			of Lake Wright Patman,
			Segment Number 0302 of
			the Sulphur River Basin;
			Outfall No. 003 to Panther
	1		Creek to Barkman Creek to
	·		McKinney Bayou and to a
	,		diversion canal to the Red
			River; and Outfall No. 0201
			of the Red River Basin
·			(TNRCC 1995b).
Nuclear Regulatory	November 16, 1988	12-00722-06	This permit is for Tritium
Commission license	<b>,</b>	ļ	(H <sub>3</sub> ) illumination devices.
			These devices are used on
			tanks as weapon reference
			sensors. (Refer to Section
	· ·		4.4.6 for a detailed
			description.)
Nuclear Regulatory	Unknown	BML-12-00722-14	This permit is for Nickel-63
Commission license			sources within chemical
			agent monitors. (Refer to
	,		Section 4.4.6 for a detailed
			description.)

Table 2-3 (Continued)

PERMIT TYPE	DATE ISSUED	PERMIT AND EPA IDENTIFICATION NO.	DESCRIPTION
Nuclear Regulatory Commission license	Unknown	12-00722-13	This permit is for Americium-241 sources within chemical agent monitors. (Refer to Section 4.4.6 for a detailed description.)
Nuclear Regulatory Commission license	To be determined	SUC-1380	This license is for the storage of depleted uranium from Staballoy components. (Refer to Section 4.4.6 for a detailed description.)
Texas Solid Waste Disposal Act	Unknown	67004	Unknown
Texas Clean Air Act	Unknown	X-4466, X-15644, C- 17973, R-9157, R-8315A	Unknown
Air Curtain Destructor Permit	March 9, 1991	R-7804	This permit authorizes the burning of trees, brush, waste lumber, and explosives-contaminated waste.
Industrial and hazardous waste notice of registration permit	Unknown	TNRCC #30991 and EPA #TX7213821831	Unknown
Federal Aviation Administration (FAA)	February 4, 1993	Letter	FAA approval of the controlled firing and demolition of ammunition at the High Explosive Demolition Grounds.

# 2.1.2.2 <u>Inspection Reports and Enforcement Actions</u>

According to a letter dated May 10, 1995, from Mr. Lonnie F. Wright, Director of the Industrial Risk Management Office of the Red River Army Depot, to EPA, the Final Holding Lagoon and the Intermediate Lagoon associated with the chromate and phosphate collection treatment facilities (Wastewater Treatment Area) and Internal Outfall No. 103 are being eliminated as a part of the Agreed Order with TNRCC. The Agreed Order requires that an alternative wastewater management system be in place and operational by October 12, 1996. As a result of this Agreed Order, EPA has granted a minor NPDES permit modification to change the outfall

narrative description and sampling location description, and require more frequent monitoring and reporting for Phosphate (Total as PO<sub>4</sub>), Chromium (Total), Lead (Total), cadmium (Total), and Zinc (Total), as identified in 40 CFR Part 122.63(b)(RR23).

# 2.1.3 Aerial Photographs

A search of existing aerial photographs was conducted through the U.S. Army Information Office at the Red River Army Depot. Seven nine-by-nine inch black and white aerial photographs were received. Three of the photographs were dated April 19, 1953 and four were dated February 18, 1970. Additionally, aerial photographs numbered RR-AP-1 through RR-AP-55 (dated from 1941 to 1994) were received from the U.S. Army Information Office. The photographs were used to identify areas of disturbed ground, staining, distressed vegetation, landfills, and other distinguishing features that could provide useful information at the time of the EBS site inspection. The photographs showed sufficient detail and locations to aid in the preparation of this EBS report.

# 2.1.4 Existing Property Maps

Existing installation property maps were used to assist in identifying past property use and practices at the Red River Army Depot that may have contributed to environmental degradation or concerns. Property maps were also used to determine current physical conditions of the installation and to focus on areas where there may be concerns regarding past or current waste management practices.

A microstation installation map was used in the preparation of this EBS report to locate topographic and structural features, areas where environmental investigations were conducted, and installation facilities and features. This Microstation map is formatted in AutoCad 12® and was used as the basis for the CERFA maps presented in Section Five (Figures 5-1 through 5-3).

#### 2.1.5 Interviews

To facilitate the review of the installation's environmental history and practices, interviews of current and former employees involved in operations were conducted. To ensure the interview

process was thorough, standardized interview forms were created and utilized. Information was also obtained through discussion with escorts during the visual inspections and noted as such on the visual inspection form. Interviews were conducted at the time of the site visit performed from January 22, 1996 through February 12, 1996. A sample interview form is presented in Appendix C.

Table 2-4 provides a list of the individuals who were interviewed.

# Table 2-4 INTERVIEWS OF PERSONNEL ASSOCIATED WITH THE RED RIVER ARMY DEPOT CONDUCTED JANUARY 2 THROUGH FEBRUARY 12, 1996

NAME	TITLE	ORGANIZATION	TELEPHONE NUMBER	PERIOD ASSOCIATED WITH AREA OR FACILITY
B. Rayburn	Property Management Branch Chief	Defense Reutilization Marketing Office (DRMO)	(903) 334-2487	25 years
Billy W. Richardson	Armament Division Chief	Red River Army Depot Electronic Directorate Armament	(903) 334-2741	35 years
B.J. McDonald	Security	Red River Army Depot Support Office	(903) 334-2729	15 years/Defense Logistics Agency (DLA) 5 years
Bob Boyd	Division Chief	Installation Services Division, DLA	(903) 334-2674	30 years
Bonnie Lewis	Water Treatment Plant Operations Supervisor		(903) 334-4881	20 years
Charles Gardner	Industrial Hygienist	Red River Army Depot Industrial Hygiene	(903) 334-2965	13 years
Charles L. Spiller	Division Chief	Red River Army Depot Cross and HYD REP Division	(903) 334-3701	3 years
Charles F. Young	Hazardous Waste Worker	Metal Processing Division	(903) 334-4446	BB-15 (Rubber Denuding Plant) 4 years/Environmental Management Office (EMO) 4 years
Chick Balmine	Reserve Training Coordinator	Red River Army Depot Building 112	(903) 334-3184	25 years

# Table 2-4 (Continued)

NAME	TITLE	ORGANIZATION	TELEPHONE NUMBER	PERIOD ASSOCIATED WITH AREA OR FACILITY
Colonel Knapper	DLA Commander	Red River Army Depot DLA	(903) 334-3167	2 years
Connie Bench	Chief of DLA	Red River Army Depot DLA	(903) 334-2146	21 years
Danny R. Feagin	Telecommunications Specialist	Red River Army Depot Communications Division	(903) 334-2934	23 years
David Keck	Boiler Plant Chief	Red River Army Depot Operations and Maintenance Division	(903) 334-3218	30 years
David McCright	Supervisor	Red River Army Depot Test Track Division	(903) 334-2730	16 years
Deanne M. Renteria	Housing Manager	Red Kiver Army Depot Buildings S-56 and 34	(903) 334-3976	6 years
Dennis Martin	Manager	Red River Army Depot Buildings 87, 86, and 85	(903) 334-4636	Unknown
Donna L. Eason	Management Assistant	Department of Information Management (DOIM)	(903) 334-2402	27 years
Ed Hanna	Production Engineer	Red River Army Depot Production Engineering Division	(903) 334-3380	30 years
Eddie Carabajal	Safety Specialist/Radiation Protection Officer	Red River Army Depot Directorate of Public Works Safety Team	(903) 334-4172	3 years
Fred Schenewerk	Chief Strategic Planning Officer	Director of Maintenance	(903) 334-2378	28 years
Gene Reynolds	Safety Officer	DLA Safety Office	(903) 334-4884	4 years
Harold Taylor	Electronic Maintenance Team Leader	Red River Army Depot Maintenance Support Division	(903) 334-2034	19 years
Jerry Collins	Contractor	Lone Star Army Ammunition Plant Environmental Department	(903) 334-1114	27 years

# Table 2-4 (Continued)

NAME	TITLE	ORGANIZATION	TELEPHONE NUMBER	PERIOD ASSOCIATED WITH AREA OR FACILITY
Jerry Robinson	Contractor	Lone Star Army Ammunition Plant Environmental Department	(903) 334-1659	9 years
Jimmy Haggard	Industrial Maintenance Mechanic Leader	Red River Army Depot Buildings 133 and 135	(903) 334-2392	26 years
Joe Cueller	Division Chief	Red River Army Depot Machine Support Division	(903) 334-4657	31 years
Johnny Gross	Environmental Protection Specialist	Red River Army Depot Hazardous/ Solid Waste Management Team	(903) 334-3363	30 years
Lawrence Sims	Woodcrafter	Red River Army Depot Morale, Welfare, and Recreation (MWR)	(903) 334-3167	5 years
Mae K. Gurley	Community and Faculty Activity Assistant	Red River Army Depot Community and Family Activities Office	(903) 334-3506	11 years
Michael Allen	Missile Reactor Director	Red River Army Depot Building 176	(903) 334-3202	33 years
Mike Lockard	BRAC Environmental Coordinator	Red River Army Depot	(903) 334-5046	10 years
Mike Odom	Golf Course Manager	Non-Appropriated Funds (NAF)	(903) 334-2359	1 year
Nick Dyke	Carpenter Leader	DPW	(903) 334-3583	31 years
Patsy L. Carrol	Inventory Management Specialist Supervisor	Defense Distribution Depot Region Texarkana (DDRT)	(903) 334-4940	29 years
Patsy McMillan	Chief of Accounts Payable, Defense Finance and Accounting Service	Red River Army Depot Defense Accounting Office	(903) 334-4283	10 years
Randall Barton	Expeditor .	Red River Army Depot Hazardous Management Office	(903) 334-2300	5 years

# Table 2-4 (Continued)

NAME	TITLE	ORGANIZATION	TELEPHONE NUMBER	PERIOD ASSOCIATED WITH AREA OR FACILITY
Raven E. Lewis	Toxic Waste Handler	Red River Army Depot Hazardous/Solid Waste Management Team	(903) 334-4881	20 years
Roy L. Cardwell	Communications Specialist	Red River Army Depot Communications Division	(903) 334-4889	28 years
Raymond Jones	Contractor	Lone Star Army Ammunition Plant Environmental Department	(903) 334-1114	31 years/ Environmental and Engineering Coordinator 5 years
Bob L. Norrid	Management Analyst	Red River Army Depot Management Analysis Team	(903) 334-3743	29 years
Robert Walston	Electronic Integrated System Mechanic	Red River Army Depot Weapons Support and Assembly Division	(903) 334-3888	24 years
Ron A. Satterfield	Heating, Ventilation, Air Conditioning (HVAC) and Pipe Fitting Division Chief	Red River Army Depot Operations and Maintenance Division	(903) 334-2205	22 years
Ron L. Williams	Environmental Protection Specialist	Red River Army Depot Environmental Management Division	(903) 334-4103	12 years
Royce Clayton	Union Steward	Red River Army Depot Building 303	(903) 334-2533	21 years
Steve Reeves	Food Service Worker	BRAD Community Club	(903) 334-4636	8 years
Ted Robinson	Mobil Equipment Division Chief	DPW	(903) 334-3286	20 years
Terry L. Funderberg	Environmental Protection Specialist	Red River Army Depot Environmental Management Division	(903) 334-4006	18 years
Jim Pennington	Warehouseman	Red River Army Depot DLA	(903) 334-6904	Unknown

Table 2-4 (Continued)

NAME	TITLE	ORGANIZATION		PERIOD ASSOCIATED WITH AREA OR FACILITY
· ·	U.S. Army Center for Health Protection and Preventative Medicine	Protection and	(401) 671-3502	Less than 1 year
Will E. White	Lieutenant, Guard Supervisor	Red River Army Depot Provost Marshal Office	(903) 334-2004	28 years

# 2.1.6 Visual Inspections

As required by CERCLA 120(h)(4)(A)(iv) and (v) and DOD guidance, a visual inspection of the real property and properties adjacent to the property was conducted and is addressed in this EBS report. On-site visual inspections of the installation property and adjacent properties were conducted by the EBS field team during the period of January 22, 1996 to February 12, 1996. Visual inspections conducted by the field team included grounds, buildings, structures, and equipment. Survey methods included visual inspections from automobiles and surveys during site walks. To ensure the visual inspections were thorough, standardized visual inspection forms were created and utilized. A sample visual inspection form is presented in Appendix D.

Table 2-5 provides a list of the installation facilities visually inspected.

Table 2-5
VISUAL INSPECTIONS CONDUCTED AT THE
RED RIVER ARMY DEPOT

GEOGRAPHIC AREA	INSTALLATION BUILDING	SURVEY TYPE
Α	34	Walking
A	37	Walking
A	38	Walking
Ā	S-56	Walking
A	77	Walking
A	T80	Walking
A	M82	Walking
A	M83	Walking

Table 2-5 (Continued)

GEOGRAPHIC AREA	INSTALLATION BUILDING	SURVEY TYPE
A	M84	Walking
A	85	Walking
A	85A	Walking
A	86	Walking
A	S-87	Walking
A	702-C	Walking
A	705-A	Walking
A	711	Walking
A	712	Walking
A	S-713	Walking
A	714	Walking
A	726	Walking
A	S-727	Walking
A	Western Undeveloped Area - Geographic Area A	Walking/Automobile
В	S-07	Walking
В	11	Walking
В	12 .	Walking
В	107	Walking
В	112	Walking
В	113	Walking
В	116A-E	On-site
В	119	Walking
В	125	Walking
В	133	Walking
В	135	Walking
В	S-161	Walking
В	162	Walking
В	S-163	Walking
В	164	Walking
В	S-167	Walking
В	168	Walking
В	170	Walking
В	171	Walking
В	172	Walking
В	175	Walking

Table 2-5 (Continued)

GEOGRAPHIC AREA	INSTALLATION BUILDING	SURVEY TYPE
В	176	Walking/Automobile
В	S-177	Walking
В	S-179	Walking
В	S-180	Walking
В	183	Walking
В	Vehicle Storage Area - Geographic Area B	Walking
С	312	Walking
С	319	Walking
C	S-332	Walking/Automobile
C	333	On-Site
С	333A	Walking
C	S-334	Walking/Automobile
С	334A	Walking
C	S-340	Walking/Automobile
С	350	Walking
С	388	On-Site
С	396	On-Site
С	Vehicle Storage Area - Geographic Area C	Walking
D	401	Walking
D	403	Walking
D	405	Walking
D	411	Walking
D	413	Walking
D	S-414	Walking
D	421	On-Site
D	422	Walking
D	423	Walking
D	423A	Walking
D .	424	Walking
D	428	Walking
D	431	Walking
D	432	Walking

Table 2-5 (Continued)

GEOGRAPHIC AREA	INSTALLATION BUILDING	SURVEY TYPE
D	433	Walking
D	443	Walking
D	469	Walking

#### 2.1.7 Title Documents

CERCLA 120(h)(4)(A)(ii) and DOD guidance require a review of the "recorded chain of title documents regarding the real property." For the EBS, the Environmental Title History Report was reviewed to identify the prior property owners at the time of transfer to the U.S. Army. The purpose of this review was to collect additional information concerning the prior use and environmental condition of the property at the time of transfer to the U.S. Army. Previous ownership and the dates of transfer are presented in Appendix E.

The Environmental Title History Report produced by Environmental Database, Inc. contains 415 entries. According to these entries, the United States of America took title of all Red River Army Depot property in 1941 and 1942. These 415 former owners of Red River property appear to be non-industrial entities including families, individuals, school districts, and churches. The names of former owners that indicate commercial enterprises (only three are listed, including a feed mill, a cotton company, and a cotton oil company) were involved in agricultural processing. Apparently, the land that the Red River Army Depot occupies was previously agricultural and residential property, and it appears there is little potential that current Red River Army Depot environmental concerns were caused by land uses prior to the transfer of property to the federal government.

## 3.0 PROPERTY CHARACTERIZATION

This section presents an overview of past and current operations at the Red River Army Depot and a discussion of potential environmental contamination associated with these operations. It provides a description of the installation facilities and addresses past and current waste management practices at the Red River Army Depot.

#### 3.1 INSTALLATION HISTORY AND MISSION

The Red River Army Depot, established in 1941, was originally intended to serve only as an Army ammunition storage installation. Construction of 702 ammunition igloos and the depot's administrative area on approximately 14,000 acres of land began in the fall of 1941 (Red River Army Depot 1978). In December 1942, the installation began additional missions that included the overhaul and modification of tanks, and shipment of tanks, artillery, and small firearms. From 1943 until March 1944, the Lone Star Army Ammunition Plant, which shares its western boundary and portions of its southern boundary with the Red River Army Depot, was associated with the Red River Army Depot as the Texarkana Ordnance Center. In 1945, the Texarkana Ordnance Center was abolished; however, the Lone Star Army Ammunition Plant remained part of the Red River Army Depot until 1952 (Red River Army Depot and USACE 1995). The new name of the combined facilities was the Red River Ordnance Depot.

On August 1, 1962, Red River became an Army Depot under the Supply and Maintenance Command and continued with the missions assigned by Army Regulation (AR) 780-970. In 1966, the U.S. Army Supply and Maintenance Command was discontinued and its missions and functions were reassigned to Headquarters, U.S. Army Materiel Command.

In 1980, the Red River Army Depot began an intensive facility modernization program. Several newly constructed facilities replaced outdated and inefficient operations. Facilities included in this modernization program were a light track vehicle overhaul facility, a new rubber operations facility, a new steam boiler plant, and a bridge crane with two 30-ton synchronized lifts. By 1983, more than 5,000 M113 vehicles were converted from gasoline power to diesel power, and the first camouflage-painted M113 was manufactured. In 1984, the Directorate of Ammunition Operations was established. By 1989, Phase One, Site Development of the Central Distribution

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Center (CDC), a one million square foot supply distribution warehouse and operations center, was completed. Phase Two, the Main Construction and Equipment Installation of the CDC, was directed by Congress in 1990 (USACE 1994); however, the facility was never developed. Currently, the Distribution Operation Center, located south of Building 420 and operated by DLA, is being constructed with these funds.

The current mission of the Red River Army Depot includes ammunition supply, modification, demilitarization, and storage; maintenance, modification, and rebuilding of Army light-tracked vehicles, and tenant-operated supply of soldier-oriented items for the middle eighteen contiguous states. The Red River Army Depot maintains 1,710,000 square feet of storage in 702 igloos and 18 standard magazines, and operates as one of three major Army DOD distribution centers supplying ordnance to more than half of the active Army. Ammunition maintenance activities include renovation or demilitarization of conventional ammunition (USACE 1994). The vehicle maintenance activities include the overhaul, modification, and fabrication of a multitude of Army items in a large industrial complex comprised of 42 buildings.

#### 3.2 DESCRIPTION OF FACILITIES

The Red River Army Depot is an active U.S. Army facility. The major tenants who work at the installation are DRMO and DLA. DRMO reutilizes and/or disposes of surplus items, and DLA supports seven of the eleven continental U.S. divisions in an eighteen-state area.

The Army started addressing environmental concerns through an Installation Assessment Report prepared in 1978. Environmental investigations continued on several sites until the Red River Army Depot was issued a RCRA Part B Permit in 1988. This permit qualifies the Red River Army Depot as a Municipal Hazardous Waste Management Site as amended by the Hazardous and Solid Waste Amendments of 1984. Provision VII of the Permit requires the Red River Army Depot to conduct a RCRA Facility Investigation (RFI) in areas where there is a concern that hazardous constituents may have been released to the environment. The Red River Army Depot has 46 Defense Site Environmental Restoration Tracking System (DSERTS) sites, including 14 RFI sites. Only 6 RFI sites are located on BRAC property, subject to transfer or lease.

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The Red River Army Depot has approximately 576 acres of land to be excessed under the BRAC 95 program. To facilitate describing the BRAC property, the 576 acres have been divided into the following four geographic areas (Figure 1-1):

- <u>Geographic Area A</u>: The most western portion (housing and golf course) of the BRAC property.
- <u>Geographic Area B</u>: Centrally located (administrative), immediately adjacent to the eastern edge of Geographic Area A of the BRAC property.
- <u>Geographic Area C</u>: Centrally located (maintenance), immediately adjacent to the eastern edge of Geographic Area B of the BRAC property.
- Geographic Area D: The most eastern portion (maintenance) of the BRAC property.

In addition to the four geographic areas to be excessed, one building has been identified as BRAC property to be transferred or leased. The structure and land for Building 125 will be subject to transfer or lease. A complete listing of these buildings is presented in Table 3-1 (following Section Three).

#### 3.2.1 Mission Related Activities

An overview of the mission-related activities associated with the Red River Army Depot is presented below by geographic area.

# 3.2.1.1 Geographic Area A

Geographic Area A encompasses approximately 362 acres and is located along the northern boundary of the Red River Army Depot, west of the main gate (Figure 5-1). This area is characterized by a large, flat, wooded section to the west, an eight-unit housing facility, a 9-hole golf course, several administrative buildings, and a swimming pool. Extensive document reviews and an EBS site visit revealed that no mission-related activities occurred in this area.

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## 3.2.1.2 Geographic Area B

Geographic Area B encompasses approximately 95 acres and is located along the northern boundary of the Red River Army Depot, east of the main gate (Figure 5-2). This area is primarily an administrative area that includes a chapel, barracks, offices, a jogging track, a gym, a softball field, and several other maintenance facilities. Brief descriptions of the mission-related activities associated with Geographic Area B are described below.

#### Staging Area for M577s and M548s

The M577s and M548s staging area is located north of Buildings 11 and 12 and northeast of Building 107. This area is used for the staging of light tracked or wheeled vehicles that are awaiting repair or overhaul. The area is primarily undeveloped and flat with an asphalt road near the center that services all three buildings.

#### **Building 133**

Building 133 is located south of the jogging track along the western edge of Geographic Area B. This building is currently used as a maintenance facility specializing in maintenance and repair of pneumatic tools, electric motor rewinding, non-industrial machine shop work, and rubber and rubberized product cleaning.

#### Various Repair Shops

Three repair shops are located in Geographic Area B. These repair shops include Buildings 161, 164, and 170. Building 161 is located along the western edge of Geographic Area B and served as a Material Handling Equipment (MHE) repair shop. This building is currently vacant. Building 164 is located near the center of Geographic Area B, southwest of the locomotive repair shop. It has been the radio repair shop since 1995. Prior to 1993, this building was the former print shop for the Red River Army Depot. In 1993, the building was converted into administration offices. Building 170, located directly east of Building 164 near the center of Geographic Area B, consists of a main building and a shed. This building is the former radio repair shop and is currently used for the storage of electronic parts.

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#### Vehicle Maintenance/Storage Buildings

Two vehicle maintenance shops (Building 163 and 167) are located within Geographic Area B. Building 163 is a small vehicle maintenance shop located directly east of Building 161, near the center of Geographic Area B. This building was used to service vehicles (oil changes, engine repair, etc.). This shop has two wash racks, one inside and one outside, a boiler (for the high pressure washers), and an overhead lift. Building 167 is a vehicle storage facility located east of Building 163 near the center of Geographic Area B. During the EBS site visit, Building 167 was being used to store motor oil, brakes, and antifreeze; however, no vehicle storage was observed.

### 3.2.1.3 Geographic Area C

Geographic Area C encompasses approximately 88 acres and is located along the northern boundary of the Red River Army Depot east of Geographic Area B (Figure 5-3). The mission-related activities are all located in the southern portion of this area and include an automated storage and retrieval building for military parts (Building 312), a light tracked vehicle maintenance shop (Building 333), a former nickel-cadmium battery repair shop (Building 350), and two hazardous storage buildings (Buildings 333A and 334A). A brief description of each building and its mission-related activities is presented below.

#### **Building 312**

Building 312, the Material Staging and Control Building, is a relatively new building, constructed in 1985, that provides storage of military parts used in the repair and rebuilding of light tracked vehicles. This building is located along Texas Avenue, north of Building 333. This building stores military vehicle parts, batteries, unused oils and lubricants, and hydraulic fluid. The items stored in this building are automatically retrieved through robotics and delivered directly to Buildings 321, 333, and 345 for use in repair and rebuilding operations.

#### **Building 333**

Building 333, the Light Track Vehicle Shop, was built at the same time as Building 312 and is used to repair and rebuild light tracked military vehicles. This building is used to perform numerous activities on military tracked vehicles, including removal and re-application of chrome

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plating, refabrication and rebuilding of parts, complete disassembly and reassembly, and removal and reapplication of paint. In addition, this facility was used to refuel the vehicles once the modification or rebuilding operations were complete.

#### **Building 333A**

Building 333A is a corrosive storage building, located west of Building 333. This building is designed to house numerous corrosive materials such as phosphoric acid, defoamers, chromic acid, boric acid, aluminum chloride, benzyl alcohol, acetic acid, aluminum paint strippers, and zinc-plating solutions. The materials within this building are used at the maintenance buildings for a number of different operations.

#### **Building 334A**

Building 334A is a flammable materials storage facility located directly west of Building 333 and east of the oil separation lagoon (discussed as an adjacent property in Section 4.3). This building is used to store the flammable materials used in the repair and rebuilding operations. The materials stored in this building include oils, paints, and solvents. This building is designed to store these chemicals inside with adequate spills or release containment; however, materials are routinely stored outside this building where there is minimal spill containment.

## 3.2.1.4 Geographic Area D

Geographic Area D encompasses approximately 31 acres. Located south of the DRMO, this area consists of warehouse, temporary storage, and industrial buildings (Figure 5-3).

#### Warehouse Buildings

Warehouse buildings comprise the majority of the facilities within this area. These buildings include Buildings 403, 405, 413, S-414, 421, 423, 424, 431, 433, and 443. Buildings 403 and 405 are compressed gas storage warehouses. Building 413 contains a national stockpile of amosite in its raw form. This material is triple-bagged, is contained within ten thousand 100-pound bags in wooden crates, and is regularly inspected. Building S-414 is a warehouse with a soil floor that has historically been considered a "catch all" building for equipment and

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supplies received by the Red River Army Depot's tenant, DLA. The past storage practices are unknown and the soil floor provides no spill containment. Buildings 421, 423, 424, and 431 are general purpose storage buildings. Buildings 433 and 443 are operated by DLA. Building 433 formerly contained rubber denuding operations prior to relocation of these operations to BB-15. The rubber denuding process utilized a chlorinated solvent vapor degreaser that was stored in the northern portion of the building.

## **Temporary Storage Buildings**

Temporary storage Building 428 is the former flammable materials storage building. This building formerly contained materials that are currently stored in Building 423A.

#### Manufacturing Buildings

Industrial facilities include Building 401, which is the shop building for final testing of Bradley tanks, the M113 family of tracked vehicles, multiple launch rocket systems, and M813 series trucks. Following inspection of repairs, these vehicles are staged prior to shipment. Building 411 is currently a sheet metal shop building. During the 1940s and 1950s, this building was used to maintain locomotives. During construction of the turret punch press in 1994, maintenance operator pits were encountered. An employee interview indicated that old vats containing oil and used for annealing operations were centrally located within this facility. An interview with installation personnel indicated that the annealing oils within these vats have since been removed. Building 422 is an electronics maintenance shop. Hazardous materials used within this building are checked out of Building 333A on an "as needed" basis.

#### 3.2.1.5 Additional Buildings to be Transferred or Leased

In addition to the four geographic areas, one building has been identified as BRAC property to be transferred or leased. The structure and land for Building 125 (facility engineering maintenance) will be subject to transfer or lease. The document review and EBS site visit revealed that mission-related activities did not occur in Building 125. Building 125, Facility Engineering Maintenance, is currently used for administrative offices; however, in the past it was the compressor building and computer shop.

#### 3.3 FACILITY SUPPORT ACTIVITIES

The Red River Army Depot is an active military installation. The activities identified in this section are based upon reasonably obtainable information. This information included interviews, site inspections, and document reviews.

The facility support activities at the Red River Army Depot include:

- Hazardous Materials/Waste Management
- Solid Waste/Landfill Management
- Storage Tanks
- Drinking Water Management
- Stormwater Management
- Sewage Treatment
- On-Site Housing

## 3.3.1 Hazardous Materials/Waste Management

Hazardous materials management at the Red River Army Depot includes the facilities where hazardous materials are used and/or stored and areas where hazardous materials are managed and/or disposed.

Areas within BRAC property where hazardous waste is generated include most of the vehicle maintenance facilities located in the industrial area, including:

- Building 333
  - Blasting Operations Hull blasting and component blasting area in Building 333.
  - Paint Stripping Operations Parts chemical cleaning area in Building 333.
  - Vapor Degreasers Parts chemical cleaning area in Building 333.

- Chemical Cleaning Operations Parts chemical cleaning area in Building
   333.
- Contaminated Waste Oils Vehicle production, engine disassembly, and vehicle fluid draining area in Building 333.
- Electrical Maintenance (Buildings 170/171)
- Miscellaneous Hazardous Waste Operations

Buildings 333A and 334A located west of Building 333 store hazardous materials prior to use. Building 333A is a corrosive materials storage building that contains materials such as acids, defoamers, aluminum chloride, zinc-painting solutions, paint strippers, etc. Building 334A is a flammable materials storage building. This building contains materials such as oils, paints, and solvents. Once hazardous waste is generated, or if out-of-specification chemicals are received, they are shipped to three buildings on site for disposal off site. Past practice at the Red River Army Depot involved disposal of the hazardous material in the OTC landfill or direct discharge into Panther Creek. Once RCRA was enacted (approximately 1976), the Red River Army Depot was required to apply for and received a RCRA Part B permit to generate, store, and dispose of hazardous waste. The Red River Army Depot permit for hazardous waste management (Permit No. HW-50178) was issued on August 2, 1988. This permit has been amended and modified since it was originally issued. The most recent version of this permit was issued on August 28, 1995. The facilities that store or dispose of the hazardous waste are listed in Table 3-2.

Table 3-2
HAZARDOUS WASTE MANAGEMENT UNITS

HAZARDOUS WASTE MANAGEMENT UNIT	STATUS	DESIGN CAPACITY (gallons)	YEARS IN OPERATION	DATE IN SERVICE	DESCRIPTION
Ordnance Training Compound Landfill	Closed	3.75 million	8	1977	This landfill received drummed hazardous waste from operations on the Red River Army Depot.
Chromate Equalization Lagoon	Closed	109,000	10	1978	This surface impoundment was used by the Red River Army Depot to detain raw chromium rinse waters before being treated at the IWTP.

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Table 3-2 (Continued)

HAZARDOUS					
WASTE MANAGEMENT		DESIGN CAPACITY	YEARS IN	DATEIN	
UNIT	STATUS	(gallons)	OPERATION	SERVICE	DESCRIPTION
Sludge Drying Beds	Active	21,000	18	1 <b>978</b>	These sludge drying beds are currently used to process sludge generated from the Red River Army Depot IWTP. These waste piles were upgraded to RCRA standards in 1986.
Building 293	Active	23,100	10	1986	This building is used to store waste in containers (i.e., 55-gallon drums). This facility is equipped to store wastes such as paint residues, waste acids, waste caustic, chlorinated solvents, blasting media, contaminated POLs, contaminated soil, adhesives, photographic chemical waste, offspec batteries, lab packs, off-spec hazardous chemicals (inorganic, organic, and U listed). Permitted wastes are stored here prior to shipment to Building 479.
Building 346	Active	14,850	14	1982	This building is used as a recycling center for used oil and solvent. This facility is equipped to store wastes such as paint residues, waste acids, waste caustic, chlorinated solvents, and contaminated POLs. Permitted wastes are stored here prior to shipment to Building 479.
Building 479 (DRMO)	Active	40,480	10	1986	This building is used to store waste in containers (i.e., 55-gallon drums). Wastes stored in this building are from Buildings 293 and 346, in addition to on-site activities. Wastes from this building are eventually transferred to a permitted treatment, storage, and disposal facility.

Wastes generated at the Red River Army Depot are transported to four different areas on site.

Wastewater from the electroplating operations is sent to the IWTP where the sludge is separated

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and placed in the drying beds. Prior to construction of this wastewater treatment area, electroplating water was sent to the Hayes Treatment Plant where the water was treated. Sludge generated at the Hayes Treatment Plant was placed into 55-gallon drums and sent to the OTC landfill. Waste currently is placed into 55-gallon drums and transported to either Building 293, 346, or 479. Waste is first shipped to one-year RCRA permitted container storage areas, Building 293 or 346, then transferred to Building 479, and ultimately transferred to an off-site permitted treatment, storage, and disposal facility.

### 3.3.2 Solid Waste/Landfill Management

As a result of the EBS document review and site investigation, four solid waste disposal/landfill areas have been identified. Wastes generated at the Red River Army Depot were disposed of in these landfills; however, none of these landfills are located on BRAC property. Table 3-3 describes each landfill area.

Table 3-3 LANDFILLS

LANDRILLS	LOCATION	DESCRIPTION	STATUS
Sanitary Landfill	Southeast of Geographic Area D	This was the sanitary landfill for the Red River Army Depot and the Lone Star Army Ammunition Plant. It began operation in 1973.	Closed
		Waste disposed included cardboard products, paper products, plastics, paint filters, infectious waste, glass, baghouse residue, sand-blast residue, and rags. The Red River Army Depot and the Lone Star Army Ammunition Plant sanitary waste was received at this landfill.	
Old Sanitary Landfill	East of Geographic Area D	This landfill was used as a sanitary landfill and was closed in 1973.	Closed
Wood Landfill and Wood Burning Pit	West of Geographic Area A	Waste wood products were disposed of in these locations. Citizens were allowed to rummage through these piles and remove scrap wood. The remainder was burned or compacted with heavy equipment.	Closed
Paper Product Landfill and Rubber Landfill	East of Geographic Areas C and D	Waste paper and rubber products were disposed of in these two separate landfills.	Closed

#### 3.3.3 Storage Tanks

Previous investigations have identified five USTs on BRAC property. Table 3-4 presents a storage tank summary.

Table 3-4 STORAGE TANKS

GEOGRAPHIC AREA	UST/AST	CAPACITY (Gallons)	LOCATION FACILITY	CONTENTS	STATUS
A	UST	110	Runnels Village	Diesel	Removed in 1993
В	UST	5,000	North of Building 162	Diesel	Removed in 1993
В	UST	12,000	South of Building 162	Unleaded Gasoline	Removed in 1993
В	UST	1,000	East of Building 175	Gasoline	Removed in 1993
С	UST	4,000	Southwest corner of Building 333	Diesel	Removed in 1992

### 3.3.4 Drinking Water Management

The Red River Army Depot's drinking water supply is normally obtained from Caney Creek Reservoir, which is located in the southeast corner of the installation. A second source is Elliott Creek Reservoir, which is connected to Caney Creek Reservoir by an 18-inch diameter pipeline. Water is pumped from the intake structure at Caney Creek Reservoir to the potable water plant X-1 via three transfer pumps located in Building 1191. The treatment plant, with total design capacity of three million gallons per day (MGD), serves both the Red River Army Depot and the Lone Star Army Ammunition Plant. Treated water is stored at the treatment plant site in three clear wells with capacities of 70,000, 175,000, and 500,000 gallons prior to distribution (Painter and Spitz 1985b).

The Red River Army Depot water distribution system consists mainly of cast iron or ductile iron pipelines ranging in size from 6-inch diameter to 14-inch diameter. A majority of these water mains were built in 1942. Several new distribution lines have been added at the Rubber Operation Facility (south of the Vehicle Test Track) and the Maintenance Modernization Facility (north of the groundwater storage). One 500,000-gallon elevated tank is located east of the golf course. The high water elevation of this tank is 526 feet above sea level.

### 3.3.5 Stormwater Management

A topographic ridge running east-west influences stormwater flow and divides the northern one-third of the Red River Army Depot from the rest of the installation. The majority of the stormwater flows predominantly south through numerous creeks and intermittent streams located across the installation. The creeks flow into Wright Patman Lake and the Sulphur River located approximately five miles south of the installation (Red River Army Depot 1994a). Stormwater north of the topographic ridge flows predominantly north through Panther Creek, an unnamed tributary, and various other creeks and ditches that flow into the Red River.

### 3.3.6 Sewage Treatment

The sanitary sewer system for the Red River Army Depot was constructed in the 1940s and consists of approximately eight miles of vitrified clay gravity sewer pipe. The system is comprised of the following:

- 7,530 linear feet (LF) of 12" diameter pipe
- 7,530 LF of 10" diameter pipe
- 21,830 LF of 8" diameter pipe
- 5,530 LF of 6" diameter pipe

The wastewater collection system also includes seven lift stations and 2,340 LF of force main, excluding the Hayes Lift Station and its force main (Painter and Spitz 1985a).

Sewage collected in the sewer system is pumped approximately 2-½ miles to the Lone Star Army Ammunition Plant collection system. The sewage is pumped by the Hayes Lift Station.

After the sewage enters the Lone Star Army Ammunition Plant collection system, it flows to the X-1 sewage treatment plant, which is located in the southcentral portion of the Lone Star Plant. No industrial wastes enter or are treated at this facility. This sewage treatment plant serves both the Red River Army Depot and the Lone Star Army Ammunition Plant, but it is operated by Red River Army Depot personnel. The design capacity of the plant is three million gallons per day.

#### 3.3.7 On-Site Housing

During the EBS site visit and document review, two housing facilities were identified on BRAC property. These areas are listed in Table 3-5 by Geographic Area.

Table 3-5
HOUSING FACILITIES

GEOGRAPHIO AREA	HOUSING FACILITY	DESCRIPTION
A	Runnels Village	This is a housing complex located northwest of the golf course. It consists of eight structures and is used for family housing.
В	Building 112	This is a barracks building located in the northeastern part of Geographic Area B. This building contains two floors of barracks (Army Reserve housing), a mess hall, and various administrative offices.

### 3.4 SENSITIVE ENVIRONMENTS

The Red River Army Depot is located within the Pineywoods Ecological Region, which is defined as pine-hardwood forests and is well suited for fish and wildlife resources. This environment fosters several mammal species, over 400 species of birds, and over 20 species of fish. Management of these resource lands within the boundaries of the Red River Army Depot is performed by the Land Management Section of the Red River Army Depot. The Red River Army Depot has cooperative agreements with the Texas Parks and Wildlife Department (TPWD) and the U.S. Fish and Wildlife Service for management of their fish and wildlife programs (Dames and Moore 1990).

Parts of the installation are within the 100-year floodplain according to the Special Flood Hazard Boundary Map, Bowie County, Texas, issued by the U.S. Department of Housing and Urban Development, August 14, 1978. None of the BRAC parcels is located within this floodplain.

There are no known state or federally listed, threatened, or endangered species nor critical habitat found on the Red River Army Depot. The Bald Eagle, which is listed as endangered by both

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federal and state agencies, can occasionally be observed at Elliott Creek Reservoir during the winter. The Bald Eagle is known to winter at Wright Patman Lake, which is approximately two miles south of the Red River Army Depot. Table 3-6 identifies the listed species and their probability of occurrence in Bowie County, Texas. There has never been an endangered species survey conducted at the installation (Dames and Moore 1990).

A comprehensive Cultural Resources Management Program for the Red River Army Depot began in 1984. The initial survey of prehistoric and historic archaeological resources on 4,153 acres of the Red River Army Depot began in 1988. The survey recorded a total of 52 archaeological sites. Of these recorded sites, none are within BRAC parcels; however, numerous buildings dating to the World War II era are approaching the 50-year age limit commonly considered necessary for historic status.

Table 3-6
LISTED SPECIES AND THEIR OCCURRENCE WITHIN BOWIE COUNTY, TEXAS

-		FEDERAL	STATE	CONFIRMED	PROBABLE
COMMON NAME	SCIENTIFIC NAME	STATUS.	STATUS"	SPECIES	SPECIES "
Black Bear	Ursus americanus		Е		X
Bald Eagle	Haliaeetus leucocephalus	E	E	X	
Interior Least Tern	Sterna antillarum athalassos	E	E	X	
Red-Cockaded Woodpecker	Picoides borealis	E	Е		X
Paddle Fish	Polyodon spathula		E	X	
Shovelnose Sturgeon	Scaphirhynchus platorynchus		E		X
American Swallow-Tailed	Elanoides forficatus	<del></del> -	T	X	
Kite	<u> </u>				
Wood Stork	Mycteria americana		T	X	
Bachman's Sparrow	Aimophilia aestivalis		T	X	<del>-</del>
Arctic Peregrine Falcon	Falco peregrinus tundrius	T	T		<del></del>
Texas Horned Lizard	Phrynosoma cornutum		T	X	_
Timber Rattlesnake	Crotalus horridus	<del></del>	T	X	
Northern Scarlet Snake <sup>a</sup>	Cemophora coccinea copei		T		
Creek Chubsucker	Erimyzon oblongus		T	X	
Blackside Darter	Percina maculata		T	X	

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## Table 3-6 (Continued)

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS <sup>(4)</sup>	STATE STATUS "	CONFIRMED SPECIES <sup>BI</sup>	PROBABLE SPECIES <sup>(0)</sup>
Blue Sucker	Cycleptus elongatus		T		X

Note: This list refers to known species within Bowie County.

There is no known survey conducted for Threatened/Endangered species on the Red River Army Depot or the Lone Star Army Ammunition Plant.

Source: U.S. Army Corps of Engineers, Natural and Cultural Resource Management Plan, 1994

<sup>&</sup>lt;sup>a</sup> E-endangered, T-threatened

b verified recent occurrence in Bowie County
c unconfirmed, but within general distribution pattern of the species

d unconfirmed, but at periphery of known distribution of the species

# Table 3-1 FACILITIES TO BE EXCESSED RED RIVER ARMY DEPOT, TEXAS

BUILDING NUMBER	APPROXIMATE SIZE (ACRES)	YEAR CONSTRUCTED	CURRENT USE
S-07	.09	1943	Chapel
11	.12	1987	Administrative Building
12	.09	1988	Morale and Welfare Building
34	.08	1987	Barracks
37	<del>                                     </del>	1963	Swimming Pool
38	.01	1969	Swimming Pool Maintenance Building
39	.01	1975	Pool Chlorinator
40	.08	1987	Barracks
41	-	1966	Tennis Courts
S-56	.06	1945	Thrift Shop
57	.10	1994	Child Care Center
57A	.01	1994	Playground
77	.09	1991	Golf Pro Shop
T80	.02	1942	Storage Building
M82	<del></del>		Storage Building
M83	-		Storage Building
M84	-		Storage Building
85	.31	1954	Officers' Club
85a		1994	Storage Shed
86		1970	Compressor Building
S-87	.01	1944	Storage Building
107	.12	1988	Administrative Building
112		1953	Mess Hall
116a to e	-	1985	Administrative Buildings
125	.03	1943	Maintenance Building
133	.31	1942	Allied Trades Building
135	.36	1942	Gymnasium
S-161	.45	1942	Vehicle Storage Area
162	.01	1942	Old Gas Station
S-163	.03	1963	Wash Rack
164	.10	1942	Print Shop
S-167	.06	1950	Operations and Maintenance Repair
170	.04	1942	Electric Maintenance Building
175	.25	1969	Administrative/Kitchen
176	.04	1942	Administrative Building
S-177	.01	1975	Storage Building
S-179	.01	1983	Storage Building
S-180	.01	1983	Storage Building
183	.02	1961	Radio Shop

TABLE 3-1 (Continued)

BUILDING	APPROXIMATE	YEAR	
NUMBER	SIZE (ACRES)	CONSTRUCTED	***************************************
230	•	1952	Natural Gas Booster Station
312	2.91	1986	Warehouse
319	-		Diesel AST for Building 319 Boiler
333	5.02	1986	Maintenance Building
333A	.09	1993	Hazardous Materials Storage Building
334A	.14	1993	Flammable Storage Building
342	.09	1990	Administrative Building
350	.02	1968	Break Room/Storage Building
388	.28	1942	Compressor Building
396	.01	1968	Compressor Shed
401	.42	1942	Maintenance Building
403	.03	1959	Compressed Gas Warehouse
405	.03	1977	Compressed Gas Warehouse
411	.48	1942	Sheet Metal Shop
413	.23	1942	Asbestos Storage Warehouse
S-414	.50	1951	Warehouse
421	1.19	1942	Warehouse
422	.06	1989	Electronic Maintenance Shop Building
423	.23	1942	Warehouse
423a	-	1995	Flammable Storage Building
424	.23	1942	Warehouse
428	-	1979	Flammable Storage Building
431	.69	1942	Administrative Building
432	.01	1943	Public Restroom
433	.80	1942	Industrial Building
443	.72	1942	Administration Building
469	.04	1985	Community Counseling Center
411	-	1942	Sheet Metal Shop Building
702	.12	1976	Family Housing
704	.23	1976	Family Housing
705	.10	1976	Family Housing
707	.10	1976	Family Housing
708	.04	1976	Family Housing
710	.09	1976	Family Housing
711	-	1966	Golf Course
712		1978	Picnic Area
S-713	.10	1942	Maintenance Building
714	.01	1979	Ceramics Building
715	.10	1976	Family Housing

TABLE 3-1 (Continued)

BUILDING NUMBER	APPROXIMATE SIZE (ACRES)	YEAR CONSTRUCTED	CURRENT USE
717	.10	1976	Family Housing
726	.05	1983	Wood Shop/Autocraft
S-727	.01	1982	Storage Building

#### 4.0 INVESTIGATION RESULTS

This section describes the results of the EBS investigation. It discusses:

- Sources of potential contamination that have been addressed in prior reports
- Sources of potential contamination that have not been addressed by previous investigations
- Adjacent properties that may be potential sources of contamination to the installation property
- Areas containing contamination substances not regulated by CERCLA (non-CERCLA)
- Remediation activities that have occurred
- Real property within the installation property that will be retained by the U.S. Army (reserve enclaves)

## 4.1 PREVIOUSLY IDENTIFIED SOURCES OF POTENTIAL CONTAMINATION

The following information was obtained from the Environmental Compliance Assessment System Report (Red River Army Depot 1995c).

## 4.1.1 Former Building 348 Spill Site (RRAD-33)

Former Building 348 was located immediately south of Building 333 within the maintenance area (Geographic Area C). The building housed paint stripping, surface treatment, and vapor degreasing operations utilizing chlorinated solvents and caustic solutions. Due to the chemicals used within the building, the concrete floor was damaged, which resulted in a release of chlorinated solvents to the soil beneath the building and the perched groundwater. Operations were moved to an alternate facility in 1992.

## 4.1.2 UST Removal, Building 162 (RRAD-51)

Building 162, a former gasoline station, was the previous location of two fuel tanks. It is located in the administration area in Geographic Area B. During Fiscal Year (FY) 1993, both USTs were removed along with associated contaminated soil. Groundwater monitoring wells (cluster

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## **INVESTIGATION RESULTS**

wells) were installed and quarterly monitoring was performed for four quarters. Groundwater sample results indicated that contamination was not present. Clean closure documenting TNRCC concurrence that all corrective action requirements had been completed was obtained on July 9, 1996.

#### 4.1.3 UST Removal, Building 333 (RRAD-52)

Building 333 is located within the maintenance area (Geographic Area C). A diesel storage tank located on the southwest side of this building was utilized for refueling armored vehicles after the rebuild process. Monitoring of tank volumes indicated fuel was being released from the tank. The tank and contaminated soil were removed in 1992. Confirmation sampling of soils was not performed; however, groundwater monitoring results indicate contamination in this area. Since this area is impacted by contamination from other sites, further remediation will be performed in compliance with the other site requirements. The Red River Army Depot is currently performing quarterly monitoring. This site is within the area currently investigated as Building 333 and former Building 348.

## 4.1.4 Building 433 Soils and Groundwater (RRAD-60)

Building 433 is located in the southwestern portion of the depot (Geographic Area D). This building previously housed rubber manufacturing and bonding operations for light tracked armored vehicle roadwheels and track blocks, including adhesive application booths, paint operations, vapor degreasing, blasting, and injection molding. Industrial operations ceased in the early 1980s, and the building is currently used for storage of accountable property.

A RCRA Facility Assessment (RFA) has been completed, and volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals have been identified as contaminants of concern. A visual inspection has identified blasting media in the remaining exhaust ducts located on the exterior of the building. An RFI is underway.

## 4.2 POTENTIAL CONTAMINATION AREAS IDENTIFIED DURING THE EBS INVESTIGATION

During the EBS site inspection, additional areas potentially requiring environmental evaluation were identified. These are summarized in Table 4-1.

Table 4-1
POTENTIAL CONTAMINATION AREAS

INSTALLATION BUILDING	GEOGRAPHIC AREA	BASIS	EBS SOURCE OF EVIDENCE
S-713	A	During the EBS site visit, oil staining and stressed vegetation were identified at the wash station used at the golf course maintenance building (Building S-713). Some oil staining was observed near a shed adjacent to this facility. No documentation was obtained characterizing the environmental condition of this parcel.	Visual Inspection
	В	Approximately 200 wheeled vehicles (M577s and M548s) are stored on a grass area in the northwest portion of Geographic Area B, north of Buildings 11 and 12 and to the east of Building 107. Evidence exists of a chronic problem of parked vehicles leaking POLs to the soils in this area. As a result, the leaking vehicles are removed and stained soils and vegetation are removed as POL-contaminated soil. Generally, successful remediation of the POL-contaminated soil is confirmed through visual inspection; however, confirmation samples are collected and analyzed at locations where larger spills are observed.	Visual Inspection of Buildings 11, 12, 107, Interviews
133	В	Activities conducted in Building 133, the Allied Trades Building, include maintenance and repair of pneumatic tools, electric motor rewinding, non-industrial machine shop work, and rubber and rubberized products cleaning. An exemption to the drying ovens air permit was required and granted by the TNRCC in 1994. This exemption indicates that this air release was greater than state air emission limits; however, it was below any limit that required any remedial action.	Visual Inspection Building 133

INSTALLATION BUILDING	GEOGRAPHIC AREA	BASIS	EBS SOURCE OF EVIDENCE
170	В	The former radio shop, Building 170, is a storage facility for electronic parts. Building 170 was utilized as a radio repair facility beginning after construction in 1942 and ending in 1995 when the radio operations were moved to Building 164. The facility also housed typewriter repair operations for a short period of time. Currently, the facility is not in use. An attached shed was constructed in 1967. This facility has always housed a standby diesel-powered generator. During the EBS site visit, numerous lithium batteries and electronic equipment were observed within this building. Small areas of suspected POL staining were observed on the floor, and two large lithium batteries appeared to have been leaking. Secondary containment was observed around the batteries, and no leakage was observed on the floor.	Visual Inspection Building 170, Interviews
S-163	В	Building S-163 is a vehicle maintenance building with indoor and outdoor wash racks. This area is located next to the M'IE repair shop (Building S-161). During the EBS site visit, the following environmental concerns were observed: an indoor floor drain for the indoor wash rack had surface staining; a surface stain is associated with the boiler; and there are several 55-gallon plastic drums of phosphate-based soap with staining around them. The wash rack was cleaned, and all materials were disposed of at DRMO. No documented evidence exists characterizing the stained area or the presence of contaminants within the drain system. Building S-163 is scheduled to be demolished according to the BRAC 95 Preliminary Report of Excess.	Visual Inspection Building S-163, Interviews
S-167	В	Building S-167 is a vehicle storage facility. Numerous drums of used oil, antifreeze, brake shoes, and rags are stored in this facility. Several spills and staining with suspected POL derivatives were observed around the drums. No documented evidence exists characterizing the environmental condition of this parcel. Building S-167 is scheduled to be demolished according to the BRAC 95 Preliminary Report of Excess.	Visual Inspection Building 167
Pesticide Pit Drainage Ditch	, <b>В</b>	Interviews with installation personnel, conducted during the EBS site visit, suggest that pesticide contamination from the former pesticide pit located at the corner of Ammunition Drive and Arkansas Avenue may be influencing a downstream drainage ditch west and northwest of the pit. An RFI has been conducted on this ditch; PCBs and pesticides have been detected at elevated levels, and remediation is planned.	Interview with Steve Smith

INSTALLATION BUILDING	GEOGRAPHIC AREA	BASIS	EBS SOURCE OF EVIDENCE
312	С	At Building 312, the automated storage and retrieval building, military vehicle parts, batteries, oils, and hydraulic fluid are stored. A sump, associated with the battery and forklift charging area, is located in the southwest corner of the building. This sump is pumped out regularly (twice a year), and battery acid leaks are pumped out upon identification. However, maintenance records for the sump are unavailable, and its present condition is unknown.	Visual Inspection, Interviews
319	C	The pipeline from AST No. 319 to Building 319 was installed during the 1950s and capped in 1990. This AST formerly provided fuel oil to a boiler in Building 319. Based on the age of the pipeline and its lack of leak detection devices, release of petroleum products to soils may have occurred. No documented evidence was obtained to characterize the environmental condition of this parcel.	Visual Inspection, Interviews
333A	C	Building 333A is a corrosive materials storage building located east of the oil separation lagoon. Phosphoric acid, defoamers, chromic acid, boric acid, aluminum chloride, benzyl alcohol, acetic acid, aluminum paint strippers, and zinc-plating solutions are stored in this building. Stressed vegetation was evident near the delivery area.	Visual Inspection
334A	С	Building 334A is a flammable materials storage building. This building stores several types of materials such as oils, paints, and solvents. The interior storage of these materials is well-controlled to handle spills; however, these materials are also routinely stored outside the building on pallets and in drums. No documentation of a past release was observed.	Visual Inspections
350	С	Building 350 is a break room and former nickel-cadmium battery repair shop located in the southern part of Geographic Area C. Outside the shop, hazardous materials were found in an unlocked flammable materials storage cabinet, and hazardous materials containers were discarded in a bin nearby. A sump located on the west side of the building was still in place, and canisters of unknown gases were noted nearby. Maintenance records for the sump and its present condition are unknown. No documented evidence was obtained to characterize the environmental condition of this parcel. This sump is a potential source of POL contamination in soil.	Visual Inspection, Interviews, Mid- EBS meeting

INSTALLATION	GEOGRAPHIC		EES SQURGE	
BUILDING	AREA	BASIS	OF EVIDENCE	
388	С	Building 388, the Compressor House, is located south of Building 396. Storage of paint, hydraulic fluid, and aircraft paint thinner were observed within Building 388. An old sink used for the washing of military mechanical/vehicle parts is located on the north side of the building. The drain from this sink was noted to pass through the wall and discharge directly to the ground. Solvents and other potential contaminants were used to clean parts in this sink. These solvents and other contaminants may have been released directly to the ground surface. No documented evidence was obtained to characterize the environmental	Visual Inspection, Interviews	
,		condition of this parcel.		
396	С	Building 396 is a compressor shed located along the northeastern boundary of Geographic Area C. A small area of oil was observed on the floor beneath the compressor within the building; however, no staining was observed on the ground surface outside the building. A secondary containment system was in place. No floor drains were observed in the area of the oil, and the amount of oil is assumed to be below reportable quantity limits.	Visual Inspection, Interviews	
Vehicle Storage -		Evidence supports a chronic problem of parked vehicles	Visual Inspection,	
Northwest Corner of Area C		(M577s and other wheeled vehicles) leaking POLs to the soils in this area. As a result, the leaking vehicles are removed and the stained soils and vegetation are removed as POL-contaminated soil. Generally, successful remediation of the POL-contaminated soil is confirmed through visual inspection; however, confirmation samples are collected and analyzed at locations where larger spills are observed.	Interviews	
401	D	Building 401 is the shop building for final testing of Bradley tanks, M113 family of tracked vehicles, multiple launch release system, and 813 series trucks. Following inspection of repairs, these vehicles are staged at Building 320 prior to shipment. This building contains hazardous waste storage areas for waste oils and antifreeze. Floor drains were noted near bay number 3 and robotics are used for the high pressure denuding process conducted at bay number 5. A sump was noted in bay number 1, located in the southwest corner of the building. Maintenance records for the sump and its present condition are unknown.	Visual Inspection, Interviews	
411	Ď	Building 411 is currently a sheet metal shop. During the 1940s and 1950s, this building was used to maintain locomotives. During construction of the turret punch press in 1994, maintenance operator pits were encountered. An employee interview indicated that old vats that may have contained oil used for annealing operations were centrally located within this facility. The annealing oils within these vats are assumed to have since been removed.	Visual Inspection, Interviews	

INSTALLATION BUILDING	GEOGRAPHIC AREA	BASIS	EBS SOURCE OF EVIDENCE
S-414	D	Building S-414, which is used as a warehouse, contains a	Visual
		soil floor and has historically been considered a "catch all"	Inspection,
		building for equipment and supplies received by the Red	Interviews
		River Army Depot. The past storage practices are unknown	
		and the soil floor does not provide any spill containment.	
		Storage for longer than one year of diesel engines from	
		M113 tanks and used steam cleaners containing diesel fuel	
		were noted. No previous documentation characterizing this	
		parcel were obtained.	

## 4.3 ADJACENT OR SURROUNDING PROPERTY SOURCES OF POTENTIAL CONTAMINATION

Based on information gathered and reviewed for the EBS, there is limited potential for facilities or commercial operations surrounding the Red River Army Depot to cause environmental contamination of the Red River Army Depot property. The evaluation of potential sources of contamination focuses on adjacent property that is situated within the installation boundary (reserve enclave).

## 4.3.1 **Building 345**

Building 345 is located directly east of Building 333 in Geographic Area C (Figure 1-1). This building is a two-level concrete structure that encompasses over 300,000 square feet and was built in 1942. The building lies within the center of the industrial area at the installation. The main mission of the facility is rebuilding combat vehicles and trucks. Two areas within the first level, the North Wash Rack and the Electroplating Shop, are currently in operation and are the areas that have been investigated as part of an RFI for SWMU Building 345 (Red River Army Depot 1995m).

The North Wash Rack consists of approximately 6,000 square feet of usable space. The former purpose of this area was to chemically clean vehicle, engine, and mechanical parts once they were dismantled. The process involves submersing the parts into a series of water and chemical

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rinse vats to clean and recondition them for extended use. A large quantity of solvents was used in this area for many years; the quantity released to the environment is unknown.

The area of concern in the Electroplating Shop consists of approximately 2,000 square feet of space. The purpose of this shop is to provide chrome, zinc, nickel, cadmium, and other miscellaneous plating operations for mechanical and engine parts. This process is also used in the reconditioning of combat vehicles and trucks.

The concrete floor slabs in the North Wash Rack and Electroplating Shop areas were once in poor condition. Most of the floor slabs have since been repaired and sealed with a chemical resistant sealant. The RFI focused on the past usage of solvents (e.g., trichloroethylene [TCE] and 1,1,1-TCA) and possible metals contamination.

#### 4.3.1.1 RFI Results - Soil

The soils beneath the North Wash Rack and Electroplating Shop in the northwest corner of Building 345 are heavily contaminated with several VOCs. These areas serve as the primary source of contamination to the soil and groundwater for this site. TCE is the primary contaminant at this site. The plume of soil contamination originates at the northwest corner of Building 345 and encompasses an area to the northwest, toward Geographic Area C. TCE has fully penetrated the weathered shale and is present in the unweathered shale to a total depth of approximately 60 to 70 feet (Red River Army Depot 1995l).

In addition, VOCs, primarily TCE, have been released to the soil and the groundwater west of Building 345 from discharges to the former ditches. Contamination resulted from the operations at Building 345 and perhaps other buildings in the area. The most likely method of release to the ditches would have been by spills that flowed over the pavement to the ditches. These two ditches then flowed west toward Panther Creek. The most heavily contaminated soil was found in the former ditch on the southeast side of Building 333. The vertical extent has not been identified because TCE concentrations were still detected at the maximum sampling depth of 60 feet. The possible sources of contamination include an old filled in ditch in the area and the trenches from phosphate, chromate, and storm sewer lines originating from Building 345.

#### 4.3.1.2 RFI Results - Groundwater

TCE is the most prevalent constituent found in groundwater at the site. TCA, 1,1-dichloroethene (1,1-DCE), and 1,1-dichloroethane (1,1-DCA) were also detected in groundwater. Groundwater in the general area flows to the west or northwest, toward Geographic Area C. The concentrations of VOCs in the groundwater are much higher than in the soil.

Nickel was also detected in concentrations significantly above background levels in groundwater at the site. The vertical extent of contamination is limited to the upper portion of the weathered clay shale; the horizontal extent of contamination has impacted Geographic Area C.

#### 4.3.2 Pesticide Pit Area

The Pesticide Pit Area is located approximately 2,000 feet west of the facility's Wastewater Treatment Area, east of Geographic Area B (Figure 1-1). This site is located north of Arkansas Avenue and is located adjacent to former Building 265. This building was demolished in September 1993. Railroad tracks are located west of the Pesticide Pit Area, and two small, unnamed drainage ditches extending north and south are located on either side of the railroad tracks. Buildings 279 and 280 are located north of the site, and Building 290 is located east of the site.

The Pesticide Pit Area was used for storage and mixing of insecticides from 1967 to 1972. Reportedly, an unlined pit, 4 feet square by 8 feet deep, was reported to have been used for dumping rinsate containing insecticides. The pit was reportedly filled with pea-sized gravel (Mariah Associates 1994a). The USACE indicates that there is no documentation of the location of this pit or a cap/cover placed over it. Previous site visits did not identify any settled or elevated (capped) areas around Building 265 that might indicate the pit's location. Pea-sized gravel, however, was found at the ground surface south of the building (Mariah Associates 1994a). The pit location has not been clearly established.

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The groundwater, soil, sediment, and surface water at the site have been investigated as part of an RFI for the Pesticide Pit (Red River Army Depot 1993a). In addition, a Baseline Risk Assessment was performed by Mariah Associates, Inc. in 1994.

### 4.3.2.1 RFI Results - Soil

Several pesticides and arochlor-1260 were detected in the soil at this site. An exact location for the pesticide pit was not determined. The maximum vertical extent of contamination at this site is about ten feet, with the majority of the contamination found at a depth of 0 to 3 feet. The railroad tracks appear to act as a barrier for the horizontal extent of contamination to the south, west, and northwest. The horizontal extent has not been defined to the north and east due to these barriers. Based on the defined horizontal and vertical extents, it appears that the Pesticide Pit Area soil contamination does not impact BRAC property.

## 4.3.2.2 RFI Results - Groundwater

RFI results identified chlordane and lindane as contaminants of concern. RFI data were used to generate plume maps for chlordane and lindane. To further identify the rate of migration, a determination of the mean hydraulic conductivity of 4.2 x 10<sup>-6</sup> centimeters per second (cm/sec) was calculated for the aquifer. Based on the chlordane and lindane plume dimensions and an average groundwater velocity of 1.46 feet per year (Red River Army Depot 1993a), it appears that the Pesticide Pit Area groundwater contamination does not impact BRAC property.

#### 4.3.3 Wastewater Treatment/Panther Creek Area

The Wastewater Treatment (WWT)/Panther Creek Area is located within the facility's industrial area, west of Building 333 (Geographic Area C) (Figure 1-1). Texas Avenue runs north of the area, Panther Creek is located to the west, and Building 333 is located to the east. Panther Creek flows from the WWT/Panther Creek Area into Geographic Area C.

According to the *RFI Final Report* prepared by the USACE in April 1992, during the 1940s through 1960s, emphasis at the Red River Army Depot was placed on production of combat vehicles being rebuilt for the war effort. Due to diverse use of the maintenance shop area,

various petroleum products and cleaning compounds, along with organic solvent degreasers, were released into the environment. Prior to construction of the WWT lagoons, discharges from the vehicle maintenance area were allowed to drain into Panther Creek via the ditch south of the South Oil Removal Lagoon. Wastewater contained residual oil and grease, as well as other constituents.

Prior to 1968, an antiquated oil removal and collection system operated in the ditch for several years and removed some of the petroleum products from the effluent wastewaters. In 1968, an oil removal system and a concrete dam were constructed. Petroleum-contaminated wastewaters were diverted to a pump house located immediately south of the dam, where oil and sludge were separated from the water and conveyed to an oil burning pit/sludge drying bed. The remaining water was discharged to the ditch downstream of the dam.

Two oil skimming lagoons currently in use were constructed in the mid-1970s. Stormwater flows through the lagoons, and any residual oils are skimmed and recovered. The two lagoons are regulated under an NPDES permit. Current operations in Building 345 and past operations in Building 348 may have contributed contaminants to soils and/or groundwater in the WWT Area via spills or other inadvertent releases.

## 4.3.3.1 RFI Results - Soil

Metals have been detected at low concentrations in the soil beneath Panther Creek to a depth of 4 feet. The south ditch is contaminated with high concentrations of VOCs. The vertical zone of contamination for the VOCs begins in the sediments and extends to depths greater than 15 feet in some areas. Thus, the groundwater has been contaminated from the releases to Panther Creek (USACE 1993b). It appears that the soils do not impact BRAC property.

## 4.3.3.2 RFI Results - Groundwater

Groundwater monitoring wells were installed in June and July 1990, June 1991, January 1992, and January to February 1993. These wells were purged and sampled in February, March, May, August, and November 1991; January 1992; and March 1993. Soil borings were drilled and

sampled in September 1990; March to April 1991; and March 1993. Thirteen borings were drilled along Panther Creek to determine the horizontal and vertical extent of contamination.

#### 4.3.3.3 RFI Results - Sediments

Sediment samples were collected from both the north and south lagoons, the south ditch, and from Panther Creek. VOCs and metals have been released to Panther Creek from the WWT and former operations at Building 345. It appears that the sediments do not impact BRAC property (USACE 1993b).

#### 4.3.3.4 RFI Results - Surface Water

Surface water samples were obtained from the south lagoon, the south ditch, and Panther Creek. Metals are being released to Panther Creek from one or a combination of the following: groundwater, sediments, and/or seepage from the lagoons (USACE 1993b). Concentrations of these metals exceed primary drinking water standards. In addition, VOCs are being released to the surface water from the sediments and/or groundwater. TCE has been detected at concentrations above drinking water standards in waters collected between Texas Avenue and the north boundary line. It appears that the surface water may impact BRAC property.

#### 4.3.3.5 Baseline Risk Assessment Results

Based on the RFI results, the major chemicals of concern identified include chloroform, chromium, 1,1-DCE, 1,4-dichlorobenzene (1,4-DCB), TCE, and vinyl chloride. The future land use scenario assumes that the site will continue to operate as it does today. Consistent with results of the baseline risk assessment, the top three feet of soil in the south ditch have been removed to reduce current VOC risks and reduce the surface water concentrations. Based on results of the baseline risk assessment, further remediation of sediments, other soil areas, surface water, and groundwater contamination may be considered.

## 4.3.4 Sanitary Sewer Lift Station

Building 113, a small sanitary sewer lift station located on reserve enclave property in the eastern portion of Geographic Area B, contains a diesel fuel AST with a capacity of approximately 100

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gallons. The AST is located to the south of the building. A documented release of diesel fuel has occurred at this site. All corrective actions have been completed; however, no documentation was obtained to confirm complete removal of contaminated soils.

## 4.3.5 Oil Storage Building

Building 168, an oil storage building on reserve enclave property, consists of an enclosed concrete building to the east and a covered concrete pad to the west. During the EBS site visit, staining of the soil was noted outside the building. In addition, it is assumed that drums of oil were stored here at one time. No documented evidence was obtained to characterize the environmental condition of this parcel. Building 168 is scheduled to be demolished according to the BRAC 95 Preliminary Report of Excess. The land will remain as a reserve enclave.

#### 4.3.6 Diesel Fuel Station

Building 172 was a diesel fuel station. During the EBS site visit, suspected diesel fuel was observed over the entire floor surface inside this building. Two clean 55-gallon drums associated with the petroleum handling system were also observed outside the building. Building 172 is scheduled to be demolished according to the *BRAC 95 Preliminary Report of Excess*. The land will remain as a reserve enclave.

Reportedly, one UST was removed previously (prior to 1990); however, no documentation was available. Another UST may be present at this site.

## 4.4 NON-CERCLA RELATED ENVIRONMENTAL, HAZARD, AND SAFETY ISSUES

The following summarizes the results of the records review pertaining to non-CERCLA contamination substances as well as any documented hazard or safety issues.

#### 4.4.1 Asbestos

A building survey for ACM was performed in 1995, and a computer printout was supplied by the Red River Army Depot. Buildings within BRAC parcels which have been identified with ACM from this survey are qualified for asbestos. Buildings constructed prior to 1985, which have not been surveyed for asbestos, were assumed to contain ACM. A complete listing of qualified

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buildings is provided in Table 5-1b. Asbestos abatement has occurred at all areas where friable asbestos was identified.

#### 4.4.2 Lead-Based Paint

During the EBS site visit and document review, it was identified that LBP was used on numerous buildings within the BRAC properties on the Red River Army Depot. These buildings are identified in Table 5-1b. In addition, it has been identified that the drip zones around these buildings may be a potential source of soil contamination. No known LBP abatement has been conducted at the Red River Army Depot.

## 4.4.3 Polychlorinated Biphenyls

During the EBS site visit and document review, one area was identified as containing transformers with PCB concentrations possibly greater than the 50 ppm BRAC limit. This area is identified as follows:

• Substation 230 in Geographic Area C - This substation was inspected during the EBS site visit and was found to contain four transformers. As of May 10, 1995, no transformers on the Red River Army Depot contained PCBs greater than 50 ppm (Red River Depot 1995h).

#### 4.4.4 Radon

During the EBS site visit and through interviews conducted with installation personnel, it was determined that a radon survey has been conducted and that radon does not appear to be a concern on the Red River Army Depot. The radon survey report was not available at the time of the EBS site visit.

## 4.4.5 Unexploded Ordnance

During the EBS site visit and document review, no areas were identified as containing unexploded ordnance. Even though the storage and demilitarization of ordnance is a mission for

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the Red River Army Depot, the areas where this activity is conducted are not part of the BRAC property.

#### 4.4.6 Radionuclides

The Red River Army Depot currently maintains a NRC license for tritium, nickel-63, americium-241, and depleted uranium. A brief description of each license and the possible storage of these materials within BRAC parcels is provided below.

The NRC license for tritium (12-00722-06) is for illuminated devices used on fire control for howitzers and mortars and the muzzle reference sensor used on tanks. This license was issued on November 16, 1988 to the U.S. Army, Marine Corps, and the Navy and expired on April 30, 1994. The license covers up to 950,000 curies with a depot storage limit of 10,000 curies per room or area delineated by 10-foot aisles, with a tritium monitor (Nuclear Regulatory Commission [NRC] 1994b). This material may have been stored within Building 443. Radiation commodities were stored at an unknown location within this building in 1967. An existing vault is the likely storage location.

The NRC license (BML-12-00722-14) is for a nickel-63 source within a chemical agent monitor. This piece of equipment is an agent vapor monitor capable of detecting, identifying, and providing relative concentration of nerve and mustard agent. This license covers up to 1,000 curies of nickel-63, not to exceed 12 millicuries per source. The date of issue and expiration of this license is unknown (NRC no date). This material may be contained within chemical alarm detectors located in the chemical/biological/radiation room located in the basement of Building 112. This material may also have been stored in Building 443. Radiation commodities were stored at an unknown location within this building in 1967. An existing vault is the likely storage location.

The NRC license for americium-241 (12-00722-13) is for an americium-241 source within a chemical agent monitor. The date of issuance of this license is unknown. This source contains a radioactive source of 250 microcuries. The license limits the maximum amount of americium-241 possessed at any one time to 25 curies or a maximum of 100,000 source components (NRC

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1994a). This material may be contained within chemical alarm detectors located in the chemical/biological/radiation room located in the basement of Building 112. This material may also have been stored in Building 443. Radiation commodities were stored at an unknown location within this building in 1967. An existing vault is the likely storage location.

The Red River Army Depot has submitted amendments to a NRC license (SUC-1380) for storage of depleted uranium on October 26, 1995. This license renewal includes the Red River Army Depot as a storage installation with a capacity of 10,000,000 kg. The source of this depleted uranium is largely from Staballoy components and the decommissioning of facilities described in the *Decontamination/Decommissioning Plan* dated June 1986 (NRC 1996). No information documenting storage of this material was obtained for buildings within the BRAC parcels.

Radium-226 and thorium have also been identified within BRAC parcels. No documentation of a NRC license for these materials was obtained during the EBS report. Equipment containing radium-226 is stored in the northern portion of Building 421.

Equipment containing thorium fluoride is stored within the southern portion of Building 421. Sights are also stored within Building 431. Excessive heat from a fire in this building in 1994 may have created a release of krypton-85.

## 4.4.7 Pesticides Usage

Herbicides are applied by the Facilities Engineering Division personnel using three-gallon hand sprayers, trailer-mounted sprayers, and railroad section car-mounted sprayers. Areas which require weed and brush control include the following: golf course, electric sub-station, transformer cages, loading ramps and docks, drainage ditches, parking lots, railroad ballast, railroad right-of-way, open storage pads in the ammunition storage area, bridge abutments and piers, foundations of buildings, security fences, and igloos. The eradication and control of noxious weeds and poisonous plants is practiced on a regular basis at the pistol range, rifle range, recreation areas, and the bivouac area of the installation. Applications within the developed areas of the installation occur on an as needed basis (Dames and Moore 1990). No

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documentation exists of a release of pesticides occurring on any portion of the BRAC parcels that are subject to lease or transfer.

The DOD has a Memorandum of Agreement with the Texas Department of Agriculture regarding the certification of pesticide applicators (Texas Department of Agriculture 1990). Uncertified herbicide and pesticide controllers work under the direct supervision of a trained, certified employee. Certification is required every three years by the Academy of Health Services, U.S. Army, Fort Sam Houston, Texas or the Texas Structural Pest Control Board in Austin, Texas (Dames and Moore 1990).

#### 4.5 REMEDIATION EFFORTS

The following information was obtained from the Environmental Compliance Assessment System Report (Red River Army Depot 1995c).

## 4.5.1 Former Building 348 Spill Site (RRAD-33)

Former Building 348 was demolished and all debris was properly disposed of. Four feet of soil with 1,1,1-TCA and heavy metals contamination beneath the footprint of the building was removed. In addition, approximately one foot of soil with metal contamination was removed from the north and east side of the footprint of the building. An RFI was conducted to identify the extent of contamination during FY95.

Currently, the Red River Army Depot is awaiting approval of the RFI by TNRCC. An approval with associated comments, if required, is necessary before funding for the risk assessment will be made available. Following approval of the risk assessment, a corrective measures study will be performed, and, if necessary, remedial design and action will follow.

## 4.5.2 UST Removal, Building 162 (RRAD-51)

During FY93, two USTs were removed along with associated contaminated soil. Groundwater monitoring wells (cluster wells) were installed, and quarterly monitoring was performed for four quarters. No benzene, toluene, ethylbenzene, and xylene (BTEX) was detected.

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Clean closure was obtained from TNRCC on July 9, 1996. The installation plans to plug the three existing cluster wells, and Building 162 is scheduled for demolition.

## 4.5.3 UST Removal, Building 175

Building 175 is located in Geographic Area B. The western portion of this building is used by NAF for administrative services and the eastern portion is a cafeteria. A 1,000-gallon UST containing unleaded gasoline was removed from the east side of this building. Evidence that the tank had leaked was not present. The site is currently awaiting closure approval from TNRCC.

### 4.5.4 UST Removal, Building 333 (RRAD-52)

A UST and associated contaminated soil (formerly containing diesel) was removed during FY93. The tank had leaked, and contaminated soils were removed. Shallow isolated groundwater contamination is present in the proximity of the previous location of the tank. The Red River Army Depot is currently performing quarterly monitoring.

## 4.5.5 Building 433 Soils and Groundwater (RRAD-60)

An RFA has been completed, and an RFI is currently underway. Phase 1 sampling included collection of soil samples outside of the building and in the drainage ditches adjacent to the building. Phase 2 of the RFI will consist of collecting additional soil samples to identify the extent of soil contamination. Phase 3 of the RFI will consist of the installation of groundwater monitoring wells to determine if groundwater at the site has been impacted.

Visual inspection has identified media in the remaining exhaust ducts located on the exterior of the building. The blasting media and any contaminated soil or sediments identified in the RFI that pose a threat to human health and/or the environment will be removed.

A risk assessment to justify alternate cleanup levels will be performed and will be based on previous studies at the BB-area, which housed similar operations. A corrective measures study may also be performed, and, if necessary, remedial design and remedial action will follow.

A summary of past, current, and future remediation efforts is presented in Table 4-2. This table also includes some pertinent information from Section 4.1, including contaminants and affected media for each site. Because no future remedial actions are anticipated for the Soil Spoils Area, it is not discussed in this section; however, it is included in the table.

Table 4-2
PAST, CURRENT, AND FUTURE REMEDIATION EFFORTS

AREA	CONTAMINANTS	AFFECTED MEDIA	PAST REMEDIAL ACTIONS	CURRENT STATUS	FUTURE ACTIONS
Former Building 348 Spill Site	Chlorinated solvents, heavy metals	Soil, groundwater	Building demolished, removal of soil at and near building footprint, RFI	Waiting for RFI approval by TNRCC	Risk Assessment, corrective measure study
UST Removal, Building 162	Total recoverable petroleum hydrocarbon (TRPH), heavy metals	Soil, groundwater	Two tanks removed, soil removal, groundwater monitoring	Waiting for UST closure, continued groundwater monitoring	Plug wells
UST Removal, Building 333	TRPH, heavy metals	Soil	Diesel tank removal, soil removal	Groundwater monitoring	Risk Assessment
Building 433 Soils and Groundwater	VOCs, heavy metals, SVOCs	Soil, sediments, groundwater	Source removed	RFI Phase 1 - soil and sediment sampling	Risk Assessment, RFI Phase 2 and 3 - soil sampling and groundwater monitoring

#### 4.6 RESERVE ENCLAVES

The Red River Army Depot encompasses a total of 19,400 acres. A total of approximately 576 acres have been identified as BRAC property to be excessed by transfer or lease. The remaining 18,824 acres will be retained by the Red River Army Depot as a reserve enclave.

#### 5.0 ENVIRONMENTAL CONDITION OF THE PROPERTY AREA

This section presents the parcelization of the BRAC property in accordance with the criteria described in the CERFA guidance and the DOD BCP Guidebook (DOD 1993).

#### 5.1 PARCEL DESIGNATIONS

Based on a review of installation documents; federal, state, and local records; and a site visit including installation personnel interviews and visual inspections of the installation property and adjacent properties, Woodward-Clyde divided the Red River Army Depot into BRAC parcels that represent the environmental condition of the property area. The BRAC parcels and corresponding categorizations are identified in Table 5-1a and on the CERFA maps, Figures 5-1 through 5-3. Areas containing non-CERCLA contamination substances are identified and delineated separately as qualified parcels and are presented in Table 5-1b. Qualified parcels overlay all environmental condition of the property categories (Categories 1 through 7). Parcels are labeled as described in Section 1.3. A 25-acre grid coordinate system is overlaid on the CERFA map to facilitate the parcelization discussion by geographically locating the various parcels.

Parcel boundaries are drawn using the best available information on the extent of contamination and do not follow map grid lines. Small point sources of contamination or storage, such as USTs, were delineated by circular 0.25-acre parcels centered on the source, as stipulated in DOD guidance. For consistency and to facilitate the summation of acreages, parcel acreages were calculated to two decimal places using the digitized map (Figure 5-1) and AutoCad 12. This method is not meant to imply an accuracy to one one-hundredth of an acre.

### 5.1.1 Category 1 Parcels

Woodward-Clyde's survey and subsequent parcelization of the Red River Army Depot property identified 4 parcels, totaling approximately 514 acres, as Category 1 parcels. The Category 1 parcels and locations on Figures 5-1 through 5-3 are described in the following sections.

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## **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

## BRAC Parcel Number and Label 1(1) CERFA Map Location 19,36

This parcel is associated with the majority of the surface area within Geographic Area A. There has been no documented storage of hazardous substances or petroleum products; nor has there been release, disposal, or migration from an adjacent property of hazardous substances or petroleum products within the identified area. The routine application of pesticides at the golf course was conducted by a licensed applicator.

## BRAC Parcel Number and Label 5(1) CERFA Map Location 25,37

This parcel encompasses the majority of the surface area of Geographic Area B. This parcel contains Buildings 116 A-E, 11, 12, 107, 176, and 175 (administrative), Building 112 (housing), Building S-07 (chapel), Building 135 (gym), Buildings 179, 180, and S-177 (storage), and Building 183 (radio repair shop). No evidence exists to conclude that storage of hazardous substances or petroleum products has occurred; nor has there been release, disposal, or migration from an adjacent property of hazardous substances or petroleum products within the identified area.

Buildings S-179 and S-180 are scheduled to be demolished according to the *BRAC 95 Preliminary Report of Excess*.

## BRAC Parcel Number and Label 28(1) CERFA Map Location 28,37

This parcel is associated with the northern portion of Geographic Area C. There has been no documented storage of hazardous substances or petroleum products; nor has there been release, disposal, or migration from an adjacent property of hazardous substances or petroleum products within the identified area.

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#### **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

#### BRAC Parcel Number and Label 35(1) CERFA Map Location 30,36

This parcel is associated with Geographic Area D. There has been no documented storage of hazardous substances or petroleum products; nor has there been release, disposal, or migration from an adjacent property of hazardous substances or petroleum products within the identified area.

#### 5.1.2 Category 2 Parcels

Woodward-Clyde's survey and subsequent parcelization of the Red River Army Depot property identified 11 parcels, totaling approximately 3.9 acres, as Category 2 parcels. The Category 2 parcels and locations on Figures 5-1 through 5-3 are described in the following sections.

#### BRAC Parcel Number and Label 2(2)HS CERFA Map Location 25,35

This parcel is associated with Geographic Area A (the swimming pool and its maintenance facilities). Building 38 is the bath house adjacent to the swimming pool (Facility 37). Building 38 stores chemicals for pool chlorination and cleaning (muriatic acid). Pipelines run between this building and the swimming pool. No documented evidence exists to conclude that any release, disposal, or migration of a hazardous substance has occurred.

#### BRAC Parcel Number and Label 3(2)PS/HS CERFA Map Location 21,35

This parcel is associated with the automobile and woodworking skill center (Building 726), which is located within Geographic Area A. This building stores solvents, degreasers, paints, and used oils (e.g., xylenes, toluene). During the EBS site visit, hazardous waste drums and flammable materials were identified inside and outside of this building. No documented evidence exists to conclude that any release, disposal, or migration of a hazardous substance has occurred.

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#### **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

#### BRAC Parcel Number and Label 8(2)PS/HS CERFA Map Location 23,36

This parcel is associated with Building 133, which is located within Geographic Area B. Building 133 originally was constructed as an inert ammunition storage warehouse but was never used as such because of a mission change during the early 1940s. Prior to 1960, the building was used for "records holding." From 1960 to the present, allied trades operations like tool repair, woodworking, and light machine shop operations have been located within the facility. Beryllium tools were made within the machine shop for ammunition operations. Past operations also included cabinetmaking and metal furniture repair. A drying oven is currently in operation within the facility as a part of the electric motor rewinding shop. Emissions from this oven qualify for standard exemptions under TNRCC guidelines. As a result of the rubber cleaning operations, storage of POL and paints were observed during the EBS site visit. No documented evidence exists to conclude that a release, disposal, or migration of hazardous substance has occurred.

#### BRAC Parcel Number and Label 11(2)PS/HS CERFA Map Location 24,36

This parcel is associated with Building 164, the former print shop, which is located in Geographic Area B. This building was utilized as a carpenter shop between 1942 and 1959. Operations included building wood pallets and shipping containers. The facility was converted to a print shop in 1959 and housed print shop operations until 1995. The facility is currently utilized as a radio repair shop. Numerous solvents, POLs, and other cleaners were observed in cabinets during the EBS site visit. No spills or releases of hazardous substances or POLs have been reported at any time during the use of this building.

#### BRAC Parcel Number and Label 13(2)PS/HS CERFA Map Location 24,35

This parcel is associated with Building S-161, the MHE repair shop, which is located within Geographic Area B. It was observed that contaminated diesel fuel, oil, and antifreeze were stored in 55-gallon drums in this building. Used parts and other pieces of equipment stored in

# **SECTION**FIVE

#### **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

boxes were also noted. No documented evidence exists to indicate that a release, disposal, or migration of a hazardous substance or petroleum product has occurred.

Building S-161 is scheduled to be demolished according to the BRAC 95 Preliminary Report of Excess.

#### BRAC Parcel Number and Label 16(2)PS CERFA Location Map 24,35

This parcel is associated with Building 175, which is located in Geographic Area B. The western portion of this building is used by NAF for administrative services and the eastern portion is a cafeteria. A 1,000-gallon UST containing unleaded gas was removed east of the building in 1993. This tank was not known to have leaked. Clean closure was obtained from TNRCC.

## BRAC Parcel Number and Label 30(2)PS(P)/HS(P) CERFA Map Location 25,36

This parcel is associated with Building 125, which is located near Geographic Area B. This building currently houses the Facility Engineering Maintenance office and other administration offices (northern half). During the EBS site visit, it was noted that this building was a former compressor building and computer shop. Based on the past use of this building, it is likely that this building stored petroleum products and hazardous substances. However, no documented evidence exists that a release, disposal, or migration of petroleum products or hazardous substances has occurred at this site.

#### BRAC Parcel Number and Label 37(2)HS CERFA Map Location 30,37

This parcel is associated with Building 421, which is a warehouse within Geographic Area D. This building contains one-year RCRA permitted container storage areas and supplies for weapon support activities. The EBS site visit revealed that hazardous wastes generated at this building are taken to Building 333. No documented evidence exists to conclude that a release, disposal, or migration of a hazardous substance has occurred. Storage of radioactive materials

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#### **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

was reported in this building in a radiological survey performed by the U.S. Army Center for Health Promotion and Preventive Medicine (Provisional) (USACHPPM) in 1996.

#### BRAC Parcel Number and Label 38(2)HS CERFA Map Location 30,36

This parcel is associated with Building 428, the former flammable materials storage building, which is located within Geographic Area D. This building formerly contained materials that are currently stored within Building 423A. No documented evidence exists to conclude that a release, disposal, or migration of a hazardous substance has occurred.

#### BRAC Parcel Number and Label 38A(2)HS CERFA Map Location 30,36

This parcel is associated with Building 423A, which is the newly constructed flammable storage building located within Geographic Area D. This building has been operable for less than one year and showed no sign of past releases to the environment. This building contained only small quantities of paints at the time of the visual inspection. This building is being retained by the Red River Army Depot and only the land it resides on is subject to parcelization. No documented evidence exists to conclude that a release, disposal, or migration of a hazardous substance has occurred.

#### BRAC Parcel Number and Label 39(2)HS CERFA Map Location 30,36

This parcel is associated with Building 431, which is a warehouse located within Geographic Area D. The southern portion of this building is occupied by DLA and was visited during the EBS site investigation. The southernmost end of this area is used for paper storage, the central portion is used for rubber storage, and the northern end is used for storage of photo developers, film, and batteries. Large quantities of lead-acid batteries were noted within a holding bay awaiting transport to DRMO. No documented evidence exists to conclude that a release, disposal, or migration of a hazardous substance has occurred.

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#### **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

#### 5.1.3 Category 3 Parcels

Woodward-Clyde's survey and subsequent parcelization of the Red River Army Depot property identified 4 parcels, totaling approximately 3.6 acres, as Category 3 parcels. The Category 3 parcels and locations on Figures 5-2 and 5-3 are described in the following sections.

#### BRAC Parcel Number and Label 7(3)HR CERFA Map Location 23,36

This parcel is associated with an area surrounding Building 133, the Allied Trade Building, which is located within Geographic Area B. Activities conducted in Building 133 include maintenance and repair of pneumatic tools, electric motor rewinding, non-industrial machine shop work, and rubber and rubberized products cleaning. An exemption to the drying ovens air permit was requested and granted by TNRCC in 1994. This exemption indicates that this air release was greater than state air emission limits; however, it was below any limit that required any remedial action. The parcel designated is a rough estimate of particulate deposition resulting from emissions of the furnaces.

# BRAC Parcel Number and Label 12(3)HS/HR CERFA Map Location 24,36

This parcel is associated with Building 170, the former radio shop, which is located in Geographic Area B. Building 170 was used as a radio repair facility beginning with its construction in 1942 and ending in 1995 when the radio repair operations were moved to Building 164. The facility also housed typewriter repair operations for a short period of time. Currently, the facility is not in use.

An adjacent shed was constructed in 1967. The facility has always housed a standby diesel powered generator. During the EBS site visit, numerous lithium batteries and electronic equipment were observed within this building. Small areas of POL staining were observed on the floor, and two large lithium batteries appear to have been leaking. Secondary containment was observed around the batteries, and no leakage was observed on the floor.

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#### **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

#### BRAC Parcel Number and Label 22(3)PR CERFA Map Location 29,37

This parcel is associated with Building 396, a compressor shed located in the northeastern portion of Geographic Area C. A small area of oil was observed on the floor beneath the compressor within the building; however, no staining was observed on the ground surface outside the building. A secondary containment system was in place, and no floor drains were observed in the area of the oil.

# BRAC Parcel Number and Label 27A(3)HS CERFA Map Location 29,38

This parcel is associated with a spoils area resulting from the construction of Building 333. This parcel is located within Geographic Area C. These soils were analyzed for metals and VOCs. All metals concentrations were below soil/air and ingestion/inhalation standards for industrial use. Groundwater monitoring data indicate that the heavy metals are isolated to the top three feet of soil, and migration of heavy metals to groundwater was not detected in groundwater samples. VOCs were not detected at this site. An RFI for this site (USACE 1995a), dated April 1995, is awaiting approval by TNRCC.

# 5.1.4 Category 4 Parcels

Woodward-Clyde's survey and subsequent parcelization of the Red River Army Depot property identified one parcel, totaling approximately 0.12 acres, as a Category 4 parcel. The Category 4 parcel and location on Figure 5-2 is described in the following paragraph.

## BRAC Parcel Number and Label 10(4)PS/PR CERFA Map Location 24,36

This parcel is associated with Building 162, the former gasoline station, which is located in Geographic Area B. Two USTs (one 12,000-gallon unleaded gasoline and one 5,000-gallon diesel) and contaminated soils were excavated to the east of this building in 1992. TNRCC approved clean closure of these tanks in a document dated July 9, 1996. Quarterly monitoring results have shown no BTEX concentrations above TNRCC action levels. Quarterly monitoring was discontinued in 1994.

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#### **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

Building 162 is scheduled to be demolished according to the BRAC 95 Preliminary Report of Excess.

#### 5.1.5 Category 5 Parcels

Woodward-Clyde's survey and subsequent parcelization of the Red River Army Depot property identified 3 parcels, totaling approximately 48.5 acres, as Category 5 parcels. The Category 5 parcels and locations on Figures 5-2 and 5-3 are described in the following sections.

#### BRAC Parcel Number and Label 6(5)PR CERFA Map Location 23,37

This parcel is located in the northwest portion of Geographic Area B. This parcel provides temporary storage of approximately 200 wheeled vehicles (M577s and M548s) located to the north of Buildings 11 and 12 and to the northeast of Building 107. Evidence exists of a chronic problem of parked vehicles leaking POLs to the soils in this area. As a result, the leaking vehicles are removed and the stained soils and vegetation considered POL-contaminated are removed. Usually, successful remediation of the POL-contaminated soil is confirmed through visual inspection; however, confirmation samples are collected and analyzed at locations where larger spills are observed.

#### BRAC Parcel Number and Label 17(5)PR CERFA Map Location 26,37

This parcel is associated with the storage area for M577s and other wheeled vehicles located in Geographic Area C. Evidence exists of a chronic problem of parked vehicles leaking POLs to the soils in this area. As a result, leaking vehicles are removed, and the stained soils and vegetation considered as POL-contaminated soil are removed. Usually successful remediation of the POL-contaminated soil is confirmed through visual inspection; however, confirmation samples are collected and analyzed at locations where larger spills are observed.

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#### **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

#### BRAC Parcel Number and Label 26(5)PS/PR/HS/HR CERFA Location Map 28,36

This parcel is associated with industrial activities conducted within the southern section of Geographic Area C. This parcel contains Buildings 333 and 334A and land associated with former Building 348. This parcel is associated with a 5.0 ppb trichloroethylene groundwater contamination plume area. This area is heavily industrialized with numerous contributors to the contamination.

Former operations in this area (before RCRA was promulgated in 1976), prior to construction of Building 333, have contributed to the groundwater contamination in this area. Prior to RCRA and NPDES permits, this facility directly discharged waste to Panther Creek. Several chemical vats containing acids and caustics are housed in the Parts Chemical Cleaning Area (PCCA) of Building 333. Paints and thinners are stored in the "paint kitchen"; and cutting oils and small quantities of cleaning compounds and chromium conversion coating materials are also currently stored in the building. The floor drain within the PCCA drains to the IWTP.

A 4,000-gallon diesel UST and distribution system was removed from the southwest corner of Building 333 in 1993. Upon excavation, it was determined that the tank had leaked, and contaminated soils associated with the tank were removed. The distribution line from the UST and the building was abandoned and closed in place. Closure by TNRCC is pending.

Building 334A is a flammable materials storage building. This building stores several types of materials such as oils, paints, and solvents. The interior storage of these materials is well-controlled to handle spills; however, these materials are also routinely stored outside the building on pallets and in drums. No documentation of a past release from storage outside was obtained.

Former Building 348, the chemical cleaning area, was demolished in 1992. Along with this demolition, a 3,000-gallon phosphoric acid AST was drained and removed. Evidence exists of numerous spills having occurred within this facility. The spills appeared to include acids and solvents. Building 333 and the former Building 348 area have future remedial action or design planned pending conclusions of the RFI.

#### 5.1.6 Category 6 Parcels

Woodward-Clyde's survey and subsequent parcelization of the Red River Army Depot property identified 3 parcels, totaling approximately 3.8 acres, as Category 6 parcels. The identified Category 6 parcels and locations on Figures 5-2 and 5-3 are described in the following sections.

# BRAC Parcel Number and Label 9A(6)HR and 9B(6)HR CERFA Map Location 25,36

This parcel is associated with a surface drainage ditch within Geographic Area B, which extends from a former pesticide pit. Interviews with installation personnel, conducted during the EBS site visit, suggest that pesticide contamination from the former pesticide pit located at the corner of Ammunition Drive and Arkansas Avenue may be influencing this area. Interviews indicate that an RFI was completed on this area in April 1995, and PCBs and pesticides were detected at elevated levels. However, the RFI report was not made available for use in the EBS process.

# BRAC Parcel Number and Label 41(6)PS/PR/HS/HR(P) CERFA Map Location 29,36

This parcel is associated with Building 433, located within Geographic Area D. This building formerly housed rubber denuding operations prior to relocation to BB-15. The rubber denuding process utilized a chlorinated solvent vapor degreaser that was located in the northern portion of the building. Several black stains were observed on the floor of this facility and within soils along the western perimeter of the building near the railroad loading dock. Removal or remedial actions have not yet been initiated. Heavy metals and VOCs have been detected in the soil surrounding the building. An RFI is currently underway.

# 5.1.7 Category 7 Parcels

Woodward-Clyde's survey and subsequent parcelization of the Red River Army Depot property identified 13 parcels, totaling approximately 4.25 acres, as Category 7 parcels. The identified Category 7 parcels and locations on Figure 5-1 through 5-3 are described in the following sections.

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#### **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

#### BRAC Parcel Number and Label 4(7) CERFA Map Location 21,35

This parcel is associated with Building S-713, the golf course maintenance building, which is located in Geographic Area A. During the EBS site visit, oil staining and stressed vegetation were identified at the wash station. Some oil staining was observed near a shed adjacent to this facility. No documentation was obtained characterizing the environmental condition of this parcel.

#### BRAC Parcel Number and Label 14(7) CERFA Map Location 24,35

This parcel is associated with Building S-163, a vehicle maintenance building with indoor and outdoor wash racks, which is located within Geographic Area B. This area is located next to the MHE repair shop (Building S-161). During the EBS site visit, the following environmental concerns were observed: an indoor floor drain for the indoor wash rack had surface staining; a surface stain is associated with the boiler; and there are several 55-gallon plastic drums of phosphate-based soap with staining around them. The wash rack was cleaned and all materials were disposed of at DRMO. No documented evidence was obtained characterizing the stained area or the presence of contaminants within the drain system.

Building S-163 is scheduled to be demolished according to the BRAC 95 Preliminary Report of Excess.

#### BRAC Parcel Number and Label 15(7) CERFA Map Location 24,35

This parcel is associated with Building S-167, which is a vehicle storage facility located within Geographic Area B. Storage of numerous drums of used oil, antifreeze, brake shoes, and rags were observed in this facility. Several spills and staining with suspected POL derivatives were observed around the drums. No documented evidence exists characterizing the environmental condition of this parcel. Building S-167 is scheduled to be demolished.

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#### **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

#### BRAC Parcel Number and Label 20(7)PS CERFA Map Location 28,37

This parcel is associated with a 420,000-gallon diesel AST (No. 319) and associated pipeline located within Geographic Area C, north of Building 315. This AST formerly provided fuel to an old boiler in Building 319. Approximately six inches of sludge currently remain in the tank. The pipeline was installed in the 1950s and capped in 1990. Based on the age of the AST and pipeline, and the lack of spill containment or leak detection devices, release of petroleum products to soils may have occurred. No documented evidence was obtained to properly characterize the environmental condition of this property associated with the pipeline; therefore, this parcel has been designated as Category 7.

# BRAC Parcel Number and Label 23(7) CERFA Map Location 29,37

This parcel is associated with Building 338, which is located within Geographic Area C, located just south of Building 396. Storage of paint, hydraulic fluid, and aircraft paint thinner were observed within Building 388. An old sink used for the washing of military mechanical/vehicle parts is located on the north side of the building. The drain from this sink was noted to pass through the wall and discharge directly to the ground. Solvents were used to rinse military mechanical/vehicle parts in this sink, and solvents and other contaminants may have been released directly to the ground surface. No documented evidence was obtained to characterize the environmental condition of this parcel.

# BRAC Parcel Number and Label 24(7) CERFA Map Location 28,37

This parcel is associated with Building 312, the automated storage and retrieval building, which is located in Geographic Area C. Military vehicle parts, batteries, oils, and hydraulic fluid are stored in this building. A sump, associated with the battery and forklift charging area, is located in the southwest corner of the building. This sump is pumped out regularly (twice a year), and battery acid leaks are pumped out upon identification. Maintenance records for the sump and its present condition are unavailable. No documented evidence was obtained to characterize the environmental condition of this parcel.

#### **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

# BRAC Parcel Number and Label 25(7)HS/HR(P) CERFA Map Location 28,36

This parcel is associated with Building 333A, which is a corrosive storage building, located east of the oil separation lagoon within Geographic Area C. Phosphoric acid, defoamers, chromic acid, boric acid, aluminum chloride, benzyl alcohol, acetic acid, aluminum paint strippers, and zinc-plating solutions are stored within this building. Stressed vegetation was evident near the delivery area.

#### BRAC Parcel Number and Label 27(7) CERFA Map Location 28,35

This parcel is associated with Building 350, which is located within Geographic Area C. This building contains a break room and is a former nickel-cadmium battery repair shop. Outside the repair shop, hazardous materials were found in an unlocked flammable materials storage cabinet; hazardous materials containers were discarded in a bin nearby; a sump on the west side of the building was still in place; and canisters of unknown gases were noted nearby. Maintenance records for the sump and its present condition are unknown. No documented evidence was obtained to characterize the environmental condition of the parcel.

# BRAC Parcel Number and Label 29(7) CERFA Map Location 29,37

This parcel is associated with land surrounding Building 350 in the southern part of Geographic Area C. A sump is associated with Building 350. Facility maintenance records regarding the present condition or past discharges of the sump are unknown. No documented evidence was obtained to characterize the environmental impact of this sump or environmental condition of the property.

#### BRAC Parcel Number and Label 36(7) CERFA Map Location 31,36

This parcel is associated with Building 401, which is located within Geographic Area D. This is a shop building for final testing of Bradley tanks, the 113 family of tracked vehicles, the multiple

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## **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

launch release system, and 813 series trucks. Following inspection of repairs, these vehicles are staged at Building 320 prior to shipment. This facility contains hazardous waste storage areas for waste oils and antifreeze. Floor drains were noted near bay number three and robotics are used for the high pressure denuding process conducted at bay number five. A sump was noted in bay number one located in the southwest corner of the building. Maintenance records for the sump and its present condition are unknown. No documented evidence was obtained to characterize the environmental condition of this parcel.

#### BRAC Parcel Number and Label 39A(7)HS CERFA Map Location 30,36

This parcel is associated with Building 413, which is located within Geographic Area D. This building contains a strategic stockpile of amosite in its raw form. This material is triple-bagged and contained within ten thousand 100-pound wooden crates; it is regularly inspected. No documented evidence exists to conclude that a release, disposal, or migration of this material has occurred.

# BRAC Parcel Number and Label 40(7) CERFA Map Location 31,36

This parcel is associated with Building S-414, which is a warehouse located within Geographic Area D. This building contains a soil floor and has historically been considered a "catch all" building for equipment and supplies received by the Red River Army Depot. The past storage practices are unknown, and the soil floor does not provide any spill containment. No documented evidence was obtained characterizing the environmental condition of this parcel.

#### BRAC Parcel Number and Label 42(7) CERFA Map Location 30,37

This parcel is associated with Building 411, which is currently a sheet metal shop building located within Geographic Area D. During the 1940s and 1950s, this building was used to maintain locomotives. During construction of the turret punch press in 1994, maintenance operator pits were encountered. An employee interview reported the presence of old vats that may have contained oil used for annealing operations. The annealing oils within these vats are

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#### **ENVIRONMENTAL CONDITION OF THE PROPERTY AREA**

assumed to have since been removed. Annealing operations were centrally located within this facility. No documented evidence was obtained characterizing the environmental condition of this parcel.

#### 5.1.8 Qualified Parcels

In determining the qualified parcels, Woodward-Clyde observed the following guidelines:

- If a complete asbestos survey has not been conducted, then buildings constructed prior to 1985 were assumed to contain ACM. An "A(P)" for the possible presence of asbestos was used to qualify the parcel.
- If a complete LBP survey has not been conducted, then buildings constructed prior to 1978 were assumed to contain LBP. An "L(P)" for the possible presence of LBP was used to qualify the parcel.

Fifty-nine parcels, approximately 10 acres, were identified as qualified parcels as described in Table 5-1b and illustrated on the CERFA maps, Figures 5-1 through 5-3. When a qualified parcel is associated with a building/facility, the acreage presented corresponds to the "footprint" of the building/facility.

# Table 5-1a BRAC PARCEL DESCRIPTIONS RED RIVER ARMY DEPOT, TEXAS

BRAC PARCEL NUMBER AND LABEL**	LOCATION (X,Y COORDINATES)	APPROX. SIZE (ACRES)	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE	REMEDIATION/ MITIGATION
1(1)	19,36	368.89	A	1	This parcel is associated with the majority of the surface area within Geographic Area A. There has been no documented storage of hazardous substances or petroleum products; nor has there been release, disposal, or migration from an adjacent property of hazardous substances or petroleum products within the identified area.	Visual Inspection, Interviews	No remediation is necessary.
2(2)HS	23,35	0.24	A	2	This parcel is associated with Geographic Area A (the swimming pool and its maintenance facilities). Building 38 is the bath house adjacent to the swimming pool, which stores chemicals for pool chlorination and cleaning (muriatic acid). Pipelines run between this building and the swimming pool. No documented evidence exists to conclude that any release, disposal, or migration of a hazardous substance has occurred.	Visual Inspection, Interviews	No remediation is necessary.
3(2)PS/HS	21,35	0.12	A	2	This parcel is associated with the automobile and woodworking skill center (Building 726), located within Geographic Area A. This building stores solvents, degreasers, paints, and used oils (e.g., xylene, toluene). During the EBS site visit, hazardous waste drums and flammable materials were identified inside and outside of this building. No documented evidence exists to conclude that any release, disposal, or migration of a hazardous substance has occurred.	Visual Inspection, Interviews	No remediation is necessary.
4(7)	21,35	0.05	A	7	This parcel is associated with Building S-713, the golf course maintenance building located within Geographic Area A. During the EBS site visit, oil staining and stressed vegetation were identified at the wash station. Some oil staining was observed near a shed adjacent to this facility. No documentation was obtained characterizing the environmental condition of this parcel.	Visual Inspection	This parcel will require an investigation and possible removal and/or remedial action of stained soils.

Table 5-1a (Continued)

BRAC PARCEL NUMBER AND LABEL <sup>45</sup>	LOCATION (X,Y COORDINATES)	APPROX. SIZE (ACRES)"	GEOGRAPHIC AREA	ENVIRONMENTAL GONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE <sup>d</sup>	REMEDIATION/ MITIGATION
5(1)	25,37	72.16	В	1	This parcel contains Buildings 116 A-E, 11, 12, 107, 176, and 175 (administrative); Building 112 (housing); Building S-07 (chapel); Building 135 (gym); Buildings S-179, S-180, and S-177 (storage); and Building 183 (radio repair shop). No evidence exists to conclude that storage of hazardous substances or petroleum products has occurred; nor has there been release, disposal, or migration from an adjacent property of hazardous substances or petroleum products within the identified area.  Buildings S-179 and S-180 are scheduled to be demolished according to the BRAC 95 Preliminary Report of Excess.	Visual Inspection, Interviews	No remediation is necessary.
6(5)PR	23,37	5.13	B Northwest portion	5	This parcel is associated with the staging area for M577s and M548s, which provides temporary storage of approximately 200 wheeled vehicles (M577s and M548s). This parcel is located north of Buildings 11 and 12 and northeast of Building 107. Evidence exists of a chronic problem of parked vehicles leaking POLs to the soils of this area. As a result, the leaking vehicles are removed, and the stained soils and vegetation are removed as POL-contaminated soil. Usually, successful remediation of the POL-contaminated soil is confirmed through visual inspection; however, confirmation samples are collected and analyzed at locations where larger spills are observed.	Visual Inspections, Interviews	Ongoing identification and soil removal.

Table 5-1a (Continued)

BRAC PARCEL NUMBER AND LABEL <sup>AD</sup>	LOCATION (X,Y COORDINATES)	APPROX. SIZE (ACRES) <sup>c</sup>	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	EASIS	EBS SOURCE OF EVIDENCE <sup>6</sup>	REMEDIATION/ MITIGATION
7(3)HR	23,36	1.01	В	3	This parcel is associated with an area surrounding Building 133, the Allied Trades Building, which is located in Geographic Area B. Activities conducted in Building 133 include: maintenance and repair of pneumatic tools, electric motor rewinding, non-industrial machine shop work, and rubber and rubberized products cleaning. An exemption to the drying ovens air permit was required and granted by TNRCC in 1994. This exemption indicates that this air release was greater than state air emission limits; however, it was below any limit that required any remedial action. The parcel designated is a rough estimate of particulate deposition resulting from emission of the drying ovens.	Visual Inspection	No remediation is necessary.
8(2)PS/HS	23,36	0.4	В	2	This parcel is associated with Building 133 which is located within Geographic Area B. Building 133 originally was constructed as an inert ammunition storage warehouse but was never used as such because of a mission change during the early 1940s. Prior to 1960, the building was used for "records holding." From 1960 to the present, allied trades operations like tool repair, woodworking, and light machine shop operations have been located within the facility. Beryllium tools were made within the machine shop for ammunition operations. Past operations also included cabinetmaking and metal furniture repair. A drying oven is currently in operation within the facility as a part of the electric motor rewinding shop. Emissions from its oven qualify for standard exemptions under TNRCC guidelines. As a result of the rubber cleaning operations, storage of POL and paints were observed during the EBS site visit. No documented evidence exists to conclude that a release, disposal, or migration of hazardous substance has occurred.	Visual Inspection, Interviews	No remediation is necessary.

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Table 5-1a (Continued)

BRAC PARCEL NUMBER AND LABEL <sup>50</sup>	LOCATION (X.Y COORDINATES)	APPROX SIZE (AGRES) <sup>0</sup>	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE	REMEDIATION/ MITIGATION
9A(6)HR	25,36	0.16	В	6	This parcel is associated with a surface drainage ditch within Geographic Area B, which extends from a former pesticide pit. Interviews with installation personnel, conducted during the EBS site visit, suggest that pesticide contamination from the former pesticide pit located at the corner of Ammunition Drive and Arkansas Avenue may be influencing this area. An RFI has been conducted on this area. PCBs and pesticides were detected at elevated levels.	Interview	Remediation planned.
9B(6)HR	25,36	.02	В	6	This parcel is associated with a surface drainage ditch within Geographic Area B, which extends from a former pesticide pit. Interviews with installation personnel, conducted during the EBS site visit, suggest that pesticide contamination from the former pesticide pit located at the corner of Ammunition Drive and Arkansas Avenue may be influencing this area. An RFI has been conducted on this area. PCBs and pesticides were detected at elevated levels.	Interview	Remediation planned.
10(4)PS/PR	24,36	.12	В	5	This parcel is associated with Building 162, a former gasoline station located in Geographic Area B. Two USTs (one 12,000-gallon unleaded gasoline and one 5,000-diesel) and contaminated soils were excavated east of this building in 1992. Clean closure was obtained from TNRCC on July 9, 1996. Quarterly monitoring results have shown no BTEX in groundwater. Quarterly monitoring was discontinued in 1994.	1, Visual Inspection, Interviews	UST and soil removal; initial groundwater monitoring discontinued; clean closure obtained.
	·			·	Building 162 is scheduled to be demolished according to the BRAC 95 Preliminary Report of Excess.		

Table 5-1a (Continued)

BRAC PARCEL NUMBER AND LABEL <sup>15</sup>	LOCATION (X,Y COORDINATES)	APPROX. SIZE (ACRES)°	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE <sup>®</sup>	REMEDIATION/ MITIGATION
11(2)PS/HS	24,36	.10	В	2	This parcel is associated with Building 164, the former print shop, which is located in Geographic Area B. The building was utilized as a carpenter shop between 1942 and 1959. Operations included building wood pallets and shipping containers. The facility was converted to a print shop in 1959 and housed print shop operations until 1995. The facility is currently utilized as a radio repair shop. Numerous solvents, POLs, and other cleaners were observed in cabinets during the EBS site visit. No spills or releases of hazardous substances or POLs have been reported at any time during the use of the building.	Visual Inspection, Interviews	No remediation is necessary.
12(3)HS/HR	24,36	.04	В	3	This parcel is associated with Building 170, the former radio shop. Building 170 was utilized as a radio repair facility beginning after construction in 1942 and ending in 1995 when the radio operations were moved to Building 164. The facility also housed typewriter repair operations for a short period of time. Currently, the facility is not in use. An attached shed was constructed in 1967. This facility has always housed a standby diesel-powered generator. During the EBS site visit, numerous lithium batteries and electronic equipment were observed within this building. Small areas of POL staining were observed on the floor, and two large lithium batteries appeared to have been leaking. Secondary containment was observed around the batteries, and no leakage was observed on the floor.	Visual Inspection, Interviews	Removal of the batteries.

Table 5-1a (Continued)

BRAC PARCEL NUMBER AND LABEL <sup>AN</sup>	LOCATION (X.Y COORDINATES)	APPROX SIZE (ACRES)°	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE <sup>d</sup>	REMEDIATION/ MITIGATION
13(2)PS/HS	24,35	.45	В	2	This parcel is associated with Building S-161, the MHE repair shop, which is located in Geographic Area B. It was observed that contaminated diesel, oil, and antifreeze were stored in 55-gallon drums in this building. Used parts and other pieces of equipment stored in boxes were also noted. No documented evidence exists to conclude that a release, disposal, or migration of a hazardous substance or petroleum product has occurred.	Visual Inspection, Interviews	Removal of the 55- gallon drums. This building is scheduled for demolition. The BRAC Cleanup Team (BCT) should approve this work plan.
					Building S-161 is scheduled to be demolished according to the BRAC 95 Preliminary Report of Excess.		
14(7)	24,35	0.04	В	7	This parcel is associated with Building S-163, which is a vehicle maintenance building with indoor and outdoor wash racks located within Geographic Area B. This area is located next to the MHE repair shop (Building S-161). During the EBS site visit, an indoor floor drain for the indoor wash rack had surface staining; a surface stain is associated with the boiler; and there are several 55-gallon plastic drums of phosphate-based soap with staining around them. The wash rack was cleaned, and all materials were disposed of at DRMO. No documented evidence exists characterizing the stained area or the presence of contaminants within the drain system.	Visual Inspection, Interviews	Characterize potential release and survey floor stains for release to sewer system.
					Building S-163 is scheduled to be demolished according to the BRAC 95 Preliminary Report of Excess.		

Table 5-1a (Continued)

BRAC PARCEL NUMBER AND LABEL**	LOCATION (X.Y COORDINATES)	APPROX. SIZE (ACRES)°	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE <sup>d</sup>	REMEDIATION/ MITIGATION
15(7)	24,35	0.08	В	7	This parcel is associated with Building S-167, which is a vehicle storage facility located within Geographic Area B. Storage of numerous drums of used oil, antifreeze, brake shoes, and rags were observed in this facility. Several spills and staining of suspected POL derivatives were observed around the drums. No documented evidence exists characterizing the environmental condition of this parcel.	Visual Inspection	Characterize potential release of POLs.
	!				Building S-167 is scheduled to be demolished according to the BRAC 95 Preliminary Report of Excess.		
16(2)PS	24,35	0.20	В	2	This parcel is associated with Building 175, which is located in Geographic Area B. The western portion of this building is used by NAF for administrative services and the eastern portion is a cafeteria. A 1,000-gallon UST containing unleaded gas was removed east of the building in 1993. There is no evidence that this tank has leaked. This site is currently awaiting closure approval from TNRCC.	Visual Inspection, Interviews	UST removed; no evidence the tank leaked; awaiting closure approval.
17(5)PR	26,37	33.16	C	5	This parcel is associated with the storage area for M577s and other wheeled vehicles, which is located in Geographic Area C. Evidence exists of a chronic problem of parked vehicles leaking POLs to the soils of this area. As a result, the leaking vehicles are removed and the stained soils and vegetation are removed as POL-contaminated soil. Usually successful remediation of the POL-contaminated soil is confirmed through visual inspection; however, confirmation samples are collected and analyzed at locations where larger spills are observed.	Visual Inspection, Interviews	Ongoing identification and soil removal.

Table 5-1a (Continued)

BRAC PARCEL NUMBER AND LABEL <sup>80</sup>	LOCATION (X,Y COORDINATES)	APPROX SIZE (ACRES)	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE <sup>d</sup>	REMEDIATION/ MITIGATION
20(7)PS	28,37	0.30	C	2	This parcel is associated with a 420,000-gallon diesel AST (No. 319) and associated pipeline, located within Geographic Area C, north of Building 315. This AST formerly provided fuel to an old boiler in Building 319. Approximately 6 inches of sludge currently remain in the tank. This pipeline was installed during the 1950s and capped in 1990. Based on the age of the pipeline, and its lack of spill containment or leak detection devices, release of petroleum products to soils may have occurred. No documented evidence was obtained to characterize the environmental condition of this parcel.	Visual Inspection, Interviews	Removal of tank and contents.
22(3)PR	29,37	.01	С	3	This parcel is associated with Building 396, a compressor shed located in the northeastern portion of Geographic Area C. A small area of oil was observed on the floor beneath the compressor within the building; however, no staining was observed on the ground surface outside the building. A secondary contaminant system was in place, and no floor drains were observed in the area of the oil.	Visual Inspection, Interviews	Clean up the oil below the compressor.
23(7)	29,37	0.43	С	7	This parcel is associated with Building 388, the Compressor House, which is located within Geographic Area C, just south of Building 396. Storage of paint, hydraulic fluid, and aircraft paint thinner were observed within Building 388. An old sink used for the washing of military mechanical/vehicle parts is located against the north wall of the building. The drain from this sink was noted to pass through the wall and discharge directly to the ground. Solvents and other potential contaminants may have been used to rinse military mechanical/vehicle parts in this sink and directly released to the ground surface. No documented evidence was obtained to characterize the environmental condition of this parcel.	Visual Inspection, Interviews	Characterize soils for potential release.

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Table 5-1a (Continued)

BRAC PARCEL NUMBER AND LABEL <sup>AD</sup>	LOCATION (X.Y COORDINATES)	APPROX. SIZE (AGRES) <sup>6</sup>	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE <sup>d</sup>	REMEDIATION/ MITIGATION
24(7)	28,37	2.87	С	7	This parcel is associated with Building 312 (Material Staging and Control Building), the automated storage and retrieval building located in Geographic Area C. Military vehicle parts, batteries, oils, and hydraulic fluid are stored in this building. A sump, associated with the battery and forklift charging area, is located in the southwest corner of the building. This sump is pumped out regularly (2 times a year) and battery acid leaks are pumped out upon identification. Maintenance records for the sump and its present condition are unknown. No documented evidence was obtained to characterize the environmental condition of this parcel.	Visual Inspection, Interviews	Evaluate the condition of the sump and evaluate the potential for past releases.
25(7)HS	28,36	.09	C	6	This parcel is associated with Building 333A, which is a corrosive storage building located east of the oil separation lagoon. Phosphoric acid, defoamers, chromic acid, boric acid, aluminum chloride, benzyl alcohol, acetic acid, aluminum paint strippers, and zinc-plating solutions are stored within this building. Stressed vegetation was evident near the delivery area.	Visual Inspection	Continued environmental investigation and possible remediation.

Table 5-1a (Continued)

BRAC PARCEL NUMBER AND LABEL <sup>SP</sup>	LOCATION (X,Y COORDINATES)	APPROX. SIZE (ACRES)	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE <sup>d</sup>	REMEDIATION/ MITIGATION
26(5)PS/PR/HS/HR	28,36	10.27	C	5	This parcel is associated with industrial activities conducted within the southern section of Geographic Area C. This parcel contains Buildings 333 (Light Track Vehicle Shop), 334A, and land associated with former Building 348. This parcel is associated with a 5.0 ppb trichloroethylene groundwater contamination plume located at this area. This area is heavily industrialized with numerous contributors to the contamination. Below is a description of BRAC 95 buildings affected by the groundwater contamination.  Former operations in this area (before RCRA was promulgated in 1976), prior to construction of Building 333, have contributed to the groundwater contamination of this area. Prior to RCRA and NPDES permits, this facility directly discharged waste to Panther Creek. Chemical vats in the PCCA area contain acids and caustics; paints and thinners are stored in the "paint kitchen," and cutting oils and small quantities of cleaning compounds and chromium conversion coating materials are currently stored in the building. The floor drains outfall from the PCCA to the IWTP.	Visual Inspections 3, 4	Continued environmental investigation and remediation.  A 4,000-gallon diesel tank and contaminated soil was removed from the southwest corner of Building 333. Building 348 was demolished and contaminated soil was removed.
					A 4,000-gallon diesel UST and distribution system was removed from the southwest corner of Building 333 in 1993. Upon excavation, it was determined that the tank had leaked, and contaminated soils associated with the tank were removed. The distribution line from the UST and the building was plugged. Closure by TNRCC is pending; however, quarterly monitoring is being performed on a groundwater plume in the vicinity.		

Table 5-1a (Continued)

BRAC PARCEL NUMBER AND LABEL <sup>S,0</sup>	LOCATION (X.Y COORDINATES)	APPROX. SIZE (ACRES) <sup>c</sup>	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE <sup>d</sup>	REMEDIATION/ MITIGATION
26(5)PS/PR/HS/HR (Cont.)					Building 334A is a flammable materials storage building. This building stores several types of materials such as oils, paints, and solvents. The interior storage of these materials is well controlled to handle spillage; however, these materials are also routinely stored outside the building on pallets and in drums.  Former Building 348, the chemical cleaning area was demolished in 1992. Along with this demolition, a 3,000-gallon capacity phosphoric acid AST was drained and removed. Evidence exists of numerous spills having occurred within this facility. The spills appeared to include acids and solvents. Building 333 and the former Building 348 area have future remedial action or design planned pending conclusions of the RFI.		
27(7)	28,35	0.43	C	7	This parcel is associated with Building 350, which is located within Geographic Area C. This building contains a break room and is a former nickel-cadmium battery repair shop. Outside the shop, hazardous materials were found in an unlocked flammable materials storage cabinet, and hazardous materials containers were discarded in a bin nearby. A sump located on the west side of the building is still in place, and canisters of unknown gases were noted nearby. Maintenance records for the sump and its present condition are unknown. No documented evidence was obtained to characterize the environmental condition of this parcel.	Visual Inspection, Interviews	Evaluate the condition of the sump and evaluate the potential for a past release to the environment.

Table 5-1a (Continued)

BRAC PARGEL NUMBER AND LABEL <sup>56</sup>	LOCATION (X,Y COORDINATES)	APPROX. SIZE (AGRES)°	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE <sup>d</sup>	REMEDIATION/ MITIGATION
27A(3)HS	29,38	2.56	C	3	This parcel is a spoils area resulting from the construction of Building 333. This parcel is located within Geographic Area C. These soils have been analyzed for metals and VOCs. All metals concentrations were below the soil/air and ingestion/inhalation standards for industrial use. Groundwater monitoring data revealed that the heavy metals are isolated to the top three feet of soil and releases of heavy metals to groundwater were not detected in groundwater samples. VOCs were not detected at this site. A 1993 RFI for this site is awaiting approval by TNRCC.	Interviews	No further remedial action planned, pending results of the site-wide Human and Ecological Risk Assessment.
28(1)	28,37	49.73	С	1	This parcel is associated with the northern portion of Geographic Area C. There has been no documented storage of hazardous substances or petroleum products; nor has there been release, disposal, or migration from an adjacent property of hazardous substances or petroleum products within the identified area.	Visual Inspection, Interviews	No remediation is necessary.
29(7)	29,37	0.02	C	7	This parcel is associated with land surrounding Building 350 in the southern part of Geographic Area C. There is a sump located on the western edge of the building. Maintenance records for the sump and its present condition are unknown. No documented evidence was obtained to characterize the environmental condition of this parcel.	Visual Inspection, Interviews	Evaluate the condition of the sump and evaluate the potential for a past release to the environment.
30(2)PS(P)/HS(P)	25,36	0.08	Near B	2	This parcel is associated with Building 125. This building currently houses the Facility Engineering Maintenance offices. During the EBS site visit, it was noted that this building was a former compressor building and computer shop. Based on the building's past use, it may likely have had petroleum storage and hazardous materials storage. No documented evidence exists to conclude that a release, disposal, or migration of such materials has occurred.	Visual Inspection, Interviews	No remediation is necessary.

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Table 5-1a (Continued)

BRAC PARCEL HUMBER AND LABEL <sup>60</sup>	LOCATION (X.Y COORDINATES)	APPROX. SIZE (ACRES) <sup>0</sup>	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE <sup>d</sup>	REMEDIATION/ MITIGATION
35(1)	30,36	22.81	D	1	This parcel is associated with Geographic Area D. There has been no documented storage of hazardous substances or petroleum products; nor has there been release, disposal, or migration from an adjacent property of hazardous substances or petroleum products within the identified area.	Visual Inspection, Interviews	No remediation is necessary.
36(7)	31,36	0.45	D	7	This parcel is associated with Building 401, which is located within Geographic Area D. This building is a shop building for final testing of Bradley tanks, the 113 family of track vehicles, the multiple launch release system, and 813 series trucks. Following inspection of repairs, these vehicles are staged at Building 320 prior to shipment. This facility contains hazardous waste storage areas for waste oils and antifreeze. Floor drains were noted near bay number three, and robotics are used for the high pressure denuding process conducted at bay number five. A sump was noted in bay number one, located in the southwest corner of the building. Maintenance records for the sump and its present condition are unknown. No documented evidence was obtained to characterize the environmental condition of this parcel.	Visual Inspection, Interviews	Evaluate the condition of the sump and evaluate the potential for a past release to the environment.
37(2)HS	30,37	1.19	D	2	This parcel is associated with Building 421, which is a warehouse located within Geographic Area D.  This building contains several hazardous waste satellite accumulation areas and supplies for weapon support activities. Hazardous wastes generated at this building are taken to Building 333. No documented evidence exists to conclude that a release, disposal, or migration of a hazardous substance has occurred.	Visual Inspection, Interviews	No remediation is necessary.

Table 5-1a (Continued)

BRAC PARCEL NUMBER AND LABEL <sup>SP</sup>	LOCATION (X,Y COORDINATES)	APPROX. SIZE (AGRES) <sup>o</sup>	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	RASIS	EBS SOURCE GF EVIDENCE <sup>d</sup>	REMEDIATION/ MITIGATION
38(2)HS	30,36	0.1	D	2	This parcel is associated with Building 428, the former flammable materials storage building, located within Geographic Area D. This building formerly contained materials that are currently stored within Building 423. No documented evidence exists to conclude that a release, disposal, or migration of a hazardous substance has occurred.	Visual Inspection, Interviews	No remediation is necessary.
38A(2)HS	30,36	0.21	D	2	This parcel is associated with Building 423, which is the newly constructed flammable storage building, located within Geographic Area D. This building has been operable for less than one year and contained only small quantities of paints at the time of the visual inspection. This building is being retained by the Red River Army Depot and only the land it resides on is subject to parcelization. No documented evidence exists to conclude that a release, disposal, or migration of a hazardous substance has occurred.	Visual Inspection, Interviews	No remediation is necessary.
39(2)HS	30,36	0.88	D	2	This parcel is associated with Building 431, which is a warehouse located within Geographic Area D. The southern portion of this building is occupied by DLA and was visited during the visual inspection. The southernmost end of this area is used for paper storage, the central portion is used for rubber storage, and the northernmost end is used for storage of photo developers, film, and batteries. Large quantities of lead-acid batteries were noted within a holding bay awaiting transport to DRMO. No documented evidence exists to conclude that a release, disposal, or migration of a hazardous substance has occurred.	Visual Inspection, Interviews	No remediation is necessary.

Table 5-1a (Continued)

BRAC PARGEL NUMBER AND LABEL**	LOCATION (X,Y COORDINATES)	APPROX. SIZE (ACRES)*	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE <sup>4</sup>	REMEDIATION/ MITIGATION
39A(7)HS	30,36	0.24	D	2	This parcel is associated with Building 413, which contains a strategic stockpile of amosite in its raw form. This material is triple-bagged and contained within ten thousand 100-pound bags in wooden crates; it is regularly inspected. No documented evidence exists to conclude that a release, disposal, or migration of this material has occurred.	Visual Inspection, Interviews	No remediation is necessary.
40(7)	31,36	.50	D	7	This parcel is associated with Building S-414, which is a warehouse located within Geographic Area D. This building contains a soil floor and has historically been considered a "catch all" building for equipment and supplies received by the Red River Army Depot. The past storage practices are unknown, and the soil floor does not provide any spill containment. No documented evidence was obtained to characterize the environmental condition of this parcel.	Visual Inspection, Interviews	This parcel will require an investigation and possible removal and/or remedial action.
41(6)PS/PR/HS/HR(P)	29,36	3.60	D		This parcel is associated with Building 433, located within Geographic Area D. This building formerly housed rubber denuding operations prior to relocation to BB-15. The rubber denuding process utilized a chlorinated solvent vapor degreaser that was located in the northern portion of the building. Several black stains were observed on the floor of this facility and within soils along the western perimeter of the building near the railroad loading dock. Removal or remedial actions have not yet been initiated. Heavy metals and VOCs have been detected in the soil surrounding the building. An RFI is currently underway.	Visual Inspection, Interviews	Remediation pending results of the RFI.

Table 5-1a (Continued)

BRAC PARCEL NUMBER AND LABEL <sup>AD</sup>	LOCATION (X.Y COORDINATES)	APPROX. SIZE (ACRES) <sup>6</sup>	GEOGRAPHIC AREA	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	EBS SOURCE OF EVIDENCE <sup>d</sup>	REMEDIATION/ MITIGATION
42(7)	30,37	0.61	D.	7	This parcel is associated with Building 411, which is currently a sheet metal shop building located within Geographic Area D. During the 1940s and 1950s, this building was used to maintain locomotives. During construction of the turret punch press in 1994, maintenance operator pits were encountered. An employee interview indicated that old vats that may have contained oil used for annealing operations were centrally located within this facility. The annealing oils within these vats are assumed to have since been removed. No documented evidence was obtained to characterize the environmental condition of this parcel.	Visual Inspection, Interviews	This parcel will require an investigation and possible removal and/or remedial action.

#### Notes:

<sup>a</sup> BRAC parcel label definitions are as follows:

Qualified parcel label definitions are as follows:

PS = petroleum storage

PR = petroleum release or disposal

HS = hazardous substance storage

HR = hazardous substance release or disposal

A = asbestos-containing material

L = lead-based paint

P = polychlorinated biphenyls

R = radon

X = UXO and/or ordnance fragments

RD = radionuclides

(P) = possible (unverified)

b Sequential gaps in BRAC parcel numbers resulted from comments received on the Draft EBS Report and the removal of parcels from BRAC consideration.

<sup>&</sup>lt;sup>c</sup> Acreage figures are approximate; they have been calculated using AutoCad 12.

d EBS Source of Evidence numbers refer to documents listed in Table 2-1 of this report.

# KED KINEK VKWK DEBOL' LEXYS ONYTIKIED BYKCEF DESCKIBLIONS L\*ple 2-1p

REMEDIATION MITIGATION	OF EVIDENCE EBS SOURCE	SISAB	GEOGRAPHIC ABRA	APPROXIMATE SIZE (ACRES)*	COORDINATES)	OUALIFIED PARCEL  LABEL <sup>**</sup> LABEL <sup>**</sup>
None Planned	6 '8	ACM confirmed by previous sampling and testing. LBP possible based on the age of the building.		80.0	73,34	1-34Q-A/L(P)
None Planned	6,8	ACM confirmed by previous sampling and testing. LBP possible based on the age of the building.	٧	80.0	23,35	[40Q-A/L(P)
None Planned	6 '8	ACM confirmed by previous sampling and testing. LBP possible based on the age of the building.	¥	90.0	23,35	(4)J/A-998-8-1
None Planned	6 <b>'</b> 8	No ACM based on previous sampling and testing. LBP possible based on the age of the building.		90.0	23,35	I-T80Q-L(P)
None Planned	6 '8	ACM confirmed by previous sampling and testing. LBP possible based on the age of the building.	V	15.0	23,35	1-83Q-A/L(P)
None Planned	Visual Inspection,	Building 86 is a concrete building used as the utility building (e.g., water heating). ACM and LBP are possible based on the age of the building.	v	10.0	S£'£Z	(T)/L(P)
None Planned	Visual Inspection, 8, 9	Building 87 is a wooden storage shed. It is typically used for paints and general storage (e.g., cleansers, houschold supplies). LBP possible based on the age of the building.	٧	10.0	<b>53</b> ,35	(4)J-078-2-I
None Planned	6 8		٧	21.0	9£'77	(P)///-/02007-1
None Planned	6 '8	ACM confirmed by previous sampling and testing. LBP possible based on the age of the building.		62.0	9£'77	(4)J/A-Q40(-I
None Planned	Visual Inspection, 8, 9	Building 705A located in Runnels Village is a wooden structure constructed in 1972. LBP possible based on the age of the building. No ACM was identified during a survey of this building.		01.0	96,22	(4)J-920 <i>1</i> -1
None Planned	6 '8	ACM confirmed by previous sampling and testing.  LBP possible based on the age of the building.		01.0	95,22	(4)J\A-Q707-1
None Planned	6,8	ACM and LBP are possible based on the age of the building.  ACM confirmed by previous sampling and testing.  I DP possible based on the age of the building.	V	\$0.0 60.0	9£'ZZ	(P)/L(P) (P)/L(P) (P)/L(P)
None Planned	Visual Inspection,	LBP possible based on the age of the building.  Building 714, located in Runnels Village, is a wooden structure used for recreational activities.  ACM and LBP are possible based on the age of the	٧	20.0	95,22	(4).J\(9)A-Q41 <i>1</i> -1
· ·		.gniblind			ŀ	

Table 5-1b (Continued)

QUALIFIED PARCEL NUMBER AND LABEL <sup>U</sup>	LOCATION (X,Y COORDINATES)	APPROXIMATE SIZE (ACRES)	GEOGRAPHIC AREA	BASIS	EBS SOURCE OF EVIDENCE	REMEDIATION/ MITIGATION
1-S-727Q-L(P)	21,35	0.01	A	LBP possible based on the age of the building	8	None Planned
1-715Q-A(P)/L(P)	22,36	0.13	A	ACM and LBP are possible based on the age of the building.	8	None Planned
1-717Q-A(P)/L(P)	21,36	0.12	A	ACM and LBP are possible based on the age of the building.	8	None Planned
2-38Q-L(P)	23,35	0.01	A	LBP possible based on the age of the building.	8	None Planned
3-726Q-A(P)	21,35	0.05	Α	ACM possible based on the age of the building.	8	None Planned
4-S-713Q-L(P)	21,35	0.10	A	LBP possible based on the age of the building.	8	None Planned
5-112Q-A/L(P)/R(P)	24,37	0.38	В	A ruptured pipe containing ACM wrapping was observed during the EBS site visit. ACM confirmed by previous sampling and testing. LBP possible based on the age of the building.  Americium-241 and nickel-63 may be contained within chemical alarm detectors located within this building's chemical/biological/radiation room located in the basement.	Visual Inspection, 8, 9, Interview with Joseph Beckman	Radiation Survey
5-116Q-A(P)/L(P)	25,37	0.14	В	ACM and LBP are possible based on the age of the building. Building 116 was excluded from the ACM site survey	8, 9	None Planned
5-11Q-A(P)/L(P)	23,37	0.11	В	ACM and LBP are possible based on the age of the building.	8	None Planned
5-12Q-A(P)/L(P)	23,37	0.09	В	ACM and LBP are possible based on the age of the building.	8	None Planned
5-107Q-A(P)/L(P)	24,37	0.11	В	ACM and LBP are possible based on the age of the building.	9	None Planned
5-135Q- A/L(P)	24,36	0.36	В	ACM was observed around the boiler and associated piping within the building during the EBS site visit. ACM confirmed by previous sampling and testing. LBP possible based on the age of the building.	Visual Inspection, 8, 9	None Planned
5-S-07Q-A/L(P)	23,37	0.09	В	ACM confirmed by previous sampling and testing.  LBP possible based on the age of the building.	8, 9	None Planned
5-175Q-A/L(P)	24,35	0.25	В	ACM confirmed by previous sampling and testing.  LBP possible based on the age of the building.	8, 9	None Planned
5-176Q-A/L(P)	24,36	0.04	B	ACM confirmed by previous sampling and testing.  LBP possible based on the age of the building.	8, 9	None Planned
5-S-177Q-L(P)	24,35	0.01	В	LBP possible based on the age of the building.	8	None Planned

Page 2 of 6

Table 5-1b (Continued)

QUALIFIED PARCEL NUMBER AND LABEL <sup>44</sup>	LOCATION (X.Y COORDINATES)	APPROXIMATE SIZE (ACRES) <sup>5</sup>	GEOGRAPHIC AREA	BASIS	EBS SOURCE OF EVIDENCE	REMEDIATION/ MITIGATION
5-S-179Q-A(P)/L(P)	24,36	0.01	В	ACM and LBP are possible based on the age of the building.	8	None Planned
5-S-180Q-A(P)/L(P)	24,36	0.01	В	ACM and LBP are possible based on the age of the building.	8	None Planned
5-183Q-L(P)	25,35	0.01	В	LBP possible based on the age of the building.	8	None Planned
10-162Q-L	24,36	0.01	В	LBP possible based on the age of the building.	9	None Planned
11-164Q-A/L(P)	24,36	0.10	В	ACM confirmed by previous sampling and testing.  LBP possible based on age of building.	8, 9	None Planned
12-170Q-A-L(P)	24,36	0.04	В	ACM confirmed by previous sampling and testing.  LBP possible based on age of building.	8, 9	None Planned
13-161Q-A/L	24,36	0.44	В	ACM confirmed by previous sampling and testing.  LBP confirmed by previous sampling and testing.	8, 9	None Planned
15-S-167Q-A/L(P)	24,36	0.06	В	ACM confirmed by previous sampling and testing.  LBP possible based on age of building.	8, 9	None Planned
17-230Q-A(P)/L(P)/P(P)	25,37	0.01	C	This building's primary use is for high voltage transfer. ACM and LBP are possible based on the age of the building. During the EBS site visit, 4 transformers were observed within this building. No documentation was obtained to identify whether these transformers were tested for PCBs.	Visual Inspection, 8	None Planned
22-396Q-L(P)	29,37	0.06	С	No ACM present based on previous sampling and testing. LBP possible based on age of building.	8, 9	None Planned
23-388Q-L(P)	29,37	0.28	С	No ACM present based on previous sampling and testing. LBP possible based on age of building.	8, 9	None Planned
27-350Q-L(P)	29,36	0.02	С	No ACM present based on previous sampling and testing. LBP possible based on age of building.	8,9	None Planned
28-342Q-A(P)/L(P)	28,37	0.09	С	ACM and LBP are possible based on the age of the building.	8, 9	None Planned
30-125Q-A/L(P)	25,36	0.03	Near B	ACM confirmed by previous sampling and testing.  LBP possible based on age of building.	8,9	None Planned
35-403Q-L(P)	30,36	0.03	D	Building 403 contains storage of argon/oxygen mixture cylinders in approximately 25 percent of the building. These materials are not considered hazardous materials. LBP is possible based on the age of the building.	Visual Inspection, 8, 9	None Planned

Table 5-1b (Continued)

QUALIFIED PARCEL NUMBER AND LABEL <sup>AD</sup>	LOCATION (X,Y COORDINATES)	APPROXIMATE SIZE (ACRES)*	GEOGRAPHIC AREA	BASIS	EBS SOURCE OF EVIDENCE <sup>5</sup>	REMEDIATION/ MITIGATION
35-405Q-L(P)	30,36	0.03	D	Building 405 is approximately 40 percent occupied with storage of the following compressed gas cylinders: argon/helium mixture, argon/carbon dioxide mixture, hydrogen/argon mixture, and carbon dioxide. These materials are not considered hazardous materials. LBP is possible based on the age of the building.	Visual Inspection, 8, 9	None Planned
35-413Q-A/L	30,36	0.23	D	Building 413 contains a strategic stockpile of amosite in its raw form from South Africa. This material is triple-bagged and contained within ten thousand 100-pound wooden crates; it is regularly inspected. No past release of this material has been known to occur. LBP confirmed by previous sampling and testing.	Visual Inspection, 8, 9, 10	This material has been considered for relocation.
35-422Q-A/L(P)	30,36	0.06	D	Building 422 is an electronic maintenance shop that maintains equipment utilized in Building 421 operations. The amount of cleaners and solvents used during electronic maintenance is limited by regular requisitions from the light truck vehicle shop (Building 333) on an "as needed" basis. No floor drains were observed during the visual inspection of the electronic maintenance shop. ACM confirmed by previous sampling and testing. LBP possible based on the age of the building.	Visual Inspection, 8, 9	None Planned
35-423Q-A/L	30,36	0.23	D	Building 423 is a warehouse, which contains small amounts of "Chemlock" and adhesive used to secure rubber to tank tracks and wheels and administrative supplies. No floor drains were observed within this building. ACM and LBP are confirmed by previous sampling and testing.	Visual Inspection, 8, 9, 10	
35-424Q-L(P)	30,36	0.23	D	Building 424 is a warehouse, which has been occupied by DLA since 1991, and contains tank bushings and small amounts of cleaning supplies. This building has no plumbing other than for the fire sprinkler system. LBP possible based on the age of the building.	Visual Inspection, 8, 9	None Planned
35-432Q-L(P)	30,36	0.01	D	Building 432 is a public restroom. LBP possible based on the age of the building.	Visual Inspection, 8, 9	None Planned

Page 4 of 6

Table 5-1b (Continued)

QUALIFIED PARCEL NUMBER AND LABEL <sup>AD</sup>	LOCATION (X,Y COORDINATES)	APPROXIMATE SIZE (ACRES)*	GEOGRAPHIC AREA	BASIS	EBS SOURCE OF EVIDENCE	REMEDIATION/ MITIGATION
35-443Q-A/L(P)/R	30,36	0.72	D	Building 443 is used for administrative services and contains a mail room, holding area, and a self service store. ACM confirmed by previous sampling and testing. LBP possible based on the age of the building. Radiation commodities were stored at an unknown location within this building in 1967. An existing vault is the likely storage location.	Visual Inspection, 8, 9, Interview with Joseph Beckman	Radiation Survey
36-401Q-A/L(P)	30,37	0.42	D	Building 401 is used as a shop building. ACM confirmed by previous sampling and testing. LBP possible based on the age of the building.	Visual Inspection, 8, 9	None Planned
37-421Q-A/L(P)/R	30,37	1.19	D	ACM confirmed by previous sampling and testing.  LBP possible based on the age of the building. The northern portion of Building 421 contains storage of equipment containing radium-226 sources, and the southern portion contains storage of equipment containing thorium fluoride sources.	Visual Inspection, 8, 9, Interview with Joseph Beckman	Radiation Survey
39-431Q-A/L(P)/R	30,37	0.69	D	ACM confirmed by previous sampling and testing.  LBP possible based on the age of the building.  Thorium-containing sights are stored within this building. A fire within this building in 1994 may have created a release of krypton-85 due to excessive heat.	8, 9 Interview with Joseph Beckman	Radiation Survey
40-S-414Q-L(P)	30,36	0.49	D	LBP possible based on the age of the building.	8, 9	None Planned
41-433Q-A/L(P)	30,36	0.80	D	ACM confirmed by previous sampling and testing.  LBP possible based on the age of the building.	8, 9	None Planned

#### Table 5-1b (Continued)

		APPROXIMATE				REMEDIATION! MITIGATION
42-411Q-A/L(P)	30,37	0.48	D	ACM confirmed by previous sampling and testing.  LBP possible based on the age of the building.	8, 9	None Planned

#### Notes:

<sup>a</sup> BRAC parcel label definitions are as follows:

Qualified parcel label definitions are as follows:

PS = petroleum storage

A = asbestos-containing material

PR = petroleum release or disposal

L = lead-based paint

HS = hazardous substance storage

P = polychlorinated biphenyls

R = radon

HR = hazardous substance release or disposal

X = UXO and/or ordnance fragments

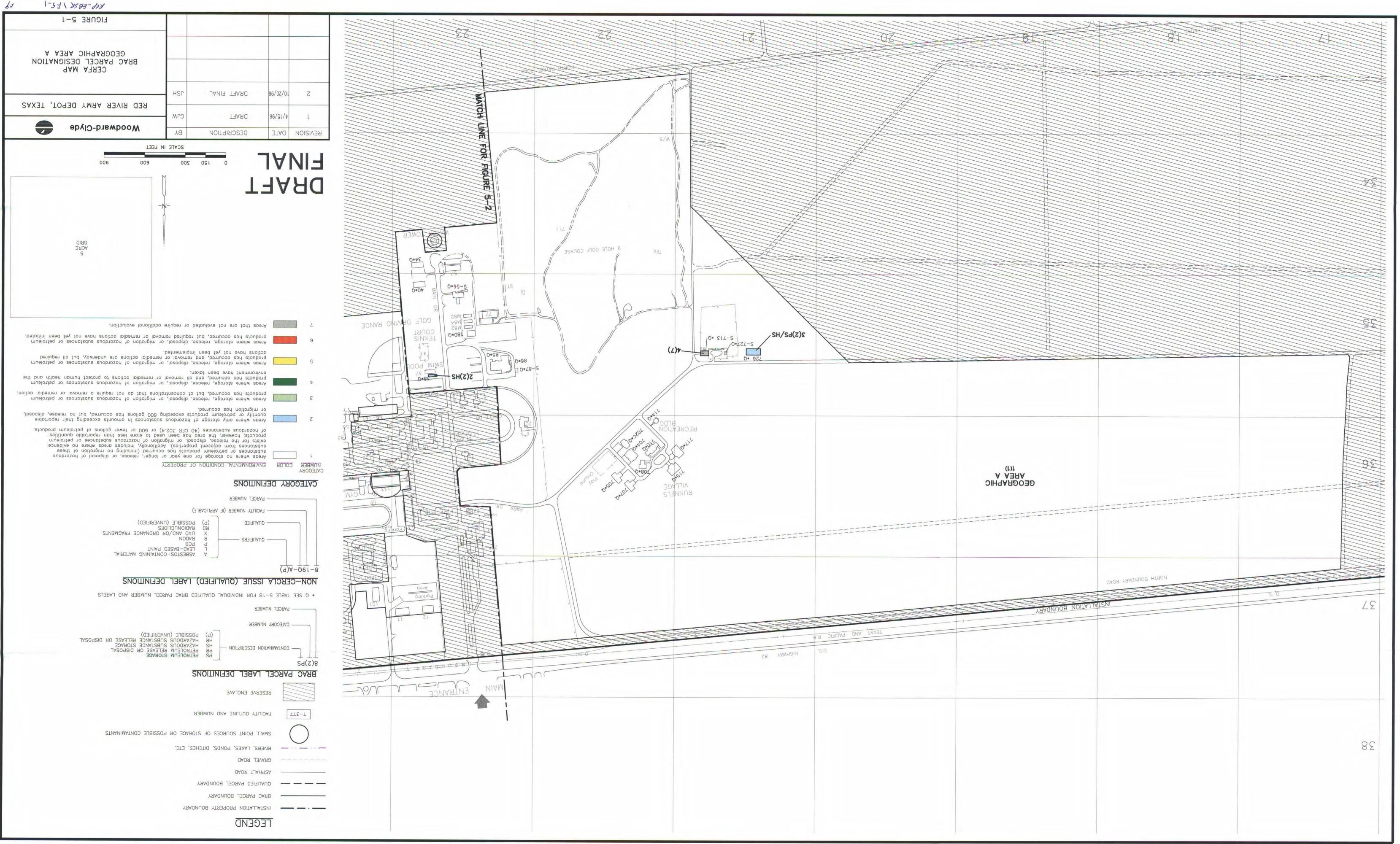
RD = radionuclides

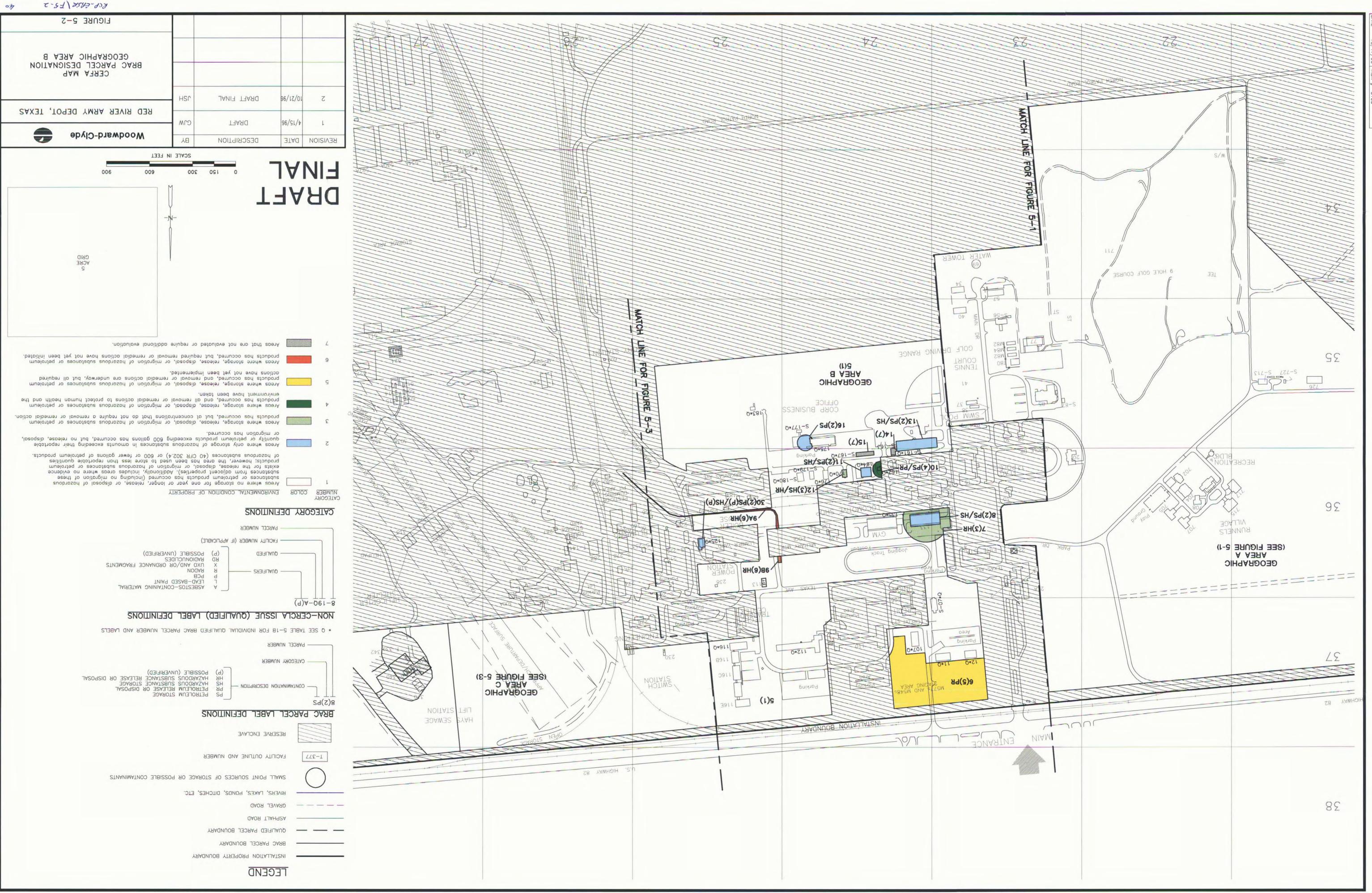
(P) = possible (unverified)

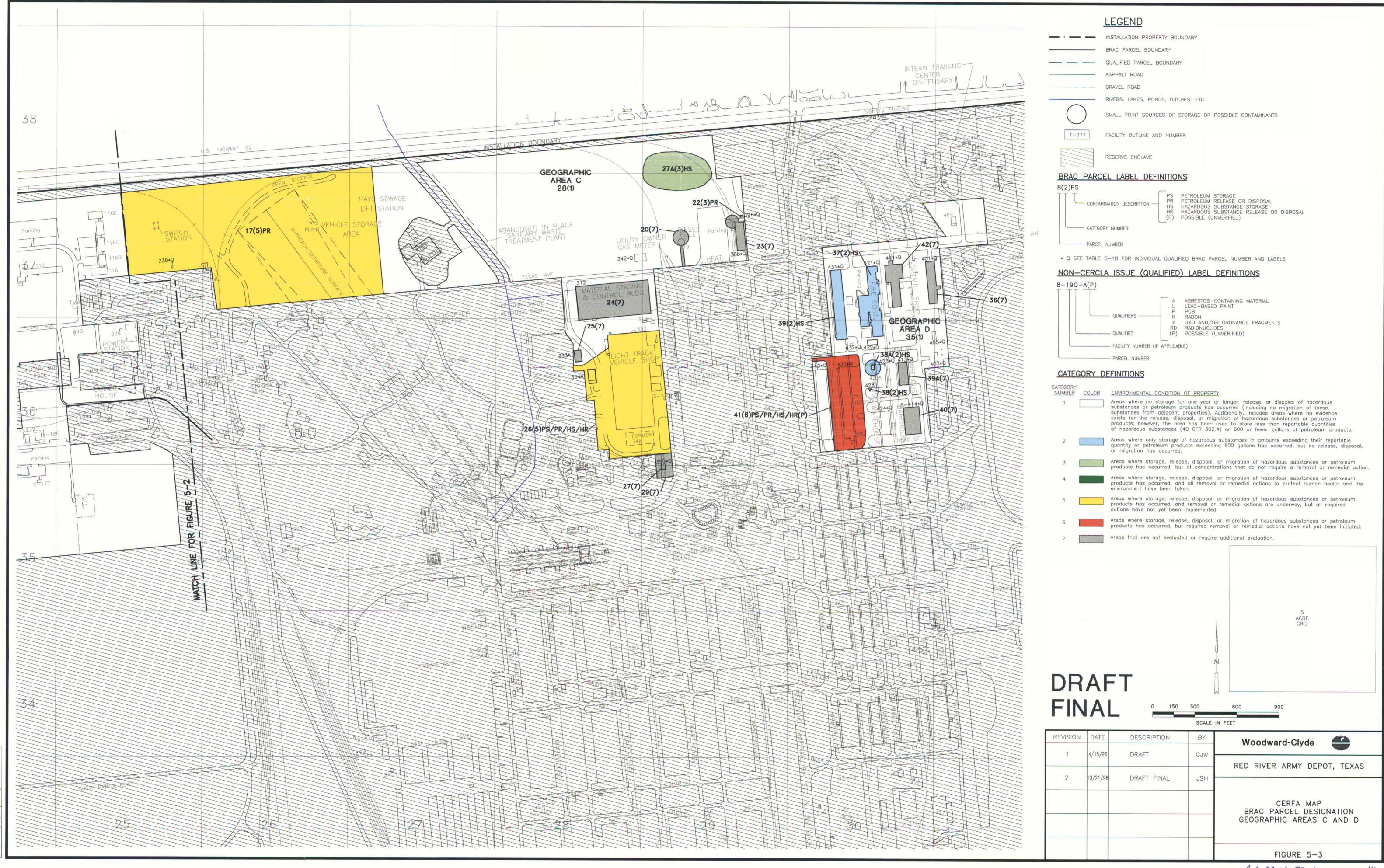
Sequential gaps in BRAC parcel numbers resulted from comments received on the Draft EBS Report and the removal of parcels from BRAC consideration.

Acreage figures are approximate; they have been calculated using AutoCad 12.

EBS Source of Evidence numbers refer to documents listed in Table 2-1 of this report.







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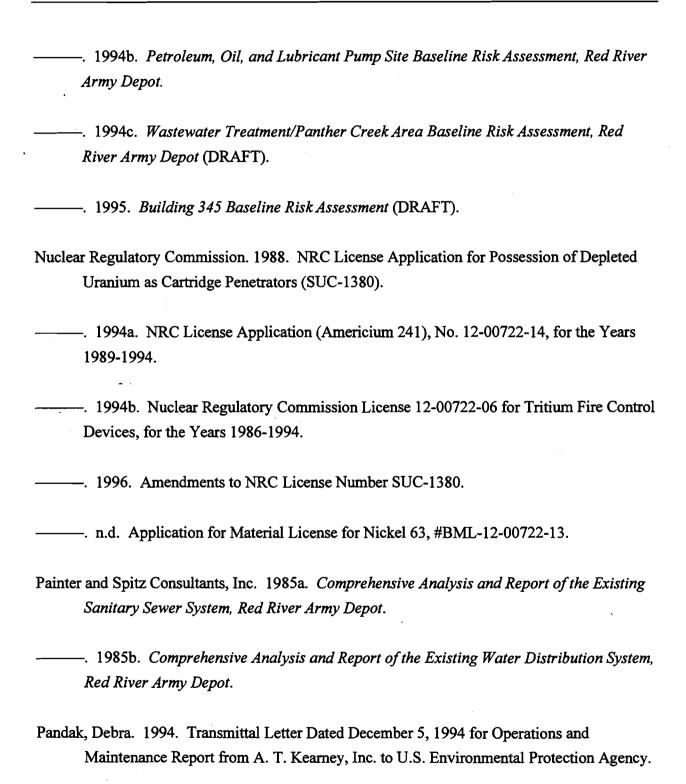
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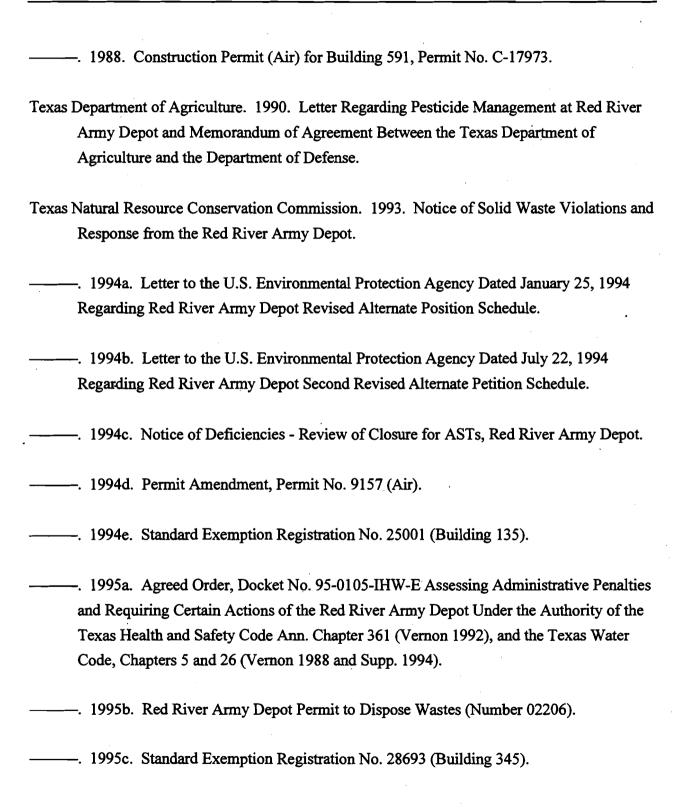
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# APPENDIX A COMMENT RESPONSE PACKAGE

# RESPONSES TO COMMENTS ON THE RED RIVER ARMY DEPOT, TEXAS DRAFT ENVIRONMENTAL BASELINE SURVEY REPORT DATED APRIL 16, 1996

# APPENDIX A COMMENT RESPONSE PACKAGE

Appendix A presents the comments Woodward-Clyde Federal Services received on the *Red River Army Depot, Texas*, *Draft Environmental Baseline Survey Report*, dated April 16, 1996, and the responses to these comments.

The comments have been typed verbatim and may include misspellings, grammatical errors, format inconsistencies, internal agency numbering systems, etc. Each comment and response has been sequentially numbered (A-1, A-2, A-3, etc.). This numbering system is used to reference previous comments or a response that may clarify a previously addressed issue.

The comments have been organized by agency and are separated by sections (A.1, A.2, A.3, etc.). The comments are presented in the following order:

- Installation
- U.S. Environmental Protection Agency
- State of Texas
  - Texas Natural Resource Conservation Commission, Industrial and Hazardous Waste Division
  - Texas Natural Resource Conservation Commission, Region 5
- U.S. Army Environmental Center
- U.S. Army Corps of Engineers
  - U.S. Army Corps of Engineers, Fort Worth District
- Other Agencies and Organizations

#### A.1 RESPONSES TO INSTALLATION COMMENTS ON THE DRAFT EBS REPORT

# A.1.1 RESPONSES TO BRAC ENVIRONMENTAL COORDINATOR COMMENTS ON THE DRAFT EBS REPORT

**ENTITY:** 

Red River Army Depot

INDIVIDUAL:

Michael L. Lockard

TITLE:

**BRAC Environmental Coordinator** 

DATE:

July 23, 1996

#### Comment A-1:

#### **Executive Summary**

pg. i 1st paragraph

1st sentence - replace closure with realignment

3rd sentence - replace 650 with 576

3rd paragraph

1st sentence - replace seven geographic...with four

1st sentence - replace 650 with 576

#### Response:

The text has been revised accordingly.

#### Comment A-2:

#### **Executive Summary**

pg. ii 1st line - replace all types of Army ordnance with Army tracked vehicles

1st paragraph

1st sentence -change to read - The depot today has the same missions: ammunition supply, modification, demilitarization and storage; maintenance, modification

## **DRAFT**

# **APPENDIX**A

#### **COMMENT RESPONSE PACKAGE**

and rebuilding of Army light-tracked vehicles, and tenant operated supply of soldier oriented items for the middle eighteen contiguous states.

#### 3rd paragraph

3rd sentence - change 650 to 576

#### Response:

The text has been revised accordingly.

#### Comment A-3:

#### **Executive Summary**

pg. iii Remove LSAAP parcel totals from chart

#### Response:

The Acreage Summary Table on page iii has been revised. All Lone Star Army Ammunition Plant parcel acreages have been removed.

#### Comment A-4:

#### **Executive Summary**

pg. viii Remove Geographic Areas E, F and G

#### **Response:**

Figures for Geographic Areas E, F, and G have been removed from the List of Figures in the Table of Contents. References to Geographic Areas E, F, and G have also been removed from the report text.

#### Comment A-5:

#### Section One

pg. 1-1 2nd paragraph

1st sentence - change closure to realignment

## **DRAFT**

# **APPENDIX**A

#### **COMMENT RESPONSE PACKAGE**

3rd sentence - eliminate information regarding LSAAP last sentence - change 650 to 576

#### Response:

The text has been revised accordingly.

#### Comment A-6:

Section One

pg. 1-2 1st paragraph - change personnel carrier to tracked vehicles

2nd paragraph

last sentence - remove the word equipment (tank track and road wheels)

#### Response:

The text has been revised accordingly.

#### Comment A-7:

Section One

pg. 1-7 <u>Section 1.5</u>

1st sentence - remove information regarding LSAAP

#### Response:

The text has been revised accordingly.

#### Comment A-8:

Section One

pg. 1-8 2nd paragraph - remove second sentence regarding LSAAP

#### Response:

#### Comment A-9:

#### Section One

pg. 1-9 <u>1st paragraph</u> - remove LSAAP <u>2nd paragraph</u> - remove LSAAP

#### Response:

The text has been revised accordingly.

#### Comment A-10:

#### Section One

pg. 1-10 1st paragraph - remove mention of LSAAP

3rd paragraph - remove mention of LSAAP

#### Response:

The text has been revised accordingly.

#### Comment A-11:

#### Section One

pg. 1-11 Remove second paragraph

3rd paragraph - remove mention of LSAAP

#### Response:

The text has been revised accordingly.

#### Comment A-12:

#### Section One

Figure 1-1

Remove sections E, F and G

#### Response:

Figure 1-1 has been revised accordingly.

#### Comment A-13:

#### Section Two

pg. 2-1 2nd row of chart - change author to COE

#### Response:

The table has been revised accordingly.

#### Comment A-14:

#### Section Two

pg. 2-2 4th and 5th row of chart - change author to COE

Eliminate 6th row

7th row - change author to RRAD Base Transition Office and date to Feb 96

Eliminate last row of chart

#### Response:

The table has been revised accordingly.

#### Comment A-15:

Section Two

pg. 2-3,4 Eliminate information regarding LSAAP

#### Response:

The text has been revised accordingly.

#### Comment A-16:

#### Section Two

pg. 2-5 Row 3 Column 3 (Insert Patman)

#### Response:

#### **COMMENT RESPONSE PACKAGE**

#### Comment A-17:

Section Two

pg. 2-6,7 Eliminate mention of LSAAP in chart

#### Response:

The table has been revised accordingly.

#### Comment A-18:

Section Two

pg. 2-9 Change tele # for Billy Richardson to 2741

#### Response:

The table has been revised accordingly.

#### Comment A-19:

#### Section Two

pg. 2-10 Change Schenewer to Schenewerk

Eliminate Raymond Jones on line with Jerry Collins; change title to Contractor

Change title for Jerry Robinson to Contractor

Change spelling from Queller to Cuellar; change # to 4657

Change spelling from Jonny to Johnny

#### Response:

The table has been revised accordingly.

#### Comment A-20:

#### Section Two

pg. 2-11 Change title for Lockard to BRAC Environmental Coordinator Change title for Raymond Jones to Contractor

#### Response:

The table has been revised accordingly.

#### Comment A-21:

Section Two

pg. 2-14 Eliminate rows for 260, 318

#### Response:

The table has been revised accordingly.

#### Comment A-22:

Section Two

pg. 2-15 Eliminate rows for 303, 303A, 303B, 308, 1500 series Bldgs

#### Response:

The table has been revised accordingly.

#### Comment A-23:

#### Section Three

pg. 3-2 1st paragraph

last sentence - replace instead with currently / replace was with is being

2nd paragraph

Insert as 2nd sentence - DLA, tenant activity at RRAD, performs the supply mission

previously performed by RRAD

1st sentence - take out supply

Remove 3rd and 4th paragraph (LSAAP oriented)

#### Response:

#### Comment A-24:

#### **Section Three**

pg. 3-3 Remove 1st and 2nd paragraph (LSAAP oriented)

#### Response:

The text has been revised accordingly.

#### Comment A-25:

#### **Section Three**

pg. 3-4 1st paragraph - change 650 to 576

Delete 2nd sentence

Bullets - delete information on Geographic Areas E, F & G
last sentence - change seven to four

#### Response:

The text has been revised accordingly.

#### Comment A-26:

#### Section Three

pg. 3-5 <u>last paragraph</u> - change sentence to read "wheeled vehicles that are awaiting repair or overhaul at the ...

#### Response:

#### Comment A-27:

#### Section Three

#### pg. 3-6 2nd paragraph

3rd sentence - change to read "western edge of Geographical Area B and served as a Material Handling Equipment (MHE)..."

4th sentence - delete sentence / replace with (This building is currently vacant.)

#### Response:

The text has been revised accordingly.

#### Comment A-28:

#### Section Three

#### pg. 3-7 2nd paragraph

last sentence - add 345 and 321 to Building 333

3rd paragraph - delete sentence "Building 333 is completely..."

4th paragraph

1st sentence - change to read "...located west of Building 333."

#### Response:

The text has been revised accordingly.

#### Comment A-29:

#### Section Three

pg. 3-8 Change section title to 334A

1st paragraph

1st sentence - change 334 to 334A

2nd paragraph - change manufacturing to industrial

3rd paragraph

4th sentence - change strategic to National

6th sentence - change Red River Amy Depot to Red River Army Depot's tenant, DLA

#### Response:

The text has been revised accordingly.

#### Comment A-30:

#### Section Three

pg. 3-9 1st paragraph

last sentence - replace "and manufacturing buildings" with facilities change multiple launch release to multiple launch rocket 2nd sentence - remove at Bldg 320 Delete sections 3.2.1.5, 3.2.1.6, and 3.2.17

#### Response:

The text has been revised accordingly.

#### Comment A-31:

Section Three

pg. 3-10 Remove entire page

#### Response:

The text has been revised accordingly.

#### Comment A-32:

#### Section Three

pg. 3-11 1st paragraph

4th sentence - remove 260 and 318

Bullets - remove cisterns

#### Response:

#### Comment A-33:

#### Section Three

pg. 3-13 Row 2, Description column - change to read "used by RRAD to detain raw chromium rinse waters before being treated at the IWTP
 Row 3, Description column - change wastewater treatment plant to Industrial waste treatment plant

#### Response:

The text has been revised accordingly.

#### Comment A-34:

#### Section Three

pg. 3-14 Row 1, Description column - add sentence "This facility is currently being used as a recycling center for used oil and solvents."

1st paragraph

2nd sentence - change wastewater treatment plant to Industrial waste treatment plant

#### Response:

The text has been revised accordingly.

#### Comment A-35:

#### Section Three

pg. 3-15 Row 2, Description column - delete 2nd sentence: Add "The sanitary sewage plant ceased operations in the 1950s, and the chromium batch treatment plant ceased operations in 1978 when the Industrial waste treatment plant was built."

Row 4, SWMU column - change wastewater treatment plant to Industrial waste treatment plant

Row 4, Description column - delete 1st sentence

Row 1, Description column - change to past tense

Row 1, Status column - change to closed

Row 3, Description column - change to read "This landfill was used as a sanitary landfill and was closed in 1973."

#### Response:

The text has been revised accordingly.

#### Comment A-36:

#### Section Three

pg. 3-16 Row 3, Description column - change to read "...recover silver from liquid waste streams"

1st paragraph - delete mention of LSAAP

#### Response:

The text has been revised accordingly.

#### Comment A-37:

#### Section Three

pg. 3-17 Delete last 2 rows of table

Delete section of cisterns (3.3.4)

#### Response:

The text has been revised accordingly.

#### Comment A-38:

#### Section Three

pg. 3-18 1st paragraph

3rd sentence - change sewage treatment plant to potable water plant

#### Response:

#### Comment A-39:

#### Section Three

pg. 3-20 Delete table regarding geographic area G

2nd paragraph

Delete last sentence regarding wetlands

#### Response:

The text has been revised accordingly.

#### Comment A-40:

#### Section Three

Table 3-1

Delete rows regarding buildings 152, 168, 172, 260, 303, 303a, 303b, 308, 310, 318, , S-332, S-334, S-340, and 1500 series buildings as well as Johnson loop

#### Response:

Table 3-1 has been revised accordingly.

#### Comment A-41:

**Section Four** 

pg 4-1

Delete section regarding B-B area (Geographical Area F)

#### Response:

This section has been deleted.

#### Comment A-42:

**Section Four** 

pg 4-5

2nd paragraph

change PA/SI to RFA in 1st sentence

#### Response:

The text has been revised accordingly.

#### Comment A-43:

Section Four

pg 4-9

Delete rows regarding 1500 series buildings

#### Response:

The rows regarding the 1500 series buildings have been deleted.

#### Comment A-44:

**Section Four** 

pg 4-11

2nd paragraph

2nd sentence - change sentence to read "The former purpose of this area was ... parts once they were dismantled."

#### Response:

#### Comment A-45:

**Section Four** 

pg 4-11

4th paragraph

delete 3rd sentence (Operations are still...)

#### Response:

The text has been revised accordingly.

#### Comment A-46:

**Section Four** 

pg 4-15

4th paragraph

change last sentence to "It appears that the surface water may impact BRAC property

#### Response:

The text has been revised accordingly.

#### Comment A-47:

**Section Four** 

pg 4-16

1st paragraph

Make mention of IRA regarding sediment removal

Section 4.3.4 - delete

Section 4.3.5 - delete

#### Response:

#### **COMMENT RESPONSE PACKAGE**

#### Comment A-48:

#### **Section Four**

pg 4-17

Section 4.4.1 - Asbestos abatement has occurred at all areas where friable asbestos was present.

Section 4.4.2 - remove mention of LSAAP

#### Response:

The text has been revised accordingly.

#### Comment A-49:

**Section Four** 

pg 4-18

2nd bullet - remove mention of BB-15 Area

#### Response:

The text has been revised accordingly.

#### Comment A-50:

Section Four

pg 4-21

Section 4.5 - remove mention of BB-15 Area

#### Response:

Text referencing the BB-15 Area has been deleted.

#### Comment A-51:

Section Four

pg 4-22

1st paragraph

change panther to unnamed drainage ditch

#### Response:

The text has been revised accordingly.

#### Comment A-52:

**Section Four** 

pg 4-23

3rd paragraph

1st sentence - change PA/SI to RFA

#### Response:

The text has been revised accordingly.

#### Comment A-53:

Section Four

pg 4-24

Remove first row regarding BB Area

#### Response:

The first row regarding the BB Area has been deleted.

#### Comment A-54:

**Section Four** 

Figure 4-1

Remove Geographic Areas E, F & G

#### Response:

Geographic Areas E, F, and G have been deleted from Figure 1-1 (Figures 1-1 and 4-1 were identical figures in the Draft EBS Report. Only Figure 1-1 is included in the Draft Final EBS Report).

#### Comment A-55:

Section Five

pg 5-2

Delete paragraph BRAC Parcel Number and Label 34 (1)

#### Response:

BRAC Parcel Number and Label 34(1) has been deleted.

#### Comment A-56:

Section Five

pg 5-3

Delete paragraphs BRAC Parcel Number and Label 44 (1) and 54 (1)

#### Response:

BRAC Parcel Numbers and Labels 44(1) and 54(1) have been deleted.

#### Comment A-57:

Section Five

pg 5-6

Delete paragraph BRAC Parcel Number and Label 33 (2) PS/HS Paragraph BRAC Parcel Number and Label 34A (2) PS/HS; change the word leased to demolished

#### Response:

BRAC Parcel Number and Label 33(2)PS/HS has been deleted. Parcel 34A(2) has also been deleted.

#### Comment A-58:

Section Five

pg 5-8

Delete BRAC Parcel Number and Label 47 (2) PS (P)/HS(P)

#### Response:

BRAC Parcel Number and Label 47(2)PS(P)/HS(P) has been deleted.

#### Comment A-59:

Section Five

pg 5-9

Delete BRAC Parcel Number and Label 48 (4)

#### Response:

BRAC Parcel Number and Label 48(4) has been deleted.

#### Comment A-60:

BRAC Parcel Number and Label 26 (5) PS/PR/HS/HR

Section Five

pg 5-12

#### 2nd paragraph

4th sentence - change sentence to read "Several chemical vats are housed in the parts...which contain...and thinners; and cutting oils..."

5th sentence - change sentence to read "The floor drain within the PCCA drains to the Industrial Waste Treatment plant

The text has been revised accordingly.

#### Comment A-61:

Section Five

pg 5-13

Delete BRAC Parcel Number and Label 49 (5) PS/PR/HS/HR (P)

# Response:

BRAC Parcel Number and Label 49(5)PS/PR/HS/HR(P) has been deleted.

# Comment A-62:

**Section Five** 

pg 5-15

BRAC Parcel Number and Label 32 (6) PS/PR; change leased to demolished

## Response:

BRAC Parcel Number and Label 32(6)PS/PR has been deleted.

#### Comment A-63:

Section Five

pg 5-16

Delete BRAC Parcel Number and Label 51 (6) HS/HR (P), 52 (6) HS/HR (P), 53 (6) HS/HR (P)

#### Response:

BRAC Parcel Numbers and Labels 51(6)HS/HR(P), 52(6)HS/HR(P), and 53(6)HS/HR(P) have been deleted.

#### Comment A-64:

**Section Five** 

pg 5-18

2nd paragraph

change leased to demolished

# Response:

The text has been revised accordingly.

### Comment A-65:

Section Five

pg 5-20

2nd paragraph

change leased to demolished

#### Response:

BRAC Parcel Number and Label 31(7) has been deleted.

# Comment A-66:

Section Five

pg 5-21

Delete BRAC Parcel Number and Label 45 (7), 46 (7), 50 (7)

### Response:

BRAC Parcel Numbers and Labels 45(7), 46(7), and 50(7) have been deleted.

#### Comment A-67:

#### Section Five

Table 5-1A

```
pg 2 of 25 1st row Basis column - change leased to demolished
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pg 4 of 25 3rd row Basis column - change leased to demolished

pg 5 of 25 3rd row Basis column - change leased to demolished

pg 6 of 25 1st row Basis column - change leased to demolished

pg 6 of 25 2nd row Basis column - change leased to demolished

pg 8 of 25 1st row Basis column - delete word "as" in 3rd sentence (duplication)

pg 9 of 25 1st row Basis column - change 8 feet to 8 inches

pg 11 of 25 Basis column

# 2nd paragraph

3rd sentence - Delete An approximately 1,000 gallon capacity

Begin sentence with chemical vats...

Change last sentence to read "The floor drains outfall from the

PCCA to the Industrial Waste Treatment Plant

pg 14 of 25 3rd row Basis column - change leased to demolished

pg 15 of 25 1st row Basis column - change leased to demolished

2nd row - Delete

pg 16 of 25 1st row Delete

2nd row - Basis column - change leased to demolished

pg 20 of 25 Delete 2nd, 3rd and 4th rows

pg 21 of 25 Delete both rows

pg 22 of 25 Delete entire page

pg 23 of 25 Delete entire page

pg 24 of 25 Delete entire page

pg 25 of 25 Delete row 1 and row 2

#### Response:

All recommended changes referenced above have been made, except those related to BRAC Parcel Numbers 18(5), 31(7), 32(6), and 34A(2), which have been deleted from the report.

# A.2 RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE DRAFT EBS REPORT

**ENTITY:** 

U.S. Environmental Protection Agency, Region VI

**INDIVIDUAL:** 

David W. Neleigh

TITLE:

Chief, New Mexico - Federal Facilities Section

DATE:

July 23, 1996

#### **General Comments:**

#### Comment A-68:

Pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9620 (CERCLA) as amended by the Community Environmental Response Facilitation Act (CERFA), federal agencies are to evaluate all base closure and realignment property to identify uncontaminated parcels and to allow the transfer or lease of uncontaminated and/or remediated parcels. As defined in the CERFA guidance, properties are categorized according to their environmental condition in order to assist in the transfer or lease of uncontaminated and/or remediated parcels.

In reviewing the draft EBS for Red River Army Depot, it is apparent that the Army has created another category for properties the Army feels contain substances that are "non-CERCLA" substances. EPA does not agree with the Army's interpretation that the substances listed (i.e., asbestos, lead-based paint, pesticides, polychlorinated biphenyls (PCBs), radiological hazards, radon, and unexploded ordnance (UXO)) should be "disqualified" from the standard seven categories established by CERFA.

The objective of the CERFA categories is to identify parcels where there is no indication that the storage, release or disposal of hazardous substances or petroleum products which may have resulted in an environmental condition that poses a threat to

human health or the environment. EPA's position is that the release or disposal of any of the substances listed above, including, but not limited to 40 CFR 302.4, is covered by CERCLA and the parcels should be categorized accordingly.

If the Army wishes to assist the LRA in determining what real properties do contain or have the potential to contain asbestos and lead-based paint, EPA is certainly in favor of this disclosure. In fact, current EPA policy (Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as Title X. Section 1018) requires disclosure of the presence of lead-based paint for residential properties, however, the mere presence of lead-based paint is not an indication of a release of lead that would pose a threat to human health or the environment.

In conclusion, until such time as the qualification of properties/parcels based on the presence of asbestos, lead-based paint, pesticides, PCBs, radiological hazards, radon, and UXO is eliminated, EPA cannot concur on the CERFA category designation for parcels identified in the EBS. Therefore, EPA requests that the draft EBS be revised and the appropriate CERFA category be designated for parcels/properties previously considered "qualified."

#### Response:

A distinction is made between lead-based paint and other lead sources in the EBS report. A distinction is also made between asbestos-containing materials and raw asbestos. The approach used to identify and delineate the presence of lead-based paint and asbestos-containing materials has been developed by the Army, EPA, various states, and other regulatory agencies over two previous rounds of base realignment and closure (1991 and 1993). Their presence has been documented in the EBS report; however, their presence does not necessarily preclude the Army from transferring or leasing the property. Prior to transfer or lease, a Finding of Suitability to Transfer (FOST) or Finding of Suitability to Lease (FOSL) will be prepared to determine whether, and how, to proceed.

A distinction is made in the EBS report between the presence of PCBs within equipment, such as transformers, that have not leaked and PCBs in soil from leaking equipment. PCBs in soil from leaking equipment are considered a CERCLA issue and are reflected as such in the EBS

report. The EBS report has also identified serviceable PCB-containing equipment remaining on the property in accordance with the Toxic Substances Control Act of 1976.

Pesticides are consumer products if applied in a manner consistent with the standards for licensed application. When applied in a manner that was not consistent with standard practice, pesticides were considered a CERCLA issue in the EBS report.

Property that was used as intended for military training or operations in which residual UXO, ordnance fragments, and/or explosive materials are present or may be present has been identified and documented in the EBS report. The U.S. Army is actively implementing a UXO program. Prior to transfer or lease, a FOST or FOSL will be prepared to determine whether, and how, to proceed.

All of the BRAC property has been categorized based on the presence of CERCLA hazardous substances and petroleum products. "Qualified" parcels overlay the categorized parcels and are denoted by the letter "Q." The additional presence of a qualified issue has been documented, but may not preclude the transfer or lease of the property.

#### Comment A-69:

It is EPA's position that the known or potential extent of a ground water contaminant plume underlying excess property areas should automatically require a parcel to be assigned a category 7 designation. Upon completion of investigations necessary to determine extent of contamination and what has/has not been impacted by the ground water contamination, parcel designations can be reevaluated.

# Response:

Position noted. Additional information is required to adequately respond to this comment.

#### Comment A-70:

Where is/was the waste material and munitions, including small caliber ammunition, furnace? Is it located within the excess area? If so, plans should be made for investigations.

# Response:

Waste materials and munitions, including small caliber ammunition, are stored in Buildings 1025, 1027, and 722. These buildings have not been identified as BRAC property and, therefore, are not subject to this EBS investigation other than as an adjacent property. Additionally, the waste munitions furnaces associated with small arms demilitarization are not located on the BRAC property and, therefore, are not evaluated in this EBS report. However, these furnaces will be addressed in the 1997 IRA.

#### Comment A-71:

Where is/was all of the historic accumulation areas of electrical transformers? Are they located within the excess area? If so, plans should be made for investigations?

# Response:

Documentation on the historic accumulation areas of electrical transformers prior to 1981 was not found during the records search conducted for this EBS investigation. However, it is believed through personal interviews that electrical transformers have always been stored at the location of the present PCB storage building identified as Building 287. No sampling is scheduled in this area. This area will not be excessed as BRAC property and is identified as a reserve enclave.

# **Specific Comments:**

## Comment A-72:

#5 Section 1.1, 1.3, and 4.4: See EPA's general comment #1 regarding "qualified" parcels.

# Response:

See the response to Comment A-68.

# Note: All comments listed below pertain to Section 5

# Comment A-73:

# Geographical Area A:

#6 1(1) should indicate that the routine application of pesticides at the golf course was conducted by a certified/licensed applicator, if in fact this is the case.

#### Response:

Routine application of pesticides at the golf course was conducted by a certified/licensed applicator. This information has been added to the text in Section 5.1.1.

#### Comment A-74:

### Geographical Area A:

#7 Runnels Village and Buildings 34 and 40 should be reevaluated pursuant to EPA's general comment regarding "qualified" parcels.

#### Response:

See the response to Comment A-68.

#### Comment A-75:

# Geographical Area A:

#8 EPA was informed that the water tower (identified as building 69) was no longer included for excess, however, given the location of the water tower close to a residential area (Buildings 34 and 40), the potential for the release of lead should be evaluated.

# Response:

Comment noted. The water tower (identified as Building 69) will be retained by the U.S. Army. A circular 0.25-acre parcel has been centered on the water tower. No affected BRAC property was identified within the 0.25-acre circle.

# Comment A-76:

# Geographical Area B:

Parcels within this geographic area (including all of parcel 5) should be reevaluated pursuant to EPA's general comment regarding "qualified" parcels. Given that asbestoscontaining material has been confirmed with analysis, a release of asbestos that could pose a threat to human health should be evaluated closely. A category designation 4, 5, 6, or 7 should be given to these parcels.

What is the likelihood of ground water contamination associated with the locomotive shop, the motor pool, or any other within this geographical area? The concern would be if there is ground water contamination that a plume would extend from the enclave area into the excess area.

EPA was informed that Buildings S-179 and S-180 are to be demolished.

# Response:

Comments noted. Please see the response to Comment A-68 in reference to "qualified" parcels. In reference to the second comment, no evidence exists to conclude that release, disposal, or migration of a petroleum product or hazardous substance has occurred. Buildings S-179 and S-180 will be retained by the local re-use authority.

#### Comment A-77:

# Geographical Area B:

#10 6(5): Information regarding how the identification of areas requiring remediation is made, the method by which the remediation is conducted, the method of disposal of soils/contaminated material, and the how remediation is determined to be completed should be provided in the EBS.

# Response:

As described in Sections 4.2 and 5.1.5 and in Table 5-1a, visual observations trigger remediation, and completion is sometimes determined through sampling, but often completion is determined through visual inspection. This information was obtained through interviews. Additional information was not found during the EBS..

#### Comment A-78:

# Geographical Area B:

#11 7(3): A description of what was burned historically in the furnace must be provided in order to justify category designation.

#### Response:

The word "furnace" has been changed to "drying ovens." These drying ovens are used to dry rewound electrical motors and not used to burn or incinerate hazardous or non-hazardous wastes. An exemption to the drying ovens air permit was required and approved by TNRCC in 1994.

#### Comment A-79:

# Geographical Area B:

#12 8(2): A better description of the building is needed in order to agree with category designation (i.e., no floor drains, no sumps, etc.).

The following description has been added to the text: Building 133 originally was constructed as an inert ammunition storage warehouse but was never used as such because of a mission change during the early 1940s. Prior to 1960, the building was used for "records holding." From 1960 to the present, allied trades operations like tool repair, woodworking, and light machine shop operations have been located within the facility. Beryllium tools were made within the machine shop for ammunition operations. Past operations also included cabinetmaking and metal furniture repair. A drying oven is currently in operation within the facility as a part of the electric motor rewinding shop. Emissions from this oven qualify for standard exemptions under TNRCC guidelines.

#### Comment A-80:

# Geographical Area B:

#13 9:-EPA was informed that this property is no longer in the excess area; therefore, EPA will not provide comments.

## Response:

We concur. BRAC Parcel Number and Label 9(7) has been deleted and identified as a reserve enclave area.

#### Comment A-81:

#### Geographical Area B:

#14 9A and 9B: EPA reserves its right to comment on the category designation upon review of the RFI that supposedly has been conducted for these areas. What was/were the date(s) of the investigation(s)? Has the report been submitted to EPA and TNRCC for review? The table and text should be specific about dates and titles of documents to which it is referencing. A category 7 designation may be more appropriate.

Comment noted. The RFI report is dated April 1995. Copies of this report were submitted to EPA and TNRCC for review. However, a copy was not obtained during the EBS, though it was requested.

#### Comment A-82:

# Geographical Area B:

#15 10(5): All relevant information regarding certification of closure should be included in the EBS. EPA was informed that Building 162 is to be demolished.

# Response:

Written approval of clean closure at Building 162 was given by TNRCC on July 9, 1996. Building 162 is scheduled to be demolished. All documentation referenced in the Draft EBS Report is on file at the Red River Army Depot for review.

#### Comment A-83:

#### Geographical Area B:

#16 11(2): A better description of the building is needed in order to agree with category designation (i.e., no floor drains, no sumps, etc.).

#### Response:

The following description has been added to the text: Building 164 was utilized as a carpenter shop between 1942 and 1959. Operations included building wood pallets and shipping containers. The facility was converted to a print shop in 1959 and housed print shop operations until 1995. The facility is currently utilized as a radio repair shop.

#### Comment A-84:

# Geographical Area B:

#17 12(3): A better description of the historical uses for the building should be provided in order to justify category designation. For example, were mercury switches stored in the building?

# Response:

The following descriptions have been added to Section 5.1.3: Building 170 was used as a radio repair facility beginning with its construction in 1942 and ending in 1995 when the radio repair operations were moved to Building 164. The facility also housed typewriter repair operations for a short period of time. Currently the facility is not in use. Building 171 was constructed in 1967. This facility has always housed a standby generator.

#### Comment A-85:

# Geographical Area B:

#18 13(2): A better description of the building is needed in order to agree with category designation (i.e., no floor drains, no sumps, etc.). EPA was informed that Building S-161 is to be demolished.

#### Response:

The information obtained through the records review, interviews, and visual inspections conducted for this EBS is adequate to determine the standard environmental condition of the parcel in accordance with the *BRAC Cleanup Plan (BCP) Guidebook* (DOD 1993). Building S-161 is scheduled to be demolished by the U.S. Army.

#### Comment A-86:

#### Geographical Area B:

#19 14(7): A better description of the building is needed in order to determine appropriate sampling strategy. EPA was informed that Building S-163 is to be demolished.

See the response to Comment A-85. Building S-163 is scheduled to be demolished by the U.S. Army.

#### Comment A-87:

# Geographical Area B:

#20 15(7): A better description of the building is needed in order to determine appropriate sampling strategy. EPA was informed that Building S-167 is to be demolished.

### Response:

See the response to Comment A-85. Building S-167 is scheduled to be demolished by the U.S. Army.

# Comment A-88:

# Geographical Area B:

#21 16(5): All relevant information regarding certification of closure should be included in the EBS.

#### Response:

Based on the number of documents reviewed for this EBS report, it is impractical to include these references as attachments. All relevant information regarding certification of closure is referenced in the Draft EBS Report. Copies of the references identified in the Draft EBS Report are available at the Red River Army Depot for review.

# Comment A-89:

# Geographical Area C:

#22 17(5): Information regarding how the identification of areas requiring remediation is made, the method by which the remediation is conducted, the method of disposal of

soils/contaminated material, and the how remediation is determined to be completed should be provided in the EBS.

# Response:

See the response to Comment A-77.

#### Comment A-90:

# Geographical Area C:

#23 18: EPA was informed that this property is no longer in the excess area; therefore, EPA will not provide comments. However, given the potential impact of ground water contamination from enclave property to excess property, this area should be reevaluated. See EPA's comment #2 and #30.

# Response:

This property is no longer an excess area and is now identified as a reserve enclave. The 1996 RFI scheduled for the end of 1996 will include an additional investigation at this property.

#### Comment A-91:

# Geographical Area C:

#24 19: EPA was informed that this property is no longer in the excess area; therefore, EPA will not provide comments.

#### Response:

This property is no longer an excess area and is now identified as a reserve enclave.

#### Comment A-92:

# Geographical Area C:

#25 20(2): Given the potential for ground water contamination associated with the pipeline from AST (No. 319), the category designation should be reevaluated.

We do not concur. No documented evidence exists to conclude that a release, disposal, or migration of petroleum product has occurred. Therefore, this parcel has been designated as a Category 2.

#### Comment A-93:

# Geographical Area C:

#26 22(3): A better description of the building is needed in order to agree with category designation (i.e., no floor drains). The reportable quantity limit of any potential release is not relevant.

#### Response:

See the response to Comment A-85. Text has been added to mention the secondary containment systems constructed at this building. Also, the last sentence in reference to reportable quantities has been deleted.

#### Comment A-94:

#### Geographical Area C:

#27 25: Due to the lack of data and the need for an investigation to determine the releases that may have occurred, this parcel should be designated a category 7.

#### Response:

We concur. Parcel 25(6)HS has been changed to 25(7).

#### Comment A-95:

# Geographical Area C:

#28 26: This parcel should be designated a category 7 as further investigation is needed to determine the nature and extent of contamination in the soil and in the ground water and to determine the risks associated with the releases that have occurred. Furthermore, the

ground water contamination that exists on enclave as well as excess property needs to be identified.

# Response:

We do not concur. A 4,000-gallon diesel tank and the surrounding contaminated soil was removed at this parcel. However, additional investigations and remedial actions are still pending. Based on this information, this parcel meets the definition of Category 5.

#### Comment A-96:

# Geographical Area C:

#29 27A: EPA reserves its right to comment on the category designation upon review of the RFI that supposedly has been conducted for these areas. What was/were the date(s) of the investigation(s)? Has the report been submitted to EPA and TNRCC for review? The table and text should be specific about dates and titles of documents on which it is referencing. A category 7 designation may be more appropriate.

# Response:

Comment noted. The April 1995 RFI report was submitted to both EPA, Region VI and TNRCC. Based on the results reported in the April 1995 RFI report, this parcel meets the definition of Category 3. The reference to this report is listed as a primary document in Section Two, and included as a reference in Section Six.

#### Comment A-97:

# Geographical Area C:

#30 28: Property (eg. 342) within this parcel should be reevaluated pursuant to EPA's general comment regarding "qualified" parcels, and the category designation should be reevaluated. Furthermore, the potential for contaminated ground water from enclave property to impact excess property must be evaluated and the appropriate category designation assigned.

In reference to EPA's general comment regarding "qualified parcels," please see the response to Comment A-68. Based on the results reported in the April 1995 RFI report, the known groundwater contaminant plume does not impact this BRAC parcel.

#### Comment A-98:

# Geographical Area C:

#31 30(2): A better description of the building is needed in order to agree with category designation (i.e., no floor drains).

# Response:

See the response to Comment A-85.

# Comment A-99:

# Geographical Area C:

#32 31(7): EPA was informed that the building is considered BRAC (but will be demolished) and that the land will remain in the enclave. The category designation should be reevaluated.

#### Response:

Comment noted. Since the building will be demolished and the land will remain as a reserve enclave, this parcel designation 31(7) has been deleted from the Draft Final EBS Report.

#### Comment A-100:

#### Geographical Area C:

#33 32(6): EPA was informed that the building is considered BRAC (but will be demolished) and that the land will remain in the enclave. The category designation should be reevaluated.

Comment noted. Since the building will be demolished and the land will remain a reserve enclave, parcel designation 32(6) has been deleted from the Draft Final EBS Report.

### Comment A-101:

# Geographical Area C:

#34 33: EPA was informed that this property is no longer in the excess area; therefore, EPA will not provide comments.

# Response:

Comment noted. BRAC Parcel Number and Label 33(2)PS/HR has been deleted.

#### Comment A-102:

# Geographical Area C:

#35 34: EPA was informed that this property is no longer in the excess area; therefore, EPA will not provide comments.

#### Response:

Comment noted. BRAC Parcel Number and Label 34(1) has been deleted.

#### Comment A-103:

# Geographical Area C:

#36 34A(2): EPA was informed that the building is considered BRAC (but will be demolished) and that the land will remain in the enclave.

#### Response:

Comment noted. BRAC Parcel Number and Label 34A(2) has been deleted.

#### Comment A-104:

# Geographical Area D:

#37 Parcels/property within this geographical area should be reevaluated pursuant to EPA's general comment regarding "qualified" parcels. Given that asbestos-containing material has been confirmed with analysis, a release of asbestos that could pose a threat to human health should be evaluated closely. A category designation 4, 5, 6, or 7 should be given to these parcels.

# Response:

See the response to Comment A-68.

#### Comment A-105:

# Geographical Area D:

#38 35(1): What is it? The parcel is located in a highly industrialized area, and without additional information, a category designation cannot be justified. Furthermore, given the potential for ground water contamination to exist under this area, a category 7 designation would be appropriate until investigations have been completed.

#### Response:

We do not concur. There has been no documented storage of hazardous substances or petroleum products, nor has there been a documented release, disposal, or migration from an adjacent property of hazardous substances or petroleum products at this parcel. This parcel meets the definition of Category 1 as defined in the *BRAC Cleanup Plan (BCP) Guidebook*.

#### Comment A-106:

#### Geographical Area D:

#39 37(2): A better description of the historical uses of the building must be provided in order to justify the category designation.

#### Response:

See the response to Comment A-85.

#### Comment A-107:

# Geographical Area D:

#40 38(2): A better description of the historical uses of the building must be provided in order to justify the category designation.

# Response:

See the response to Comment A-85.

#### Comment A-108:

# Geographical Area D:

#41 38A(2): Since the land will be excessed (but not the building), what was the historical use of the property? Any reason to suspect past activities associated with hazardous substances that may have resulted in a release?

# Response:

Building 423 is a newly constructed flammable storage building. This building has been operable for less than one year and contains only small quantities of hazardous materials. No documented historical evidence exists to conclude that a release has occurred anywhere on the excessed property.

#### Comment A-109:

#### Geographical Area D:

#42 39(2): A description of historical uses should be provided in order to justify category designation.

#### Response:

See the response to Comment A-85.

#### Comment A-110:

# Geographical Area D:

#43 39A(2): Describe inspection frequency and procedure in order to justify category designation.

# Response:

This parcel has been redesignated as Category 7.

#### Comment A-111:

# Geographical Area D:

#44 41: Due to the lack of data and the need for an investigation to determine the releases that may have occurred, this parcel should be designated a category 7.

# Response:

We do not concur. Previous investigations have been conducted and, based on the presence of heavy metals and VOCs in surrounding soils, a Category 6 designation is appropriate. Further investigation of this area is scheduled as part of the 1996 RFI.

#### Comment A-112:

## Geographical Areas E. F. and G:

#45 EPA was informed that the properties within these geographical areas are no longer in the excess area; therefore, EPA will not provide comments.

# Response:

We concur. Geographic Areas E, F, and G have been deleted.

- A.3 RESPONSES TO STATE OF TEXAS COMMENTS ON THE DRAFT EBS
- A.3.1 RESPONSES TO TEXAS NATURAL RESOURCE CONSERVATION COMMISSION, INDUSTRIAL AND HAZARDOUS WASTE DIVISION COMMENTS ON THE DRAFT EBS REPORT

ENTITY:

Texas Natural Resource Conservation Commission, Industrial

and Hazardous Waste Division

**INDIVIDUAL:** 

Paul S. Lewis

TITLE:

Manager, Corrective Action Section Industrial and Hazardous

Waste (I&HW) Division

DATE:

July 23, 1996

On April 16, 1996, the Draft Environmental Baseline Survey (EBS) was provided to the Texas Natural Resource Conservation Commission Federal Facilities Team (TNRCC) during a Base Realignment and Closure Cleanup Team (BCT) meeting at Red River Army Depot (RRAD). The Draft EBS was provided to members of the BCT for review and comment. It is our understanding that this Draft EBS report is not an official request from RRAD for concurrence under CERCLA Section 120 (h)(4). Therefore, as a member of the BCT, the TNRCC has reviewed the Draft EBS and provides the following comments.

#### Comment A-113:

1. Based on discussion during the BCT meeting held on June 25 & 26, 1996, several building and parcels identified in the Draft EBS have since been removed from the BRAC list. Therefore, the entire Draft EBS report (all text, maps, and tables) should be updated to reflect all changes which have occurred since the draft report was prepared. Those areas removed from BRAC consideration should still be evaluated for potential impacts to adjacent BRAC parcels.

Comment noted. The Draft EBS Report has been revised based on the new information obtained at the BCT meeting held on June 25 and 26, 1996.

#### **Comment A-114**:

2. Page 1-2: Please explain why asbestos, lead-based paint, polychlorinated biphenyls, radon, unexploded ordnance, radiological hazardous, and pesticides are considered "non-CERCLA" contamination substances. All substances listed in CERCLA Table 302.4 - List of Hazardous Substances and Reportable Quantities should be properly evaluated. Please provide the reference(s) used to support the Draft EBS definition of "non-CERCLA" substances and designation of "qualified" parcels. As currently described in the Draft EBS, the designation of "qualified" parcels could result in inappropriate conclusions regarding the CERFA category status of these parcels.

# Response:

See the response to Comment A-68.

#### Comment A-115:

3. Page 1-6: As noted in comment #2 above, the Draft EBS does not provide sufficient information on the above noted "non-CERCLA" contamination substances. Once an adequate assessment has been completed, those parcels which have been labeled with qualifiers should be properly reevaluated and placed in their proper CERFA Category (1 through 7).

#### Response:

See the response to Comment A-68.

#### Comment A-116:

4. Page 1-10: Please include a Topographic Map which depicts the surface features discussed in Section 1.5.4.

# Response:

A topographic map has been included in the Draft Final EBS Report as Figure 1-2.

# Comment A-117:

5. Figures 1-1 and 4-1: Please clearly identify the boundary between RRAD and Lone Star Army Ammunition Plant.

#### Response:

Figure 1-1 has been revised to clearly identify the boundary line between the Red River Army Depot and the Lone Star Army Ammunition Plant. (Figures 1-1 and 4-1 were identical figures in the Draft EBS Report.)

#### Comment A-118:

6. Page 2-1: The text in Section 2.1.1 refers to 11 documents used to prepare the Draft EBS, however, the document table which follows lists 15 documents. Please make the appropriate corrections.

#### Response:

The text has been revised accordingly. Ten documents are now included.

#### Comment A-119:

7. Page 2-4: Reference is made to the number of Aboveground Storage Tanks (ASTs), Underground Storage Tanks (USTs), and Leaking Underground Storage Tanks at Lone Star Army Ammunition Plant. Please include the same information for RRAD.

Comment noted. LSAAP is no longer BRAC property; therefore, information in reference to LSAAP has been removed. The information in reference to RRAD is based on the information provided in the database search report, presented as Appendix B in the Draft Final EBS Report.

#### Comment A-120:

8. Page 2-13: The table should be updated to reflect changes in BRAC parcels.

# Response:

The table has been revised accordingly.

#### Comment A-121:

9. Page 3-12: A statement is made referring to the enactment of RCRA in approximately 1988. RCRA was enacted in 1976. The RRAD Permit for Hazardous Waste Management (Permit No. HW-50178) was issued on August 2, 1988. Permit No. HW-50178 has been amended and modified since the original issuance date, the most recent version of the permit was issued on August 28, 1995.

#### Response:

Comment noted. The text has been revised accordingly.

#### Comment A-122:

10. Page 3-14: Reference is made to waste being shipped to Satellite Accumulation Areas, Buildings 293 and 346. Please be aware that Satellite Accumulation areas, by definition, must be at or near the point of generation. Please clarify the type of waste storage area used (i.e. satellite accumulation areas, <90 days storage container storage areas, or permitted container storage areas).

Comment noted. Satellite accumulation areas will be changed to read, "one year RCRA permitted container storage areas."

#### Comment A-123:

11. Page 3-18: Section 3.3.7 discussion of the Sewage Treatment collection system: Please discuss the types of waste which are managed throughout this system, including whether this system manages industrial wastes.

# Response:

The types of waste treated at the Sewage Treatment Collection system are sanitary wastes. No industrial wastes enter or are treated at this facility. The text has been revised accordingly.

#### Comment A-124:

12. Table 3-1: This table consists of a listing of facilities being excessed including the year of construction. However, it was noted by members of the Restoration Advisory Board (RAB), during a meeting on June 25, 1996, that at least two of the construction dates noted in Table 3-1 are incorrect. Please review this table along with RRAD records and make the appropriate corrections.

# Response:

The table has been reviewed and updated.

#### Comment A-125:

13. Page 4-3: Please contact the TNRCC PST Division for a current update on the closure status of the UST removal/remediation activities at Building 162.

Comment noted. A copy of a letter from TNRCC, dated July 9, 1996, has been obtained that documents TNRCC concurrence that the corrective action requirements at Building 162 have been completed. This information has been included in the Draft Final EBS Report.

#### Comment A-126:

14. Page 4-17: Please explain the non-CERCLA contamination substance discussion, see previous comments #2 and #3.

# Response:

See the response to Comment A-68.

#### Comment A-127:

15. Page 5-1: In regard to the discussion of qualified parcels, please refer to comments #2 and #3.

#### Response:

See the response to Comment A-68.

#### Comment A-128:

16. Section 5.1.1: Based on the information available at this time and the issue regarding the "qualification" of parcels, the TNRCC does not agree with the CERFA Category 1 designations of the parcels described in this section.

#### Response:

See the response to Comment A-68.

#### Comment A-129:

17. Page 5-5: Please provide documentation that a release investigation for the 420,000 gallon Aboveground Storage Tank (AST) used to store diesel fuel, in parcel number 20(2)PS has been completed. TNRCC feels that investigation of the pipeline associated with this AST, parcel number 21(7) discussed on page 5-18, should include the area around the AST. Therefore, we feel that a more appropriate CERFA classification for the AST would be Category 7.

# Response:

We concur. BRAC Parcel Number and Label 21(7) has been deleted. The affected property has been identified as one contiguous parcel labeled as 20(7). Please note that the designated category number has also been changed to a 7, pending the results of the 1996 RFA report.

#### Comment A-130:

18. Page 5-6: The EBS reports that radioactive materials have been stored in Building 421, parcel number 37(2). Has a radiological survey been completed for this building? If a radiological survey has not been completed, we feel this parcel should be listed as CERFA Category 7. Once the survey has been completed, Building 421 should be reevaluated and assigned the proper CERFA Category (1-7).

# Response:

A radiological survey was performed in 1996 at the Red River Army Depot through an electronic records search and review by the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM). Since documentation exists to conclude radiological materials were stored in Building 421, this building has been qualified for radiological hazards. The U.S. Army has scheduled a radiological sampling survey program to be conducted in 1998.

#### Comment A-131:

19. Page 5-22: In regard to the discussion of "qualified" parcels, please refer to comments #2 and #3.

See the response to Comment A-68.

#### Comment A-132:

20. Table 5-1A: In the case of all parcels for which an RCRA Facility Investigation (RFI) has been conducted and review and/or approval by TNRCC is pending, we feel that classification as CERFA Category 7 would be more appropriate. Please make all the necessary corrections.

All parcels located in or adjacent to areas in which soil and/or groundwater contamination occurs should be closely evaluated and categorized based on the status of investigative and/or remedial activities associated with the contamination.

This table should also be updated to reflect the changes which have occurred (i.e. parcels removed from BRAC consideration) since the Draft EBS was prepared. In addition, more detail should be provided in the Basis column of the table.

#### Response:

We do not concur. The EBS report is not intended to provide analyses of previous report findings that have been approved by the regulatory agencies, but rather to document environmental conditions based on the information collected and reviewed during the EBS investigation. If the information used to document environmental conditions is found to be in error, the EBS report should be re-evaluated at that time.

In reference to the second comment, parcels located in or adjacent to areas in which soil and/or groundwater contamination was documented in past investigative studies were closely evaluated during the category designation process in accordance with the BRAC Cleanup Plan (BCP) Guidebook.

Table 5-1a has been updated to reflect the changes that have occurred (i.e., parcels removed from BRAC consideration) during the development of the Draft Final EBS Report. Text has also been added to the "Basis" column in the table, where appropriate.

# Comment A-133:

21. Table 5-1B: All BRAC parcels identified as qualified in this table should be reevaluated and assigned the appropriate CERFA Category (1-7).

# Response:

See the response to Comment A-68.

#### Comment A-134:

Since this Draft EBS Report was submitted to members of the BCT for review and comment, the TNRCC requests that RRAD address each of the above noted comments during preparation of the Final EBS report which is currently scheduled for completion during the last week of September 1996. In addition, comments provided by the U.S. Environmental Protection Agency - Region 6 (EPA), provided under separate cover, shall also be addressed. At this time, it is our understanding that upon submittal of the Final EBS report, RRAD will officially request concurrence with properties designated as uncontaminated in accordance with CERCLA Section 120 (h)(4).

#### Response:

The Final EBS Report has been rescheduled for completion on December 4, 1996. Response to comments generated are included as Appendix A.

#### Comment A-135:

Please be aware that TNRCC protocol requires that the Regional Office (Region 5 - Tyler) be notified in writing no less than 10 days prior to conducting any additional investigative or remedial activities at RRAD. In addition, copies of all documents and correspondence regarding the restoration activities at RRAD shall be sent to Mr. H.L. "Bud" Jones, TNRCC Region 5 - Tyler and Ms. Lisa Marie Price, U.S. EPA Region 6 - Dallas.

#### Response:

Comment noted.

# A.3.2 RESPONSES TO TEXAS NATURAL RESOURCE CONSERVATION COMMISSION, REGION 5 COMMENTS ON THE DRAFT EBS

**ENTITY:** 

Texas Natural Resource Conservation Commission, Region 5

INDIVIDUAL:

Mike Brashear

TITLE:

Waste Program Manager, Region 5

DATE:

July 24, 1996

#### Comment A-136:

1. Executive Summary: Par. 1, line 1

... selected for realignment ...

# Response:

The text has been revised accordingly.

#### Comment A-137:

2. Section 1.5.5 Geology and Soils: Par. 2, line 1

... Geologic formations cropping out on RRAD and Lone Star Army Ammunition Plant (LSAAP) are the Tertiary Eocene Midway and Wilcox Groups, the Quaternary Pleistocene Fluviatile Terrace Deposits, and the Quaternary Recent Alluvium Deposits, in ascending order.

# Response:

The text has been revised accordingly. Reference to the Lone Star Army Ammunition Plant has been removed from the report.

# **DRAFT**

# **APPENDIX**A

# **COMMENT RESPONSE PACKAGE**

#### Comment A-138:

TNRCC Region requests that RRAD address the above noted comments during preparation of the Final EBS report which is currently scheduled for completion during the last week of September 1996.

# Response:

Comment noted. The Final EBS Report has been rescheduled for completion on December 4, 1996.

# A.4 RESPONSES TO U.S. ARMY ENVIRONMENTAL CENTER COMMENTS ON THE DRAFT EBS REPORT

The U.S. Army Environmental Center did not review or comment on the Draft EBS Report.

# A.5 RESPONSES TO U.S. ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT COMMENTS ON THE DRAFT EBS REPORT

# A.5.1 RESPONSES TO GEOGRAPHIC PROJECT MANAGER COMMENTS ON THE DRAFT EBS REPORT

**ENTITY:** 

U.S. Army Corps of Engineers, Fort Worth District

INDIVIDUAL:

Steven Smith

TITLE:

Geographic Project Manager

DATE:

July 23, 1996

#### Comment A-139:

1. Omit the "The" before Red River Army Depot throughout the report.

# Response:

We do not concur. The current usage is consistent with the style adopted for this series of EBS reports.

#### Comment A-140:

2. Page i. Last sentence of first para. ... that may limit or preclude the transfer or lease of the property for ... Should "lease" be used in this sentence?

#### Response:

Specific conditions may exist that would limit or preclude lease. Site-specific conditions would be documented in the FOSL.

#### Comment A-141:

3. Page iii. Table will change based on LRA's changes.

The table has been revised.

#### Comment A-142:

4. Page 1-1, 2nd para. Remove reference to Lone Star. As of now no parcels on Lone Star are under BRAC. Also, the Hayes Plant and Panther Creek are no longer BRAC sites. Remove them from the report.

# Response:

The text has been revised accordingly.

#### Comment A-143:

5. Page 1-4. Add definition of geographic area.

# Response:

A definition of geographic area has been added to Section 1.3.

#### Comment A-144:

6. Page 1-5. Is this table current? Check categories 3 and 4.

#### Response:

The definitions of the seven environmental condition of property area types used in the EBS are consistent with the *BRAC Cleanup Plan (BCP) Guidebook* (DOD 1993). Several CERFA guidance documents including CERCLA §120(h)(4); OSWER Directive 9345.0-09, EPA 540/F-94/32, PB 94-963249, April 19, 1994; and Appendix C of the *BCP Guidebook* (DOD 1993) were used by the Army to develop the descriptions.

#### Comment A-145:

7. Page 2-1, section 2.1.1. Recount the number of documents. Add April 1992 RFI Final Report by USACE. Remove #15, the BB-15 Area, which is no longer on BRAC.

#### Response:

Comment noted. The table has been revised accordingly.

#### Comment A-146:

8. Page 2-3, text at bottom refers to a map which is not in the report.

#### Response:

The map indicating site locations (VISTA National Radius Profile) is presented in Appendix B in the Draft EBS Report.

#### Comment A-147:

9. Page 2-5, bottom left cell in table. Add Patman after "Lake Wright". McKinney is misspelled.

#### Response:

The table has been revised accordingly.

#### Comment A-148:

10. Page 2-7, last sentence of section 2.1.2.2. I believe cadmium should be added.

#### Response:

The text has been revised accordingly.

#### Comment A-149:

11. Page 2-8, section 2.1.4. Microstation should be capitalized. Add trademark?

The text has been revised accordingly.

#### Comment A-150:

12. Page 3-1, first para., section 3.1. This info is located in previous section.

#### Response:

Comment noted. The information provided in Section 3.1 was intentionally duplicated in the Executive Summary for readers of this EBS report who will only read the Executive Summary and not the entire report.

#### Comment A-151:

13. Page 3-3, last line. Revise the number of DSERTS (Defense Sites Environmental restoration Tracking System) sites, ask Mike Lockard. Do not use RMIS any more. Also revise how they are broken down on next page.

## Response:

The text has been revised accordingly.

#### Comment A-152:

14. Page 3-4. Revise, see Mike Lockard's comments. Omit Areas F and G here and throughout the report along with the BB-15 Area.

#### Response:

Geographic Areas E, F, and G and the BB-15 Area have been deleted.

#### Comment A-153:

15. Page 3-11, section 3.2.1.8. Revise.

It is not clear what revisions were requested in this comment. However, revisions have been made to this section based on previous comments.

#### Comment A-154:

16. Page 3-12. I believe 1,1,1-trichloroethane is no longer used at RRAD.

#### Response:

The text has been revised accordingly.

#### Comment A-155:

17. Page 3-15, last row. Verify description of the wood landfill and wood burning pit with Mike Lockard.

## Response:

Verification with Mr. Mike Lockard has been made. No text changes were recommended to this section in the Draft EBS Report.

#### Comment A-156:

18. Section 3.3.4. Remove

#### Response:

Section 3.3.4 has been deleted.

#### Comment A-157:

19. Page 3-18, section 3.3.5, first sentence ... which is located in the southeast corner of the installation. Third sentence. Should <u>sewage</u> treatment plant be mentioned here? I'm not sure.

Comment noted. Sewage treatment has been changed to read "potable water" and "corner" has been added.

#### Comment A-158:

20. Page 3-19, section 3.3.8. ... document review, two areas were... Revise table in this section.

#### Response:

The text and table have been revised.

#### Comment A-159:

21. Page 3-20, section 3.4. Remove reference to Johnson's loop.

## Response:

The text has been revised accordingly.

#### Comment A-160:

22. Table 3-1. Revise, see minutes of April 17, 1996 meeting and Mike's comments.

#### Response:

Table 3-1 has been revised accordingly.

#### **Comment A-161:**

23. Page 4-3, UST Removal. Replace last sentence. Red River Army Depot has been granted closure for the UST site by the TNRCC on ?????. Please call Mark Crawford for the details at (903) 334-4008.

A copy of a letter dated July 9, 1996 in reference to TNRCC concurrence (clean closure) at Building 162 has been received. This information has been added to the Draft Final EBS Report.

## Comment A-162:

24. Page 4-4, RRAD-52, 4th sentence. Replace with: The tank and soil were removed in 1992.

#### Response:

The text has been revised accordingly.

#### Comment A-163:

25. Page 4-6, 4th row. I believe this describes Building 162 not 175.

### Response:

The referenced row has been deleted from the table as a potential contamination area.

#### Comment A-164:

26. Page 4-12, section 4.3.2. The area around Building 260 is no longer under BRAC.

#### Response:

Comment requires clarification. This page does not mention Building 260.

#### Comment A-165:

27. Page 4-14, 4th para. I do not think the lagoons mentioned in the 4th sentence receive discharge from the IWTP.

Based on Mr. Mike Lockard's recommendation, the fourth and fifth sentences on page 4-14, paragraph 4 have been deleted. The second sentence has been changed to read, "Stormwater..."

#### Comment A-166:

28. Page 4-15, section 4.3.3.2. Several other chemicals were mentioned in the risk assessment beside these. 3rd sentence: The soil mentioned here has already been removed.

#### Response:

Comment noted. The word "major" has been inserted into the sentence. The sediment removal has been added to the text.

#### Comment A-167:

29. Page 4-20, 1st para section 4.4.7, last line. Replace disposal with lease?

#### Response:

The text has been revised accordingly.

#### Comment A-168:

30. Page 4-21, RRAD-33. Four feet of soil with 1,1,1-TCA and heavy metals contamination...

#### Response:

The text has been revised accordingly.

#### Comment A-169:

31. Page 4-21, section 4.5. Add section for the <u>WWT Area (RRAD-48)</u>. Five feet of soil and sediment were removed from the ditch south of the south oil skimming lagoon which lies west of Building 333.

#### Response:

The text has been revised accordingly.

#### **Comment A-170:**

32. Page 4-22, RRAD-44. ...five feet of sediment/soil which contained moderate levels of VOCs were removed from a ditch south of Texas Avenue (Figure ???).

#### Response:

The RRAD-44 area is located on property that will not be transferred or leased (i.e., reserve enclave). Therefore, the RRAD-44 area discussion has been removed from the EBS report.

#### Comment A-171:

33. Page 4-22, RRAD-51, last sentence. ...installation will plug the three existing cluster wells.

## Response:

The text has been revised accordingly.

#### Comment A-172:

34. Page 4-23, 5th para. ...alternate cleanup levels will be performed.

#### Response:

The text has been revised accordingly.

#### Comment A-173:

35. Page 4-24, table. Past remedial actions column: remove RFI reference, replace PA/SI with source removed (Bldg 433). Current status Panther Creek: add "approval by TNRCC". Future actions Bldg 162: Plug wells. Remove BB area. UST Bldg 333: 333 is not a source of VOC contaminants.

#### Response:

The table has been revised accordingly, except that Panther Creek is no longer within the BRAC area.

#### Comment A-174:

36. Page 4-24, section 4.6. Revise last sentence.

#### Response:

The entire section has been revised.

#### **Comment A-175**:

37. Page 5-10, last para. Quarterly monitoring was discontinued in 1994. I do not believe the EPA has recommended more monitoring.

#### Response:

The text has been revised accordingly.

#### Comment A-176:

38. Page 5-11, 1st full para. The last two sentences are incorrect. I believe the site is closed. Check with Mark Crawford at RRAD.

#### Response:

Clean closure was obtained from TNRCC. The text has been revised accordingly.

# **DRAFT**

# **APPENDIXA**

**COMMENT RESPONSE PACKAGE** 

## Comment A-177:

39. Tables 5-1A and 5-1B. Revise per all comments.

## Response:

Tables 5-1a and 5-1b have been revised accordingly.

## A.6 RESPONSES TO OTHERS COMMENTS ON THE DRAFT EBS REPORT

No other agencies or organizations commented on the Draft EBS Report.

## APPENDIX B

## DATABASE SEARCH REPORT OF FEDERAL, STATE, AND LOCAL GOVERNMENT RECORDS

VISTA Report #: 6/090144-001

Date of Report: 11/21/95

For more information call: (619) 450-6100

Ref/Loan #: RED RIVER ARSENAL

Client: VAN SANDS, WOODWARD CLYDE-DENVER

4582 S ULSTER ST STE 1200, DENVER, CO 80237-2637

Subject

Property:

HOOKS, TX 75561

#### SUMMARY OF FEDERAL RECORDS FOUND

Database		0 to	
& Date	Agency and Type of Records	8 mi	TOTAL
			_
NPL	US EPA	1	1
09/95	Superfund Sites		
CERCLIS	US EPA	1	1
09/95	Potential Superfund Sites		
RCRA-LgGen	US EPA	3	3
06/95	RCRA Large Quantity Generators	,	,
00/75	Korix Large additively delicrators		
RCRA-SmGen	US EPA	2	2
06/95	RCRA Small and Very Small Quantity Generators		
RCRA-TSD	US EPA	2	2
06/95	RCRA Treatment, Storage, and/or Disposal Sites	_	_
DCDA Trans	US EPA	0	•
RCRA-Transp	<del>-</del>	Ü	0
06/95	RCRA Transporters		
ERNS	US EPA	4	4
03/95	·		
•	·		
	FEDERAL RECORDS Sub-total:	13	13

Note: 1) A dash (--) indicates the list is not searched at that distance.

2) Sites often have a record in more than one database.

VISTA Report #: 6/090144-001

Date of Report: 11/21/95

For more information call: (619) 450-6100

Ref/Loan #: RED RIVER ARSENAL

Client: VAN SANDS, WOODWARD CLYDE-DENVER 4582 S ULSTER ST STE 1200, DENVER. CO

80237-2637

Subject

Property:

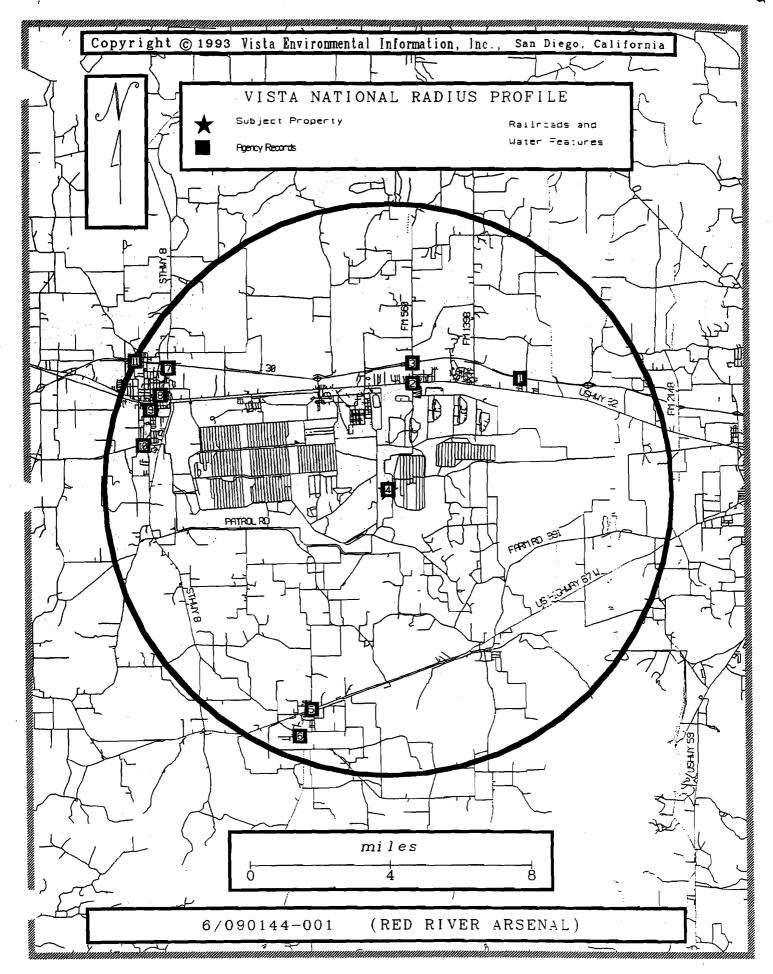
HOOKS, TX 75561

## SUMMARY OF STATE RECORDS FOUND

Database		0 to	
& Date	Agency and Type of Records	8 mi	TOTAL
		•	
SPL	Natural Resource Conservation Commission	. 0	0
08/95	State Superfund Program		
LUST	Natural Resource Conservation Commission	11	11
08/95	Leaking Petroleum Storage Tank Case Report		
SWLF	Natural Resource Conservation Commission, Division of MSW	2	2
06/95	Solid Waste Facilities Permit Applications File		
UST's	Water Commission	26	26
08/95	Petroleum Storage Tank Database		
•			
	STATE RECORDS Sub-total:	39	39
		= ======	
	TOTAL:	52	52

Note: 1) A dash (--) indicates the list is not searched at that distance.

2) Sites often have a record in more than one database.



11/21/95

VISTA Report #: 6/090144-001

NPL

MAP EPA ID /
REF # AGENCY ID

SITE NAME AND ADDRESS

WITHIN 1/4 MILE

LONE STAR ARMY AMMUNITION PLAN

HIGHWAY 82 WEST

TEXARKANA

75501

Distance: 0.00 mi.

Direction: --

Vista ID: 248777

TX7213821831 Status

: CURRENTLY ON FINAL NPL

Site Ownership

: FEDERALLY OWNED

Description :THIS GOVERNENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY

OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED I

WELLS NEAR THE SOUTH BORDER OF THE FACILITY.

(c) VISTA Environmental Information, Inc., 1994

11/21/95

VISTA Report #: 6/090144-001

Page:

CERCLIS

MAP EPA ID / REF #

AGENCY ID

SITE NAME AND ADDRESS

WITHIN 1/4 MILE

LONE STAR ARMY AMMUNITION PLAN

HIGHWAY 82 WEST

**TEXARKANA** 

75501

Distance: 0.00 mi.

Direction: --Vista ID: 248777

TX7213821831 Status

: CURRENTLY ON FINAL NPL

Site Ownership

: FEDERALLY OWNED

Site Events

: RECORD OF DECISION Event Type Event Type : REMEDIAL DESIGN Event Type : REMEDIAL ACTION : COMBINED RI/FS Event Type : RECORD OF DECISION Event Type

Event Type : REMEDIAL DESIGN : REMEDIAL ACTION Event Type

: OPERATIONS & MAINTENANCE AFTER REMEDIAL ACTION Event Type

Lead Agency : EPA FUND FINANCED

Event Type : MANAGEMENT ASSISTANCE (FEDERAL RENUMERATION)

: FEDERAL ENFORCEMENT

: COMBINED RI/FS Event Type

: SCREENING SITE INSPECTION Event Type

: REMOVAL INVESTIGATION AT NPL SITES Event Type

Lead Agency : EPA FUND FINANCED : PRELIMINARY ASSESSMENT Event Type : PROPOSED FOR NPL Event Type : EPA FUND FINANCED Lead Agency Event Type : FINAL LISTING ON NPL : EPA FUND FINANCED Lead Agency : NPL DELETION Event Type

Event Type : DISCOVERY

Lead Agency

: EPA FUND FINANCED Lead Agency

:THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERAL FACILITY PRODUCES A VARIETY Description

> OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED I

WELLS NEAR THE SOUTH BORDER OF THE FACILITY.

11/21/95

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RCRA-LgGen

MAP EPA ID /

REF # AGENCY ID

SITE NAME AND ADDRESS

WITHIN 1/4 MILE

· 4 LONE STAR ARMY AMMUNITION PLAN

HIGHWAY 82 WEST

TEXARKANA

Distance:

0.00 mi.

75501

Direction: --

Vista ID: 248777

TX7213821831 Generator Class

:Generators who generate at least 1000 kg./month of non-acutely hazardous

waste ( or 1 kg./month of acutely hazardous waste).

4 US ARMY RED RIVER ARMY DEPOT

18N W OF HWY 82

TEXARKANA

Distance:

0.00 mi.

75501

Direction: --

Vista ID: 4965263

TX3213820738 Generator Class

:Generators who generate at least 1000 kg./month of non-acutely hazardous

waste ( or 1 kg./month of acutely hazardous waste).

WITHIN 1/2 TO 8 MILES

8

WOOD MOTOR CO HWY 82 E IN C LIM NEW BOSTON

Distance:

7.02 mi.

75570

Direction: NW

Vista ID: 3749823

TXD987984739 Generator Class

:Generators who generate at least 1000 kg./month of non-acutely hazardous

For more information call: (619) 450-6100

waste ( or 1 kg./month of acutely hazardous waste).

VISTA Report #: 6/090144-001

RCRA-SmGen

EPA ID / MAP

REF # AGENCY ID SITE NAME AND ADDRESS

WITHIN 1/2 TO 8 MILES

**QUALITY CLEANERS & LAUNDRY** 

405 N CENTER

**NEW BOSTON** 

Distance: 7.11 mi.

Direction: NW

75570 Vista ID: 343756

For more information call: (619) 450-6100

TXD144944766 Generator Class

:Generators who generate 100 kg./month but less than 1000 kg./month of

non-acutely hazardous waste

8

RONNIES PAINT & BODY SHOP

308 E S FRONT ST

NEW BOSTON

75570

Distance:

7.00 mi.

Direction: NW Vista ID: 1796364

TXD988000014 Generator Class

:Generators who generate less than 100 kg./month of non-acutely hazardous

VISTA Report #: 6/090144-001

Page:

RCRA-TSD

MAP EPA ID /

AGENCY ID

SITE NAME AND ADDRESS

WITHIN 1/4 MILE

LONE STAR ARMY AMMUNITION PLAN

HIGHWAY 82 WEST

TEXARKANA

Distance:

75501

Direction: --Vista ID: 248777

TX7213821831 Process Codes

:N/A Tank treatment Surface Impoundment Storage Waste Pile Tank Storage

Container Storage Ocean Disposal

US ARMY RED RIVER ARMY DEPOT

18M W OF HWY 82

TEXARKANA

Distance: 0.00 mi.

For more information call: (619) 450-6100

75501

Direction: --

Vista ID: 4965263

TX3213820738 Process Codes

:N/A Other Treatment Incinerator Tank treatment Surface Impoundment

Storage Waste Pile Tank Storage Container Storage Landfill

VISTA Report #: 6/090144-001

MAP EPA ID / AGENCY ID REF #

SITE NAME AND ADDRESS

WITHIN 1/4 MILE

LONE STAR ARMY AMMUNITION PLAN

LONE STAR ARMY AMMUNITION PLANT

**TEXARKANA** 

Distance: 0.00 mi.

Direction: --

Vista ID: 200114337

Spill Date:01/17/1989

Case Number:

Spill Location: LONE STAR ARMY AMMUNITION PLANT

Spill City:TEXARKANA

Spill State:TX

Spill Zip:

Spill County:BOWIE

Source/Agency:

Material Spilled:TOXIC CHEMICALS

0.00, UNK

Medium Affected: Land Waterway Affected:N/A

LONESTAR ARMY AMMUNITION PLANT

**TEXARKANA** 

Distance: 0.00 mi.

Direction: --

Vista ID: 200165391

Spill Date:08/16/1988

DAY AND ZIMMERMAN INC.

Case Number:

Spill Location: LONESTAR ARMY AMMUNITION PLANT

Spill City: TEXARKANA

Spill State:TX

Spill Zip:

Spill County: BOWIE

Source/Agency:

Material Spilled:TRANSFORMER OIL 280PPM

28.00, GAL

Medium Affected: Land

Waterway Affected:SOIL

USA-RED RIVER ARMY DEPOT

**TEXARKANA** 

Distance: 0.00 mi.

Direction: --

Vista ID: 200272957

203478

Spill Date: 10/18/1993 Case Number: 203478

Spill Location:

Spill City:

Spill State:

Spill Zip:

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VISTA Report #: 6/090144-001

ERNS

MAP EPA ID / ·

REF # AGENCY ID SITE NAME AND ADDRESS

WITHIN 1/4 MILE

USA-RED RIVER ARMY DEPOT

**TEXARKANA** 

Distance: 0.00 mi.

Direction: --

Vista ID: 200272957

Spill County: Source/Agency:

Material Spilled:UNKNOWN OIL

, 00000000.00 , UNK

Medium Affected:

Waterway Affected:N/A

USA-RED RIVER ARMY DEPOT

TEXARKANA

Distance:

0.00 mi.

Direction: --

Vista ID: 200273919

F94-0204

Spill Date: 10/18/1993 Case Number: F94-0204 Spill Location: Spill City:

Spill State: Spill Zip: Spill County: Source/Agency:

Material Spilled:UNKNOWN OIL

Waterway Affected:N/A

Medium Affected:

, 00000000.00 , UNK

11/21/95

VISTA Report #: 6/090144-001

LUST

MAP EPA ID /

REF # AGENCY ID

092366

SITE NAME AND ADDRESS \_\_\_\_\_\_\_

WITHIN 1/4 HILE

LONE STAR ARMY AMMUNITION PLT

**TEXARKANA** 

Distance: 0.00 mi.

OLD GASOLINE STATION

75501

Direction: --Vista ID: 2576115

Owner Name Owner Address : US ARMY

Discovery Date

Media Affected

: 11/23/88 : NONE

Leak Cause

: UNAVAILABLE

Remediation

: CLEANUP IN PROGRESS/REQUIRED

Discovery Date

: 12/01/88

Media Affected

: DRINKING WATER SUPPLY

Leak Cause Remediation : UNAVAILABLE : REPORT OVERDUE

LONE STAR ARMY AMMUNITIONS PLANT

TEXARKANA 75505

Distance:

0.00 mi. Direction: --

Vista ID: 3844515

W HWY 82

Owner Name

: LONE STAR ARMY AMMUN

Owner Address

Discovery Date

: 11/08/91

Media Affected

: SOIL/LAND/SAND

Leak Cause

: UNAVAILABLE

Remediation

: CASE CLOSED/CLEANUP COMPLETE

LONE STAR ARMY AMMO

**TEXARKANA** 

Distance:

0.00 mi.

102748

75505

Direction: --

Vista ID: 4091962

095655

Owner Name

: US ARMY

Owner Address

Discovery Date Media Affected

: 04/16/90

Leak Cause

: SOIL/LAND/SAND

Remediation

: UNAVAILABLE : INCIDENT REPORTED

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VISTA Report #: 6/090144-001

LUST

MAP EPA ID /

AGENCY ID REF #

SITE NAME AND ADDRESS

WITHIN 1/4 MILE

LONE STAR ARMY AMMUNITION PLANT

**BULK STORAGE FCLTY** 

**TEXARKANA** 

Distance: 0.00 mi.

Direction: --

Vista ID: 5109074

091312

Owner Name

: US ARMY

Owner Address

Discovery Date : 05/13/87

Media Affected

: NONE

Leak Cause

: UNAVAILABLE

Remediation

: CLEANUP IN PROGRESS/REQUIRED

LONE STAR ARMY AMMO

**TEXARKANA** 

Distance: 0.00 mi.

Direction: --

Vista ID: 5109817

093630

Owner Name

: US ARMY

Owner Address

Discovery Date

: 09/20/89 : SOIL/LAND/SAND

Media Affected Leak Cause

: UNAVAILABLE

Remediation

: INCIDENT REPORTED

WITHIN 1/2 TO 8 MILES

RANEYS TEXACO

SPUR 74

HOOKS 75561 Distance: 4.87 mi.

Direction: NE

Vista ID: 2538305

094998

Owner Name

: ATCO DISTRIBUTING CO

Owner Address

Discovery Date

: 03/05/90

Media Affected Leak Cause

: GROUNDWATER : UNAVAILABLE

Remediation

: PAPERWORK RECEIVED

11/21/95

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LUST

MAP EPA ID /

AGENCY ID

SITE NAME AND ADDRESS

WITHIN 1/2 TO 8 HILES

7

**ROAD RUNNER #92** 

INTSTATE 30 & HWY 8

**NEW BOSTON** 

75570

Distance: 7.13 mi.

Direction: NW Vista ID: 5363885

094005

099435

Owner Name Owner Address : TRUMAN ARNOLD COMPAN

: 08/25/89

Discovery Date Media Affected

: DRINKING WATER SUPPLY

Leak Cause

: UNAVAILABLE

Remediation

Owner Name

: PAPERWORK RECEIVED

8

GRIFFITH'S GULF

102 HWY 82 **NEW BOSTON** 

75570

Distance: 7.19 mi.

Direction: NW Vista ID: 2593690

: SHUTE HIRAM

Owner Address

: 07/02/91

Discovery Date Media Affected

: GROUNDWATER

Leak Cause Remediation : UNAVAILABLE : REPORT OVERDUE

BUD YOUNG MOBIL

201 E NORTH FRONT ST **NEW BOSTON** 

75570

Distance: 7.10 mi.

Direction: NW Vista ID: 3669312

Owner Name

: W S TYSON (DOCTOR)

Owner Address

Discovery Date

Media Affected

: 06/01/93

: SOIL/LAND/SAND

Leak Cause

: UNAVAILABLE

Remediation

: CASE CLOSED/CLEANUP COMPLETE

8

MELTON (PHILLIPS) MOTOR COMPANY

NEW BOSTON

Distance: 6.82 mi.

501 E NORTH FRONT

75570

Direction: NW

102964

106867

Owner Name

: M & S INVESTMENTS

Owner Address

Vista ID: 3842154

VISTA Report #: 6/090144-001

LUST

EPA ID / MAP

REF # AGENCY ID SITE NAME AND ADDRESS

WITHIN 1/2 TO 8 HILES

8

**NELTON (PHILLIPS) MOTOR COMPANY** 

501

E NORTH FRONT

NEW BOSTON

Distance:

6.82 mi.

75570

Direction: NW Vista ID: 3842154

Discovery Date : 04/20/92

Media Affected

: SOIL/LAND/SAND

: UNAVAILABLE

Leak Cause Remediation

: ADMINISTRATIVE ORDER ISSUED

WOOD DWIGHT MOTOR COMPANY

**NEW BOSTON** 

Distance:

7.03 mi.

307 E NORTH FRONT

75570

Direction: NW

Vista ID: 4009330

105874

Owner Name

: WOOD DWIGHT MOTOR CO

Owner Address .

Discovery Date

: 01/13/93

Media Affected

: SOIL/LAND/SAND : UNAVAILABLE

Leak Cause Remediation

: CASE CLOSED/CLEANUP COMPLETE

## 4

## VISTA NATIONAL RADIUS PROFILE

VISTA Report #: 6/090144-001

01898

11/21/95

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SWLF MAP EPA ID / AGENCY ID SITE NAME AND ADDRESS REF # WITHIN 1/4 MILE HOOKS Distance: 0.00 mi. 2.5M W OF FHOOKS CITY LIMITS, 3M E O 75561 Direction: --Vista ID: 3045224 01315 Facility Type : CONSTRUCTION/DEMOLITION Facility Status : GRANDFATHER SITE Owner Name : RED RIVER ARMY DEPOT Owner Address : GENERAL DELIVERY , TX 75501 TEXARKANA Facility Type : TRANSFER STATION : GRANDFATHER SITE Facility Status Owner Name Owner Address : SANITARY LANDFILL/LANDFILL Facility Type Facility Status : GRANDFATHER SITE HOOKS Distance: 0.00 mi. LONE STAR ARMY AMMUNITION PLANT, 11M 75561 Direction: --Vista ID: 3045410

: SANITARY LANDFILL/LANDFILL

, TX 75505

For more information call: (619) 450-6100

: LONE STAR ARMY AMMO

: PROPOSED

: U.S. HWY 82 TEXARKANA

Facility Type

Owner Name Owner Address

Facility Status

VISTA Report #: 6/090144-001

		UST/s		
MAP REF #	EPA ID / AGENCY ID	SITE NAME AND ADDRESS	********************	22-2
		WITHIN 1/4 MILE		
4		LONE STAR ARMY AMMUNITION PLAN HIGHWAY 82 WEST	TEXARKANA 75501	Distance: 0.00 mi. Direction: Vista ID: 248777
	0000104	Number of Underground Tanks: 37 Number of Aboveground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),DIESEL,HYDRAN	JLIC FLUIDS,EMPTY,	
		WITHIN 1/2 TO 8 MI	ES	
1		RANEYS TEXACO I 30 & SPUR 74	HOOKS 75561	Distance: 4.87 mi. Direction: NE Vista ID: 2538305
	0032690	Number of Underground Tanks: 6 Contents:GASOLINE (UNSPECIFIED),DIESEL,	•••••	
2		PAUL THOMAS GROC. HWY 82 & FM 560	HOOKS 75561	Distance: 3.05 mi. Direction: NE Vista ID: 1798178
n.	0042262	Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),		
3		LOVE'S COUNTRY STORES #228 I 30 & S R 560	HOOKS 75561	Distance: 3.61 mi. Direction: NE Vista ID: 1366131
	0002293	Number of Underground Tanks: 5 Contents:DIESEL,GASOLINE (UNSPECIFIED),	·	
3		RAS #6-3781 I30 FM RD 560	HOOKS 75561	Distance: 3.61 mi. Direction: NE Vista ID: 1796930
*****	0026482	Number of Underground Tanks: 4 Contents:GASOLINE (UNSPECIFIED),USED OIL,		



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		UST/s	_	
MAP REF #	EPA ID / AGENCY ID	SITE NAME AND ADDRESS		
	244244	WITHIN 1/2 TO 8 NILES		
'5		ROY E FOSTER	MAUD	Distance: 6.51 mi.
		U S 67 AT AUSTIN STREE	<i>7</i> 5567	Direction: SW Vista ID: 3670771
	0063944	Number of Underground Tanks: 1 Contents:UNKNOWN,		VISCA ID. 30/0//1
6		DOWNS, JOHNNY C.	MAUD	Distance: 7.33 mi.
		HWY 8 & BIRCH ST	75567	Direction: SW Vista ID: 1371161
	0007858	Number of Underground Tanks: 3		
		Contents:GASOLINE (UNSPECIFIED),		
7		E-Z MART #166	NEW BOSTON	Distance: 7.13 mi.
·	<u>-</u> -	HWY 8 & 1 30	75570	Direction: NW Vista ID: 1373371
	0010242	Number of Underground Tanks: 3		
		Contents:GASOLINE (UNSPECIFIED),		
7		BOSTONIAN GULF	NEW BOSTON	Distance: 7.13 mi.
		HWY 8 & I 30	75570	Direction: NW Vista ID: 1401663
	0041411	Number of Underground Tanks: 7 Contents:GASOLINE (UNSPECIFIED),USED OIL,		
7		TOTAL 2851	NEW BOSTON	Distance: 7.13 mi.
		1-30 & HWY 8	75570	Direction: NW Vista ID: 1811303
	0008093	Number of Underground Tanks: 4		
		Contents:DIESEL,GASOLINE (UNSPECIFIED),		
7		ROAD-WAY EXXON	NEW BOSTON	Distance: 7.02 mi.
•		708 N MCCOY BLVD	75570	Direction: NW Vista ID: 3668875
	0026483	Number of Underground Tanks: 8		
		Contents:GASOLINE (UNSPECIFIED),DIESEL,USED OIL,		

UST's

VISTA Report #: 6/090144-001

EPA ID /

AGENCY ID

0038184

0041406

0042263

0041407

0060394

8

MAP

REF #

8

8

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SITE NAME AND ADDRESS WITHIN 1/2 TO 8 MILES TRIPLE T MART **NEW BOSTON** Distance: 7.09 mi. E HOSKINS 75570 Direction: NW Vista ID: 1398685 Number of Underground Tanks: 2 Contents:DIESEL, GASOLINE (UNSPECIFIED), DAIRY QUEEN NEW BOSTON Distance: 7.09 mi. 312 E HOSKINS 75570 Direction: NW Vista ID: 1401658 Number of Underground Tanks: 2 Contents: GASOLINE (UNSPECIFIED), GRIFFITHS GULF **NEW BOSTON** Distance: 7.19 mi.

0041410 Number of Underground Tanks: 4 Contents: GASOLINE (UNSPECIFIED), USED OIL, 8 C R YOUNG 201 FRONT ST

\_ ELM & US 82

**NEW BOSTON** 75570

75570

Distance: .7.11 mi. Direction: NW

Vista ID: 1402406

Direction: NW Vista ID: 1401662

ARNOLD BARFIELD DIST.CO., INC 205 N HWY 8

Contents:DIESEL,

Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),

Number of Underground Tanks: 1

**NEW BOSTON** 75570

Distance: Direction: NW

Vista ID: 1805838

MAX'S DRIVE IN RESTAURANT 408 N HWY 8

**NEW BOSTON** 75570

For more information call: (619) 450-6100

Distance: 6.80 mi.

Direction: NW Vista ID: 2582097

Number of Underground Tanks: 2

Contents: GASOLINE (UNSPECIFIED),



1/21/05

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		UST*s		
MAP REF #	EPA ID / AGENCY ID	SITE NAME AND ADDRESS		
		WITHIN 1/2 TO 8 MI	ES	
8		DWIGHT WOOD MOTOR CO., INC. 307E N FRONT	NEW BOSTON 75570	Distance: 7.02 mi. Direction: NW Vista ID: 3666404
	0003703	Number of Underground Tanks: 1 Contents:USED OIL,	·	VISTA ID: 3000404
8		WIMPY'S 7-11 #1 MCOY BLVD & HOSKINS ST	NEW BOSTON 75570	Distance: 6.78 mi.
	0041413	Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),		Vista ID: 3668331
8	-	BUD YOUNG MOBIL 201 E NORTH FRONT ST	NEW BOSTON 75570	Distance: 7.10 mi.
	0063429	Number of Underground Tanks: 5 Contents:EMPTY,	i	Vista ID: 3669312
8		MELTON MOTORS 411 E N FRONT ST	NEW BOSTON 75570	Distance: 6.94 mi.
	0042880	Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),		Vista ID: 3669313
8		JERRY'S MUFFLER SHOP 705 NEFRONT HWY 82	NEW BOSTON 75570	Distance: 6.74 mi.
	0062104	Number of Underground Tanks: 2 Contents:UNKNOWN,		Vista ID: 3669316
8		TRIPLE T EXXON 307 HOSKINS ST	NEW BOSTON 75570	Distance: 7.09 mi. Direction: NW
	0010628	Number of Underground Tanks: 6 Contents:GASOLINE (UNSPECIFIED),DIESEL,		Vista ID: 4898945

11/21/95

VISTA Report #: 6/090144-001

Page: 1

UST's

MAP EPA ID /

REF # AGENCY ID SITE NAME AND ADDRESS

#### WITHIN 1/2 TO B MILES

. 9 CITY OF NEW BOSTON

NEW BOSTON

Distance: 7.05 mi.

303 S ELM

75570

Direction: NW

For more information call: (619) 450-6100

Vista ID: 1796011

. 0041431

Number of Underground Tanks: 2

Contents: GASOLINE (UNSPECIFIED), DIESEL.

Distance:

7.01 mi.

10

BUDDYS #1

301 PRAIRIE

NEW BOSTON 75570

Direction: NW

0041414

0041416

Number of Underground Tanks: 5

Contents: KEROSENE, GASOLINE (UNSPECIFIED), DIESEL,

Vista ID: 1401666

11

WIMPY'S 7-11 #2

HWY 82 & FM 992

NEW BOSTON

75570

Distance:

7.97 mi.

Number of Underground Tanks: 3

Contents: GASOLINE (UNSPECIFIED),

Direction: NW

Vista ID: 3667871

CUSTOMER USE LIMITATIONS - Customer proceeds at its own risk in choosing to rely upon VISTA services, in whole or part, prior to proceeding with any transaction. VISTA assumes no responsibility for the accuracy of government records, for errors occurring in conversion of data, or for customer's use of VISTA services. VISTA's obligation regarding data is solely limited to providing portions of data existing in government records as of the date of each government update received by VISTA.

VISTA Report #: 6/090144-001

Date of Report: 11/21/9

#### **UNMAPPABLE SITES**

Unmappable sites are environmental risk sites that cannot be geocoded, but can be located by zip code or city name.

In general, a site cannot be geocoded because of inaccurate or missing locational information in the record provided by the agency. For many of these records, VISTA has corrected or added locational information by using U.S. Postal address validation files and proprietary programming that adds locational information from private industry address files. However, many site addresses cannot be corrected using these techniques and those sites cannot be mapped.

Of the sites that cannot be mapped, VISTA identifies those that have complete zip code or city name information. All ungeocoded sites that have a ZIP code in the radius are considered for inclusion. Ungeocoded sites that do not have a ZIP code but do have a street name are considered for inclusion if they have a city in the radius. An ungeocoded record may be excluded if it can be determined to be outside the relevant radius searched for a particular database.

11/21/95

VISTA Report #: 6/090144-001

## UNMAPPABLE SITES

age: 1

		gG			

SITE NAME AND ADDRESS	VISTA ID	EPA ID / AGENCY ID
PICOMA INDUSTRIES INC TEXAS DIVISION: 3800 PICOMA DRIVE, TEXARKANA 75501	329938	
Generator Class :Generators who generate at least 1000 kg./month of non-acutely hazardous waste).	zardous	TXD052909629
TEXANA TANK CAR AND MANUFACTURING IN: HWY 82 W OF NASH ON FM 2148, NASH 75569	421703	
Generator Class :Generators who generate at least 1000 kg./month of non-acutely haz waste ( or 1 kg./month of acutely hazardous waste).	zardous	TXD043195221
ALUMAX MILL PRODUCTS INC.: 300 ALUMAX DRIVE, TEXARKANA 75501	486378	
Generator Class :Generators who generate at least 1000 kg./month of non-acutely hazardous waste).	zardous	TXD981056815



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Generator Class

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RCRA-SmGen

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TXD988073235

For more information call: (619) 450-6100

EPA ID / SITE NAME AND ADDRESS AGENCY ID VISTA 1D TEDDER AVIATION CORP: FM RD 1840, NEW BOSTON 75570 418894 Generator Class :Generators who generate less than 100 kg./month of non-acutely hazardous TXD067042630 TEXAS DEPT OF HWYS & PUB TRANSP: HWY 8 S .25M S H-82, NEW BOSTON 75570 1812379 :Generators who generate 100 kg./month but less than 1000 kg./month of Generator Class TXD988000931 non-acutely hazardous waste POPES AUTO: 1007 HWY 82 E, HOOKS 75561 4091371

non-acutely hazardous waste

:Generators who generate 100 kg./month but less than 1000 kg./month of

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UNMAPPABLE SITES

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RCRA-TSD

EPA ID / SITE NAME AND ADDRESS VISTA ID AGENCY ID TEXANA TANK CAR AND MANUFACTUR: HWY 82 W OF NASH ON FM 2148, NASH 75569 421703 TXD043195221



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## UNMAPPABLE SITES

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Transporter Status :Engaged in the off-site transportation of hazardous waste		TXD982283673
FOUR THIRTEEN INC: NO 10 HUGHES RD, TEXARKANA 75501	157944	
SITE NAME AND ADDRESS	VISTA ID	EPA ID / AGENCY ID
RCRA-Transp		

VISTA Report #: 6/090144-001

#### UNMAPPABLE SITES

age. 5

F92-3743

F92-3737

131661

**ERNS** 

SITE NAME AND ADDRESS VISTA ID AGENCY ID

PRAX AIR INC: 130 EASTBOUND, 3 MI SOUTH OF NEW BOSTON, NEW BOSTON 75570 200003480

Spill Date: 08/12/1992 Case Number: F92-3743

Spill Location: I30 EASTBOUND, 3 MI SOUTH OF NEW BOSTON

Spill City:NEW BOSTON

Spill State:TX
Spill Zip:

Spill County:BOWIE

Source/Agency:DISCHARGER

Material Spilled:OXYGEN, LIQUIFIED

, 00040000.00 , LBS

, 00000000 , UNK

, 00000000.00 , UNK

Medium Affected: Air Waterway Affected:N/A

PRAXAR INC: I-30 MILE 192 NORTHBOUND, NEW BOSTON 75570 200004215

Spill Date: 08/12/1992

Case Number: F92-3737

Spill Location: I-30 MILE 192 NORTHBOUND

Spill City:NEW BOSTON

Spill State:TX

Spill Zip:75570

Spill County:BOWIE

Source/Agency:DISCHARGER

Material Spilled:OIL: DIESEL

Material Spilled:OXYGEN, LIQUIFIED

Medium Affected: Water

Waterway Affected: UNKNOWN CREEK

PRAX AIR INC: 130 EASTBOUND, NEW BOSTON 75570 200005261

Spill Date: 08/12/1992

Case Number: 131661

Spill Location: I30 EASTBOUND

Spill City: NEW BOSTON

Spill State:TX

Spill Zip:

Spill County:BOWIE

Source/Agency:

Material Spilled: OXYGEN, LIQUIFIED

, 00040000.00 , LBS

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UNMAPPABLE SITES

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ERNS

75570

SITE NAME AND ADDRESS

VISTA Report #: 6/090144-001

VISTA ID

EPA ID /
AGENCY ID

131547

PRAX AIR INC: 130 EASTBOUND, NEW BOSTON

200005261

Medium Affected: Air

Waterway Affected: ATMOSPHERE

PRAXAR INC: I-30 MILE 192 NORTHBOUND, NEW BOSTON

75570

200005313

Spill Date: 08/12/1992

Case Number: 131547

Spill Location: I-30 MILE 192 NORTHBOUND

Spill City: NEW BOSTON

Spill State:TX
Spill Zip:75570
Spill County:BOWIE
Source/Agency:

Material Spilled:OIL: DIESEL

, 00000000.00 , UNK , 00000000.00 , UNK

Material Spilled:OXYGEN, LIQUIFIED

Medium Affected: Water

Waterway Affected: UNKNOWN CREEK

BAGGETT TRUCKING CO.: I 30 (314 NILE MARKER EXIT), HOOKS

-----

75561

F90-1041

200070069

Spill Date: 01/17/1990

Case Number: F90-1041

Spill Location: I 30 (314 MILE MARKER EXIT)

Spill City:LEARY
Spill State:TX
Spill Zip:
Spill County:

Source/Agency:UNKNOWN

Material Spilled:EXPLOSIVES

, 00000000.00 , UNK

Medium Affected: Land Waterway Affected:NONE

ROLLINS LEASING: I-30 MM 212 EAST BOUND BETWEEN HOOKS AND, HOOKS

75561

For more information call: (619) 450-6100

200077788

Spill Date: 05/08/1990

Case Number:20938

Spill Location: I-30 MM 212 EAST BOUND BETWEEN HOOKS AND LEARY

20938

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### UNMAPPABLE SITES

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ERNS

SITE NAME AND ADDRESS

VISTA ID

EPA ID / AGENCY ID

ROLLINS LEASING: I-30 MM 212 EAST BOUND BETWEEN HOOKS AND, HOOKS

75561

200077788

Spill City:HOOKS

Spill State:TX

Spill Zip:

Spill County: BOWIE

Source/Agency:

Material Spilled:OIL, FUEL: NO. 2

, D0000150.00 , GAL

Medium Affected: Water

Waterway Affected: JONES CREEK

SW ELECTRIC POWER CO .: ON HWY 82, NEW BOSTON

75570

200093932

Spill Date: 10/04/1990

Case Number:42770

Spill Location: ON HWY 82 Spill City: NEW BOSTON

Spill State:TX

Spill Zip:

Spill County:BOWIE

Source/Agency:

Material Spilled:POLYCHLORINATED BIPHENYLS

, 00000003.00 , GAL

Medium Affected: Land Waterway Affected: GRAVEL

: COUNTY ROAD 4007, NEW BOSTON

75570

200098090

Spill Date: 11/18/1990

Case Number: 48480

Spill Location: COUNTY ROAD 4007

Spill City: NEW BOSTON

Spill State:TX

Spill Zip:

Spill County: BOWIE

Source/Agency:

Material Spilled:NITROUS OXIDE

, 00000000.00 , UNK

Medium Affected: Air

Waterway Affected:N/A

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For more information call: (619) 450-6100

48480

42770



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ERNS

SITE NAME AND ADDRESS

VISTA ID

EPA ID / AGENCY ID

SOUTHWESTERN ELECTRIC POWER CO: .3 MI NORTH OF HWY 82, .5 MI EAST OF HWY, NEW

200116025

BOSTON

75570

Spill Date:03/03/1988

Case Number:

Spill Location:.3 MI NORTH OF HWY 82, .5 MI EAST OF HWY 8

Spill City: NEW BOSTON

Spill State:TX

Spill Zip:

Spill County:BOWIE

Source/Agency:

Material Spilled:PCB CONTAMINATED MINERAL OIL

1500.00, GAL

Medium Affected: Water Waterway Affected:N/A

MONTE'S RADIATOR SERVICE: RT 9, TEXARKANA

75501

200286920

220643

F94-1672

Spill Date: 02/06/1994

Case Number: 220643

Spill Location:RT 9

Spill City:TEXARKANA

Spill State:TX

Spill Zip:75501 Spill County:BOWIE

Source/Agency:

Material Spilled:ETHYLENE GLYCOL

, 00000000.00 , UNK

Medium Affected: Land Waterway Affected: SOIL

MONTE'S RADIATOR SERVICE: RT 9, TEXARKANA

75501

200289058

Spill Date: 02/06/1994

Case Number: F94-1672

Spill Location:RT 9

Spill City: TEXARKANA

Spill State:TX

Spill Zip:75501

Spill County: BOWIE

Source/Agency:

Material Spilled:ETHYLENE GLYCOL

, 00000000.00 , UNK

Medium Affected: Land

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SITE NAME AND ADDRESS

VISTA ID

EPA ID / AGENCY ID

254392

MONTE'S RADIATOR SERVICE: RT 9, TEXARKANA

75501

200289058

Waterway Affected:N/A

HAWK TRANSPORTATION: I-30 MILEMARKER 205, HOOKS

75561

200341121

Spill Date: 08/08/1994

Case Number:254392

Spill Location: I-30 MILEMARKER 205

Spill City:HOOKS Spill State:TX Spill Zip:

Spill County: BOWIE Source/Agency:

Material Spilled:OIL: DIESEL

, 00000000.00 , UNK

Medium Affected: Land

Waterway Affected: CONCRETE HIGHWAY

HAWK TRANSPORTATION: I-30 MILEMARKER 205, HOOKS

75561

, 00000000.00 , UNK

200342648

Spill Date: 08/08/1994.

Case Number: F94-4409

Spill Location: I-30 MILEMARKER 205

Spill City: HOOKS Spill State:TX Spill Zip: Spill County: BOWIE

Source/Agency:DISCHARGER Material Spilled:OIL: DIESEL

Medium Affected: Land

Waterway Affected: CONCRETE HIGHWAY

F94-4409

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### UNMAPPABLE SITES

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LUST

SITE NAME AND ADDRESS

VISTA ID

EPA ID / AGENCY ID

HOOKS ISD: HWY 82, HOOKS 75561

Owner Name

199503

098536

Owner Address

: HOOKS ISD

Discovery Date

: 04/02/91

Media Affected

: SOIL/LAND/SAND

Leak Cause Remediation : UNAVAILABLE

: CASE CLOSED/CLEANUP COMPLETE

ALUMAX MILL PRODUCTS INC .: 300 ALUMAX DRIVE, TEXARKANA 75501

486378

Owner Name

: ALUMAX MILL PRODUCTS

108425

Owner Address

Discovery Date

: 05/23/94

Media Affected

: GROUNDWATER

Leak Cause Remediation

: UNAVAILABLE

: PENDING : 08/17/92

Discovery Date Media Affected

: SOIL/LAND/SAND

Leak Cause

: UNAVAILABLE

Remediation

: CASE CLOSED/CLEANUP COMPLETE

RAS #6-3781: FM 560, HOOKS 75561

2565054

Owner Name

: EXXON COMPANY USA

Owner Address

Discovery Date

: 08/09/89

Media Affected

: NONE

Leak Cause

: UNAVAILABLE

Remediation

: CORRECTIVE ACTIONS COMPLETED

ROAD RUNNER #91: MAIN, HOOKS 75561

2578363

For more information call: (619) 450-6100

Owner Name

: TRUMAN ARNOLD COMPAN

095337

094324

Owner Address

11/21/95

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SITE NAME AND ADDRESS

VISTA ID

EPA ID / AGENCY ID

ROAD RUNNER #91: MAIN, HOOKS 75561

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2578363

IGENÇI ID

Discovery Date

: 08/28/89

Media Affected

: DRINKING WATER SUPPLY

Leak Cause

: UNAVAILABLE

Remediation

: CASE CLOSED/CLEANUP COMPLETE

COUNTY BARN PRECINCT 4: FM 1840, NEW BOSTON 75570

2586252

Owner Name

: BOWIE COUNTY DISTRIB

101566

098281

Owner Address

Discovery Date

: 10/22/91

Media Affected

: SOIL/LAND/SAND

Leak Cause

: UNAVAILABLE

Remediation

: CASE CLOSED/CLEANUP COMPLETE

TXDOT NEW BOSTON: HWY 8, NEW BOSTON 75570

2593523

Owner Name

: TXDOT

Owner Address

: 03/06/91

Discovery Date Media Affected

: SOIL/LAND/SAND

Leak Cause

: UNAVAILABLE

Remediation

: INCIDENT REPORTED

EXXON STATION #6-3781: HWY 30, HOOKS 75561

2593662

Owner Name

: MOSLEY OIL COMPANY

093420

Owner Address

: 07/21/89

Discovery Date Media Affected

: NONE

Leak Cause

: UNAVAILABLE

Remediation

: CLEANUP IN PROGRESS/REQUIRED

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SITE NAME AND ADDRESS

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EPA ID /

105353

103148

103810

105026

VISTA ID

LUST

AGENCY ID

GTE-NASH FLEET: HWY 82, NASH 75567 3667208

Owner Name

: GTE

Owner Address

: 11/12/92

Discovery Date Media Affected

: SOIL/LAND/SAND

Leak Cause

: UNAVAILABLE

Remediation

: CASE CLOSED/CLEANUP COMPLETE

SPENCER GROCERY: FM 991, REDWATER 75573 3667870

Owner Name

: MOSELY OIL CO

Owner Address

Discovery Date : 01/22/91

Media Affected

: SOIL/LAND/SAND : UNAVAILABLE

Leak Cause Remediation

: CASE CLOSED/CLEANUP COMPLETE

JERRY'S MUFFLERS: E HWY 82, NEW BOSTON 75570 3842010

Owner Name

: SPRIGGS SHEILA

Owner Address

Discovery Date : 07/08/92

Media Affected

: SOIL/LAND/SAND

Leak Cause

: UNAVAILABLE

Remediation

: CASE CLOSED/CLEANUP COMPLETE

NUWAY (FFP #551): HWY 67, MAUD 75567 3843608

Owner Name

: FFP OPERATING PARTNE

Owner Address

Discovery Date

: 10/17/92

Media Affected

: DRINKING WATER SUPPLY

Leak Cause

: UNAVAILABLE

Remediation

: CLEANUP IN PROGRESS/REQUIRED

For more information call: (619) 450-6100

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ADIUS PROFILE 11/21/95

For more information call: (619) 450-6100

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#### UNMAPPABLE SITES

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LUST

EPA ID / SITE NAME AND ADDRESS VISTA ID AGENCY ID BOWIE COUNTY BUS BARN: S HWY 8, NEW BOSTON 75570 4089676 : BOWIE COUNTY DISTRIC Owner Name 106683 Owner Address Discovery Date : 05/18/93 : SOIL/LAND/SAND Media Affected Leak Cause : UNAVAILABLE Remediation : ADMINISTRATIVE ORDER ISSUED : NEW BOSTON, TEXARKANA 5110106 : AMERICAN AUTO LUBE Owner Name 091269 Owner Address Discovery Date : 03/01/87 **Nedia Affected** : NONE Leak Cause : UNAVAILABLE Remediation : PENDING DAY & NITE STORE #119: HWY 67, MAUD 75567 5110355 Owner Name : DAY & NITE CONVENIEN 108620 Owner Address Discovery Date : 01/25/93 : DRINKING WATER SUPPLY Media Affected Leak Cause : UNAVAILABLE Remediation : PENDING : HWY 82, TEXARKANA 5110383 : LONE STAR ARMY AMMO 091225 Owner Name Owner Address Discovery Date : 02/07/87 Media Affected : SOIL/LAND/SAND

Leak Cause

Remediation

: UNAVAILABLE

: CASE CLOSED/CLEANUP COMPLETE



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Discovery Date

TIDWELL GROCERY: HWY 82, HOOKS 75561

Media Affected

Media Affected

SITE NAME AND ADDRESS

### UNMAPPABLE SITES

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LUST

: 12/11/92

: DRINKING WATER STOPLY

: NONE

EPA ID / VISTA ID AGENCY ID

5364423

5547921

SMITH RONALD R: E HWY 82, HOOKS 75561 5265546

> : SMITH RONALD R Owner Name 105849

Owner Address

Media Affected : SOIL/LAND/SAND Leak Cause : UNAVAILABLE Remediation : ADMINISTRATIVE ORDER ISSUED

Owner Name : ATKENSON PETROLEUM 104264 Owner Address

: 07/30/92 Discovery Date

Leak Cause : UNAVAILABLE Remediation : PENDING

REDWATER COUNTRY STORE: HWY 67, REDWATER 75573

: COUNTRY STORES 109618 Owner Name

Owner Address

: 04/26/95 Discovery Date

Leak Cause : UNAVAILABLE Remediation : INCIDENT REPORTED

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SWLF

SITE NAME AND ADDRESS

VISTA ID

EPA ID / AGENCY ID

: 200'N OF US 67, S OF MOPAC RR., 2708, TEXARKANA

3045380

Facility Type

: TRANSFER STATION

Q1022

Facility Status

: PROPOSED

Owner Name

: WESTERN REFUSE OF TE

Owner Address

: P.O. BOX 2702

TEXARKANA

, TX 75501

1000'S OF US 67, 1.25M E OF MAUD CIT, MAUD 75567

3045813

Facility Type

: SANITARY LANDFILL/LANDFILL

00756

Facility Status

: GRANDFATHER SITE

Owner Name Owner Address : MAUD, CITY OF : PO BOX 427

MAUD

, TX 75567

: N OF IH 30 .1 MILE E FM 1398, HOOKS 75561

3048029

Facility Type

: SANITARY LANDFILL/LANDFILL

00132

00497

00576

Facility Status

: PROPOSED

Owner Name Owner Address : WESTERN REFUSE OF TX : 1629 W 18TH STREET

TEXARKANA

, TX 75501

: 7M FROM TEXARKANA LIMITS ON HWY 67W, TEXARKANA

3051260

Facility Type

: SANITARY LANDFILL/LANDFILL

Facility Status

: GRANDFATHER SITE

Owner Name

: SAM W. HUGHES SR.

Owner Address

: RT 6 BOX 547C

**TEXARKANA** 

, TX 75501

: 1.7 MILES W OF IH-30 AND SH-8 INT., S, NEW BOSTON 75570

3051569

Facility Type

: SANITARY LANDFILL/LANDFILL

Facility Status

: GRANDFATHER SITE

Owner Name

: WESTERN WASTE INDUST

Owner Address

: 100 INTERSTATE 45 LP TOWER S-2

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# VISTA NATIONAL RADIUS PROFILE

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## UNMAPPABLE SITES

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SVLF		
SITE NAME AND ADDRESS	VISTA ID	EPA ID / AGENCY ID
: 1.7 MILES W OF IH-30 AND SH-8 INT.,S, NEW BOSTON 75570	3051569	
CONROE , TX 77301		

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## UNMAPPABLE SITES

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SITE NAME AND ADDRESS	VISTA ID	EPA ID / AGENCY ID
ALUMAX MILL PRODUCTS, INC.: 300 ALUMAX DR, TEXARKANA 75501	486378	
Number of Underground Tanks: 9	-	0000032
Number of Aboveground Tanks: 1		
Contents:DIESEL,OIL(NOT SPECIFIED),USED OIL,KEROSENE,		
ICNISH, TILTON C.: 704 BROADWAY, MAUD 75567	1367583	•
Number of Underground Tanks: 2 Contents:EMPTY,		0003956
HOOKS TRUCK STOP MOTEL RESTAURNT: I 30 AT EXIT 208, HOOKS 75561	1367584	
Number of Underground Torker 6		0007057
Number of Underground Tanks: 6		0003957
Number of Aboveground Tanks: 4 Contents:EMPTY,GASOLINE (UNSPECIFIED),DIESEL,	•	
Contents:EMP11, Modeline (Ondrectified), Michell,		
BRYAN ALLEN'S GRO & STA: HWY 82, RED SPRINGS 76378	1371594	
Number of Underground Tanks: 1		0008311
Contents:GASOLINE (UNSPECIFIED),	-	
RED WATER HARDWARE: 67 W, REDWATER 75573	1372172	
Number of Underground Tanks: 2		0008923
Contents:GASOLINE (UNSPECIFIED),		
·		
-Z MART #56: HWY 82, HOOKS 75561	1373339	•
Number of Underground Tanks: 3		0010210
Contents: GASOLINE (UNSPECIFIED),		
DELAUGHTER, STEVE: HWY 67, REDWATER 75573	1378780	
Number of Hadespround Torker 7		
Number of Underground Tanks: 3		0016306
Contents:GASOLINE (UNSPECIFIED),		

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## VISTA NATIONAL RADIUS PROFILE

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SITE NAME AND ADDRESS	VISTA ID	EPA ID / AGENCY ID
FFP #550: HWY 82, HOOKS 75561	1380780	
Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),		0018514
FFP #551: HWY 67, MAUD 75567	1380814	
Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),	••••	0018548
COY W. WALRAVEN: PO BOX 189, REDWATER 75573	1384407	
Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),		0022603
TEXARKANA RADIO BLDG.: PROT Z RD 4 MI W, TEXARKANA 75501	1394344	
Number of Underground Tanks: 1 Contents:D1ESEL,		0033492
STRICKLEN GROC. & STA.: OLD HWY 67, REDWATER 75573	1398686	
Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),	***********	0038185
ECHO HILLS EXXON: FM 991, REDWATER 75573	1398699	
Number of Underground Tanks: 4 Contents:GASOLINE (UNSPECIFIED),		0038198
TIDWELL EXXON: HWY 82 & HOOKS, HOOKS 75561	1398700	
Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),		0038199

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UST's		•
SITE NAME AND ADDRESS	VISTA ID	EPA ID / AGENCY ID
JACKSON GROCERY: HWY 67, MAUD 75567	1401027	÷
Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),		0040703
VIVIAN ANDERSON: BOX 200, NEW BOSTON 75570	1401536	
Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),		0041266
KIRBYS GULF: US 67, REDWATER 75573	1401675	
Number of Underground Tanks: 1 Contents:GASOLINE (UNSPECIFIED),		0041423
MALTA GROCERY: HWY 82, NEW BOSTON 75570	1401678	
Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED), EMPTY,		0051527
SARTIN'S MOBIL: US HWY 67, MAUD 75567	1402410	
Number of Underground Tanks: 5 Contents:GASOLINE (UNSPECIFIED),USED OIL,		0042267
MURRAY WISDOM & BARNS: DAVIS BIRDWELL, NASH 75569	1402794	
Number of Underground Tanks: 1 Contents:DIESEL,		0042684
PENDER WATER WELLS: BOX 334, TEXARKANA 75503	1406317	
Number of Underground Tanks: 1 Contents:DIESEL,		0046698



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UST*s		
SITE NAME AND ADDRESS	VISTA ID	EPA ID / AGENCY ID
CITY OF HOOKS: W 1ST ST, HOOKS 75561	1408626	
Number of Underground Tanks: 1 Contents:GASOLINE (UNSPECIFIED),		0049177
EED'S HARDWARE: 104 WAVE A, HOOKS 75561	1408875	
Number of Underground Tanks: 3 Contents:EMPTY,	••••••	0049433
& M GRO.: W HWY 67, TEXARKANA 75501	1782590	
Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),		0008929
OLLUTION CONTROL: BOX 143A, TEXARKANA 75502	1782707	
Number of Underground Tanks: 4 Contents:DIESEL,GASOLINE (UNSPECIFIED),USED OIL,		0046473
SACE WRIGHT PATMAN PROJECT: , TEXARKANA 75504	1783312	
Number of Underground Tanks: 2 Contents:DIESEL,GASOLINE (UNSPECIFIED),		0003544
MITH, RONALD R.: E HWY 82, HOOKS 75561	1783343	
Number of Underground Tanks: 4 Contents:GASOLINE (UNSPECIFIED),		0012486
ELLIS THRIFTMART: S HWY 8, MAUD 75567	1783351	
Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),		0014708

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SITE NAME AND ADDRESS	VISTA ID	EPA ID / AGENCY ID
ACCOY GROCERY: PO BOX 6, MAUD 75567	1783352	•
Number of Underground Tanks: 3 Contents:EMPTY,GASOLINE (UNSPECIFIED),	·	0033361
EXARKANA TX RMLR: ROAD 67, NASH 75569	1783363	
Number of Underground Tanks: 1 Contents:GASOLINE (UNSPECIFIED),		0035847
OWIE COUNTY SCHOOLS: S HWY 8, NEW BOSTON 75570	1783364	
Number of Underground Tanks: 1 Contents:GASOLINE (UNSPECIFIED),		0041429
EW BOSTON CONCRETE: _S HWY 8, NEW BOSTON 75570	1783365	
Number of Underground Tanks: 2 Contents:DIESEL,GASOLINE (UNSPECIFIED),		0041415
LD BOSTON GROC.: S HWY 8, NEW BOSTON 75570	1783367	
Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),		0038187
ANDYS GROCERY: S HWY 8, NEW BOSTON 75570	1783368	
Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),	•••••	0041421
HOMPSON EXXON: E HWY 82, NEW BOSTON 75570	1783369	
Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),		0038194

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## VISTA NATIONAL RADIUS PROFILE

VISTA Report #: 6/090144-001

## UNMAPPABLE SITES

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Number of Underground Tanks: 3	SITE NAME A	ND ADDRESS	VISTA ID	EPA ID / AGENCY ID
Contents:GASOLINE (UMSPECIFIED),  RED RIVER PARTS & EQUIPMENT CO.: W IH 30 EXIT #206 N, NEW BOSTON 75570 1801432  Number of Underground Tanks: 2 003899* Contents:USED OIL,  PIC-N-PAK: MAIN & I 30, HOOKS 75561 1804132  Number of Underground Tanks: 3 005031; Contents:GASOLINE (UMSPECIFIED),  FORMERLY ACE HARDWARE: BOX 206, TEXARKANA 75501 1810017  Number of Underground Tanks: 3 005014; Contents:GASOLINE (UMSPECIFIED),  PAPPY'S GROCERY & RV: BOX 466A, TEXARKANA 75501 1810078  Number of Underground Tanks: 3 004664; Contents:GASOLINE (UMSPECIFIED),  DAY & NITE CONVENIENCE STORE: HWY 67, NAUD 75567 1811152  Number of Underground Tanks: 3 004142; Contents:GASOLINE (UMSPECIFIED),  NAUD BAIT & TACKLE SHOP: HWY 67, MAUD 75567 1811153  Nauber of Underground Tanks: 2 005311;				
Number of Underground Tanks: 2       003899*         Contents:USED OIL,       1804132         PIC-N-PAK: MAIN & I 30, HOOKS 75561       1804132         Number of Underground Tanks: 3       005031         Contents:GASOLINE (UNSPECIFIED),       1810017         Number of Underground Tanks: 3       005014         Contents:GASOLINE (UNSPECIFIED),       1810078         PAPPY'S GROCERY & RV: BOX 466A, TEXARKANA 75501       1810078         Number of Underground Tanks: 3       004664         Contents:GASOLINE (UNSPECIFIED),       004664         DAY & NITE CONVENIENCE STORE: HWY 67, NAUD 75567       1811152         Number of Underground Tanks: 3       004142         Contents:GASOLINE (UNSPECIFIED),       004142         NAUD BAIT & TACKLE SHOP: HWY 67, MAUD 75567       1811153         NAUD BAIT & TACKLE SHOP: HWY 67, MAUD 75567       1811153         Number of Underground Tanks: 2       005311		·	*************************	0055066
Contents:USED OIL,  PIC-N-PAK: MAIN & I 30, HOOKS 75561  Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),  FORMERLY ACE HARDWARE: BOX 206, TEXARKANA 75501  Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),  PAPPY'S GROCERY & RV: BOX 466A, TEXARKANA 75501  Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),  DAY & NITE CONVENIENCE STORE: HUY 67, MAUD 75567  Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),  MAUD BAIT & TACKLE SHOP: HUY 67, MAUD 75567  Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),  MAUD BAIT & TACKLE SHOP: HUY 67, MAUD 75567  Number of Underground Tanks: 2  O05311	RED RIVER P	ARTS & EQUIPMENT CO.: W IH 30 EXIT #206 N, NEW BOSTON 75570	1801432	
Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),  FORMERLY ACE HARDWARE: BOX 206, TEXARKANA 75501  Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),  PAPPY'S GROCERY & RV: BOX 466A, TEXARKANA 75501  Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),  DAY & NITE CONVENIENCE STORE: HWY 67, MAUD 75567  Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),  MAUD BAIT & TACKLE SHOP: HWY 67, MAUD 75567  1811153  Number of Underground Tanks: 2  005311:		Contents:USED OIL,	•••••	0038991
Contents:GASOLINE (UNSPECIFIED),  FORMERLY ACE HARDWARE: BOX 206, TEXARKANA 75501 1810017  Number of Underground Tanks: 3 0050141 Contents:GASOLINE (UNSPECIFIED),  PAPPY'S GROCERY & RV: BOX 466A, TEXARKANA 75501 1810078  Number of Underground Tanks: 3 0046641 Contents:GASOLINE (UNSPECIFIED),  DAY & NITE CONVENIENCE STORE: HWY 67, MAUD 75567 1811152  Number of Underground Tanks: 3 0041421 Contents:GASOLINE (UNSPECIFIED),  NAUD BAIT & TACKLE SHOP: HWY 67, MAUD 75567 1811153  Number of Underground Tanks: 2 005311	PIC-N-PAK:	MAIN & I 30, HOOKS 75561	1804132	
Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),  PAPPY'S GROCERY & RV: BOX 466A, TEXARKANA 75501  Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),  DAY & NITE CONVENIENCE STORE: HWY 67, MAUD 75567  Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),  MAUD BAIT & TACKLE SHOP: HWY 67, MAUD 75567  1811153  Number of Underground Tanks: 2  005311:		Contents:GASOLINE (UNSPECIFIED),		0050312
Contents:GASOLINE (UNSPECIFIED),  PAPPY'S GROCERY & RV: BOX 466A, TEXARKANA 75501 1810078  Number of Underground Tanks: 3 004664  Contents:GASOLINE (UNSPECIFIED),  DAY & NITE CONVENIENCE STORE: HWY 67, MAUD 75567 1811152  Number of Underground Tanks: 3 004142  Contents:GASOLINE (UNSPECIFIED),  MAUD BAIT & TACKLE SHOP: HWY 67, MAUD 75567 1811153  Number of Underground Tanks: 2 005311	FORMERLY AC	E HARDWARE: BOX 206, TEXARKANA 75501	1810017	
Number of Underground Tanks: 3 0046640 Contents:GASOLINE (UNSPECIFIED),  DAY & NITE CONVENIENCE STORE: HWY 67, MAUD 75567 1811152  Number of Underground Tanks: 3 0041420 Contents:GASOLINE (UNSPECIFIED),  MAUD BAIT & TACKLE SHOP: HWY 67, MAUD 75567 1811153  Number of Underground Tanks: 2 0053110	·	Contents:GASOLINE (UNSPECIFIED),		0050148
Contents:GASOLINE (UNSPECIFIED),  DAY & NITE CONVENIENCE STORE: HWY 67, MAUD 75567  Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),  MAUD BAIT & TACKLE SHOP: HWY 67, MAUD 75567  Number of Underground Tanks: 2  005311	PAPPY'S GRO	CERY & RV: BOX 466A, TEXARKANA 75501	1810078	
Number of Underground Tanks: 3 0041424 Contents:GASOLINE (UNSPECIFIED),  MAUD BAIT & TACKLE SHOP: HWY 67, MAUD 75567 1811153  Number of Underground Tanks: 2 0053116		Contents:GASOLINE (UNSPECIFIED),		0046640
Contents:GASOLINE (UNSPECIFIED),  MAUD BAIT & TACKLE SHOP: HWY 67, MAUD 75567  Number of Underground Tanks: 2  005311	DAY & NITE			
Number of Underground Tanks: 2 005311				0041420
	MAUD BAIT &	TACKLE SHOP: HWY 67, MAUD 75567	1811153	
CONTENTS: GASULINE (UNSPECIFIED),		Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),		0053119

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For more information call: (619) 450-6100

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## UNMAPPABLE SITES

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<u> </u>		
SITE NAME AND ADDRESS	VISTA ID	EPA ID / AGENCY ID
STEWARTS GROCERY: HWY 82, NEW BOSTON 75570	1811353	
Number of Underground Tanks: 3		0041432
Contents:GASOLINE (UNSPECIFIED),DIESEL,		
INTERNATIONAL PAPER CO.: HWY 82, NEW BOSTON 75570	1811355	
Number of Underground Tanks: 3		0041428
Contents:DIESEL,GASOLINE (UNSPECIFIED),	•	
EMETT WINTTERS AUTO SALVAGE: INTERSECTION FM 14 & 1, RED SPRINGS	2545287	
Number of Underground Tanks: 2		0055239
Contents:GASOLINE (UNSPECIFIED),		
NORTHRIDGE COUNTRY CLUB: 120 BILL ROGERS DR, TEXARKANA 75503	2552326	
Number of Underground Tanks: 1		0060819
Contents:GASOLINE (UNSPECIFIED),		
TYSON TRUCK SERVICE: N 5 M OF NEW BOSTON HWY, NEW BOSTON 75570	2583574	
Number of Underground Tanks: 1		0059666
Contents:DIESEL,		
TEDDER AVIATION CORP: BOX 79, NEW BOSTON 75570	2589160	
Number of Underground Tanks: 0		0061489
Number of Aboveground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),		
6-H FARM: HWY 3110, NEW BOSTON 75570	2592000	
Number of Underground Tanks: 0		0058913
Number of Aboveground Tanks: 1 Contents:DIESEL,		

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## VISTA NATIONAL RADIUS PROFILE

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SITE NAME AND ADDRESS	VISTA ID	EPA ID / AGENCY ID
IEW BOSTON LUMBER MILL: E HWY 82, NEW BOSTON 75570	3665734	
Number of Underground Tanks: 0 Number of Aboveground Tanks: 1 Contents:DIESEL,		005 <b>2</b> 221
UDDY'S GROCERY: FM #3419, TEXARKANA 75501	3667830	
Number of Underground Tanks: 1 Contents:GASOLINE (UNSPECIFIED),		0063275
PENCER GROCERY: FM 991, REDWATER 75573	3667870	
Number of Underground Tanks: 3 Contents:UNKNOWN,GASOLINE (UNSPECIFIED),		0042268
IC CONNELL HEAVY HAULERS, INC.: HWY 67 WEST AT KELLY R, TEXARKANA 75501	3668608	
Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),DIESEL,		0011833
PARADISE COVE MARINA: BOX 100, TEXARKANA 75501	3669876	
Number of Underground Tanks: 0 Number of Aboveground Tanks: 1 Contents:GASOLINE (UNSPECIFIED),		0062961
JACK & SHEILA KAY BARROW: RT 2 BOX 735, REDWATER 75573	3669908	•
Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),		0061945
RANDY MOORE: 744 BROADWAY, MAUD 75567	3970513	
Number of Underground Tanks: 2 Contents:EMPTY,		0064303

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SITE NAME A	ND ADDRESS	VISTA ID	EPA ID / AGENCY ID
TOTAL 2850:	MAIN & I-30, HOOKS 75561	3971185	
	Number of Underground Tanks: 5 Contents:DIESEL,GASOLINE (UNSPECIFIED),	•	0008083
HOOKS ISD:	W HWY 82, HOOKS 75561	4089671	
	Number of Underground Tanks: 3 Contents:WATER,GASOLINE (UNSPECIFIED),		0010536
: ѕ ныү 8,	MAUD 75567	4089674	
	Number of Underground Tanks: 3 Contents:EMPTY,		0064709
MIDGET GROC	ERY: 2822 NORRIS COOLEY, TEXARKANA 75501	4092270	
	Number of Underground Tanks: 1 Contents:UNKNOWN,		0064635
TXDOT HAINT	FACILITY: HWY8 0 3 MI S, NEW BOSTON 75570	4898515	
	Number of Underground Tanks: 4 Contents:USED OIL,GASOLINE (UNSPECIFIED),DIESEL,		0013000
CLAPP'S GRO	CERY: BOX 300, TEXARKANA 75504	5167190	
	Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),		0032688
TRI-STATE M	OTOR TRANSIT CO: BOX 373, TEXARKANA 75504	5167194	
	Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),DIESEL,		0001845



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## UNMAPPABLE SITES

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UST/\$	
SITE NAME AND ADDRESS	EPA ID / VISTA ID AGENCY I
WARD-DAVIS, INC: BOX 1894, TEXARKANA 75504	5167195
Number of Underground Tanks: 2 Contents:EMPTY,	0037185
JACKSON, A.R.: BOX 176, MAUD 75567	5167219
Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),	0012153
JACKSON'S SERVICE STATION: BOX 176, MAUD 75567	5167220
Number of Underground Tanks: 2 Contents:GASOLINE (UNSPECIFIED),	0012154
& D CONV. STORE: COR. OF 19TH & HWY 82, HOOKS 75561	5169997
Number of Underground Tanks: 3 Contents:GASOLINE (UNSPECIFIED),	0023591
I-W PAYNE CONST. CO., INC.: PO BOX, TEXARKANA 75505	5175452
Number of Underground Tanks: 3 Contents:DIESEL,GASOLINE (UNSPECIFIED),	0002496
COUNTRY STORES: HWY 67 & FM RD 991, REDWATER 75573	5547412
Number of Underground Tanks: 6 Contents:GASOLINE (UNSPECIFIED),	0029795

CUSTOMER USE LIMITATIONS - Customer proceeds at its own risk in choosing to rely upon VISTA services, in whole or in part, prior to proceeding with any transaction. VISTA assumes no responsibility for the accuracy of government records, for errors occurring in conversion of data, or for customer's use of VISTA services. VISTA's obligation regarding data is solely limited to providing portions of data existing in government records as of the date of each government update received by VISTA.

#### DESCRIPTION OF DATABASES SEARCHED

Below are general descriptions and search parameters of the federal and state databases that VISTA searches for the National Radius Report.

#### FEDERAL DATABASES

Please check the "Summary of Environmental Risks Found" matrix on the cover of this profile to determine the specific dates of the federal databases searched for this profile.

#### U.S. EPA: NPL

The National Priorities List (NPL) is the EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial action under the Superfund Program. A site, to be included on the NPL, must either meet or surpass a predetermined hazard ranking systems score, or be chosen as a state's top-priority site, or meet all three of the following criteria:

- 1) The US Department of Health and Human Services issues a health advisory recommending that people be removed from the site to avoid exposure.
- 2) The EPA determines that the site represents a significant threat.
- 3) The EPA determines that remedial action is more cost-effective than removal action.

#### **U.S. EPA: CERCLIS**

The CERCLIS List is a compilation by the EPA of the sites which the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA or Superfund Act).

#### U.S. EPA: RCRA (RCRIS/HWDMS)

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of reporting facilities that generate, transport, treat, store or dispose of hazardous waste.

#### U.S. EPA: ERNS

The Emergency Response Notification System (ERNS) is a national database used to collect information on reported accidental releases of oil and hazardous substances. The database contains information from spill reports made to federal authorities including the EPA, the US Coast Guard, the National Response Center and the Department of Transportation.

#### STATE DATABASES

Please check the "Databases Searched" to determine if the following type of databases are available from VISTA for the state in which the subject property of this report is located. Please note that if the Summary does not list one of the following databases, it is not currently available. You may also determine the specific names and dates of the databases searched for this profile in the summary.

#### STATE: SPL

The State Priority List is a generic name for databases maintained by many states that contain sites considered to be actually or potentially contaminated and presenting a possible threat to human health and the environment. These sites are generally listed by the state to warn the public or as a part of an investigation and cleanup program managed by the state.

#### STATE: LUST

This is a database maintained by state or local agencies of known or suspected leaking underground storage tanks.

#### STATE: UST

This is a database maintained by state or local agencies of registered underground storage tanks.

#### STATE: SWLF

This is a database maintained by state or local agencies of Solid Waste Landfills, Incinerators, and transfer stations.

#### VISTA INFORMATION SOLUTIONS

## FACILITY RISK PROFILE

Client Project/P.O. No.:

VISTA Report No.:

090144011

Client Reference Name:

Date of Report:

Nov. 22, 1995

#### SITE DESCRIPTION

RED RIVER ARSENAL

NONE SUPPLIED BY CLIENT

HOOKS, TX

75501

**BOWIE COUNTY** 

#### ADDITIONAL SEARCH CRITERIA

Facility Names:

- 1) LONE STAR
- 2) US ARMY RED
- 3) RED RIVER ARMY
- 4) USA-RED-RIVER

Street Names:

1) RT-82 2) 18M 3) LONE STAR 4) LONESTAR 5)

2.5M W 6) RED RIVER

Zip Codes:

1) 75505 2) 75561

A search of the VISTA Environmental Database found facility record(s) which fit the above site descriptions and/or additional search criteria. The following is a summary of the combined risks listed in those records:

# Summary of Environmental Risks at Site

## Records of Existing or Potential Contamination

- Site is a Federal Superfund Site(NPL)
- Site is listed on the US EPA's Evaluation System(CERCLIS)
- Site has had RCRA Corrective Actions imposed(CORRACTS)
- Site has reported incidence of Leaking Underground Storage Tanks (LUST)
- Site is a Sanitary Landfill, Incinerator or Transfer Station (SOLID WASTE)
- Site has reported spill incidents listed in the State's Spill Database (SPILLS)

#### Records of Hazardous Materials or Environmental Permits

See the last two pages for a description of how this report is produced and the agency lists searched

(Rev. 5.01, Oct 20 1995. ())

(c) VISTA INFORMATION SOLUTIONS, INC., 1995

Nov. 22, 1995-Report #-090144011

5060 Shoreham Place, Suite 300, San Diego, CA 92122

For more info call: (619) 450-6100

- Site is a hazardous waste treatment/storage/disposal facility(RCRIS TSD)
- Site generates hazardous waste (RCRIS Generator)
- Site handles PCBs(PADS)
- Site uses or releases toxic chemicals on-site(TRIS)
- Site operates a public drinking water system(FRDS)
- Site listed in the EPA FINDS system(FINDS)
- Site utilizes storage tanks(UST/AST)

## Records of Environmental Non-Compliance

- Site has violations under the RCRA program(RCRIS)
- The EPA has imposed RCRA Administrative Actions(RAATS)
- Site has had Occupational Safety and Health Administration violations (OSHA)

Page # 3

INVENTORY OF ENVIRONMENTAL RECORDS REVIEWED Records of Existing and Potential Contamination

		List	Record	Rec. Not
Agency/Database	Type of Record	Available	Found	Found
US EPA NPL	FEDERAL SUPERFUND SITE	Y	X	
US EPA CERC/NFRAP	CERCLIS(C)/NFRAP(N) SITE	Y	C.	
US EPA CORRACTS	CORRECTIVE ACTIONS SITE	$\mathbf{Y}$	X	
US EPA ERNS	SPILL NOTIFICATION	. <b>Y</b>		X
STATE SPL/SCL	CONTAMINATED SITE	Y		X
STATE LUST	LEAKING TANKS SITE	$\mathbf{Y}$	X	
STATE SOLID WASTE	SOLID WASTE SITE	Y	. <b>X</b>	
STATE SPILL	SPILL SITE	Y	X	

## Records Indicating Hazardous Materials or Environmental Permits Present

		List	Record	Rec. Not
Agency/Database	Type of Record	Available	Found	Found
US EPA RCRIS	HAZ WASTE TSD SITE	Y	X	
US EPA RCRIS	HAZ WASTE TRANSPORTER	Y		X
US EPA RCRIS	HAZ WASTE GENERATOR	Y	X	
US EPA PADS	PCB HANDLER	Y	X	
US EPA CICIS	CHEMICAL PRODUCER SITE	Y		X
US EPA TRIS	TOXIC CHEMICAL RELEASES	Y	$_{i}\mathbf{X}$	
US EPA PCS	WASTE WATER PERMIT	Y		X
US EPA AIRS	REGULATED AIR EMISSIONS	Y		X
US EPA FATES	PESTICIDES PROCESSOR	Y		X
US EPA FRDS	PUBLIC WATER SUPPLY	Y	X	
US EPA FINDS	FACILITY INDEX SYSTEM	Y	X	
STATE UST/AST	TANK SITES	Y	X	

## Records of Environmental Compliance

		List	Record	Rec. Not
Agency/Database	Type of Record	Available	Found	Found
US EPA RCRIS	RCRA COMPLIANCE	Y	Х	
US EPA RAATS	RCRA ADMIN. ACTIONS	Y	X	
US EPA PCS	NPDES COMPL/ENF	Y		X
US EPA AIRS	AIR EMISSION COMPLIANCE	<b>. Y</b>		X
US EPA FTTS	FIFRA/TSCA/EPCRA COMP	Y		X
US DoL OSHA	OSHA COMPLIANCE	$\mathbf{Y}_{\cdot}$	X	
US EPA SETS	RESPONSIBLE PARTY	Y		X
US EPA DOCKET	CIVIL JUDICIAL ACTIONS	Y		X

### VISTA INFORMATION SOLUTIONS, INC.

# General Records Found Under Site Description

Facility Name

: RED RIVER ARMY DEPOT

Facility Address

: NOT REPORTED

Facility City/Zip

: HOOKS, TX

Facility County

: BOWIE

VISTA Enhanced

City/Zip

: HOOKS, 75561

VISTA #

: 3045224

#### Solid Waste Record Details

Agency ID Number:01315

Owner Information

Owner Name:

RED RIVER ARMY DEPOT

Owner Address:

GENERAL DELIVERY

Owner City:

TEXARKANA

Owner State:

TX

75501

Owner Zip:

Solid Waste Details

Permit Date:

06/25/79

Facility Type:

CONSTRUCTION/DEMOLITION

Status:

**GRANDFATHER SITE** 

#### Solid Waste Record Details

Agency ID Number:01314

Owner Information

Owner Name:

RED RIVER ARMY DEPOT

Owner Address:

GENERAL DELIVERY

Owner City:

TEXARKANA

Owner State:

ТX

Owner Zip:

75501

Page # 5

Solid Waste Details

Permit Date:

06/25/79

Facility Type:

TRANSFER STATION

Status:

GRANDFATHER SITE

Solid Waste Record Details

Agency ID Number:01313

Solid Waste Details

Permit Date:

06/25/79

Facility Type:

SANITARY LANDFILL/LANDFILL

Status:

**GRANDFATHER SITE** 

### VISTA INFORMATION SOLUTIONS, INC.

# General Records Found Under Site Description

Facility Name

: US ARMY RED RIVER ARMY DEPOT

Facility Address

: 18M W OF HWY 82

Facility City/Zip

: TEXARKANA, TX 75501

Facility County

: BOWIE

VISTA #

: 4965263

#### **Industry Description**

Sic Code:9999 - GOV-NONCLASSIFIABLE ESTABLISHMENTS

Sic Code:9711 - GOV-NATIONAL SECURITY

Sic Code:9511 - GOV-AIR WATER & SOLID WASTE MANAGEMENT

Sic Code:7699 - SVC-REPAIR SERVICES NEC

Sic Code:7539 - SVC-AUTOMOTIVE REPAIR SHOPS NEC

Sic Code:7532 - SVC-TOP & BODY REPAIR & PAINT SHOPS

Sic Code:7384 - SVC-PHOTOFINISHING LABORATORIES

#### RCRA Record Details

EPA ID Number: TX3213820738

#### Generator Details

Waste Quantity Class:

Generates at least 1000 kg./month of non-acutely hazardous waste ( or 1

kg./month of acutely hazardous waste).

Violations:

This handler has violations outstanding in the Corrective Action

Compliance Schedule Area

#### RCRA Record Details

EPA ID Number: TX3213820738

#### TSD Details

TSD Activities

This facility is engaged in the treatment/storage and or disposal of

hazardous waste

Land Disposal Universe:

VERIFIED LAND DISPOSAL FACILITY.

Incinerator Universe:

VERIFIED INCINERATOR FACILITY.

Storage Treatment Universe:

VERIFIED STORAGE/TREATMENT FACILITY.

Violations:

Corrective Action Compliance Schedule Viol.: This handler has

violations outstanding in the Corrective Action Compliance Schedule

Area

# US ARMY RED RIVER ARMY DEPOT (continued)

Land Ban Requirements Viol.: This TSD has violations outstanding in the Land Restrictions Area

### VISTA INFORMATION SOLUTIONS, INC.

# General Records Found Under Site Description

Facility Name

: LONE STAR ARMY AMMUNITION PLAN

Facility Address

: HIGHWAY 82 WEST

Facility City/Zip

: TEXARKANA, TX 75501

Facility County

: NOT REPORTED

VISTA #

: 248777

### **Industry Description**

Sic Code:3483 - MFG-AMMUNITION EXC. FOR SMALL ARMS NEC

#### **UST Record Details**

Agency ID Number:0000104

Owner Information

Owner Name:

DEPT OF THE ARMY/ RE

Owner Address:

**W HWY 82** 

Owner City:

TEXARKANA .

Owner State:

TX

75505

Owner Zip:

Tank Information

Number of Above Ground Tanks:

3

Number of Underground Tanks:

Tanks Details

Tank Id:

2A

Tank Contents:

GASOLINE (UNSPECIFIED)

Tank Size:

10000 GALLONS

Tank Status:

ACTIVE/IN SERVICE

Tank Id:

3A

Tank Contents:

DIESEL

Tank Size:

10000 GALLONS

Tank Status:

ACTIVE/IN SERVICE

Tank Id:

## LONE STAR ARMY AMMUNITION PLT (continued)

Tank Contents:

GASOLINE (UNSPECIFIED)

Tank Size:

10000 GALLONS

Tank Status:

ACTIVE/IN SERVICE

Tank Id: 16U

Tank Contents:

HYDRAULIC FLUIDS

Tank Size:

55 GALLONS

Tank Status:

ACTIVE/IN SERVICE

Pipe Type:

ANTI-CORROSIVE

Tank Id: 17U

Tank Contents:

HYDRAULIC FLUIDS

Tank Size:

**50 GALLONS** 

Tank Status:

ACTIVE/IN SERVICE

Pipe Type:

ANTI-CORROSIVE

Tank Id:

18U

Tank Contents:

HYDRAULIC FLUIDS

Tank Size:

50 GALLONS

Tank Status:

ACTIVE/IN SERVICE

Pipe Type:

ANTI-CORROSIVE

Tank Id:

19U

Tank Contents:

HYDRAULIC FLUIDS

Tank Size:

50 GALLONS

Tank Status:

ACTIVE/IN SERVICE

Pipe Type:

ANTI-CORROSIVE

Tank Id:

20U

Tank Contents:

HYDRAULIC FLUIDS

Tank Size:

50 GALLONS

Tank Status:

ACTIVE/IN SERVICE

Pipe Type:

**ANTI-CORROSIVE** 

Tank Id:

21U

Tank Contents:

HYDRAULIC FLUIDS

Tank Size:

**50 GALLONS** 

Tank Status:

ACTIVE/IN SERVICE

### LONE STAR ARMY AMMUNITION PLT (continued)

Pipe Type: ANTI-CORROSIVE

Tank Id: 22U

Tank Contents: HYDRAULIC FLUIDS

Tank Size: 50 GALLONS

Tank Status: ACTIVE/IN SERVICE

Pipe Type: ANTI-CORROSIVE

Tank Id: 9U

Tank Contents: HYDRAULIC FLUIDS

Tank Size: 55 GALLONS

Tank Status: ACTIVE/IN SERVICE

Pipe Type: ANTI-CORROSIVE

Tank Id: 10U

Tank Contents: HYDRAULIC FLUIDS

Tank Size: 50 GALLONS

Tank Status: ACTIVE/IN SERVICE

Pipe Type: ANTI-CORROSIVE

Tank Id: 11U

Tank Contents: HYDRAULIC FLUIDS

Tank Size: 55 GALLONS

Tank Status: ACTIVE/IN SERVICE

Pipe Type: ANTI-CORROSIVE

Tank Id: 12U

Tank Contents: HYDRAULIC FLUIDS

Tank Size: 50 GALLONS

Tank Status: ACTIVE/IN SERVICE

Pipe Type: ANTI-CORROSIVE

Tank Id: 13U

Tank Contents: HYDRAULIC FLUIDS

Tank Size: 50 GALLONS

Tank Status: ACTIVE/IN SERVICE

Pipe Type: ANTI-CORROSIVE

6

## LONE STAR ARMY AMMUNITION PLT (continued)

Tank Id: 15U

Tank Contents: HYDRAULIC FLUIDS

Tank Size: 50 GALLONS

Tank Status: ACTIVE/IN SERVICE

Pipe Type: ANTI-CORROSIVE

Tank Id: 14U

Tank Contents: HYDRAULIC FLUIDS

Tank Size: 50 GALLONS

Tank Status: ACTIVE/IN SERVICE

Pipe Type: ANTI-CORROSIVE

Tank Id: 21U

Tank Contents: DIESEL

Tank Size: 50 GALLONS

Tank Status: REMOVED

Pipe Type: ANTI-CORROSIVE

Tank Id: 22U

Tank Contents: DIESEL

Tank Size: 50 GALLONS

Tank Status: REMOVED

Pipe Type: ANTI-CORROSIVE

Tank Id: 23U

Tank Contents: EMPTY

Tank Size: 50 GALLONS

Tank Status: REMOVED

Tank Material: CONCRETE

Pipe Type: ANTI-CORROSIVE

Tank Id: 5U

Tank Contents: GASOLINE (UNSPECIFIED)

Tank Size: 10000 GALLONS

Tank Status: REMOVED

Pipe Type: ANTI-CORROSIVE

Tank Id: 6U

## LONE STAR ARMY AMMUNITION PLT (continued)

Tank Contents:

GASOLINE (UNSPECIFIED)

Tank Size:

10000 GALLONS

Tank Status:

REMOVED-

Pipe Type:

ANTI-CORROSIVE

Tank Id:

7U

Tank Contents:

GASOLINE (UNSPECIFIED)

Tank Size:

10000 GALLONS

Tank Status:

REMOVED.

Pipe Type:

ANTI-CORROSIVE

Tank Id:

8U

Tank Contents:

GASOLINE (UNSPECIFIED)

Tank Size:

10000 GALLONS

Tank Status:

REMOVED

Pipe Type:

ANTI-CORROSIVE

Tank Id:

9U

Tank Contents:

DIESEL

Tank Size:

55 GALLONS

Tank Status:

REMOVED

Pipe Type:

ANTI-CORROSIVE

Tank Id:

10U

Tank Contents:

DIESEL

Tank Size:

50 GALLONS

Tank Status:

REMOVED

Pipe Type:

ANTI-CORROSIVE

Tank Id:

11U

Tank Contents:

DIESEL

Tank Size:

55 GALLONS

Tank Status:

REMOVED

Pipe Type:

ANTI-CORROSIVE

Tank Id:

12U

Tank Contents:

DIESEL

Tank Size:

**50 GALLONS** 

Page # 13

# LONE STAR ARMY AMMUNITION PLT (continued)

Tank Status:

REMOVED

Pipe Type:

ANTI-CORROSIVE

Tank Id:

13U

Tank Contents:

DIESEL

Tank Sizé:

**50 GALLONS** 

Tank Status:

REMOVED

Pipe Type:

ANTI-CORROSIVE

Tank Id:

14U

Tank Contents:

DIESEL

Tank Size:

50 GALLONS

Tank Status:

REMOVED

Pipe Type:

ANTI-CORROSIVE

Tank Id:

15U

Tank Contents:

DIESEL

Tank Size:

110 GALLONS

Tank Status:

**REMOVED** 

Tank Material:

STEEL

Pipe Type:

FOR TANK #2,SINGLE WALL

Tank Id:

16U

Tank Contents:

DIESEL

Tank Size:

55 GALLONS

Tank Status:

REMOVED

Pipe Type:

ANTI-CORROSIVE

Tank Id:

17U

Tank Contents:

DIESEL

Tank Size:

50 GALLONS

Tank Status:

REMOVED

Pipe Type:

ANTI-CORROSIVE

Tank Id:

Tank Contents:

DIESEL

18U

Tank Size:

**50 GALLONS** 

Tank Status:

REMOVED

## LONE STAR ARMY AMMUNITION PLT (continued)

Pipe Type: ANTI-CORROSIVE

Tank Id: 19U

Tank Contents: DIESEL

Tank Size: 50 GALLONS

Tank Status: REMOVED

Pipe Type: ANTI-CORROSIVE

Tank Id: 20U

Tank Contents: DIESEL

Tank Size: 50 GALLONS

Tank Status: REMOVED

Pipe Type: ANTI-CORROSIVE

Tank Id: 1U

Tank Contents: GASOLINE (UNSPECIFIED)

Tank Size: 3000 GALLONS

Tank Status: REMOVED

Pipe Type: ANTI-CORROSIVE

Tank Id: 2U

Tank Contents: GASOLINE (UNSPECIFIED)

Tank Size: 1000 GALLONS

Tank Status: REMOVED

Pipe Type: ANTI-CORROSIVE

Tank Id: 3U

Tank Contents: GASOLINE (UNSPECIFIED)

Tank Size: 1000 GALLONS

Tank Status: REMOVED

Pipe Type: ANTI-CORROSIVE

Tank Id: 4U

Tank Contents: DIESEL

Tank Size: 1000 GALLONS

Tank Status: REMOVED

Pipe Type: ANTI-CORROSIVE



## (g

#### RCRA Record Details

EPA ID Number: TX7213821831

Generator Details

Waste Quantity Class:

Generates at least 1000 kg./month of non-acutely hazardous waste ( or 1

kg./month of acutely hazardous waste).

RCRA Record Details

EPA ID Number: TX7213821831

TSD Details

TSD Activities

This facility is engaged in the treatment/storage and or disposal of

hazardous waste

Storage Treatment Universe:

VERIFIED STORAGE/TREATMENT FACILITY.

PCB Handler Record Details

EPA ID Number: TX7213821831

**PCB** Information

Activity:

Generates PCBs

NPL Record Details

EPA ID Number: TX7213821831

Site Information

Status:

CURRENTLY ON FINAL NPL

Site Ownership:

FEDERALLY OWNED

CERCLA EVENTS

Event Type:

DISCOVERY

Lead Agency:

EPA FUND FINANCED

Event Status:

NOT REPORTED

Actual Completion Date:

19/80/01

Event Type:

NPL DELETION

Lead Agency:

FEDERAL ENFORCEMENT

Event Status:

NOT REPORTED

Event Type:

FINAL LISTING ON NPL

Lead Agency:

EPA FUND FINANCED

Event Status:

NOT REPORTED

Actual Completion Date:

19/87/22

## LONE STAR ARMY AMMUNITION PLANT (continued)

Event Type: PROPOSED FOR NPL

Lead Agency: EPA FUND FINANCED

Event Status: NOT REPORTED

Actual Completion Date: 19/84/15

Event Type: PRELIMINARY ASSESSMENT

Event Status: HIGH

Actual Start Date: 19/84/01

Actual Completion Date: 19/84/01

Event Type: REMOVAL INVESTIGATION AT NPL SITES

Lead Agency: EPA FUND FINANCED

Event Status: NOT REPORTED

Actual Start Date: 19/90/01

Actual Completion Date: 19/90/23

Event Type: SCREENING SITE INSPECTION

Event Status: LOW

Actual Start Date: 19/84/01

Actual Completion Date: 19/84/01

Event Type: COMBINED RI/FS

Event Status: NOT REPORTED

Actual Start Date: 19/90/18

Event Type: MANAGEMENT ASSISTANCE (FEDERAL RENUMERATION)

Event Status: NOT REPORTED

Actual Start Date: 19/88/07

Event Type: OPERATIONS & MAINTENANCE AFTER REMEDIAL ACTION

Lead Agency: EPA FUND FINANCED

Event Status: NOT REPORTED

Event Type: REMEDIAL ACTION

Page # 17

## LONE STAR ARMY AMMUNITION PLANT (continued)

Event Type:

REMEDIAL DESIGN

Event Status:

NOT REPORTED

Event Type:

RECORD OF DECISION

Event Status:

NOT REPORTED

Event Type:

COMBINED RI/FS

Event Status:

NOT REPORTED

Actual Start Date:

19/90/18

Event Type:

REMEDIAL ACTION

**Event Status:** 

NOT REPORTED

Event Type:

REMEDIAL DESIGN

**Event Status:** 

NOT REPORTED

Event Type:

RECORD OF DECISION

Event Status:

NOT REPORTED

Site Description

Description:

THIS GOVERMENT-OWNED, CONTRACTOR OPERATED FEDERALFACILITY PRODUCES A VARIETY OF EXPLOSIVES AND AMUNITIONS. HEAVY METAL CONTAMINATION HAS BEEN DETECTED IN GROUNDWATER WELLS NEAR THE

SOUTH BORDER OF THE FACILITY.

## General Records Found Under Site Description

Facility Name

: LONE STAR ARMY AMMUNITION PLT

Facility Address

: HWY 82 W

Facility City/Zip

: TEXARKANA, TX 75505

Facility County

: NOT REPORTED

VISTA #

: 5232562

## FINDS Record Details

EPA ID Number: TX0000320119

Agency Id Information

Program Name:

FTTS/NCDB

Agency Id:

106#19930928337

Program Name:

FTTS/NCDB

Agency Id:

106#19930928337



## General Records Found Under Site Description

Facility Name

: LONE STAR ARMY AMMO PLANT PLAN

Facility Address

: HWY. 82 W.

Facility City/Zip

: TEXARKANA, TX 75505

Facility County

: BOWIE

VISTA#

: 5265544

#### **Industry Description**

Sic Code:2892 - MFG-EXPLOSIVES

Sic Code:3483 - MFG-AMMUNITION EXC. FOR SMALL ARMS NEC

#### TRIS Record Details

EPA ID Number: TX7213821831

Agency ID Number:75505LNSTRHWY82

**CAS Number** 

Chemical Name

Total Qty.

000076131

FREON 113

16000 lbs.

## General Records Found Under Site Description

Facility Name

: LONE STAR ARMY AMMUNITION PLT

Facility Address

: LONE STAR ARMY AMM

Facility City/Zip

: TEXARKANA, TX 75501-0000

Facility County

: NOT REPORTED

VISTA#

: 2576115

### LUST Record Details

Agency ID Number:092366

Owner Information

Resp. Name:

US ARMY ·

LUST Details

Leak Date:

11/23/88

Media Affected:

NONE

Remed. Status:

CLEANUP IN PROGRESS/REQUI

#### **LUST Record Details**

Agency ID Number:092361

Owner Information

Resp. Name:

ARW INC

LUST Details

Leak Date:

12/01/88

Media Affected:

DRINKING WATER SUPPLY

Remed. Status:

REPORT OVERDUE

## General Records Found Under Site Description

Facility Name

: LONE STAR ARMY AMMO PLANT

Facility Address

: 12 MI. W OF TEXARKANA O

Facility City/Zip

: TEXARKANA, TX 75505

Facility County
VISTA #

: BOWIE

: 4552029

## State Spill Record Details

Agency ID Number:8705130051

Spill Details

Substance:

GASOLINE (UNSPECIFIED)

Media Affected:

SURFACE WATER

Spill Cause:

MECHANICAL FAILURE/EQUIPM

Waterway:

GROUNDWATER CONTAMIN

## State Spill Record Details

Agency ID Number:8702070041

Spill Details

Substance:

GASOLINE (UNSPECIFIED)

Quantity:

1483.00 GALLONS

Media Affected:

SURFACE WATER

Spill Cause:

**HUMAN ERROR** 

Waterway:

POSS. GROUNDWATER CO

## General Records Found Under Site Description

Facility Name : RED RIVER ARMY DEPOT

Facility Address : 3500 FT W ON INT OF US HWY 82

Facility City/Zip : HOOKS, TX

Facility County : BOWIE

VISTA Enhanced

City/Zip : HOOKS, 75561

VISTA # : 3045410

#### Solid Waste Record Details

Agency ID Number:01898

Owner Information

Owner Name: LONE STAR ARMY AMMO

Owner Address: U.S. HWY 82

Owner City: TEXARKANA

Owner State: TX
Owner Zip: 75505

Solid Waste Details

Permit Date: 04/07/86

Facility Type: SANITARY LANDFILL/LANDFILL

Status: PROPOSED

## General Records Found Under Site Description

Facility Name

: LONE STAR ARMY AMMUNITIONS PLA

Facility Address

: WHWY 82

Facility City/Zip

: TEXARKANA, TX 75505

Facility County

VISTA #

: BOWIE

: 3844515

## LUST Record Details

Agency ID Number:102748

Owner Information

Resp. Name:

LONE STAR ARMY AMMUN

LUST Details

Leak Date:

11/08/91

Media Affected:

SOIL/LAND/SAND

Remed. Status:

CASE CLOSED/CLEANUP COMPL

## General Records Found Under Site Description

Facility Name

: RED RIVER ARMY DEPOT

Facility Address

: RED RIVER ARMY DEPOT

Facility City/Zip

: TEXARKANA, TX 75507

Facility County
VISTA #

: BOWIE

: 2587860

## LUST Record Details

Agency ID Number:094540

Owner Information

Resp. Name:

US ARMY

LUST Details

Leak Date:

01/17/90

Media Affected:

NONE

Remed. Status:

CLEANUP IN PROGRESS/REQUI

#### LUST Record Details

Agency ID Number:094340

Owner Information

Resp. Name:

US ARMY

LUST Details

Leak Date:

11/30/89

Media Affected:

NONE

Remed. Status:

CLEANUP IN PROGRESS/REQUI

#### FRDS Record Details

No details available for this list

### PCB Handler Record Details

EPA ID Number: TX3213820738

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## **PCB** Information

Activity: Generates PCBs

## State Spill Record Details

Agency ID Number:9001230051

Spill Details

Substance: SLUDGE/SEWAGE

Quantity: 2000.00 GALLONS

Spill Cause: MECHANICAL FAILURE/EQUIPM

## State Spill Record Details

Agency ID Number:8411300011

Spill Details

Substance: MISC. CHEMICAL

Quantity: 300.00 GALLONS

Spill Cause: MECHANICAL FAILURE/EQUIPM

## General Records Found Under Site Description

Facility Name

: USARMY RED RIVER DEPOT

Facility Address

: HWY 82 18 MI W OF TEXARKANA

Facility City/Zip

: TEXARKANA, TX 75507

Facility County

: NOT REPORTED

VISTA #

: 3752560

**Industry Description** 

Sic Code:4952 - TCU-SEWERAGE SYSTEMS Sic Code:3471 - MFG-PLATING & POLISHING

### FINDS Record Details

EPA ID Number: TX3213820738

Agency Id Information

Program Name:

Haz Waste

Agency Id:

TX3213820738

Program Name:

NPDES

Agency Id:

TX0000132

Program Name:

AIR

Agency Id:

4803700006

Program Name:

**AIR** 

Agency Id:

480370006

Program Name:

TOXICS-FATES

Agency Id:

TX3213820738

Program Name:

CERCLIS

Agency Id:

TX3213820738

Program Name:

Fed Activities

Agency Id:

TX-213820738

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## USARMY RED RIVER DEPOT (continued)

Program Name: TOXICS-PADS

Agency Id: TX3213820738

## General Records Found Under Site Description

Facility Name

: USARMY LONE STAR ARMY AMMUNITI

Facility Address

: HIGHWAY 82 W

Facility City/Zip

: TEXARKANA, TX 75505-9101

Facility County

: NOT REPORTED

VISTA #

: 5232563

### **Industry Description**

Sic Code:3483 - MFG-AMMUNITION EXC. FOR SMALL ARMS NEC

### FINDS Record Details

EPA ID Number: TX7213821831

Agency Id Information

Program Name:

Haz Waste

Agency Id:

TX7213821831

Program Name:

**NPDES** 

Agency Id:

TX0000124

Program Name:

TOXICS-FATES

Agency Id:

TX7213821831

Program Name:

**CERCLIS** 

Agency Id:

TX7213821831

Program Name:

FTTS/NCDB

Agency Id:

D06#TXH-89-221

Program Name:

ENF & COMPL

Agency Id:

06-88-0513

Program Name:

ENF & COMPL

Agency Id:

06-89-0532

## USARMY LONE STAR ARMY AMMUNITION (continued)

Program Name: I

Fed Activities

Agency Id:

TX-213821831

Program Name:

**TOXICS-PADS** 

Agency Id:

TX7213821831

Program Name:

TOXICS-TRIS

Agency Id:

75505LNSTRHWY82

## Compliance Records Found Under Site Description

Facility Name : US ARMY RED RIVER ARMY DEPOT

Facility Address : 18M W OF HWY 82

Facility City/Zip : TEXARKANA, TX 75501

Facility County : NOT REPORTED

VISTA # : 4965263

EPA ID: TX3213820738

### RCRA COMPLIANCE INFORMATION

RCRA compliance evaluations are conducted by the US EPA or the state agency responsible for the RCRA program. The following is a summary of the facility's current compliance status and a listing of all RCRA evaluations. The current compliance status indicates any outstanding (not yet corrected) non-compliances issues found during one of the listed evaluations or after appropriate testing is completed by the agency.

### RCRA Compliance Status: Handle

Handler has the following outstanding non-compliance issues

- TSD-LAND BAN REQUIREMENTS
- CORRECTIVE ACTION COMPLIANCE SCHEDULE

## RCRA Compliance History:

Evaluations with at least one Class One Violation:

#### **Evaluations**

Date	Type	Violation
10/20/89	OPERATION AND MAINTENANCE INSPECTION	YES
06/22/90	COMPLIANCE EVALUATION	YES
01/31/91	COMPLIANCE EVALUATION	YES
01/13/93	COMPLIANCE EVALUATION	YES
05/20/93	OTHER EVALUATION	YES

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Nov. 22, 1995-Report #-090144011

## K

## Evaluations Cont.

Date	Туре	Violation
06/23/94	COMPLIANCE EVALUATION	YES

## **Violations**

Violation	Scheduled	Actual	Violation
Date	Compliance	Compliance	Туре
05/20/93	N/A	N/A	GENERATOR REQUIREMENTS-EXCEPT LAND BAN
01/13/93	11/05/94	N/A	TSD-LAND BAN REQUIREMENTS
01/13/93	11/05/94	N/A	TSD-OTHER REQUIREMENTS
06/22/90	07/14/94	05/21/93	TSD-OTHER REQUIREMENTS
06/22/90	07/14/94	05/21/93	TSD-OTHER REQUIREMENTS
06/22/90	07/14/94	05/21/93	TSD-OTHER REQUIREMENTS
06/22/90	07/14/94	05/21/93	TSD-OTHER REQUIREMENTS
10/20/89	07/14/94	05/21/93	TSD-GROUNDWATER MONITORING REQ.
10/20/89	07/14/94	05/21/93	TSD-GROUNDWATER MONITORING REQ.
01/31/91	06/15/91	03/28/91	TSD-OTHER REQUIREMENTS
10/20/89	07/14/94	05/21/93	TSD-GROUNDWATER MONITORING REQ.
06/22/90	07/14/94	05/21/93	TSD-OTHER REQUIREMENTS†
†-High pric	ority violations		

## State Enforcements

	Penalty	Settlement	
Date	Assessed	Amount	Туре
08/16/90	\$ N/A	\$ N/A	VERBAL INFORMAL
10/03/90	\$ N/A	\$ N/A	WRITTEN INFORMAL
12/19/90	\$ N/A	\$ N/A	3008(A) COMPLIANCE ORDER
02/22/91	\$ N/A	\$ N/A	WRITTEN INFORMAL
07/17/91	\$ N/A	\$ N/A	3008(A) COMPLIANCE ORDER
10/19/93	\$ N/A	\$ N/A	WRITTEN INFORMAL
07/22/94	\$ N/A	\$ N/A	WRITTEN INFORMAL
01/23/95	\$ 152380	\$ N/A	3008(A) COMPLIANCE ORDER
04/17/95	\$ N/A	\$ 0	3008(A) COMPLIANCE ORDER

### CORRECTIVE ACTIONS INFORMATION

In the Hazardous and Solid Waste Amendments of 1984, Congress proposed stringent corrective action requirements on TSD facilities. Corrective actions are required for all current or past releases of hazardous waste and constituents regardless of when the waste was treated or disposed of. If necessary, corrective actions may extend beyond a facility's boundary. Corrective Action requirements are usually included in the operating permit or modifications. Other instruments may be used for non-operating facilities.

EPA ID:

Prioritization Status: LOW as of 05/14/92

Instruments:

EPA OPERATING PERMIT

Details

Effective Date:

10/25/88

Issuance Date:

10/25/88

Revocation Date:

N/A

Resp. Program:

N/A

Legal Authority:

RCRA 3004(U) OR EQUIVALENT

Related Area:

RFI 4 UNITS, P-VIII

Required Event:

Event Type:

RCRA FACILITY INVESTIGATION IMPOSI-

TION

Agency:

**EPA** 

Actual Date:

10/25/88

Resp. Program:

N/A

Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN NOTICE OF DEFICIENCY ISSUED

Agency:

**EPA** 

Actual Date:

09/19/89

Resp. Program:

N/A

Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN APPROVED

## EPA OPERATING PERMIT Cont.

Agency:

EPA

Actual Date:

08/21/90

Resp. Program:

N/A

• Related Area:

PANTHER & BIG CREEKS

• Related Area:

PESTICIDE PIT, P-VIII

• Related Area:

TRANSFER PUMPS

• Related Area:

PANTHER CR AND BIG CR

• Related Area:

OTC AREA, CP-III

• Related Area:

WWT AREA, CP-IV

• Related Area:

SLUDGE BEDS,P-VIII

## STATE OPERATING PERMIT

Details

Effective Date:

04/24/91

Issuance Date:

04/24/91

Revocation Date:

N/A

Resp. Program:

RCRA

Legal Authority:

RCRA 3004(U) OR EQUIVALENT

#### STATE OPERATING PERMIT

Details

Effective Date:

08/02/88

Issuance Date:

08/02/88

Revocation Date:

N/A

Resp. Program:

RCRA

Legal Authority:

iona.

RCRA 3004(U) OR EQUIVALENT

• Related Area:

PANTHER CR AND BIG CR

• Required Event:

STATE OPERATING PERMIT Cont.

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN APPROVED

Agency:

STATE

Actual Date:

04/13/93

Resp. Program:

**RCRA** 

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN APPROVED

Agency:

STATE

Actual Date:

05/05/93

Resp. Program:

RCRA

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION AP-

PROVED

Agency:

STATE

Actual Date:

10/05/92

Resp. Program:

RCRA

• Required Event:

Event Type:

CORRECTIVE ACTION PROCESS IS TERMI-

NATED

Agency:

STATE

Actual Date:

10/05/92

Resp. Program:

**RCRA** 

• Related Area:

OTC AREA, CP-III

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN APPROVED

Agency:

STATE

Actual Date:

05/05/93

Resp. Program:

RCRA

Related Area:

PESTICIDE PIT BLDG S-265

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN NOTICE OF DEFICIENCY ISSUED

Agency:

STATE

STATE OPERATING PERMIT Cont.

Actual Date:

09/19/89

Resp. Program:

RCRA

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN NOTICE OF DEFICIENCY ISSUED

Agency:

STATE

Actual Date:

03/21/90

Resp. Program:

RCRA

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN NOTICE OF DEFICIENCY ISSUED

Agency:

STATE

Actual Date:

05/21/90

Resp. Program:

RCRA

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN NOTICE OF DEFICIENCY ISSUED

Agency:

**STATE** 

Actual Date:

09/03/93

Resp. Program:

RCRA

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN APPROVED

Agency:

STATE

Actual Date:

08/21/90

Resp. Program:

RCRA

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN APPROVED

Agency:

STATE

Actual Date:

09/23/93

Resp. Program:

RCRA

Related Area:

**BLDG S-341** 

• Required Event:

STATE OPERATING PERMIT Cont.

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN NOTICE OF DEFICIENCY ISSUED

Agency:

STATE

Actual Date:

09/19/89

Resp. Program:

**RCRA** 

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN NOTICE OF DEFICIENCY ISSUED

Agency:

STATE

Actual Date:

03/21/90

Resp. Program:

RCRA

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN APPROVED

Agency:

STATE

Actual Date:

08/21/90

Resp. Program:

RCRA

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION AP-

PROVED

Agency:

STATE

Actual Date:

10/05/92

Resp. Program:

RCRA

• Required Event:

Event Type:

NO FURTHER CORRECTIVE ACTION AT

THIS TIME

Agency:

STATE

Actual Date:

02/01/89

Resp. Program:

RCRA

Related Area:

SLUDGE BEDS

• Required Event:

Event Type:

NO FURTHER CORRECTIVE ACTION AT

THIS TIME

Agency:

STATE

Actual Date:

10/28/91

STATE OPERATING PERMIT Cont.

Resp. Program:

**RCRA** 

• Related Area:

WWT

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN APPROVED

Agency:

STATE

Actual Date:

08/21/90

Resp. Program:

**RCRA** 

• Related Area:

**BLDG 430** 

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN NOTICE OF DEFICIENCY ISSUED

Agency:

STATE

Actual Date:

09/19/89

Resp. Program:

RCRA

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN NOTICE OF DEFICIENCY ISSUED

Agency:

STATE

Actual Date:

03/21/90

Resp. Program:

RCRA

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN APPROVED

Agency:

STATE

Actual Date:

08/21/90

Resp. Program:

RCRA

• Related Area:

TRANSFER PUMPS (POL)

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN NOTICE OF DEFICIENCY ISSUED

Agency:

STATE

STATE OPERATING PERMIT Cont.

Actual Date:

09/19/89

Resp. Program:

**RCRA** 

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN NOTICE OF DEFICIENCY ISSUED

Agency:

STATE

Actual Date:

03/21/90

Resp. Program:

RCRA

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN APPROVED

Agency:

STATE

Actual Date:

08/21/90

Resp. Program:

RCRA

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION AP-

**PROVED** 

Agency:

STATE

Actual Date:

01/24/94

Resp. Program:

**RCRA** 

## Events Not Related To Specific Instruments:

• Event Type:

RCRA FACILITY ASSESSMENT COMPLETED

Agency:

**EPA** 

Actual Date:

03/31/86

Resp. Program:

N/A

• Event Type:

CA PRIORITIZATION: FACILITY WAS

ASSIGNED A LOW CORRECTIVE ACTION

**PRIORITY** 

Agency:

EPA

Actual Date:

05/14/92

Resp. Program:

**RCRA** 

## Compliance Records Found Under Site Description

Facility Name

: US ARMY LONE STAR ARMY AMMUNIT

Facility Address

: HIGHWAY 82 WEST

Facility City/Zip

: TEXARKANA, TX 75501

Facility County

: NOT REPORTED

VISTA # : 248777

EPA ID: TX7213821831

RCRA COMPLIANCE INFORMATION

RCRA compliance evaluations are conducted by the US EPA or the state agency responsible for the RCRA program. The following is a summary of the facility's current compliance status and a listing of all RCRA evaluations. The current compliance status indicates any outstanding (not yet corrected) non-compliances issues found during one of the listed evaluations or after appropriate testing is completed by the agency.

RCRA Compliance Status: Handler has the following outstanding non-compliance issues

- TSD-LAND BAN REQUIREMENTS
- CORRECTIVE ACTION COMPLIANCE SCHEDULE

**Notification Status:** 

THIS HANDLER HAS BEEN IDENTIFIED THROUGH A SOURCE OTHER THAN NOTIFICATION AND IS SUSPECTED OF CONDUCTING RCRA-REGULATED ACTIVITIES WITHOUT PROPER AUTHORITY.

## RCRA Compliance History:

Evaluations with at least one Class One Violation: 4

## **Evaluations**

Date	Туре	Violation
12/07/87	COMPLIANCE EVALUATION	YES
04/22/88	NON-FINANCIAL RECORD REVIEW	YES
11/29/88	COMPLIANCE EVALUATION	YES
04/17/90	OPERATION AND MAINTENANCE INSPECTION	YES

## Violations

Violation	Scheduled	Actual	Violation
Date	Compliance	Compliance	Туре
04/17/90	07/20/90	08/20/90	TSD-GROUNDWATER MONITORING REQ.
11/29/88	04/12/89	01/17/89	TSD-OTHER REQUIREMENTS
12/07/87	05/25/88	12/07/87	TSD-OTHER REQUIREMENTS
04/22/88	N/A	12/27/89	GENERATOR-LAND BAN REQUIREMENTS

## **EPA** Enforcements

	Penalty	Settlement	
Date	Assessed	Amount	Туре
07/21/88	\$ 86500	\$ N/A	3008(A) COMPLIANCE ORDER
10/20/89	\$ 17250	\$ N/A	3008(A) COMPLIANCE ORDER

## State Enforcements

	Penalty	Settlement		
Date	Assessed	Amount	Туре	
02/25/88	\$ N/A	\$ N/A	WRITTEN INFORMAL	
12/16/88	\$ N/A	\$ N/A	WRITTEN INFORMAL	•
05/25/90	\$ N/A	\$ N/A	VERBAL INFORMAL	
06/20/90	\$ N/A	\$ N/A	WRITTEN INFORMAL	

### CORRECTIVE ACTIONS INFORMATION

In the Hazardous and Solid Waste Amendments of 1984, Congress proposed stringent corrective action requirements on TSD facilities. Corrective actions are required for all current or past releases of hazardous waste and constituents regardless of when the waste was treated or disposed of. If necessary, corrective actions may extend beyond a facility's boundary. Corrective Action requirements are usually included in the operating permit or modifications. Other instruments may be used for non-operating facilities.

EPA ID: TXT

TXT982813677

Prioritization Status:

HIGH as of 02/24/92

### **Instruments:**

## STATE OPERATING PERMIT

Details

Effective Date:

06/24/92

Issuance Date:

06/24/92

Revocation Date:

N/A

Resp. Program:

R.C.R.A

Legal Authority:

RCRA 3004(U) OR EQUIVALENT

• Related Area:

UNITS 45-48,52-54,73

• Required Event:

Event Type:

CMS REPORT RECEIVED

Agency:

STATE

Actual Date:

07/10/92

Resp. Program:

RCRA

• Related Area:

UNIT 002

Required Event:

Event Type:

DATE FOR REMEDY SELECTION (CM

IMPOSED)

Agency:

STATE

Actual Date:

12/09/92

Resp. Program:

RCRA

• Related Area:

UNITS 16,18,38-44,55,422,4

STATE OPERATING PERMIT Cont.

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN APPROVED

Agency:

**STATE** 

Actual Date:

09/02/92

Resp. Program:

**RCRA** 

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN APPROVED

Agency:

STATE

Actual Date:

07/29/93

Resp. Program:

**RCRA** 

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN APPROVED

Agency:

STATE

Actual Date:

06/28/94

Resp. Program:

RCRA

• Related Area:

NFA UNITS

• Related Area:

UNIT 15

• Related Area:

AREA G & DITCHES

• Required Event:

Event Type:

RCRA FACILITY INVESTIGATION WORK-

PLAN NOTICE OF DEFICIENCY ISSUED

Agency:

STATE

Actual Date:

02/18/94

Resp. Program:

RCRA

## Events Not Related To Specific Instruments:

• Event Type:

RCRA FACILITY ASSESSMENT COMPLETED

Agency:

**EPA** 

Actual Date:

06/29/88

Resp. Program:

N/A

• Event Type:

CA PRIORITIZATION: FACILITY WAS

ASSIGNED A HIGH CORRECTIVE ACTION

**PRIORITY** 

Agency:

EPA

Actual Date:

02/24/92

Resp. Program:

N/A

## General Records Found Under Site Description

Facility Name : RED RIVER ARMY DEPOT

Facility Address : 18 MI W OF TEXARKANA ON HWY 82

Facility City/Zip : TEXARKANA, TX 75507

Facility County : BOWIE

VISTA Enhanced

City/Zip : TEXARKANA , 75501

VISTA # : 3025964

#### **CERCLIS Record Details**

## GENERAL INFORMATION

EPA ID: TX3213820738

EPA Region: 06

Congressional District: 01

Federal Facility: FEDERAL FACILITY

Federal Facility Docket: SITE IS INCLUDED ON THE DOCKET

Facility Ownership: FEDERALLY OWNED

Site Incident Category: NOT REPORTED

Incident Type: NOT REPORTED

Site Description: NOT REPORTED

NPL Status: NOT ON NPL

Proposed NPL Update: 00

Final NPL Update: 00

Financial Mgmt Sys ID: 06ZF

Latitude: 3327360

Longitude: 09415120

Lat/Long Source: GENERATED BY THE GEOGRAPH DATABASE

Lat/Long Accuracy: NOT REPORTED

Dioxin Tier: NOT REPORTED

USGS Hydro Unit: 11140106

RCRA Indicator: NOT REPORTED

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### **ALIAS INFORMATION**

Alias ID: 01

Alias EPA ID: TX3213820738

Alias Name: 01

Alias Street: NOT REPORTED

Alias City, State Zip: NOT REPORTED

Alias Latitude: NOT REPORTED
Alias Longitude: NOT REPORTED

Alias Description: NOT REPORTED

# ENFORCEMENT INFORMATION NOT REPORTED

### Site Assessment History

### OPERABLE UNIT

Unit ID: 00

Unit Name:

SITE EVALUATION/DISPOSITION

The following is a list of events related to this Operable Unit:

#### **Event**

DISCOVERY Type:

Category:

NOT REPORTED

Plan Status:

NOT REPORTED

Lead Agency:

EPA FUND-FINANCED

Actual Start Date:

NOT REPORTED

Actual Completion Date:

09/01/80

Qualifier:

NOT REPORTED

#### **Event**

Type: PRELIMINARY ASSESSMENT

Category:

NOT REPORTED

Plan Status:

NOT REPORTED

Lead Agency:

FEDERAL FACILITIES

Actual Start Date:

05/01/84

Actual Completion Date:

05/01/84

Qualifier:

LOWER PRIORITY

## **Event**

Type:

LISTING SITE INSPECTION

Category:

NOT REPORTED

Plan Status:

NOT REPORTED

Lead Agency:

FEDERAL FACILITIES

Actual Start Date:

05/22/92

Actual Completion Date:

05/22/92

Qualifier:

RECOMMENDED FOR HRS SCORING

### **Event**

Type:

SCREENING SITE INSPECTION

Category:

NOT REPORTED

Plan Status:

NOT REPORTED

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## **Event Continued**

Lead Agency: FEDERAL FACILITIES

Actual Start Date: 05/22/92 Actual Completion Date: 05/22/92

Qualifier: LOWER PRIORITY

## General Records Found Under Site Description

Facility Name

: LONE STAR ARMY AMMUNITION PLAN

Facility Address

: HWY 82 W

Facility City/Zip

: TEXARKANA, TX 75501

Facility County

: BOWIE

VISTA Enhanced

City/Zip

: TEXARKANA, 75501

VISTA # : 248777

#### **CERCLIS Record Details**

## GENERAL INFORMATION

EPA ID:

TX7213821831

EPA Region:

06

Congressional District:

01

Federal Facility:

FEDERAL FACILITY

Federal Facility Docket:

SITE IS INCLUDED ON THE DOCKET

Facility Ownership:

FEDERALLY OWNED

Site Incident Category:

FEDERAL FACILITY

Incident Type:

NOT REPORTED

Site Description:

THIS GOVERMENT-OWNED, CONTRACTOR OP-ERATED FEDERAL FACILITY PRODUCES A VARI-

ETY OF EXPLOSIVES AND AMUNITIONS. HEAVY
METAL CONTAMINATION HAS BEEN DETECTED IN
GROUNDWATER WELLS NEAR THE SOUTH BORDER

OF THE FACILITY.

NPL Status:

CURRENTLY ON FINAL NPL

Proposed NPL Update: 00

Final NPL Update: 00

Financial Mgmt Sys ID:

0687

Latitude:

3324360

Longitude:

09405120

Lat/Long Source:

GENERATED BY THE GEOGRAPH DATABASE

Lat/Long Accuracy:

NOT REPORTED

Dioxin Tier:

NOT REPORTED

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### GENERAL INFORMATION Continued

USGS Hydro Unit: 11140302

RCRA Indicator: NOT REPORTED

### **ALIAS INFORMATION**

NOT REPORTED

### **ENFORCEMENT INFORMATION**

Event: NPL RP SEARCH

Lead Agency:

FEDERAL ENFORCEMENT

Actual Start Date: NOT REPORTED

Actual Completion Date:

08/15/84

Event:

INTERAGENCY NEGOTIATIONS

Lead Agency:

FEDERAL ENFORCEMENT

Actual Start Date:

08/11/88

Actual Completion Date:

07/17/90

Event:

FEDERAL INTERAGENCY AGMT

Lead Agency:

FEDERAL ENFORCEMENT

Actual Start Date:

06/18/90

Actual Completion Date:

07/17/90

#### Site Assessment History

#### OPERABLE UNIT

Unit ID: 00

Unit Name:

SITE EVALUATION/DISPOSITION

The following is a list of events related to this Operable Unit:

Event

Type:

NPL DELETION

Category:

NOT REPORTED

Plan Status:

NOT REPORTED

Lead Agency:

FEDERAL ENFORCEMENT

Actual Start Date:

NOT REPORTED

Actual Completion Date:

NOT REPORTED

Qualifier:

NOT REPORTED

**Event** 

Type:

**DISCOVERY** 

Category:

NOT REPORTED

Plan Status:

NOT REPORTED

Lead Agency:

EPA FUND-FINANCED

Actual Start Date:

NOT REPORTED

Actual Completion Date:

09/01/80

Qualifier:

NOT REPORTED

Event

Type:

PRELIMINARY ASSESSMENT

Category:

NOT REPORTED

Plan Status:

NOT REPORTED

Lead Agency:

FEDERAL FACILITIES

Actual Start Date:

04/01/84

Actual Completion Date:

04/01/84

Qualifier:

HIGHER PRIORITY

**Event** 

Type:

SCREENING SITE INSPECTION

Category:

NOT REPORTED

Plan Status:

NOT REPORTED

# E

#### **Event Continued**

Lead Agency:

FEDERAL FACILITIES

Actual Start Date:

04/01/84

Actual Completion Date:

04/01/84

Qualifier:

LOWER PRIORITY

#### Event

Туре:

PROPOSED FOR NPL

Category:

NOT REPORTED

Plan Status:

NOT REPORTED

Lead Agency:

EPA FUND-FINANCED

Actual Start Date:

NOT REPORTED

Actual Completion Date:

10/15/84

Qualifier:

NOT REPORTED

#### Event

Type:

FINAL LISTING ON NPL

Category:

NOT REPORTED

Plan Status:

NOT REPORTED

Lead Agency:

EPA FUND-FINANCED

Actual Start Date:

NOT REPORTED

Actual Completion Date:

07/22/87

Qualifier:

NOT REPORTED

#### Event

Type:

REMOVAL INVESTIGATION AT NPL SITES

Category:

NOT REPORTED

Plan Status:

NOT REPORTED

Lead Agency:

EPA FUND-FINANCED

Actual Start Date:

05/01/90

Actual Completion Date:

05/23/90

Qualifier:

NOT REPORTED

#### OPERABLE UNIT

Unit ID:

01

Unit Name:

NOT REPORTED

The following is a list of events related to this Operable Unit:

#### **Event**

Type: OPERATIONS & MAINTENANCE AFTER REMEDIAL

**ACTION** 

Category: NOT REPORTED

Plan Status: NOT REPORTED

Lead Agency: EPA FUND-FINANCED

Actual Start Date: NOT REPORTED

Actual Completion Date: NOT REPORTED

Qualifier: NOT REPORTED

#### **Event**

Type: REMEDIAL ACTION

Category: NOT REPORTED
Plan Status: NOT REPORTED

Lead Agency: FEDERAL FACILITIES

Actual Start Date: NOT REPORTED
Actual Completion Date: NOT REPORTED

Qualifier: NOT REPORTED

#### **Event**

Type: REMEDIAL DESIGN

Category: NOT REPORTED

Plan Status: PRIMARY

Lead Agency: FEDERAL FACILITIES

Actual Start Date: NOT REPORTED
Actual Completion Date: NOT REPORTED

Qualifier: NOT REPORTED

#### **Event**

Type: RECORD OF DECISION

Category: NOT REPORTED Plan Status: NOT REPORTED

Lead Agency: FEDERAL FACILITIES

Actual Start Date: NOT REPORTED
Actual Completion Date: NOT REPORTED

Qualifier: NOT REPORTED

#### Event

Type: MANAGEMENT ASSISTANCE (FEDERAL RENU-

MERATION)

Category: NOT REPORTED

Plan Status: ALTERNATE

Lead Agency: FEDERAL FACILITIES

Actual Start Date: 03/07/88

Actual Completion Date: NOT REPORTED

Qualifier: NOT REPORTED

#### Event

Type: COMBINED RI/FS

Category: NOT REPORTED

Plan Status: PRIMARY

Lead Agency: FEDERAL FACILITIES

Actual Start Date: 06/18/90

Actual Completion Date: NOT REPORTED

Qualifier: NOT REPORTED

Financial Type: TES/ESS TASKING

Financial Date: 06/90 Financial Amount: \$20,000

Financial Type: TES/ESS DETASKING

Financial Date: 08/90 Financial Amount: \$19

Financial Type: TES/ESS DETASKING

Financial Date: 10/90 Financial Amount: \$125

Financial Type: TES/ESS TASKING

Financial Date: 06/91 Financial Amount: \$50,000

Financial Type: ACTUAL OBLIGATION

Financial Date: 09/93 Financial Amount: \$124,200

#### **OPERABLE UNIT**

Unit ID: 02

Unit Name: NOT REPORTED

The following is a list of events related to this Operable Unit:

#### Event

Type: REMEDIAL ACTION

Category: NOT REPORTED

Plan Status: NOT REPORTED

Lead Agency: FEDERAL FACILITIES

Actual Start Date: NOT REPORTED

Actual Completion Date: NOT REPORTED

Qualifier: NOT REPORTED

#### **Event**

Type: REMEDIAL DESIGN

Category: NOT REPORTED

Plan Status: NOT REPORTED

Lead Agency: FEDERAL FACILITIES

Actual Start Date: NOT REPORTED

Actual Completion Date: NOT REPORTED

Qualifier: NOT REPORTED

#### **Event**

Type: RECORD OF DECISION

Category: NOT REPORTED

Plan Status: NOT REPORTED

Lead Agency: FEDERAL FACILITIES

Actual Start Date: NOT REPORTED
Actual Completion Date: NOT REPORTED

Qualifier: NOT REPORTED

#### Event

Type: COMBINED RI/FS

Category: NOT REPORTED

Plan Status: NOT REPORTED

Lead Agency: FEDERAL FACILITIES

Actual Start Date: 06/18/90

Actual Completion Date: NOT REPORTED

age # 55

**Event Continued** 

Qualifier: NOT REPORTED

#### VISTA INFORMATION SOLUTIONS, INC.

# Compliance Records Found Under Site Description

Facility Name

: U. S. RED RIVER ARMY DEPOT-DEP

Facility Address

: HWY 82, 2 MILES WEST

Facility City/Zip

: HOOKS, TX 75507

Facility County

: NOT REPORTED

VISTA Enhanced

City/Zip

: HOOKS, 75561

VISTA #

: 199351951

#### OSHA Record Details

#### General Information:

Report Id:

0626300

Activity #:

100585207

Inspector #:

S1828-C

SIC:

9711

Secondary SIC:

Owner Type:

FEDERAL AGENCY

Unionized:

YES

#### **Employee Information:**

Number of Employees:

6500

Number of Employees Covered by Inspection:

20

Lost work Day Injury Rate:

N/A

Number of Employees Controlled by Employer:

999999

#### Inspection Information:

Type:

UNPROGRAMMED COMPLAINT

Category:

SAFETY

Scope:

**PARTIAL** 

Class:

Total Inspection Time:

51.0 HOURS

Inspection Opened:

7/21/88

Inspection Closed:

8/03/88

. ...

Inspection Information: Continued

Case Closed: 6/01/89

Total Dollars Remitted: 0
Local Office Inspection ID: 478

Previous Activity Number: 001442094

#### Citation Information:

	Citation	Citation		Related	_
ID Number	Standard†	Subsection†	Type	Events	
01001	1910.109	D02 I	SERIOUS	COMPLAINT	_
01002	1910.109	D02 IVG	SERIOUS	N/A	

†Refers to "Code of Federal Regulations"

#### Citation Additional Information:

	Issuance	Abate	Abatement		Hazardous
ID Number	Date	Date	Complete	Contested	Substances
01001	8/24/88	12/01/88	YES	NO	N/A
01002	8/24/88	12/01/88	YES	NO	N/A

# Penalty Information:

	Initial	Current	Initial Failure to	Current Failure to
ID Number	Penalty	Penalty	Abate Penalty	Abate Penalty
01001	0	0	0	0
01002	0	0	. 0	0
Totals:	<b>\$ 0</b>	\$ 0	\$ 0	\$ 0

#### **Settlement Information:**

٠		Final	
	ID Number	Order Date	Disposition
٠	01001	N/A	PETITION TO MODIFY ABATEMENT
	01002	N/A	PETITION TO MODIFY ABATEMENT

### VISTA INFORMATION SOLUTIONS, INC.

# Compliance Records Found Under Site Description

Facility Name

: RED RIVER ARMY DEPOT, DEPT. OF

Facility Address

: RED RIVER ARMY DEPOT

Facility City/Zip

: HOOKS, TX 75561

Facility County

: NOT REPORTED

VISTA Enhanced

City/Zip

: HOOKS, 75561

VISTA #

: 199351944

#### **OSHA** Record Details

#### General Information:

Report Id:

0626300

Activity #:

106798507

Inspector #:

L3384-I

SIC:

9711

Secondary SIC:

Owner Type:

FEDERAL AGENCY

Unionized:

YES

#### **Employee Information:**

Number of Employees:

5000

Number of Employees Covered by Inspection:

30

Lost work Day Injury Rate:

N/A

Number of Employees Controlled by Employer:

999999

#### Inspection Information:

Туре:

UNPROGRAMMED COMPLAINT

Category:

HEALTH

Scope:

PARTIAL

Class:

Total Inspection Time:

9.5 HOURS

Inspection Opened:

6/11/90

Inspection Closed:

6/14/90

h

Inspection Information: Continued

Case Closed: 9/14/90

Total Dollars Remitted: 0
Local Office Inspection ID: 070

Previous Activity Number: 103634804

## Citation Information:

	Citation	Citation		Related
ID Number	Standard†	Subsection†	Type	Events
01001	1910.094	D09 V	SERIOUS	N/A
01002	1910.106	E06 II	SERIOUS	N/A
01003	1910.106	E09 III	SERIOUS	N/A
01004	1910.107	G02	SERIOUS	N/A
01005	1910.134	B05	SERIOUS	N/A
01006	1910.134	B09	SERIOUS	N/A
01007A	1910.215	A04	SERIOUS	N/A
01007B	1910.215	B09	SERIOUS	N/A
01008	1910.252	A02 IVC	SERIOUS	N/A
01009	19101200	F05 I	SERIOUS	N/A
01010	19101200	G01	SERIOUS	N/A
01011	1910.107	B05 I	SERIOUS	N/A

†Refers to "Code of Federal Regulations"

## Citation Additional Information:

	Issuance	Abate	Abatement		Hazardous
ID Number	Date	Date	Complete	Contested	Substances
01001	8/08/90	8/15/90	YES	NO	N/A
01002	8/08/90	8/15/90	YES	NO	N/A
01003	8/07/90	8/21/90	YES	NO	N/A
01004	8/08/90	8/21/90	YES	NO	N/A
01005	8/08/90	8/15/90	YES	NO	N/A
01006	8/08/90	8/24/90	YES	NO	N/A
01007A	8/08/90	8/15/90	YES	NO	N/A
01007B	8/08/90	8/15/90	YES	NO	N/A
01008	8/08/90	8/15/90	YES	NO	N/A
01009	8/08/90	8/15/90	YES	NO	N/A
01010	8/08/90	8/15/90	YES	NO	N/A
01011	8/08/90	9/11/90	YES	NO	N/A

# Penalty Information:

	Initial	Current	Initial Failure to	Current Failure to
ID Number	Penalty	Penalty	Abate Penalty	Abate Penalty
01001	0	0	. 0	0
01002	0	0	0	. 0
01003	0	0	0	0
01004	. 0	0	0	0
01005	0	0	. 0	0
01006	0	0	. 0	0
01007A	0	0	0	0
01007B	0	0	0	0
01008	. 0	0	0	0
01009	0	0	0	0
01010	0	0	0	0
01011	0	0	0	. 0
Totals:	<b>\$ 0</b>	\$ 0	\$ 0	\$ 0

# Settlement Information:

	Final			
ID Number	Order Date	Disposition		,
01001	N/A	N/A	<del>-</del>	<u> </u>
01002	N/A	N/A		
01003	N/A	N/A		
01004	N/A	N/A		
01005	N/A	N/A		
01006	N/A	N/A		÷
01007A	N/A	N/A		
01007B	N/A	N/A		
01008	N/A	N/A		
01009	N/A	N/A		
01010	N/A	N/A		
01011	N/A	N/A		

#### VISTA INFORMATION SOLUTIONS, INC.

# Compliance Records Found Under Site Description

Facility Name

: U.S. RED RIVER ARMY DEPOT

Facility Address

: RED RIVER ARMY DEPOT

Facility City/Zip

: HOOKS, TX 75561

Facility County

: NOT REPORTED

VISTA Enhanced

City/Zip

: HOOKS, 75561

VISTA#

: 199351954

#### OSHA Record Details

#### General Information:

Report Id:

0626300

Activity #:

102308079

Inspector #:

S1828-C

SIC:

9711

Secondary SIC:

Owner Type:

FEDERAL AGENCY

Unionized:

YES

#### Employee Information:

Number of Employees:

5000

Number of Employees Covered by Inspection:

475

Lost work Day Injury Rate:

N/A

Number of Employees Controlled by Employer:

999999

#### Inspection Information:

Type: N/A

Category:

y: SAFETY

Scope:

PARTIAL

Class:

Total Inspection Time:

**45.0 HOURS** 

Inspection Opened:

6/19/89

Inspection Closed:

7/06/89

Inspection Information: Continued

Case Closed:

9/06/89

Total Dollars Remitted:

0 578

Local Office Inspection ID:

010

Previous Activity Number:

101067692

## Citation Information:

	Citation	Citation		Related
ID Number	Standard†	Subsection†	Type	Events
01001	1910.107	G02	SERIOUS	N/A
01002	1910.179	F03	SERIOUS	N/A
01003	1910.179	N01	SERIOUS	N/A
01004	1910.184	E01	SERIOUS	N/A
01005	1910.215	<b>B</b> 09	SERIOUS	N/A
01006	1910.304	B02	SERIOUS	N/A
01007	1910.304	E01 I	SERIOUS	N/A
01008	1910.304	F04	SERIOUS	N/A
01009	1910.304	F05 V	SERIOUS	N/A
01010	1910.305	G01 III	SERIOUS	N/A
01011	1910.305	G02 II	SERIOUS	N/A

†Refers to "Code of Federal Regulations"

#### Citation Additional Information:

	Issuance	Abate	Abatement		Hazardous
ID Number	Date	Date	Complete	Contested	Substances
01001	7/14/89	8/30/89	YES	NO	N/A
01002	7/14/89	8/30/89	YES	NO	N/A
01003	7/14/89	8/30/89	YES	NO	N/A
01004	7/14/89	8/30/89	YES	NO	N/A
01005	7/14/89	8/30/89	YES	NO	N/A
01006	7/14/89	8/30/89	YES	NO	N/A
01007	7/14/89	8/30/89	YES	NO	N/A
01008	7/14/89	8/30/89	YES	NO	N/A
01009	7/17/89	8/30/89	YES	NO	N/A
01010	7/14/89	8/30/89	YES	NO	N/A
01011	7/14/89	8/30/89	YES	NO	N/A

# Penalty Information:

<del></del>	Initial	Current	Initial Failure to	Current Failure to
ID Number	Penalty	Penalty	Abate Penalty	Abate Penalty
01001	0	0	0	0
01002	0	0	0	0
01003	0	0	0	0
01004	0	0	0	0
01005	0	0	• 0	0
01006	0 ,	0	0	0
01007	.0	0	0	0
01008	0	0	0	0
01009	0	0	0	0
01010	0	0	0	. 0
01011	0	0	0	0
Totals:	\$ 0	\$ 0	\$ 0	\$ 0

# Settlement Information:

	Final	
ID Number	Order Date	Disposition
01001	N/A	N/A
01002	N/A	N/A
01003	N/A	N/A
01004	N/A	N/A
01005	N/A	N/A
01006	N/A	N/A
01007	N/A	N/A
01008	N/A	N/A
01009	N/A	N/A .
01010	N/A	N/A
01011	N/A	N/A

#### VISTA INFORMATION SOLUTIONS, INC.

# Compliance Records Found Under Site Description

Facility Name

: DAY & ZIMMERMAN INC.

Facility Address

: NOT REPORTED : TEXARKANA, TX

Facility City/Zip
Facility County

: NOT REPORTED

VISTA Enhanced

City/Zip VISTA# : TEXARKANA, 75501

: 444544

#### RAATS Record Details

Facility Name

DAY & ZIMMERMAN INC.

EPA ID #: TX7213821831

Facility Address

NOT REPORTED

Docket Number: VI-809-H

Facility City

TEXARKANA

VISTA Number: 000444544

Facility State

TX 75501

Issue Date: 12291988

Facility Region

IX 1990.

Final Date: 12191989

Status

15

06

Action Code

NOT REPORTED

Violation

268.7

Violation Type

C

Proposed Penalty

6750

Final Penalty

17250

Violation

265.13(B)

Violation Type

С

Proposed Penalty

6500

Final Penalty

NOT REPORTED

Violation

268.50(A)(2)(I)

Violation Type

C

Proposed Penalty

9500

Final Penalty

NOT REPORTED

#### APPENDIX 1

#### Explanation of VISTA's Database Search for this Report:

Environmental reporting from the EPA and other government agencies is often inconsistent. The same facility or property may be listed many different ways. A facility may have more than one name(e.g., 'Smith's Garage' and 'Exxon Service Station #12') or an inconsistent presentation of the same name. A street may also be known by more than one name (e.g., 'Main Street' is also known as 'Route 9'). An area may have more than one city name. City names also are frequently abbreviated.

To provide you with the most complete search of government records possible, VISTA does extensive computerized matching of records to combine agency data from different sources. VISTA also performs address verification to the Post Office's Zip+4 database to assure the accuracy of the city and zip code information.

The additional search criteria indicated on Page 1 were used to further enhance the search for government records. This report comprises all VISTA records which fit any of the following conditions relative to the subject property:

### Search Criteria

- matching street number, street name, city but no zip code:
- matching street number, street name, zip code:
- within 10 street numbers with matching facility name:
- no street number, but matching street name, city or zip and facility name:
- intersection of matching street name, matching city or zip and facility name:
- no street number or street name with matching city or zip and facility name:
- P.O. Box with matching city or zip and facility name:
- matching EPA Identification Number:

#### Limitations of Information:

All data contained in this report was obtained from the federal and state government environmental databases. VISTA does not warrant the accuracy, timeliness, merchantability, completeness or usefulness of any information furnished, and the subscriber accepts any and all risks resulting from decisions made based solely or in part on VISTA information.

# FACILITY RISK PROFILE

# FEDERAL AGENCY RECORDS SEARCHED

			Database
Agency	Database	Type of Record	Currency
US EPA	NPL	Federal Superfund Sites	09/95
US EPA	CERCLIS	Sites Under Review by US EPA	09/95
US EPA	NFRAP	NFRAP Sites Under Review by US EPA	09/95
US EPA	TRIS	Facilities Releasing Toxic Chemicals	05/95
US EPA	CICIS	Chemical Producers (as of 1981)	05/86
US EPA	FATES	Manufacturers or Processors of Pesticides	10/93
US EPA	PCS	Site with NPDES Water Dischg. Permit	04/94
US EPA	AIRS	Produces Regulated Air Emissions	09/95
US EPA	RCRIS	Hazardous Waste Handlers	06/95
US EPA	CORRACTS	RCRA Corrective Action Site	06/95
US EPA	RAATS	RCRA Administrative Action Site	04/95
US EPA	PADS	PCB Handler	10/93
US EPA -	FRDS	Operators of a Pub. Drinking Water Sys.	06/95
US EPA	FINDS	Site on EPA's Facility Index System	11/94
US EPA	ERNS	Spill Sites	03/95
US DoL	OSHA	Facilities with OSHA Inspections	11/94
US EPA	FTTS	FIFRA/TSCA/EPCRA Compliance Sites	06/95
US EPA	SETS	Superfund Potentially Responsible Parties	10/95
US EPA	DOCKETS	Sites listed in Civil Enforcement System	06/95
	TEXAS STATI	E AGENCY RECORDS SEARCHED	•

·		Database
Agency	Type of Record	Currency
Natural Resource Conserva- tion Commission	State Superfund Program	08/95
Natural Resource Conserva- tion Commission	Leaking Petroleum Storage Tank Case Report	08/95
Natural Resource Conserva- tion Commission, Division of MSW	Solid Waste Facilities Permit Applications File	06/95
Natural Resource Conserva- tion Commission	Aboveground Storage Tank Database	08/95

# TEXAS State Agency Databases Searched (continued)

·		Database
Agency	Type of Record	Currency
Natural Resource Conserva- tion Commission	Petroleum Storage Tank Database	08/95
Natural Resource Conserva-	Spills Incident Information System	07/95

# APPENDIX C SAMPLE INTERVIEW FORM

# **FORM 3 - INTERVIEWS**

	_; Area:	; Parcel:;	
Facility No.:	; Facility Name:		
		Address:	
Team Member Nam	e:	; Date:	•
Interviewee Inform	nation:		
Name:	; Organiza	tion:; Title: ; Phone: nd detailed knowledge of the area or fa	;
Role/Responsibility	:	; Phone:	<b>;</b>
Period for which the	person would have specific an	nd detailed knowledge of the area or fa	cility in question:
<sup>2</sup> )			
3)		<del></del>	
2)3) Who can I talk to re	garding previous uses or proce	sses of this area/facility?	
2)3) Who can I talk to re Period:	garding previous uses or proces	sses of this area/facility?	
2)3) 3) Who can I talk to re Period: Period:	garding previous uses or procesContact:Contact:	sses of this area/facility?	
2)3)3)3 Who can I talk to re Period: Period:	garding previous uses or procesContact:Contact:Contact:	sses of this area/facility?	
2)3)	garding previous uses or proces Contact: Contact: Contact: Contact:	sses of this area/facility?	
2)3)3)3 Who can I talk to reperiod: Period: Period:	garding previous uses or proces  Contact: Contact: Contact: Contact: Contact: Contact:	sses of this area/facility?	
2)3)3)3 Who can I talk to reperiod: Period: Period:	garding previous uses or proces  Contact: Contact: Contact: Contact: Contact: Contact:	sses of this area/facility?	

FACILITY NO.	FACILITY NAME	DATE CONSTRUCTED	DATE EXPANDED
			· · · · · · · · · · · · · · · · · · ·

#### FORM 3 - INTERVIEWS (continued)

Page 2 of 8

Installation Code:	; Area:	; Parcel:	; Facility No:
Team Member Name:		; Date:	<u> </u>
Interviewee:			

#### **USE HISTORY**

Use the following questions to complete Table I-2. Include historical perspective on disposal practices and locations, and state amounts of stored chemicals and wastes in the comments column.

Was or is the area/facility in question used as a gasoline station, motor or machine fabrication or repair facility, dry cleaners, photo developing laboratory, plating shop, paint shop, electronics or electro-optical manufacturing or repair facility, medical or dental facility, training area, or as a waste treatment, disposal (such as junkyard or landfill), processing, or recycling facility? Y/N

Was or is the area in question used as a firing and/or bombing range? Y/N

Describe the use history of this area or facility, including the processes for which the area or facility was used.

Describe the process chemicals and petroleum products which have been or are used in this facility or area?

Describe the process chemicals and petroleum products which have been or are **stored** in this facility or area, and where these materials are stored.

Describe any pesticides, paints, or other chemical containers, or damaged or discarded automotive or industrial batteries which have been or are located, stored, or used in this facility or area.

Describe any other drums, sacks, or cartons containing chemicals located in this facility or area.

Describe the wastes which have been or are generated in this facility or area, and the rates at which these wastes were and are generated.

Describe chemical or petroleum products wastes which have been or are stored in this facility or area, the amounts of stored wastes, and where these wastes are stored.

Does the facility generate used oil? Y/N

Were or are radioactive elements (such as radium, uranium) used in a manufacturing process or contained in machinery/devices which were repaired? Y/N If yes, what are the radioactive elements? Where were/are raw materials stored? Where were/are wastes disposed? Can you provide copies of permits? Y/N

Is or was mercury used or contained in any machinery parts, or electrical, pressure, or vacuum instruments? Y/N

## **FORM 3 - INTERVIEWS (continued)**

Installation Code:	; Area:	; Parcel:	; Facility No:
Team Member Name:		; Date:	
Interviewee:		•	

## TABLE I-2: AREA OR FACILITY USE HISTORY

PERIOD	USE/PROCESS	CHEMICALS / PETROLEUM PRODUCTS USED OR GENERATED	TYPE'	CLASS <sup>2</sup>	GEN. RATE	STORAGE <sup>3</sup>	DISPOSAL
							,
			:				
		8885					
	,				•		

<sup>1 -</sup> P = process, W = waste, C = cleaning, O = other such as pesticides and paint stored for incidental use.

<sup>2 -</sup> PP = petroleum product, HS = hazardous substance.
3 - Identify specific location in area or facility. For USTs and ASTs use Table I-3.

Installation Code:	; Area:	; Parcel:	; Facility No:
Team Member Name: _		; Date:	
Interviewee:			•
			•

#### **UST AND AST INVENTORY**

Have there been or are there any above ground or under ground storage tanks containing hazardous substances or petroleum products located on the installation/area/facility? Y/N If yes, can you provide a complete list of all tanks, a tank location map, and a copy of all permit(s)? Y/N If yes, Document ID: \_\_\_\_\_\_; otherwise complete:

TABLE I-3: UST AND AST INVENTORY

TANK NO	Of		CAPACITY/ (GAL) CONSTRUCTION	CONTENTS	CLASS	STATUS	SITE NO.	FUTURE ACTIONS	COMMENTS <sup>2</sup>
		-							
				· · · · · · · · · · · · · · · · · · ·					
					_				

<sup>1 -</sup> PP = petroleum product, HS = hazardous substance.

<sup>2 -</sup> Include compliance monitoring, if present, and results.

Are there any sumps or dry wells in this area/facility? Y/N If yes, What is discharged into it?

and remedial action conducted? Y/N If yes, enter required information into Table I-4

Vhen was it installed? ; Abandoned? Y/N; When? ; Is or was an investigation

Installation Code:; Area:; Parcel:; Facility Number:  Team Member Name:; Date:;  Interviewee:
COMPLIANCE ISSUES
Has an asbestos survey been performed? Y/N If yes, when?; Can you provide a copy of the survey? Y/N If yes, Doc. ID:; Did the survey identify any ACM? Y/N If yes, where?
Was the asbestos removed? Y/N; If yes, when?
Has a lead-based paint survey been performed? Y/N If yes, when?; Can you provide a copy of the survey? Y/N If yes, Doc. ID:; Did the survey identify any lead-based paint onsite? Y/N; Was the paint removed? Y/N; When?
Has a radon survey been performed? Y/N If yes, When?; Can you provide a copy of the survey? Y/N If yes, Doc. ID:; Was radon detected above regulatory levels? Y/N Have mitigation actions been instituted? Y/N; When?
Has the potable water supply been tested? Y/N If yes, can you provide the test results? Y/N If yes, Doc. ID:
Are there any PCB-containing equipment other than transformers in this area/facility? Y/N If yes, can you provide a list identifying the status of each and a map locating all identified locations? Y/N If yes, Document ID:; If no, Map ID:; Coordinates:; Are any of these investigation or cleanup sites? Y/N If yes, enter required information into Table I-4
Are there any transformers in the area or facility? Y/N If yes, Can you provide a list and a map of them? Y/N If yes, Document ID:; If no, list: Map ID:; Pole No; Coordinates:; Pole No; Coordinates:; Pole No; Coordinates:; Have these transformers been inspected and tested? Y/N If yes, Can you provide documentation? Y/N If yes, Document ID:; Are any of these investigation or cleanup sites? Y/N If yes, enter required information into Table I-4.
Where is transformer retrofitting conducted?; Does the installation have a storage site for PCB wastes? Y/N If yes, Facility:; Map ID:; Coordinates:
Are or have there been air emissions from this installation/facility? Y/N If yes, can you provide a copy of the permit(s) and a complete list of all sources and a map locating the historical and present sources? Y/N If yes, Doc. ID:; If no, Describe:;

Installation Code:; Area:	; Parcel:	; Facility No:
Team Member Name:	; Date:	
Interviewee:		
Is the facility under a consent order, comp emissions? Y/N; If yes, Explain:	oliance schedule, or ever received a N	Notice of Violation for air

# **INVESTIGATION AND CLEANUP ACTIVITIES**

Describe any past or present investigation or cleanup sites in this area or associated with this facility.

TABLE I-4: INVESTIGATION AND CLEANUP SITES

SITE ID	NAME	CONTAMINANTS	STATUS/ ACTIVITY	DOCID MAPID	MAP COORD.
	-				
	,	·			
			·		
`					
	`			,	

Installation Code:	; Area:	; Parcel:	; Facility No:
Team Member Name:		; Date:	
Interviewee:			<del></del> -
MISCELLANEOUS			
			h in approximate location(s). Map ID: truction:;
			ruction: ; ; Has it leaked? Y/N If yes, Is or required information into Table I-4.
Have there been any den What was demolished?		in this area or in relation to t	his facility? Y/N If yes,
Where was it located?	Map ID:	; Coordinates:	
Where was the demolit	tion wastes dispos	ed? Map ID:	; Coordinates:
Use Table I-2 to descri			<del></del>
		I/N/U If yes, enter required	information into Table I-3.
		· · · · · · · · · · · · · · · · · · ·	es, enter required information into
	_	<del>-</del> -	oceedings, or notices from any le liability relating to hazardous
• • • •		<del>-</del>	Y/N Explain:
			;
Can you provide docume	entation? Y/N If	yes, Document ID:	

# APPENDIX D SAMPLE VISUAL INSPECTION FORM

## **FORM 4 - VISUAL INSPECTIONS**

Team Member Name:		; Date:
Installation Name:		; Installation Code:; ; Facility No;
Area:	; Parcel:	; Facility No;
Facility Name:	; Map ID:	; Coordinates:
Address:		
Area/Facility Use: (Undevelop	ed, Agriculture, Housing, Rec	reation, Commercial, Utilities, Light Industrial,
Heavy Industrial, Other:	); Acreage	<b>:</b> ;
Associated IRP Site, SWMU,	or OU? Y/N/U; If yes, Site I	[D(s):
Area/Facility contact name/titl	e:	; Phone:
Escort Information:		
	; Organization:	; Title:
Role/Responsibility:		; Phone:
Period for which the person w	ould have specific and detailed	; Phone:; d knowledge of the area or facility in question:
Inspection Information:		
_	or facility: (Air, Auto, Walk, C	Onsite, Remote:
_		
Setting:		
Adjoining land use (show on r	nap):	
Roads without outlets? Y/N;		
Wetlands, Streams, Springs/se		
Surface Cover: (Vegetation, M	lanmade; Type:	);
Construction:		
Structure: (Metal frame, Wood		
Siding (Metal, Wood, Concret	e, PVC, Other	_);
Flooring Material: (Wood, Con	• • • •	
		ate, Cedar Shake, Rubberized, Fiberglass)
Insulation Material: (Fibergla	ss, Foam, Unknown)	
Facility Utilities:		
Heating/Ventilation/Cooling (	HVAC) System: (Oil/forced a	air, Gas/forced air, Electrical, Steam, Hot water)
HVAC Power: (Gas, Oil, Coa	l, Electric); Backup Power Su	pply? Y/N;
Boiler Room? Y/N; Exhaust S	System? Y/N	

## **Use History:**

Describe in Table I-2 additional information regarding the use history of this area or facility discovered during the visual inspection that was not already described during interviews.

	ode:; Area: r Name:	, 1 arcel	, 1 451110) 110
leam Membe	r Name:	; Date:	<del></del>
<u>FEATURES</u>	(Circle each form used. Use the	appropriate form listed belov	<u>w.)</u>
FORM V1:	STORAGE TANKS: ASTs, US	STs, Oil/Water Separators	
FORM V2:	HAZARDOUS SUBSTANCES	S AND/OR PETROLEUM P	RODUCTS USED OR
	GENERATED, AND THEIR S	TORAGE AND DISPOSAL	(except for USTs and ASTs).
FORM V3:	POTENTIAL RELEASES: As	indicated by stains, pools, str	ressed vegetation, odors, burned
	areas, illicit dumping and other		
FORM V4:	- <del>-</del>		orm water, cooling water, waste
•	water from processes, facility fl		
FORM V5:	PIPELINES		,
FORM V6:	TRANSFORMERS: inventory,	including capacitors.	•
FORM V7:	PONDS: Including infiltration	<b>O 2</b>	reservoirs, etc.
FORM V8:	AIR EMISSIONS: Including in		•
FORM V9:	POTENTIAL ASBESTOS CON	<del>-</del>	•
FORM V10:	WELLS: Including drinking wa	ater, process water, agricultur	al, monitoring, injection, oil, and
	gas.		
PHOTOGRA	<u>APHS</u>		
	• .		
Frame Number	er Compass View Subject	<del>_</del>	
			<u>·</u>
	<del></del>		

## APPENDIX E

# **ENVIRONMENTAL TITLE HISTORY REPORT**

# **ENVIRONMENTAL DATABASE, INC.**

7061 S. University Blvd. • Suite 300 Litteton, Colorado 80122 (303) 794-8389 • 1-800-982-4627 • Fax (800) 615-0049

#### Chain Of Title Document Review

Project Number: E9518BZ

. Installation: Red River Army Depot

Texarkana, TX

Report To: Kate Power

1/15/96

From: Paul Lehnertz

Environmental Database, Inc.

Enclosed please find the Chain Of Title report for the Red River Army Depot installation.

Paul Lehnertz

# ENVIRONMENTAL TITLE SERVICES, INC. 401 EUCLID AVENUE, SUITE 445

CLEVELAND, OHIO. 44114-2402

PHONE: (216) 696-555	4		FAX: (216) 861-3433
RE:	RED RIVER	ARMY DEPOT, TEXARK	ANA, TEXAS
	St	JBJECT PROPERTY ADD	PRESS
NO: <u>4093</u>			
LIABILITY: \$5,00	00.00		
	ENVIRO	NMENTAL TITLE SERV	VICES, INC.
\$	SUBJECT TO THE T	RPORATION, HEREIN CA ERMS AND CONDITIONS ENVIRONMENTAL TITLE	S OF THE AGREEMENT
• ·		REPORTS TO	
	Env	IRONMENTAL DATABAS	E, INC.
		CLIENT	
PROPERTY AS REC	UESTED BY THE C	LIENT IN THE AGREEM	DOCUMENTS REGARDING THE SUBJECT ENT, ONLY THOSE MATTERS SET FORTH JBJECT PROPERTY, WERE FOUND AND .
			NOT VALID AND ETS SHALL HAVE ATION, OR A COPY THEREOF, IS
Date: <u>January</u>	12, 1995	BY:	SIGNATURE

# ENVIRONMENTAL TITLE SERVICES, INC.

	<u>Dated</u> <u>Filed</u>	Vol./Pg.
1) United States of America took title from:	R.G. Slaven by Deed: 3/18/1942 -80.36 and 121.43 acres (a).	184/269
2) United States of America took title from:	L.L. Hicks by Deed: 7/7/1941 -54.87a	192/139
3) United States of America took title from:	Forrest Baker by Deed: 12/30/1941 -20.16a	186/144
4) United States of America took title from:	R.W. Smith and T. Smith, by 112/12/1941 -59 and 6a	Deed: 181/322
5) United States of America took title from:	W.L. Grant and T. Forgey by 17/7/1941 -125.69 and 69.31a	Deed: 181/323
6) United States of America took title from:	W.L. Gibson and Briley by De 12/12/1941 -287a	eed: 181/323
7) United States of America took title from:	Louise Swindell by Deed: 1/27/1942 -31.21a	186/247
8) United States of America took title from:	Byron Barkman by Deed: 12/12/1941 -108.30a	181/323
9) United States of America took title from:	W.D. Cooley by Deed: 12/26/1941 -218a	181/363

# ENVIRONMENTAL TITLE SERVICES, INC.

	<u>Dated</u>	Vol./Pg.
10) United States of America took title from:	Tip Cooley by Deed: 2/9/1942 -100a	185/410
11) United States of America took title from:	R.A. Patout Jr. et al by Deed: 112/17/1941 -478a	181/335
12) United States of America took title from:	R.G. Crawford et al by Deed: 12/17/1941 -100a	181/335
13) United States of America took title from:	N.L. Dalby et al, by Deed: 7/7/1941 -308a	181/335
14) United States of America took title from:	J.A. Autrey by Deed: 7/7/1941 -200a	183/528
15) United States of America took title from:	Clara Murphy by Deed: 10/18/1941 -87a	183/528
16) United States of America took title from:	The F.D. Crook Estate, et al, by De 7/7/1941 -96a	eed: 192/288
17) United States of America took title from:	W.N. Fields by Deed: 12/2/1941 -81a	186/55
18) United States of America took title from:	E.C. McGowen by Deed; 11/19/1941 -88.41 a	186/26
19) United States of America took title from:	R.W. Rodgers by Deed: 7/7/1941 -50a	181/323
20) United States of America took title from:	W.S. Hatcher by Deed: 3/6/1942 -50a	190/144

	<u>Dated</u>	Vol./Pg.
21) United States of America took title from:	Judith F. Mears et al, by Deed: 7/7/1941 99.50a	181/324
22) United States of America took title from:	D.S. Heard by Deed: 7/7/1941 -231.80	183/528
23) United States of America took title from:	Mrs. A. M. Kenney by Deed: 12/19/1941 -156.44a	186/128
24) United States of America took title from:	Janie & T.A> Adams by Deed: 12/31/1941 -8.10a	186/139
25) United States of America took title from:	Lucille Stingler by Deed: 7/7/1941 -31.20a	181/324
26) United States of America took title from:	Laura E. Henry by Deed; 12/31/1941 -31.13	186/139
27) United States of America took title from:	R.D. Hnery by Deed: 1/14/1942 -31.30	186/195
28) United States of America took title from:	W.A. Henry by Deed; 7/7/1941 -31.20a	183/528
29) United States of America took title from:	Mrs. W. E. Henry by Deed; 7/7/1941 -75.13 and 27.87a	183/529
30) United States of America took title from:	C.L. & W. E. Stilson by Deed: 1/23/1942 -42.50a	183/603

	<u>Dated</u>	Vol./Pg.
31) United States of America took title from:	Henry Stilson by Deed; 7/7/1941 -233a	181/336
32) United States of America took title from:	TD. Wilson by Deed: 7/7/1941 181/336 -100a	
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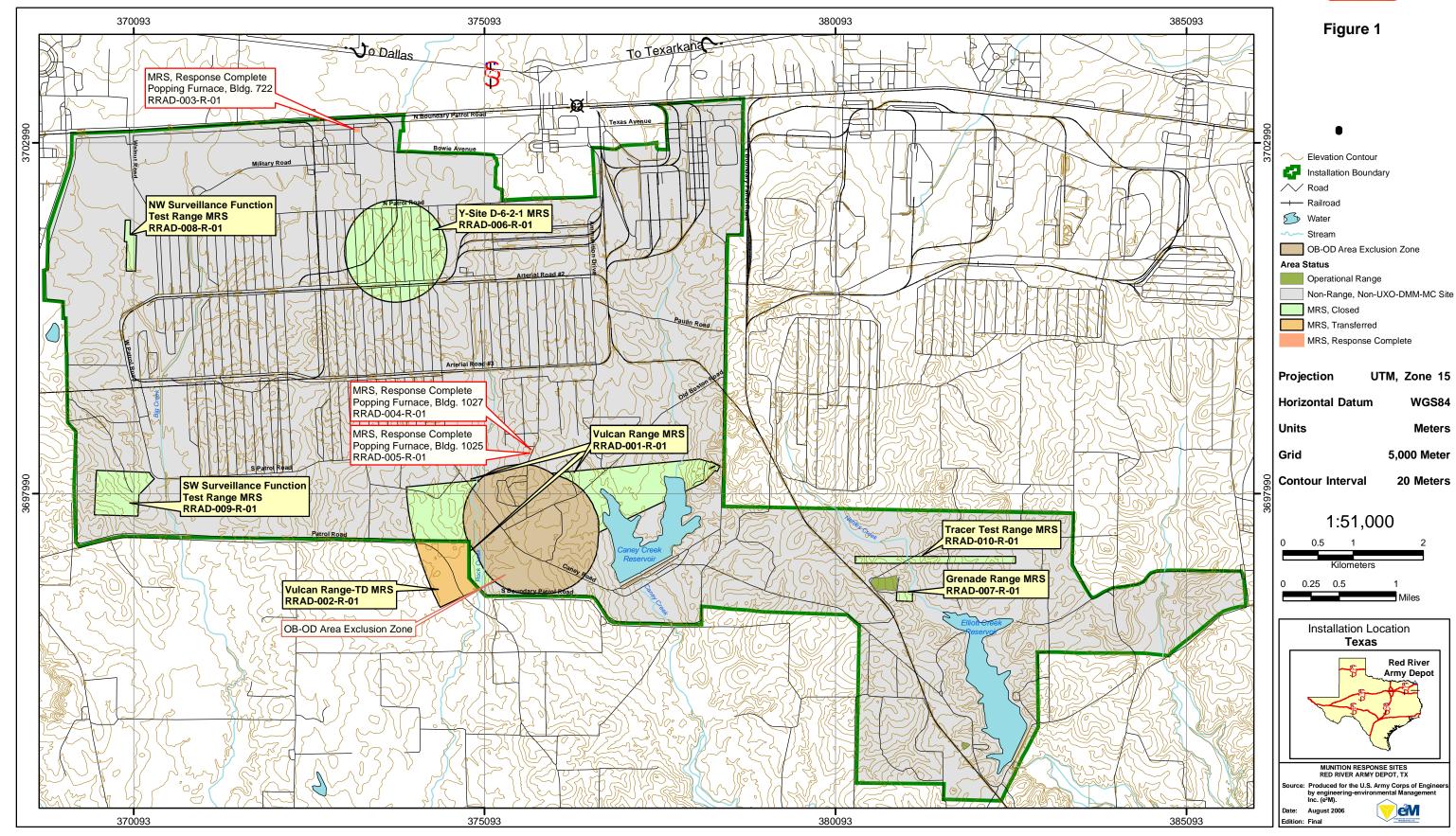
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### Site Inspection Report

# **MUNITION RESPONSE SITES Red River Army Depot, Texas**





## FY2013

# RED RIVER ARMY DEPOT Army Defense Environmental Restoration Program Installation Action Plan

Printed 09 September 2013

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### Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multiyear cleanup program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern (AOC), and proposes a comprehensive, installation-wide approach, along with the costs and schedules associated with conducting investigations and taking the necessary remedial actions (RAs).

In an effort to coordinate planning information between the restoration manager, Army Materiel Command (AMC), the US Army Environmental Command (USAEC), Red River Army Depot (RRAD), the executing agencies, the regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules, and tentative budgets for all major Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

A/I Active/Inactive AEDB-CC Army Environmental Database - Compliance-related Cleanup AEDB-R Army Environmental Database - Restoration AMC Army Materiel Command AOC Area of Concern APAR Affected Property Assessment Report AR Arkansas AST Aboveground Storage Tanks BCP BRAC Cleanup Plan Bldg Building BRAC Base Closure and Realignment Commission BTEX Benzene, Toluene, Ethylbenzene, Xylene CC Compliance-related Cleanup (program) CEL Chromate Equalization Lagoon CERCLA Comprehensive Environmental Response Compensation Liability Act of 1980 (amended in 1984 and later) CIP Community Involvement Plan CMI Corrective Measures Implementation CMI(C) Corrective Measures Implementation (Construction) CMI(O) Corrective Measures Implementation (Operations) CMS Corrective Measures Study COC Contaminants of Concern CONUS Continental United States COPC Contaminants of Potential Concern CP Compliance Plan CR Compliance Restoration (program) CS Confirmatory Sampling CTC Cost-to-Complete CTT Closed, Transferred, or Transferring CY Calendar Year cy cubic yards DCE Dichloroethylene **DD** Decision Document DERP Defense Environmental Restoration Program DES Design Engineering Study DLA Defense Logistics Agency DMM Discarded Military Munitions DNAPL Dense Non-Aqueous Phase Liquids DRMO Defense Reutilization and Marketing Office DRMS Defense Reutilization and Marketing Service DSMOA Defense State Memorandum of Agreement EM CX Environmental and Munitions Center of Expertise

ER Emergency Removal

FOST Finding of Suitability to Transfer

ER,A Environmental Restoration, Army (formerly DERA)

FERLFE&C Final Ecological Reference Location Field Evaluation & Comparison

- FRA Final Remedial Action
- FS Feasibility Study
- FUDS Formerly Used Defense Site
  - FY Fiscal Year
- GPRA Government Performance and Results Act
- GPS Global Positioning System
- GWPS Groundwater Protection Standard
  - HE High Explosives
  - HRR Historical Records Review
- HSWA Hazardous and Solid Waste Amendments
  - IAP Installation Action Plan
  - IRA Interim Remedial Action
  - IRP Installation Restoration Program
  - ISC Initial Site Characterization
- **IWTP** Industrial Wastewater Treatment Plant
  - kg kilogram
  - lb pound
- LNAPL Light Non-Aqueous Phase Liquids
- LPST Leaking Petroleum Storage Tanks
- LSAAP Lone Star Army Ammunition Plant
  - LTM Long-Term Management
  - LUC Land Use Control
  - MC Munitions Constituents
  - MEC Munitions and Explosives of Concern
  - mg milligram
- mg/kg milligram per kilogram
- mm millimeter
- MMRP Military Munitions Response Program
- MNA Monitored Natural Attenuation
- MRS Munitions Response Site
- MRSPP Munitions Response Site Prioritization Protocol
- MSSC Maneuver System Sustainment Center
- MSW Municipal Solid Waste
- MW Monitoring Wells
- NAPL Non-Aqueous Phase Liquid
- NFA No Further Action
- Ni-Cad Nickel-Cadmium
  - NPL National Priorities List
  - OB Open Burning
  - OD Open Detonation
  - OE Ordnance/Explosive
- ORAP Operational Range Assessment Program
- OTC Ordnance Training Center
- OUTC Ordnance Unit Training Center
  - PA Preliminary Assessment

- PAH Polycyclic Aromatic Hydrocarbons
- Pb Lead
- PBA Performance-Based Acquisition
- PBC Performance-Based Contract
- PCB Polychlorinated biphenyl
- PCL Protective Concentration Level
- PCLE Protective Concentration Level Exceedance
- PLM Professional Labor Management
- PMZ Plume Management Zone
- POL Petroleum, Oil, and Lubricants
- PP Proposed Plan
- ppb parts per billion
- PRB Permeable Reactive Barrier
- PST Petroleum Storage Tank
- QC Quality Control
- RA Remedial Action
- RA(C) Remedial Action (Construction)
- RA(O) Remedial Action (Operation)
- RAB Restoration Advisory Board
- RACER Remedial Action Cost Engineering and Requirements
- RACR Response Action Completion Report
- RAD Radioactive Waste or a unit of radiation measure
- RAP Response Action Plan
- RC Response Complete
- RCRA Resource Conservation and Recovery Act
  - RD Remedial Design
  - RFA Resource Conservation and Recovery Act Facility Assessment
  - RFI RCRA Facility Investigation
  - RI Remedial Investigation
  - RIP Remedy-in-Place
- ROD Record Of Decision
- RRAD Red River Army Depot
- RRMC Red River Munitions Center
- RRSE Relative Risk Site Evaluation
  - S&A Supervision and Administration
- S&R Supervision and Review
  - SI Site Inspection
- SLERA Screening Level Ecological Risk Assessment
- SVOC Semi-Volatile Organic Compound
- TAC Texas Administrative Code
- TAPP Technical Assistance for Public Participation
- TBD To Be Determined
- TCA 1, 1, 1 Trichloroethane
- TCE Trichloroethylene or Trichloroethene
- TCEQ Texas Commission on Environmental Quality

- TCLP Toxicity Characteristic Leaching Procedure
  - TD Transferred
- TPH Total Petroleum Hydrocarbons
- TRC Technical Review Committee
- TRPH Total Recoverable Petroleum Hydrocarbons
- TRRP Texas Risk Reduction Program
  - TX Texas
  - US United States
- USACE US Army Corps of Engineers
- USACHPPM US Army Center for Health Promotion and Preventive Medicine (now Public Health Command)
  - USAEC US Army Environmental Command
  - USAEHA US Army Environmental Hygiene Agency
  - USEPA US Environmental Protection Agency
    - UST Underground Storage Tank
    - UXO Unexploded Ordinance
    - VOC Volatile Organic Compound
    - WIA Western Industrial Area
  - WWT Wastewater Treatment

#### **Installation Information**

#### **Installation Locale**

Installation Size (Acreage): 15840.01

City: Texarkana County: Bowie State: Texas

#### Other Locale Information

The Red River Army Depot (RRAD) is located on 15,840.015 acres of land in Bowie County, Texas (TX). The installation is approximately 18 miles west of Texarkana, TX/Arkansas (AR) (population 29,919/36,411 per 2010 census). The installation is adjacent to Hooks, TX (population 2,769) to the north, and New Boston, TX (population 4,550) to the west. The Bowie County population is 92,565 per 2010 US Census data, of which 67% is urban, and 33% is rural. The former Lone Star Army Ammunition Plant (LSAAP) is adjacent to RRAD to the east, which after Base Realignment and Closure Commission (BRAC) 2005 closure is now known as TexAmericas East.

In July 1995, the BRAC recommended realigning RRAD by moving all maintenance missions associated with the M113 tactical vehicle series to other depot maintenance activities. The installation retains its Bradley Fighting Vehicle series and tactical vehicle maintenance missions, road wheel and track remanufacturing missions, intern training center, civilian training, Defense Logistics Agency (DLA), and rubber products renovation/ production/ fluidized bed combustion facilities. In BRAC 1995, 765 acres were designated for transfer to the Red River Redevelopment Authority. In 2001, the water treatment plant, industrial waste treatment plant, sewer treatment plant and high voltage electrical distribution system were privatized through BRAC, transferring an additional 32 acres. In 2006 two findings of suitability to transfer (FOST) for a total of 38 acres, were approved for transfer.

Per BRAC 2005, 3,839 additional acres were transferred, including the Red River Munitions Center (RRMC) ammunition storage and open burning (OB) and open detonation (OD) missions, and the RRAD Patriot and Hawk missile recertification missions.

#### **Installation Mission**

The mission for Red River Army Depot is to:

Conduct ground combat, and tactical systems sustainment maintenance operations and related support services worldwide, for the US and Allied Forces and friendly nations in support of the Warfighter. Be an active and viable partner within our community and the Four States area.

#### **Lead Organization**

Army Materiel Command (AMC)

#### **Lead Executing Agencies for Installation**

US Army Corps of Engineers, Ordnance and Explosives Design Center, Huntsville US Army Corps of Engineers (USACE), Southwestern Division, Fort Worth District

#### **Regulator Participation**

State Texas Commission on Environmental Quality (TCEQ)

Local Texas Commission on Environmental Quality, Tyler Regional Office

#### **National Priorities List (NPL) Status**

RED RIVER ARMY DEPOT is not on the NPL

#### **Installation Information**

### Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status

RAB established 199602

#### **Installation Program Summaries**

**IRP** 

Primary Contaminants of Concern: Dense nonaqueous phase liquid (DNAPL), Light non-aqueous phase liquids

(LNAPL), Metals, Perchlorate, Petroleum, Oil and Lubricants (POL), Polycyclic

Aromatic Hydrocarbons (PAH), Semi-volatiles (SVOC), Volatiles (VOC)

Affected Media of Concern: Groundwater, Sediment, Soil, Surface Water

**MMRP** 

Primary Contaminants of Concern: Explosives, Metals, Munitions and explosives of concern (MEC), Munitions

constituents (MC), Perchlorate, White Phosphorous

Affected Media of Concern: Building Decontamination, Groundwater, Sediment, Soil

**CR** 

Primary Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Affected Media of Concern: Groundwater, Soil

### 5-Year / Periodic Review Summary

#### 5-Year / Periodic Review Summary

Status	Start Date	End Date	End FY
Planned	201710	201809	2018

#### 5-Year / Periodic Review Details

Associated ROD/DD Name	Sites
Building 414 Deed Notice	RRAD-73
Decision Document D Area Y Site D060201	RRAD-006-R-01
Decision Document Tracer Test Range	RRAD-010-R-01
Decision Document Vulcan Range	RRAD-001-R-01
FRA for Building 722	RRAD-62
Former DRMO Scrap Yard	RRAD-99
RRAD-55 Permit Issuance	RRAD-55
deed notice bldg 1025/1027	RRAD-63

**LUC Title:** 5 year reviews **Site(s):** RRAD-006-R-01

ROD/DD Title: Decision Document D Area Y Site D060201

Location of LUC

Portions of D Area at Red River Army Depot. Warning signs prohibiting digging without permission. Warning signs for this

Munitions Response Site were installed beginning in early 2013 on rows D-1 through D-9.

Land Use Restriction: Media specific restriction - Prohibit, or otherwise manage excavation, Restrict land use - No residential

use

Types of Engineering Controls: Signs

Types of Institutional Controls: Notations in Master Plan, Restrictions on land use

**Date in Place:** 201309 **Modification Date:** N/A **Date Terminated:** N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

**Documentation Date: N/A** 

LUC Enforcement: 5 Year Reviews

Contaminants: Unexploded Ordnance(UXO)

**Additional Information** 

N/A

LUC Title: 5 yr rvws/constr support

Site(s): RRAD-001-R-01

ROD/DD Title: Decision Document Vulcan Range

**Location of LUC** 

former Vulcan Range area

Land Use Restriction: Restrict land use - No residential use

Types of Engineering Controls: Signs

Types of Institutional Controls: Construction Permit, Notations in Master Plan, Restrictions on land use

**Date in Place:** 201309 **Modification Date:** N/A **Date Terminated:** N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

**Documentation Date: N/A** 

LUC Enforcement: 5 Year Reviews

Contaminants: METALS, Unexploded Ordnance(UXO)

**Additional Information** 

N/A

LUC Title: Annual inspections

Site(s): RRAD-99

ROD/DD Title: Former DRMO Scrap Yard

**Location of LUC** 

Red River Army Depot parking lot # 57B.

Land Use Restriction: Restrict land use - No residential use

Types of Engineering Controls: None

Types of Institutional Controls: Deed Notices, Notations in Master Plan, Restrictions on land use

Date in Place: 201110

Modification Date: N/A

Date Terminated: N/A

**Inspecting Organization:** USACE District **Record of LUC:** Master Plan or Equivalent

**Documentation Date: N/A** 

LUC Enforcement: Annual Inspections, 5 Year Reviews

Contaminants: METALS

Additional Information

N/A

LUC Title: Bldg 722 in Master Plan

Site(s): RRAD-62

ROD/DD Title: FRA for Building 722

**Location of LUC** 

Bldg 722/723 former SAA incinerators site

Land Use Restriction: Restrict land use - No residential use

Types of Engineering Controls: None

Types of Institutional Controls: Deed Notices, Notations in Master Plan, Restrictions on land use

**Date in Place:** 200609 **Modification Date:** N/A **Date Terminated:** N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

Documentation Date: N/A

LUC Enforcement: 5 Year Reviews

Contaminants: METALS

Additional Information

N/A

LUC Title: Deed Notice bldg 414

Site(s): RRAD-73

ROD/DD Title: Building 414 Deed Notice

**Location of LUC** 

Former site of demolished storage building 414. Currently under portions of the new Maneuver Systems Sustainment Center,

including new facility 412H.

Land Use Restriction: Restrict land use - No residential use

Types of Engineering Controls: None

Types of Institutional Controls: Deed Notices

Date in Place: 201302 Modification Date: N/A Date Terminated: N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

**Documentation Date: N/A** 

LUC Enforcement: 5 Year Reviews

Contaminants: ORGANICS

Additional Information

N/A

LUC Title: Response Plan bldg 371

Site(s): RRAD-36

ROD/DD Title: Response Action Plan Building 371

**Location of LUC** 

Around building 371 at Red River Army Depot.

Land Use Restriction: Restrict land use - No residential use

Types of Engineering Controls: None

Types of Institutional Controls: Deed Notices

**Date in Place:** 200812 **Modification Date:** N/A **Date Terminated:** N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

**Documentation Date: N/A** 

LUC Enforcement: 5 Year Reviews

Contaminants: VOC
Additional Information

N/A

**LUC Title:** Western Industrial Area **Site(s):** RRAD-35, RRAD-56, RRAD-71

ROD/DD Title: Response Action Plan Western Industrial

**Location of LUC** 

Western Industrial Area of Red River Army Depot. Includes IRP sites RRAD-35, -56, -71.

Land Use Restriction: Restrict land use - No residential use

Types of Engineering Controls: None

Types of Institutional Controls: Deed Notices

Date in Place: 200905 Modification Date: N/A Date Terminated: N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

**Documentation Date: N/A** 

LUC Enforcement: 5 Year Reviews

Contaminants: VOC
Additional Information

N/A

**LUC Title:** deed notice **Site(s):** RRAD-62

ROD/DD Title: BUILDINGS 722

Location of LUC

Former site of small ammunition item incinerator facility buildings 722 and 723, which have been partially demolished and renovated. Currently location of RRAD MWR recycling facility.

Land Use Restriction: Restrict land use - No residential use

Types of Engineering Controls: None

Types of Institutional Controls: Restrictions on land use

Date in Place: 200608

Modification Date: N/A

Date Terminated: N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

**Documentation Date: N/A** 

LUC Enforcement: 5 Year Reviews

**Contaminants:** METALS **Additional Information** 

N/A

**LUC Title:** deed notice **Site(s):** RRAD-63

ROD/DD Title: deed notice bldg 1025/1027

**Location of LUC** 

Former site of buildings 1025/1027, ammunition incinerators, Red River Army Depot, Bowie County, Texas. AEDB-R site RRAD-63 (site absorbed adjacent site RRAD-30).

Land Use Restriction: Restrict land use - No residential use

Types of Engineering Controls: None

Types of Institutional Controls: Deed Notices

Date in Place: 201302Modification Date: N/ADate Terminated: N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

**Documentation Date: N/A** 

**LUC Enforcement:** 5 Year Reviews

**Contaminants:** METALS **Additional Information** 

N/A

#### **Cleanup Program Summary**

#### **Installation Historic Activity**

In 1942, the Army purchased the majority of the land (19,081 acres) for RRAD from several land owners in Bowie County. The installation was initially intended to be a reserve ammunition storage depot; however, in December 1942, additional missions were added. Some of the missions included overhaul and modification of tanks, and the shipment of tanks, tactical vehicles, artillery, and small firearms. From 1943 until March 1944, the LSAAP was loosely combined with RRAD as the Texarkana Ordnance Center. In 1945, LSAAP was made a part of RRAD and remained as such until 1951. As a result of partial closure resulting from the BRAC 1995 mandates and ongoing utility privatizations, there are approximately 797 acres of an original 19,081 acres that have already or will soon be transferred out of Army control. Some 3,835 acres will be transferred as a result of BRAC 2005.

During World War II and the Korean War the depot served as an Ordnance Training Center (OTC) for the purpose of training officers in ordnance support. The OTC was deactivated after the Korean War, but occasionally provides training to US Army Reserve units. An off-depot parcel used by the OTC for troop training is now classified as a formerly used defense site (FUDS).

Major historic tenants at RRAD are the Defense Reutilization and Marketing Service (DRMS) (now called DLA Disposition Services), the DLA, and the RRMC. DRMS reuses and/or disposes of surplus items. The DLA supports seven of the eleven continental US (CONUS) divisions in an 18-state area.

RRAD was issued a part B permit for a municipal hazardous waste management site on Dec.13, 1988 (Permit No. HW-50178-000, USEPA ID No. TX 3213820738), pursuant to the Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA). Provision VIII of the permit requires RRAD to conduct RCRA facility investigations (RFIs). RFIs are required to determine whether hazardous constituents have been released into the environment. The TCEQ is responsible for enforcing the requirements of the part B permit. A ten-year permit renewal was issued December 14, 2012.

In fiscal year (FY)95 the installation formed a BRAC cleanup team and the community formed the Red River Local redevelopment authority. In FY96 the installation formed a RAB and prepared a BRAC cleanup plan (BCP). The BCP was updated in FY01.

Originally, in FY03, six Military Munitions Response Program (MMRP) sites were identified.

Later, in FY03, three of the six MMRP sites were identified as no further action (NFA), as the environmental closure was underway under the Environmental Restoration, Army (ER,A) program at these sites. This brought the total down to three MMRP sites.

In FY04 four new MMRP sites were added when concurrence with historical closure of these four long-abandoned ranges was received. This brought the total to seven MMRP sites.

In FY07 two of the seven MMRP sites became BRAC 2005 sites. This brought the total of non-BRAC RRAD MMRP sites down to five.

The resulting active phase MMRP site totals (not counting BRAC or NFA sites) went from six to three in FY03, then to seven in FY04, and to five in FY07.

The RRAD is an active US Army Facility. The major operational facilities on the depot include: maintenance and rebuild of military vehicles, demilitarization of out-of-specification ordnance, ammunition storage, maintenance, modification, and recertification of the Hawk, Chaparral, and Patriot missiles (transferring per BRAC 2005), tank track and road wheel rebuild, and rubber products maintenance. Currently, most of the acreage covered by RRAD is used for commercial forestry and ammunition storage.

BRAC 95 realigned RRAD by moving the M113 vehicle mission to other depots. The installation retained its Bradley fighting vehicle, light tactical vehicle, engineering intern training, Patriot missile, and rubber production missions.

BRAC 2005 realigned RRAD and moved the ammunition and missile recertification missions elsewhere.

Areas of environmental concern at the depot include spill sites associated with previous industrial and pre-RCRA disposal activities, and closed landfills. Trichloroethylene (TCE) and 1,1,1-trichloroethane (TCA) and their biodegradation products are the main contaminants affecting groundwater at the installation.

#### **Cleanup Program Summary**

#### **Installation Historic Activity**

The installation maintains a partnership with the TCEQ through the Defense State Memorandum of Agreement (DSMOA) program.

The building (bldg) 441 indoor weapons test range, with 1000 yard target concrete tubes, had shot traps emptied and was demolished in late 2007.

The Army has completed an inventory of closed, transferred, and transferring (CTT) ranges and sites with UXO, discarded military munitions, or MC. An additional two MMRP sites were identified after the original MMRP listings, for a total of seven sites at this installation. Remedial investigation (RI) and feasibility studies (FS) on these sites began in FY09. In 2012 the Operational Range Assessment Program completed Phase II Assessment sampling associated with Nettles Creek near the active rifle range with a report in 2013.

In FY03, the installation completed the groundwater modeling study in the Western Industrial Area (WIA) and submitted the study to regulators. Repairs were made to the chrome and storm sewers by relining with cured-in-place-piping. The Hays Plant affected property assessment report (APAR) was completed. The Army awarded a contract for removal of the chrome beds at the industrial waste treatment plant. The installation expanded sampling at the X-1 sewer treatment plant to define the extent of contamination. The installation initiated an MMRP site inspection (SI) in the active portion of the installation.

Major historical tenant operations are the DRMS, the DLA, and the RRMC. DRMS reuses and/or disposes of surplus items. The DLA supports seven of the eleven CONUS divisions in an eighteen state area. The RRMC stored, renovated, and demilitarized ammunition.

Some smaller tenant activities included the health clinic, and former school for engineering and logistics intern training (before closing in 2013 called Army Logistics Management College).

The major tenant operation is the Defense Logistics Agency (Defense Distribution Red River - Texarkana).

The RRMC closure, which occurred as a result of BRAC 2005, will result in anticipated environmental closure costs for two OB and one OD heavy demolition ranges.

The RRAD does not have any US Environmental Protection Agency (USEPA) NPL Superfund sites.

The RRAD was not on the original USEPA Government Performance and Results Act (GPRA) baseline, but RRAD is listed in the USEPA GPRA 2020 baseline.

In FY09 18,676.24 acres was recorded in the Real Property Inventory for the RRAD property size. That 18,676,24 acre number was a result of a boundary adjustment between LSAAP and RRAD due to BRAC 2005. The current RRAD acreage is calculated at 15,840.015.

#### Installation Program Cleanup Progress IRP

Prior Year Progress: -Continued corrective measures implementation (operations) [CMI(O)] at sites RRAD-33, 34, 44,

and 48 (BRAC) and 35, 36, 37, 43, 56, 60, and 71(IRP).

-Continued long-term management (LTM) at RRAD-55 and RRAD-99.

-Completed process to formally incorporate groundwater monitoring into TCEQ permit on December

14 2012 for RRAD-35, 35, 37, 43, 56, 60, and 71.

-Continued assessment at site CC-006-RR. Fieldwork was completed in January 2013 for TCEQ

requested additional assessment.

Future Plan of Action: -Continuance of CMI(O) through 2015 for sites RRAD-33, 34, 44, and 48 (BRAC) and 35, 36, 37, 43

56, 60, and 71 [Installation Restoration Program(IRP)].

-Continuance of LTM at RRAD-55 and RRAD-99.

-Determine the need for corrective action or additional groundwater monitoring at CC-006-RR.

#### **Cleanup Program Summary**

#### **MMRP**

**Prior Year Progress:** Contract awarded in 2011 with options funded in 2012 for RAs that began in 2013 on Tracer Range,

Vulcan Range and D area Y Site. Requested and received contract funds in 2013 for RCRA Facility Investigations (RFI) on Demolition Area Creeks, Demolition Area Washrack/Storage/Trails, and

Unpermitted Demolition Areas (sites RRAD-011-R-01/02/03).

Future Plan of Action: TCEQ approval is expected in 2014 for RAs that began in 2013 on Tracer Range, Vulcan Range and

the D area Y Site.

Corrective measures studies (CMS) contract options are planned for FY14 funding and award as

necessary for sites RRAD-011-R-01/02/03.

**CR** 

**Prior Year Progress:** The Compliance Restoration (CR) program consists of site CC-006-RR, which is the installation's

fuel station.

Additional assessment fieldwork was completed in January 2013 with soil, groundwater, and vapor sampling. A report is planned for submittal in 2013 to TCEQ, and it is possible that corrective actions

to prevent exposure will be necessary.

Future Plan of Action: It is unknown at this time, but it is possible that an RA or additional duration LTM will be necessary.

### **RED RIVER ARMY DEPOT Army Defense Environmental Restoration Program Installation Restoration Program**

#### **IRP Summary**

#### Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 48/35

#### Installation Site Types with Future and/or Underway Phases

- 1 Contaminated Ground Water
  - (PBC Red River)
- 1 POL (Petroleum/Lubricants) Lines
  - (RRAD-56)
- 9 Spill Site Area
  - (RRAD-35, RRAD-36, RRAD-37, RRAD-43, RRAD-60, RRAD-62, RRAD-63, RRAD-71, RRAD-73)
- Storage Area
  - (RRAD-99)
- 1 Surface Impoundment/Lagoon

(RRAD-55)

#### **Most Widespread Contaminants of Concern**

Dense nonaqueous phase liquid (DNAPL), Light non-aqueous phase liquids (LNAPL), Metals, Perchlorate, Petroleum, Oil and Lubricants (POL), Polycyclic Aromatic Hydrocarbons (PAH), Semi-volatiles (SVOC), Volatiles (VOC)

#### **Media of Concern**

Groundwater, Sediment, Soil, Surface Water

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA)) Site ID Site Name Action Remedy FY					
RRAD-41	SOILS NEAR BLDG 430	FRA	WASTE REMOVAL - SOILS	1989	
RRAD-55	CHROMATE EQUALIZATION LAGOON	FRA	WASTE REMOVAL - SOILS	1990	
RRAD-54	SOILS AT BLDG 420	FRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1993	
RRAD-56	BUILDING 315 TRANSFER STATION	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1993	
RRAD-28	WOODYARD LANDFILL	IRA	CAPPING	1994	
RRAD-30	POPPING FURNACE BLDG #1025	IRA	WASTE REMOVAL - SOILS	1995	
RRAD-40	RAW PHOSPHATE DETENTION LAGOON,IWTP	IRA	WASTE REMOVAL - SOILS	1995	
RRAD-39	FINAL LAGOON, IWTP	IRA	WASTE REMOVAL - SOILS	1997	
RRAD-83	COMP BUILDING 413	FRA	REMOVAL	1997	
RRAD-71	BLDG 350, FORMER NI-CAD BATTERY SHO	IRA	DUAL-PHASE EXTRACTION	2004	
RRAD-62	POPPING FURNACE BLDG# 722	FRA	WASTE REMOVAL - SOILS	2005	
RRAD-56	BUILDING 315 TRANSFER STATION	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	2006	
PBC Red River	PBC	FRA	OTHER	2007	
RRAD-35	SOIL UNDERLYING BLDG 345, NORTH WASHRACK	FRA	OTHER	2007	
RRAD-36	BLDG 371 (BATTERY SHOP) SOILS	FRA	OTHER	2007	
RRAD-37	SOILS UNDERLYING BLDG 373(DYNAMOMET	FRA	OTHER	2007	
RRAD-43	SOILS NEAR TRANSFER PUMPS, BLDG 473	FRA	REMOVAL	2007	
RRAD-56	BUILDING 315 TRANSFER STATION	FRA	OTHER	2007	

### **IRP Summary**

#### Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
RRAD-63	POPPING FURNACE BLDG #1027	FRA	IN-SITU SOIL TREATMENT	2007
RRAD-71	BLDG 350, FORMER NI-CAD BATTERY SHO	FRA	OTHER	2007
RRAD-60	BLDG 433, FORMER RUBBER PRODUCTS BL	FRA	REMOVAL	2011
RRAD-99	DRMO Scrap Yard	FRA	WASTE REMOVAL - SOILS	2012

#### **Duration of IRP**

Date of IRP Inception: 197803

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201207/203709

Date of IRP completion including Long Term Management (LTM): 204509

#### **IRPContamination Assessment**

#### **Contamination Assessment Overview**

In FY14 or beyond, thirteen IRP sites will receive IRP funding, including one site for performing performance-based contract (PBC) management.

There are two LTM sites funded by RRAD that are not eligible for ER,A funding. These two Compliance-Related Cleanup (CC) program sites are the OB/OD Area and the Sludge Drying Beds.

The major concerns for releases to the environment have occurred in the Western Industrial Area (WIA), the surrounding industrial areas, and the used oil/antifreeze POL site. The primary COCs are chlorinated solvents that were used in degreasing, paint, and fuel operations. The solvents used include TCE and 1,1,1-TCA. Solvents and their degradation compounds have been found in sediments, soils, groundwater, and surface water around the maintenance area. The other contaminants of concern are heavy metals that include cadmium, chromium, lead (Pb), and nickel which are commonly found in metal finishing processes.

Solvents have contaminated the groundwater under the WIA. The contamination at the WIA has the potential to migrate off-post. Contamination and future activities at WIA are being conducted under both the ER,A and BRAC programs. Studies have been completed that determine rate and extent of groundwater contamination.

The RRAD conducted a pilot study at RRAD-71 Building (Bldg) 350 to test solvent remediation technologies. Dual phase extraction was the technology chosen by the Army to best study the practicality of removing solvents in relatively impermeable clay shale.

Due to the economic impracticability of a full scale dual phase extraction project, the planned alternatives to address DNAPL are a plume management zone (PMZ) and permeable reactive barrier (PRB) walls. The PRB walls were installed in 2007 and funded under the BRAC 1995 program.

Solvent contamination of surface water in Panther Creek is addressed through monitoring of the two PRB walls. Installation of PRB monitor wells occurred after the TCEQ agreement with the monitoring network design for the PRB walls.

A long term remediation project involving extraction of spilled or leaked fuel underneath Bldg 373 (site RRAD-37) will continue. In FY10 TCEQ approved a recommendation of no action for Panther Creek sediments, based upon a Screening Level Ecological Risk Assessment (SLERA) study and report for Panther Creek and the WIA.

#### **Cleanup Exit Strategy**

The installation reached initial IRP RIP in FY07 through having a PBC contract. Remedial action (operation) [RA(O)]/LTM, with the exception of RRAD-55, is funded under the PBC through 2015. The PBC contractor will assist in development of an exit/ramp-down strategy for all PBC sites remaining in RA(O)/LTM after FY15.

Site RRAD-99 Defense Reutilization and Marketing Office (DRMO) Scrap Yard is separate from the PBC contract, with the RFI/CMS completed in 2010, with removal of stockpiled metal contaminated soil completed in FY11, and annual inspections of a protective parking lot cap as current and future LTM.

	Title	Author	Date
1972			
1094	Texas Water Development Board No. 157, Survey of The Subsurface Saline Water of Texas, Vol. #7,Geologic Well Data-East Texas	Texas Water Development Board	SEP-1972
1984	Cravinal violation Overlite: A concernant OTC Area for The	Damas 9 Massa	ALIC 4004
	Groundwater Quality Assessment OTC Area for The Army Corps of Engineers Groundwater Quality Assessment WWT Area for The	Dames & Moore  Dames & Moore	AUG-1984
	Army Corps of Engineers	Darries & Moore	AUG-1904
1987			
	Contaminated Soil Investigation Beneath Building #348, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	NOV-1987
1988			
	Remedial Investigation of Hayes Batch Treatment Plant, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	JUN-1988
1990			
	Site Assessment for Subsurface Release of Diesel Fuel at Building #333, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	JUN-1990
	RCRA Facility Investigation, Ordnance Training Center (OTC), Interim Status Report	US Army Corps of Engineers, Fort Worth District	JUN-1990
	Site Assessment for Sub-Surface Release of Gasoline and Diesel, Building #162 F, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	JUL-1990
	Environmental Noise Consultation No. 52-34-624-90 Noise Contours, Red River Army Depot	US Army Corps of Engineers	JUL-1990
	Site Assessment For Subsurface Release of Gasoline And Diesel Addendum, Building #162	US Army Corps of Engineers, Fort Worth District	AUG-1990
	Site Assessment Addendum for Subsurface Release of Diesel Fuel at Building #333	US Army Corps of Engineers, Fort Worth District	SEP-1990
1992		Diotriot	
	Soil Gas Survey- Building #345	US Army Corps of Engineers, Fort Worth District	MAR-1992
	Volumes I & II-RCRA Facility Investigation, Final Report, Includes: Buildings #430, Big Creek, Sludge Drying Beds, WWT Area, POL Pump Site, OTC Area, Panther Creek, and Pesticide Pit, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	APR-1992
	Water Quality Survey No. 31-62-GM2-92, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	APR-1992
	Building #420, Soil Investigation (Two Phases), Red River Army Depot	US Army Corps of Engineers, Fort Worth District	MAY-1992
	Geologic Siting-Industrial Waste Landfill, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	DEC-1992

Date

1993

Title

Building #345, Interim RFI Report	US Army Corps of	APR-1993
	Engineers, Fort Worth	
	District	
RCRA Facility Investigation Amended Report, Sludge	US Army Corps of	MAY-1993
Drying Beds, Red River Army Depot	Engineers, Fort Worth	
	District	
RCRA Facility Investigation Amended Report, SWMU-	US Army Corps of	JUN-1993
WWT Area, Red River Army Depot	Engineers, Fort Worth	
	District	
RCRA Facility Investigation Amended Report, Panther	US Army Corps of	JUL-1993
Creek, Red River Army Depot	Engineers, Fort Worth	
	District	
Interim Removal Building #265, Red River Army Depot	US Army Corps of	SEP-1993
	Engineers, Fort Worth	
	District	
RCRA Facility Investigation Amended Report, POL	US Army Corps of	SEP-1993
Pump Site, Red River Army Depot	Engineers, Fort Worth	
	District	
Current Status and Observation Report, Building #162,	US Army Corps of	OCT-1993
First Quarter (Jul-Sep 1993), Red River Army Depot	Engineers	
RCRA Facility Investigation Amended Report, OTC	US Army Corps of	NOV-1993
Area, Red River Army Depot	Engineers, Fort Worth	
	District	
RCRA Facility Investigation Amended Report, Pesticide	US Army Corps of	DEC-1993
Pit, Red River Army Depot	Engineers, Fort Worth	
	District	

Author

1994

RCRA Facility Investigation Addendum To the Amended Report, Pesticide Pit, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	FEB-1994
RCRA Facility Investigation for SWMU Building #333, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	MAR-1994
RCRA Facility Investigation For Building #333, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	APR-1994
RCRA Facility Soil Investigation, Building #1025, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	APR-1994
RCRA Facility Investigation, Building #345, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	APR-1994
Baseline Risk Assessment, Maintenance Salvage Yard, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	AUG-1994
RCRA Facility Investigation for SWMU-Building #348, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	SEP-1994
RCRA Facility Investigation, Building #348, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	SEP-1994
RCRA Facility Investigation, BB-15 Area, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	OCT-1994

	Title	Author	Date
1994			
	Report of Findings, Soil Investigation North East of Building #1025, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	NOV-1994
	Soil Investigation at Building #1027, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	NOV-1994
	Closure Report Building #1025, Demolition and Soil Excavation, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	NOV-1994
1996			
	RCRA Facility Investigation-Hayes Plant, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	MAR-1996
	BRAC 95 Program- Environmental Baseline Survey, Final Report, Red River Army Depot	US Army Corps of Engineers	DEC-1996
	Report of Findings-Soil Stock Pile Sampling, Building #1025, Red River Army Depot	US Army Corps of Engineers	DEC-1996
1997			
	Closure Report for Industrial Wastewater Treatment Lagoons, Building #356, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	JAN-1997
	Closure Reports for Building #1025, Demolition and Soil Excavation, Volumes # I and II, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	FEB-1997
	Closure Report for the Industrial and Final Industrial Wastewater Treatment Lagoons, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	MAY-1997
	Data Compilation Package, Volumes #I, II, and III, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	OCT-1997
1998		Diotriot	
	Soil Background Investigation Report, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	JUN-1998
	RCRA Facility Assessment, Advanced Consolidated Footprint, Volumes # I & # II, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	JUL-1998
	Groundwater Background Investigation Report, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	SEP-1998
2000			
	RCRA Facility Investigation Report for Building #350, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	MAY-2000
	RCRA Facility Investigation Report for Building #414, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	MAY-2000
	RCRA Facility Investigation Report for Building #433, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	MAY-2000
	Final Background Characterization of Groundwater Investigation Report, Red River Army Depot	US Army Corps of Engineers	MAY-2000
	Natural Attenuation Study, Western Industrial Area	US Army Corps of	JUN-2000

	Title	Author	Date
2000			
	(WIA), Red River Army Depot	Engineers, Fort Worth District	
	Closure Report for Excavation of Contaminated Soil at the Water Tower, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	JUN-2000
	Remediation Report for Building #265 and Adjacent Storm Water Ditches, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	SEP-2000
	RCRA Facility Investigation Report for X-1 Sewage Treatment Plant, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	OCT-2000
2001		1 21 21	
	Natural Attenuation Study for Ordnance Training Center (OTC), Red River Army Depot	US Army Corps of Engineers, Fort Worth District	JAN-2001
	Ordnance Training Center (OTC) Area, Semiannual Report, Red River Army Depot	US Army Corps of Engineers, Fort Worth District	JAN-2001
	Findings of Suitability to Transfer Buildings #133, 150, 154, 167, 184, 281, 286, 290, the Water Tower, the Directorate of Public Works, Storage Yard and Housing Area, Buildings #10, 20, 28, & 30	US Army Corps of Engineers, Fort Worth District	MAR-2001
	Remedial Action Completion Report for North and South Storm water Lagoons	US Army Corps of Engineers, Fort Worth District	MAY-2001
	Response Action Completion Report (2 Volumes) North and South Storm water Lagoons and UST at Building 334A	US Army Corps of Engineers, Fort Worth District	MAY-2001
	Monitored Natural Attenuation Evaluation, OTC (Ordnance Training Center) Landfill	US Army Corps of Engineers, Fort Worth District	NOV-2001
2002			
	2001 Annual Report	US Army Corps of Engineers, Fort Worth District	JAN-2002
2003			-
	2002 Annual Report	US Army Corps of Engineers, Fort Worth District	JAN-2003
2004			
	2003 Annual Report	US Army Corps of Engineers, Fort Worth District	JAN-2004
	Building 172 Release Investigation Report	Installation	MAR-2004
	Industrial Wastewater Treatment Plant Release Investigation Report	Installation	APR-2004
2005			
	2004 Annual Report	US Army Corps of Engineers, Fort Worth District	JAN-2005
	Response Action Completion Report Bldg 722	Cape	JUL-2005

		IIII I ICVIOUS	Otdaics
	Title	Author	Date
2005	Corrective Measures Implementation Plan for the OTC Area	Parsons / US Army Corps of Engineers, Fort Worth District	DEC-2005
2006			
	2005 Annual Report	US Army Corps of Engineers, Fort Worth District	JAN-2006
	Amended Affected Property Assessment Report 1313 Landfill	Installation	JAN-2006
	Draft Final Supplemental Affected Property Assessment Report for Bldg 1027 Area	Kemron / US Army Corps of Engineers, Fort Worth District	MAR-2006
	Draft Final Response Action Plan for Bldg 1027 Area	Kemron / US Army Corps of Engineers, Fort Worth District	JUN-2006
	Final Project Summary Report - Removal of Above Ground Storage Tank #319	Toltest Inc.	JUN-2006
	Semi-Annual Report for OTC Area	US Army Corps of Engineers, Fort Worth District	JUL-2006
	Draft Final Response Action Plan Bldg 371	Kemron / US Army Corps of Engineers, Fort Worth District	AUG-2006
	Draft Final Response Action Plan for Bldg 473	Kemron / US Army Corps of Engineers, Fort Worth District	AUG-2006
	Final Affected Property Assessment Report for Bldg 473	Kemron / US Army Corps of Engineers, Fort Worth District	AUG-2006
	Final Affected Property Assessment Report Bldg 371	Kemron / US Army Corps of Engineers, Fort Worth District	AUG-2006
	Final Affected Property Assessment Report for Bldg 373	Kemron / US Army Corps of Engineers, Fort Worth District	SEP-2006
	Draft Final Response Action Plan for Bldg 373	Kemron / US Army Corps of Engineers, Fort Worth District	SEP-2006
	Response Action Plan for WIA and Panther Creek	Kemron / US Army Corps of Engineers, Fort Worth District	DEC-2006
2007			
	2006 Annual Report	US Army Corps of Engineers, Fort Worth District	JAN-2007
	Draft Final Affected Property Assessment Report for Bldg 433	Kemron / US Army Corps of Engineers, Fort Worth District	FEB-2007
	Semiannual Report for OTC Area	US Army Corps of Engineers, Fort Worth District	JUL-2007
	Affected Property Assessment Report for WIA	Kemron / US Army Corps of Engineers, Fort Worth District	DEC-2007

	Title	Author	Date
2008			
	2007 Annual Report	US Army Corps of Engineers, Fort Worth District	JAN-2008
	Response Action Completion Report Bldg 1027	Kemron / US Army Corps of Engineers, Fort Worth District	FEB-2008
	Semi-Annual Report for OTC and Sludge Drying Beds Areas	Fort Worth District US Army Corps of Engineers	JUL-2008
	Response Action Plan for Bldg 371	Kemron / US Army Corps of Engineers, Fort Worth District	AUG-2008
	Draft Response Action Completion Report Bldg 473	Kemron / US Army Corps of Engineers, Fort Worth District	OCT-2008
2009			
	2008 Annual Report	US Army Corps of Engineers, Fort Worth District	JAN-2009
	2009 Semi-Annual Report for OTC Landfill and Sludge Drying Beds	US Army Corps of Engineers, Fort Worth District	JUL-2009
	Final Ecological Reference Location Field Evaluation and Comparison Report for the Western Industrial Area and Panther Creek	Kemron Environmental Services	NOV-2009
2010			
	2009 Annual Report for OTC Landfill, Sludge Drying Beds, Chromate Equalization Lagoon, and OB/OD Areas	US Army Corps of Engineers, Fort Worth District	JAN-2010
	1st Year Data Summary Report Bldgs 371, 373, 433, 473	Kemron Environmental Services, Marietta Ohio	APR-2010
	1st Year Data Summary Report Western Industrial Area (WIA)	Kemron Environmental Services, Marietta Ohio	MAY-2010
	2010 Semi-Annual Report for OTC Landfill and Sludge Drying Beds	US Army Corps of Engineers, Fort Worth District	JUL-2010
	Response Action Completion Report for Building 433	Kemron Environmental Services, Marietta Ohio	JUL-2010
	Final Response Action Plan Closed DRMO Area	Tetra Tech NUS Inc, Houston, TX	OCT-2010
	Corrected Final Affected Property Assessment Report Closed DRMO Area	Tetra Tech NUS Inc, Houston, TX	OCT-2010
2011			
	2010 Annual Report for OTC Landfill, Sludge Drying Beds, Chromate Equalization Lagoon, and OB/OD Areas	US Army Corps of Engineers, Fort Worth District	JAN-2011
	Response Action Effectiveness Report, Western Industrial Area	Kemron Environmental Services, Marietta Ohio	MAY-2011
	Response Action Effectiveness Report, Buildings 371, 373, 433, and 473-POL	Kemron Environmental Services, Marietta Ohio	MAY-2011
	2011 Semi-Annual Report	US Army Corps of Engineers, Fort Worth District	JUL-2011

	Title	Author	Date
2012			
	2011 Annual Report	US Army Corps of Engineers, Fort Worth District	JAN-2012
	2011 Annual Report for WIA, and Bldgs 371, 373, 433, and 473	Kemron Environmental Services	APR-2012
	Final Response Action Completion Report, Removal of Stockpiled Soil North of Bldg 421N (DRMO Scrap Yard)	Cape	APR-2012
2013			
	2012 Annual Report for OTC, OB/OD, CEL, Sludge Drying Beds	Kemron Environmental Services	JAN-2013
	2012 Annual Report for WIA, and Bldgs 371, 373, 433, and 473	Kemron Environmental Services	JAN-2013

#### **RED RIVER ARMY DEPOT**

Installation Restoration Program
Site Descriptions

#### Site ID: PBC Red River Site Name: PBC



Regulatory Driver: RCRA

RRSE: LOW

Contaminants of Concern: Dense nonaqueous phase liquid (DNAPL), Metals, Petroleum, Oil and Lubricants (POL),

Volatiles (VOC)

Media of Concern: Groundwater, Sediment, Soil, Surface

Water

Phases	Start	End
RFA	200009	200109
CMI(C)	200508	200709
CMI(O)	200709	201509

**RIP Date:** 200709 **RC Date:** 201509

#### SITE DESCRIPTION

This site is for funding a PBC with Kemron Environmental Services. The contract is administered by the USACE. The IRP and BRAC sites are covered under this multiyear contract.

The IRP sites subject to this funding are RRAD-35, 36, 37, 43, 56, 60 and 71. Separately funded under the BRAC Red River site are RRAD-33, RRAD-34, RRAD-44, and RRAD-48.

Program and contract management costs for the USACE are also funded under PBC Red River.

The contract awarded in August 2005 is to reach RIP/RC at these sites to include any RA(O), CMI(O), and LTM through 2015. Any additional RA(O), CMI(O), LTM after 2015 will be addressed under each individual site. Progress to date is captured under individual site descriptions.

#### **CLEANUP/EXIT STRATEGY**

The performance-based acquisition (PBA) fulfills the purpose of the RIP/RC exit strategy. The current PBA contractor's schedule had final submittals of investigations and remedial plans to the state in April 2008 for most sites except Panther Creek (BRAC 1995) and RRAD-60, which have since been made RIP. More detailed cleanup strategies are described under each individual site description.

# Site ID: RRAD-35 Site Name: SOIL UNDERLYING BLDG 345, NORTH WASHRACK



Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Dense nonaqueous phase liquid (DNAPL), Metals, Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA	197803	197807
RFI/CMS	199109	200709
CMI(C)	200508	200709
CMI(O)	200508	203709
LTM	203710	204509

**RIP Date:** 200709 **RC Date:** 203709

#### SITE DESCRIPTION

Bldg 345 is located in the center of the WIA. This two-story building of approximately 300,000 square feet, was built in 1942 and accommodates mechanical tear down, metal finishing, and re-build of military vehicles. There were an unknown number of solvent (TCE, TCA) spills during the 1950s and 60s. This site is still active; however, TCE and TCA are no longer being used at the depot.

Chlorinated solvents have been detected in the groundwater since 1991. These solvents are potentially causing a threat of exposure in surface water (Panther Creek).

The contaminated soil is covered by the building and is, in part, covered by the building or asphalt/concrete, and is on top of a several hundred feet thick layer of dense clay shale.

A building vapor intrusion (ambient air) study was conducted from August 2000 to May 2001, and vapors were detected. RRAD-35 is one of three non-BRAC sites within the WIA solid waste management unit (SWMU). RRAD-35 has solvents contaminating the groundwater in a PMZ. During FY13 there is planned to be a contract for partial well abandonment plugging as approved by the TCEQ on August 25, 2011.

There will be an 8 year duration LTM phase from FY38 through FY45 consisting of only one 5-year review in FY43. The LTM phase is necessary because there is a deed notice associated with the PMZ and commercial / industrial use only LUC. Current Army Environmental Command rules limit the total future duration of CMI(O) plus LTM phases to 30 years. Since there is a LUC restricting the site only to commercial/industrial usage, it has been determined per an Army Environmental Command Strategy Review in 2011 that a five-year review is necessary to monitor the LUC during LTM.

#### **CLEANUP/EXIT STRATEGY**

This site is part of the proposed WIA PMZ, which on Dec. 14, 2012 was incorporated into the RCRA compliance plan permit. LTM will continue and will consist of monitoring solvent contaminated groundwater, and LUC. The WIA PMZ has been deed recorded.

In August 2005, a PBC was awarded to Kemron Environmental Services Inc., to bring the site to RIP/RC and perform monitoring until 2015. Requirements for the corrective measures-construction [CMI(C)] and CMI(O) are funded under the AEDB-R site PBC Red River.

## Site ID: RRAD-36

#### Site Name: BLDG 371 (BATTERY SHOP) SOILS



Regulatory Driver: RCRA

RRSE: MEDIUM

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA	199207	199207
RFI/CMS	199811	200709
CMI(C)	200508	200709
CMI(O)	200508	203709
LTM	203710	204409

**RIP Date**: 200709 **RC Date**: 203709

#### SITE DESCRIPTION

Bldg 371 is used as a battery shop where large, wet cell, Pb-acid forklift batteries are recharged and stored. The building was formerly used for dynamometer testing and had solvent cleaning vats.

TCE contamination has been present in monitoring wells (MW) around Bldg 371. Groundwater TCE has exceeded protective concentration levels (PCLs). Soil PCLs have not been exceeded.

A revised APAR and a response action plan (RAP) have been completed and approved by the TCEQ.

The process for incorporation of the RA plan approved PMZ for the site into the RRAD permit LTM began in FY10, and was completed with issuance of permit 50178 renewal on Dec. 14, 2012.

In 2009, a 1.17-acre PMZ was established; the recorded deed had a restriction for commercial / industrial usage, a Response Action Effectiveness Report in 2011, and groundwater monitoring reports. The CMI(O) phase, comprised of groundwater monitoring operations and professional labor management is expected to continue under site ID PBC Red River through FY15, then site RRAD-36 from FY16 through FY37. There will be an eight year duration LTM phase from FY38 through FY44 consisting of only one five-year review in FY43 associated with the deed notice associated with the PMZ LUC.

#### **CLEANUP/EXIT STRATEGY**

In August 2005, a PBC was awarded to Kemron Environmental Services, Inc. to bring the site to RIP/RC, and perform monitoring until 2015. Kemron has revised the APAR in accordance with the TCEQ's comments and received concurrence.

On Dec. 14, 2012 this site was incorporated into the RCRA permit as part of WIA PMZ monitoring. The WIA PMZ has been deed recorded.

The response action is a PMZ and MNA.

Requirements for the CMI(C) and CMI(O) are funded under the AEDB-R site PBC Red River.

LTM of solvent contaminated groundwater will be funded under site RRAD-36 after FY15.

Site ID: RRAD-37

#### Site Name: SOILS UNDERLYING BLDG 373(DYNAMOMET



Regulatory Driver: RCRA

RRSE: MEDIUM

Contaminants of Concern: Light non-aqueous phase liquids

(LNAPL), Petroleum, Oil and Lubricants (POL)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA	197803	197807
CS	199712	199805
RFI/CMS	199811	200709
CMI(C)	200508	200709
CMI(O)	200508	203709
LTM	203810	204409

**RIP Date**: 200709 **RC Date**: 203709

#### SITE DESCRIPTION

RRAD-37 has releases of petroleum products contaminating the groundwater, for which monitoring began in 2008. Building 373 was originally a 39,478 square foot building constructed in 1947, which has had several expansions since then. The primary use of the facility has been for work on engines and transmission, including dynamometer testing. The historical source for gasoline, diesel, and JP-8 fuels used in building 373 was underground fuel lines from the adjacent Fuel Station associated with building 393. An Affected Property Assessment Report and Response Action Plan was finalized in September 2006, a Deed Recordation of a Plume Management Zone and commercial / industrial land usage restriction in 2009, a First Year Data Summary Report was completed in April 2010, a Response Action Effectiveness Report was dated May 2011, and an Annual Report in January 2013. Vacuum extraction of petroleum product contaminated groundwater from under building 373 has been occurring quarterly since 2008, and will continue until remediation is complete. Regardless of vacuum extraction results there will continue to be a long term requirement for groundwater monitoring of a plume management zone and LUC (commercial/industrial use only) that was documented in a deed notice and decision document (DD).

Actions at this site through FY15 are included in the PBA. Post-PBA groundwater monitoring cost-to-complete (CTC) is based on-site contract costs for FY14.

A five-year review cost is derived from a Fort Benning Government Cost Estimate developed by the USACE Environmental and Munitions Center of Expertise (EM CX) dated Jan. 7, 2013. The USACE EM CX has determined that the Fort Benning estimate is suitable for RRAD, as the installation site complexity, contaminants, and number of sites is similar.

There will be a single five-year review in FY43 during LTM phase. The LTM phase for five-year review is an Army Environmental Command (USAEC) recommendation in FY12 for sites with LUCs. The CMI(O) phase will end in FY37, and the LTM phase will begin in FY38 and end in FY44 so there is a total of 30 years of combined CMI(O) and LTM programmed in the CTC database, as per USAEC Strategy Review recommendations. LUCs for this site are established by a deed notice for the Plume Management Zone and restriction to commercial/industrial usage only.

#### **CLEANUP/EXIT STRATEGY**

In August 2005 a PBC was awarded to Kemron Environmental Services Inc., to bring the site to RIP/RC and perform monitoring through FY15.

Requirements for the CMI(C) (funded in FY05) and CMI(O) are funded under the AEDB-R site PBC Red River.

A PMZ was deed recorded on Nov. 2, 2009.

The response actions are monitoring of a PMZ, groundwater extraction, and MNA.

# Site ID: RRAD-37 Site Name: SOILS UNDERLYING BLDG 373(DYNAMOMET

LTM will be funded under site RRAD-37 after FY15.

In FY10 work began on a RCRA permit application to formally incorporate this site's PMZ into the installation compliance plan permit monitoring program. The new permit was issued Dec. 14, 2012.

In FY13 CMI(O) phase vacuum extraction of fuel from recovery well number 373-MW6 continues under the Kemron Environmental Services Inc. PBC contract.

Site ID: RRAD-43

#### Site Name: SOILS NEAR TRANSFER PUMPS, BLDG 473



Regulatory Driver: RCRA

RRSE: LOW

Contaminants of Concern: Polycyclic Aromatic Hydrocarbons

(PAH), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA	198812	198812
RFI/CMS	199012	200709
DES	200508	200709
CMI(C)	200508	200709
CMI(O)	200508	203709
LTM	203810	204409

**RIP Date:** 200709 **RC Date:** 203709

#### **SITE DESCRIPTION**

This site is located in the northeast portion of the Depot and south of non-associated Bldg 473. This site is also called the 'POL Pump Site;' it has four aboveground storage tanks (AST) that contain used POL and used antifreeze. The soil is contaminated from past activities with hydrocarbons, solvents, and antifreeze spills at the transfer pump site. IRP eligibility is due to historic release of solvents (TCE) from either product lines, pumping/storage operations, or from one of the four storage tanks.

RRAD-43 is a former fuel station constructed in 1976 which is located across Texas Avenue from building 473. The site has three above ground 10,000 gallon storage tanks and one 20,000 gallon tank inside concrete berm No. 454. One of the storage tanks was formerly used for storing used solvents, which apparently was a source for spills or leaks to soil and groundwater that occurred before the gravel floor berm was retrofitted with a concrete floor. A RA was completed in 2008 on soils contaminated with vinyl chloride, 1,1-dichlorothene and 1,1,1- TCA, and which completed removal of the pump island. The storage tanks are currently used for storage of used process water from power washers, used antifreeze, and used oil and fuel. A PMZ for solvents contaminating the groundwater was established in 2009, along with a deed recordation LUCs for contaminants remaining in place that do not meet Texas residential protective concentration standards.

Groundwater has been impacted with solvents. Soil has been impacted with total petroleum hydrocarbons (TPH). The primary concern for this site is the use of VOCs, which occurred prior to 1987. Solvents are no longer being used. A concrete liner was added to the bermed floor several years ago. An APAR was submitted to the TCEQ in 2004 and 2005. State comments on the APAR were received in January 2006. A revised APAR and RAP were submitted to the TCEQ. Additional TCEQ comments were received, and new wells were installed in order to address comments. The APAR and RAP were approved by the TCEQ in November 2008.

A soil removal action of the site's abandoned pump island and investigation of underground piping were carried out in late 2007. The removal included sampling subsurface pipelines and removal of the pump island and contaminated soils not under storage tank related berm structures.

The Response Action Completion Report (RACR) for this remediation was approved by the TCEQ in February 2009. The PMZ and the soil remediation area have been deed recorded. Incorporation of the site into the RRAD permit for CMI(O) and LTM are underway. Actions at this site through FY15 are included in the PBA. Post-PBA CTC is long term groundwater monitoring, and is based on contract costs from FY14.

#### **CLEANUP/EXIT STRATEGY**

In August 2005, a PBC was awarded to Kemron Environmental Services Inc., to bring the site to RIP/RC and perform monitoring until 2015.

# Site ID: RRAD-43 Site Name: SOILS NEAR TRANSFER PUMPS, BLDG 473

Requirements for the CMI(C) (funded in FY05) and CMI(O) are funded under the AEDB-R site PBC Red River.

Response actions include a completed soil excavation project, and continued groundwater monitoring.

LTM will be funded under this site.

A PMZ and commercial/industrial restricting LUC was established through a Nov. 2, 2009 Deed Notice. Five-year reviews are planned under LTM phase after CMI(O) phase is completed.

In FY10 work began on a RCRA permit application to formally incorporate this site's PMZ into the installation compliance plan permit monitoring program. The new permit was issued Dec. 14, 2012.

## Site ID: RRAD-55 Site Name: CHROMATE EQUALIZATION LAGOON



Regulatory Driver: RCRA

RRSE: LOW

Contaminants of Concern: Metals, Volatiles (VOC)

Media of Concern: Groundwater

Phases	Start	End
RFA	197803	197807
CS	198105	198105
DES	198805	198808
CMI(C)	198812	198912
LTM	198912	202009

**RIP Date:** N/A **RC Date:** 198912

#### **SITE DESCRIPTION**

The Chromate Equalization Lagoon (CEL) area was located at the Industrial Waste Treatment facility and served as the raw collection point for electroplating rinse water. The lagoon was about 65 feet width by 95 feet length and operated from 1978 to 1989. The area was excavated upon closure and now part of the former lagoon is covered with industrial wastewater storage tanks and associated concrete containment berms.

In June 2001 this site was incorporated into the Compliance Plan.

In 2005 and 2006, arsenic and 1,1 dichloroethylene (DCE) detections exceeded groundwater practical quantitation levels. In November 2006 a class III Permit Modification application was submitted to establish alternate Groundwater Protection Standards. The modification was approved in February 2008.

From October 2010 semiannual sampling there was an analytical concentration exceedance of the groundwater protective standard for LEAD in monitor well CEL-14.

RRAD-55 is separate from the PBC awarded in 2005 for most other ER,A program sites.

The RRAD-55 property, as part of the industrial wastewater treatment plant (IWTP) site, was subject to the utility privatization initiative funded by BRAC 2005.

#### **CLEANUP/EXIT STRATEGY**

Under compliance monitoring, per RCRA permit requirements, RRAD groundwater sampling will continue at least through 2019. A five-year review is planned for 2018. Well plugging and site close-out is planned for 2020.

## Site ID: RRAD-56 Site Name: BUILDING 315 TRANSFER STATION



Regulatory Driver: RCRA

RRSE: LOW

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA	198606	198701
CS	198606	198701
RFI/CMS	199712	200709
IRA	199306	200606
CMI(C)	200508	200709
CMI(O)	200508	203709
LTM	203710	204509

**RIP Date:** 200709 **RC Date:** 203709

#### SITE DESCRIPTION

This transfer station is located at the north end of Bldg 315 within the WIA. The site was used to transfer diesel fuel to an AST. An abandoned 420,000 gallon storage tank (No. 319) was a past remnant of the station. TCE was detected in the groundwater, in the vicinity of the transfer station. The source of the contamination is thought to be solvent spills or releases into a former drainage ditch located on the western portion of the site.

Bldg 315, which is part of the WIA, is part of RRAD compliance plan SWMU No. 14.

In June through August 1993 an UST that was part of the transfer station was removed. This was done as part of a contract that removed all the remaining formerly active underground storage tanks at Red River Army Depot.

In May 2006 the above ground heating fuel (No. 2) storage tank No. 319 was cleaned, demolished and removed by Iseler Demolition Inc, under subcontract to Toltest Inc. The tank's slab was not removed as part of this project. In June 2006 a final project summary report for the tank removal was received. Tank removal was accomplished to free the property for parking and storage lots, but this plan was superseded by a need to construct administrative buildings.

#### **CLEANUP/EXIT STRATEGY**

In August 2005 a PBC was awarded to Kemron Environmental Services Inc., to bring the site to RIP/RC and perform monitoring until 2015.

Requirements for the CMI(C) (funded in FY05) and underway CMI(O) are funded under the AEDB-R site PBC Red River through FY15.

This site is part of the WIA PMZ, along with IRP sites RRAD-35 and RRAD-71, and BRAC sites RRAD-33, RRAD-34, RRAD-44, and RRAD-48. LTM will continue and will consist of groundwater monitoring under CMI(O) phase, and a five-year review of the LUC (commercial/industrial use only deed notice and PMZ) under LTM phase.

In FY10 work began on a RCRA permit application to formally incorporate this site's PMZ (part of WIA) into the installation compliance plan monitoring program. The permit renewal / major modification issuance accomplishing this was dated Dec. 14, 2012.

#### Site ID: RRAD-60

#### Site Name: BLDG 433, FORMER RUBBER PRODUCTS BL



Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Metals, Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA	199408	.199409
CS	199410	.199504
RFI/CMS	199510	.200709
DES	.200508	.200709
CMI(C)	201005	.201010
CMI(O)	200508	.203709
LTM	.203810	.204409

**RIP Date:** 201010 **RC Date:** 203709

#### **SITE DESCRIPTION**

RRAD-60 building 433 is a formerly 32,906 square foot building constructed in 1942 which was used for removing and replacing rubber on vehicle tracks and road wheels. Solvent vats were used in operations in the building until the 1980s. The building has been partially demolished and partially renovated and is currently used for administrative and storage operations.

Solvent contamination of groundwater and remaining contaminated soil exceeding Texas residential protective concentration limits required the establishment of a 12.962 acre area surrounding building 433 with a LUC of a PMZ and deed notice recordation in 2010.

The CMI(O) phase, comprised of groundwater monitoring and professional labor management is expected to run from FY2016 through FY2037 (22 years) in order to meet state requirements for 30 years of monitoring. Monitoring began in 2008. In addition, since there is a LUC with contamination left in place, there will be another eight years of LTM phase (FY38 through FY44) to consist of a five-year review in FY43. There is currently an USAEC limit of 30 years of combined CMI(O) plus LTM.

Building 433 is located east of Bldg 443, south of Bldg 431, and west of new Maneuver Systems Sustainment Center facilities at the northeast portion of the RRAD maintenance area. 433 was used for rubber stripping, re-building of road wheels for tracked vehicles, 1,1,1-TCA vapor degreasing, adhesive application booths, paint operations, sand blasting, and injection molding operations for light tracked armored vehicles. Rubber operations ceased at 433 in the early-1980s and this building is currently used for administrative offices and storage.

There were releases of solvents from vats located in the north end of 433. Samples collected from the soil and groundwater indicated contamination above PCLs.

TCA and TCE degradation products have been detected in groundwater and soil. The groundwater plume appears to extend northwest from Bldg 433 up to Bldg 441.

Bldg 433 is listed in the RRAD compliance plan as SWMU No. 9.

Actions at this site through FY15 are included under the PBA. Post-PBA CTC is based on contract costs for FY14.

In FY10 the TCEQ concurred that this site had class III groundwater based upon an additional monitor well that was emplaced/tested, and as a result gave final approval of the APAR and RAP.

A soil RA of lead contaminated soil not under roads/driveways/buildings to establish commercial/industrial (not residential) protective standards was conducted by Kemron Environmental Services Inc. in May 2010 at the north end of building 433, with a report dated July 2010. The TCEQ approved the related Response Action Completion Report in October 2010.

Site ID: RRAD-60

Site Name: BLDG 433, FORMER RUBBER PRODUCTS BL

#### **CLEANUP/EXIT STRATEGY**

In August 2005 a PBC was awarded to Kemron Environmental Services Inc., to bring the site to RIP/RC and perform monitoring through 2015.

Requirements for the CMI(C) (funded in FY05) and CMI(O) are funded under the AEDB-R site PBC Red River. After FY2015 funding is expected to occur under site RRAD-60.

In May 2010 a soil remediation project occurred under the existing PBC contract to address shallow Pb contaminated soils at the north end of Bldg 433. THE TCEQ concurred with the RACR and the Deed Notice (restricting soil from residential usage) in October 2010.

In FY10 the TCEQ concurred that this site had class III groundwater, based upon an additional monitor well that was emplaced/tested, and as a result gave final approval of the APAR and RAP.

The groundwater monitoring of a PMZ and associated LUC will continue indefinitely. The LTM phase will consist of a five-year review after CMI(O) phase completion.

In FY13, TCEQ approved a RCRA permit renewal application to formally incorporate this site's PMZ into the installation compliance plan groundwater monitoring program.

# Site ID: RRAD-62 Site Name: POPPING FURNACE BLDG# 722



Regulatory Driver: RCRA

RRSE: LOW

Phases	Start	End
RFA	197803	197807
CS	198105	198105
RFI/CMS	199712	200304
DES	200305	200406
CMI(C)	200407	200507
LTM	201302	204309

RIP Date: N/A RC Date: 200507

#### SITE DESCRIPTION

Building 722 was used for ammunition incineration from 1956 to ~1978. The building pad at the site is currently used for a metal and paper recycling center, and in 2000-2010 the area was formerly used for vehicle storage or training for National Guard or Army Reserve.

Building 722 was a building that formerly contained two small ammunition item incinerators (popping furnaces) and associated equipment inside and outside the main building for performing ammunition demilitarization. A remediation project of metal and explosive contaminated soil occurred in 2004-2005, and the TCEQ approved the completed Response Action Completion Report in July 2005. Remediation (soil removal) was only to commercial/industrial protective concentration levels, and not residential clean up levels, so a deed notice was filed with the county and RRAD Master Planning. The installation commander signed the deed notice on August 22, 2006, and TCEQ acknowledged and approved the deed notice Oct. 6, 2006. Since there is a LUC restricting the site only to commercial/industrial usage, it has been determined per an Army Environmental Command Strategy Review in 2011 that five-year reviews are necessary to monitor the LUC.

#### **CLEANUP/EXIT STRATEGY**

LTM, consisting of five-year reviews, will be performed since the site does not have un-restricted usage, due to the 8.231 acre deed notice concerning metals left in place that do not meet TCEQ Texas Risk Reduction Program residential clean-up standards.

## Site ID: RRAD-63 Site Name: POPPING FURNACE BLDG #1027



Regulatory Driver: RCRA

RRSE: MEDIUM

Phases	Start	End
RFA	197803	197807
CS	198105	198105
RFI/CMS	199006	200409
DES	200410	200709
CMI(C)	200508	200709
LTM	201302	204309

RIP Date: N/A RC Date: 200709

#### **SITE DESCRIPTION**

Buildings 1027 and 1025 were located just north of the OB/OD grounds. Building 1025 ceased operation in the mid-1980s and was removed in the mid-1990s. Building 1027 was in operation from 1956-1976, with some failed trial burns after that period. Building 1027 was partially dismantled in the late-1990s (two walls and the foundation remain) and is an interim status RCRA-regulated unit. An IRA was completed in FY95 and FY96 which addressed the bulk of the source contamination. Building 1025 was totally removed. The floor, 2 walls, and auxiliary shed remain at Building 1027. These incinerators were used to thermally treat obsolete or off-specification munitions. Cadmium and lead had been detected in the soil. In some areas, the contaminants exceeded the human health risk levels. In addition to soil contamination, munitions debris was visible on the site. Munitions debris is material which was processed in the incinerator and fell onto the ground.

Groundwater monitor wells were plugged in early 2007, as there was no groundwater contamination.

A soil and sediment FRA under PBC contract was completed in August 2007 by MKM Engineers Inc under subcontract to Kemron Environmental Services Inc.. A response action completion report was submitted to the TCEQ in February 2008.

A deed notice was signed on Aug. 2, 2008 notifying that the affected area surrounding former buildings 1025 and 1027 was not remediated to residential usage soil standards.

Building 1027 was a building that formerly contained an ammunition item incinerator (popping furnace) and associated equipment inside and outside the main building for ammunition demilitarization. A final Response Action Completion Report on soil remediation of metal contaminated soil was approved by the TCEQ on Oct. 6, 2008. Remediation (soil removal) was only to commercial/industrial protective concentration levels, and not residential clean up levels, so a deed notice was filed with the county and RRAD Master Planning. The installation commander signed the deed notice August 2, 2008, and TCEQ acknowledged and approved the deed notice on Sept. 24, 2008. Since there is a LUC restricting the site only to commercial/industrial usage, it has been determined per an USAEC Strategy Review in 2011 that five-year reviews are necessary to monitor the LUC.

A five-year review cost is derived from a Fort Benning Government Cost Estimate developed by USACE EM CX dated Jan. 7, 2013. That estimate was for 13 sites, so the individual site cost would be divided by 13. The six five-year reviews is the total CTC.

The USACE EM CX has determined that the Fort Benning estimate is suitable for RRAD, as the installation site complexity, contaminants, and number of sites is similar.

The current CTC is for beginning five-year reviews for the LTM phase in Feb. 2018. There will be five-year reviews for 30 years consisting of six five-year reviews to occur in the month February of 2018, 2023, 2028, 2033, 2038, and 2043.

#### Site ID: RRAD-63 **Site Name: POPPING FURNACE BLDG #1027**

#### **CLEANUP/EXIT STRATEGY**

LTM, consisting of five-year reviews, will be performed since the site does not have unrestricted usage, due to a 65.415 acre deed notice concerning metals left in place that do not meet Texas residential cleanup standards.

Site ID: RRAD-71

#### Site Name: BLDG 350, FORMER NI-CAD BATTERY SHO



Regulatory Driver: RCRA

RRSE: MEDIUM

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA	199610	199701
CS	199802	199806
RFI/CMS	199811	200709
IRA	200305	200409
CMI(C)	200508	200709
CMI(O)	200508	203709
LTM	203710	204509

**RIP Date:** 200709 **RC Date:** 203709

#### SITE DESCRIPTION

Bldg 350, within the WIA, was used for the maintenance of nickel-cadmium (Ni-Cad) batteries. A floor drain that led to a concrete pit outside the building is suspected of having leaked. This site initially was identified as a BRAC site, but was changed to IRP in 1997.

Historical spills of VOCs into the drainage ditch east of Bldg 350 are a probable source of the majority of contamination at this site. High levels [690 parts per million (ppm)] of solvents were detected in the groundwater. No contamination was detected in air samples. From Nov. 18, 2003 to April 8, 2004, the US Army performed a dual phase extraction pilot study of solvent extraction from groundwater at Bldg 350 and concluded that it was not economically practical to address DNAPL recovery. The TCEQ disagreed and requested completion of a non-aqueous phase liquids (NAPL) assessment at the WIA, and implementation of an effective NAPL recovery system to satisfy NAPL Response Action Triggers, for the purpose of protecting Panther Creek from additional exposure to dissolved and/or NAPL COC.

Actions at this site through FY15 are included in the PBA. Post-PBA CTC is based on contract costs for FY14.

#### **CLEANUP/EXIT STRATEGY**

This site is part of the WIA PMZ, along with IRP sites RRAD-35 and RRAD-56, and BRAC sites RRAD-33, RRAD-34, RRAD-44, and RRAD-48. Future actions consist of continued groundwater monitoring and a five-year review of the PMZ LUC.

In August 2005 a PBC was awarded to Kemron Environmental Services, Inc. to bring the site to RIP/RC and perform monitoring through 2015. It will be necessary to continue monitoring of the solvent contaminated groundwater after FY15.

Requirements for the CMI(C) (funded in FY05) and CMI(O) are funded annually under the AEDB-R site PBC Red River through FY15. Beginning in FY16 it is expected that CMI(O) then LTM will be funded under site RRAD-71.

In FY10 work began on a RCRA permit application to formally incorporate this site's PMZ into the installation compliance plan (CP) groundwater monitoring program. Formal approval was received Dec. 14 2012 with TCEQ's issuance of a renewed CP permit with major modifications.

# Site ID: RRAD-73 Site Name: BLDG 414, GEN STORAGE BLDG, DIRT FLOOR



Regulatory Driver: RCRA

RRSE: LOW

Phases	Start	End
RFA	199610	199701
CS	199802	199903
RFI/CMS	199908	199909
LTM	201302	204309

**RIP Date:** N/A **RC Date:** 199909

#### SITE DESCRIPTION

Bldg 414 was a former multi-purpose dirt floored general warehouse building that was investigated as it was originally planned that the building would be transferred as part of BRAC 1995. The transfer never occurred, but the BRAC environmental investigation found soil inside the building that had benzo(a)pyrene above the TCEQ soil-air ingestion level that would allow residential usage. Since the soil only met commercial/industrial protective concentration levels, and not residential levels, as a result a deed notice was filed with the county and RRAD Master Planning. The installation commander signed the deed notice July 1, 2003, and TCEQ acknowledged and approved the deed notice August 28, 2003. Bldg 414 was demolished in 2008-2009 for construction of parts of the new Maneuver Systems Sustainment Center (MSSC), and probably most of the contaminated soil was excavated and removed to the New Boston municipal landfill. The deed notice remains because it is uncertain if the soil excavation was made to sufficient depth to address all the contamination.

Since there is a LUC restricting the site only to commercial/industrial usage, it has been determined per an USAEC Strategy Review in 2011 that five-year reviews are necessary to monitor the LUC.

A five-year review cost is derived from a Fort Benning Government Cost Estimate developed by USACE EM CX dated Jan. 7, 2013. That estimate was for 13 sites, so the individual site cost would be divided by 13. The six five-year reviews equals the total CTC.

The USACE EM CX has determined that the Fort Benning estimate is suitable for RRAD, as the installation site complexity, contaminants, and number of sites is similar.

The current CTC is for beginning five-year reviews for the LTM phase in February 2018. There will be five-year reviews for 30 years consisting of six five-year reviews to occur in February 2018, 2023, 2028, 2038, and 2043.

#### **CLEANUP/EXIT STRATEGY**

LTM consists of five-year reviews, since the site does not have unrestricted land usage due to the deed notice that the benzo(a)pyrene concentration of 1.74 mg/kg in soil met the Texas soil Risk Reduction Standard No. 2 for commercial use, but does not meet the standard for residential use. The TCEQ said in a letter dated June 10, 2003 that no post-closure care or engineering controls are required. The exact area and depth of contamination remaining in soil after building 414 was demolished and replaced by the construction of the new MSSC is an unknown.

Site ID: RRAD-99
Site Name: DRMO Scrap Yard



Regulatory Driver: RCRA

RRSE: LOW

Contaminants of Concern: Metals

Media of Concern: Soil

Phases	Start	End
RFA	200301	.200803
RFI/CMS	.200810	.201103
CMI(C)	.201112	.201207
LTM	201210	.204209

RIP Date: N/A RC Date: 201207

#### SITE DESCRIPTION

This site was a largely an open dirt field area of about six acres that was in use for several decades to store junk metal material prior to sale for metal recycling. It is adjacent to another area of about six acres with dirt floor buildings where scrap material was formerly stored. The total acreage of both areas is about 12.

An APAR was completed in October 2010, and that and the RAP were granted TCEQ regulator concurrence on Feb. 8, 2011. The approved actions are annual inspections / maintenance of a parking lot cap that prevents contaminated metal soil exposure, and inspections began in FY12. The soil under the cap (ie parking lot No. 57B) does not meet commercial / industrial standards for the metal lead.

In FY12 the plugging of the monitor wells occurred.

Disposal of stockpiled soil from grading / redevelopment of part of the eastern half of the site into a new gravel storage lot was funded and occurred in FY12. The report on stabilization and landfill disposal of the stockpiled soil was approved by the TCEQ in FY12.

#### **CLEANUP/EXIT STRATEGY**

A contract for an RFI was awarded in FY09, and a completed APAR and RAP was submitted to the TCEQ in October 2010. The plugging of monitor wells was accomplished in FY11. Removal of some stockpiled soil (from construction of parking areas) occurred in early FY12.

The remaining actions are annual inspections/ reporting of the condition of the parking lot (LUC cap) which prevents human exposure to an area of subsurface metal contaminated soil that exceeds protective concentration levels. Reports on the annual cap inspection will occur annually before March 31, and began in FY12.

## **Site Closeout (No Further Action) Summary**

Site ID	Site Name	NFA Date	Documentation
RRAD-07	OTC HOSPITAL	198105	USACHPPM Hazardous and Medical Waste Study No. 37-EF-5698-97, Dec '96
RRAD-08	OTC RIFLE RANGE	198105	NFA because found not eligible for IRP, as this is a FUDS site, site #K06TX013901, Red River Archives Search Report, Huntsville Corps of Engineers, Mar. 1995
RRAD-09	SURVEILLANCE AREA	199802	This site is addressed under MMRP site RRAD-009-R-01.
RRAD-10	SURVEILLANCE AREA (1953)	199802	This site is addressed under MMRP site RRAD-008-R-01.
RRAD-11	SURVEILLANCE AREA (PISTOL RANGE)	199802	This site is addressed under MMRP site RRAD-001-R-01 and RRAD-002-R-01
RRAD-14	BUILDING 311 (X-RAY FACILITY)	198701	USACHPPM Hazardous and Medical Waste Study No. 37-EF-5698-97, Dec '96
RRAD-15	RAD STGE (BLDGS B12-3,G5-6,G-14-7,E13-5)	197807	These are still active sites, and are addressed in the RCRA Permit for closure
RRAD-16	RAD STG(F14-1,A14-5,C3-5,C6-1,C9-7,E4-1)	197807	These are still active sites, and are addressed in the RCRA Permit for closure.
RRAD-17	RAD FIRE BUILDING S-661 (OLD T-6)	197807	USACHPPM Hazardous and Medical Waste Study No. 37-EF-5698-97, Dec '96
RRAD-18	RAD FIRE BUILDING 421	197807	Duplicate RRAD-76
RRAD-19	RAD WASTE STORAGE	197807	The last site update person was 1st BRAC 1995 BEC, so site was probably a BRAC 1995 footprint site that was later transferred out of the BRAC footprint. Site location and details are unknown.
RRAD-21	FLM MATL STG (S-257,327,329,S-402)	197807	USACHPPM Hazardous and Medical Waste Study No. 37-EF-5698-97, Dec '96
RRAD-22	FLM MAT STG (S-547,S-648,T-1190)	197807	USACHPPM Hazardous and Medical Waste Study No. 37-EF-5698-97, Dec '96
RRAD-26	AERATION LAGOONS (4) IN AREA K	199404	Not eligible for IRP, this is an active industrial category wastewater treatment site
RRAD-28	WOODYARD LANDFILL	200609	Cap maintenance will be conducted as part of the installation's best management practices in accordance with the RRAD Master Plan.
RRAD-30	POPPING FURNACE BLDG #1025	200101	Consolidated administratively into adjacent contaminant commingled site RRAD-63
RRAD-38	WASTE PILES	199310	Determined as not eligible for IRP as this is an active site
RRAD-39	FINAL LAGOON, IWTP	199704	US Army Corps of Engineers, Fort Worth District, Closure Report for Industrial Wastewater Treatment Lagoons, Red River Army Depot, February 1997

## **Site Closeout (No Further Action) Summary**

Site ID	Site Name	NFA Date	Documentation
RRAD-40	RAW PHOSPHATE DETENTION LAGOON,IWTP	199412	Determined as not eligible for IRP as this is an active site. Transferred under utility privatization to the local redevelopment authority.
RRAD-41	SOILS NEAR BLDG 430	198901	US Army Corps of Engineers, Fort Worth District, Volumes I & II-RCRA Facility Investigation, Final Report, Includes: Buildings #430, Big Creek, Sludge Drying Beds, WWT Area, POL Pump Site, OTC Area, Panther Creek, and Pesticide Pit, Red River Army Depot, April 22, 1992
RRAD-45	SOILS UNDER BLDG 341	200209	RCRA Facility Investigation Final Report, FWACOE, April 1992
RRAD-46	BIG CREEK	199206	Texas Commission on Environmental Quality agreed with our statement in a permit revision issuance dated May 18, 2004, the "sampling results at Big Creek have indicated no impact to the stream from the OTC Landfill". NFA Letter dtd May 27, 2004.
RRAD-49	TNT WASHOUT FACILITY SOILS	199307	USAEHA Geohydrologic Study No. 38- 26-KV-49-93 10 Sep 1993
RRAD-50	OB/OD AREA	199303	This is an active site and is addressed in the RCRA Permit for closure.
RRAD-54	SOILS AT BLDG 420	199310	Building 420 Soils Investigation, Fort Worth COE, May 1992
RRAD-57	MAINTENANCE SALVAGE YARD	199907	Baseline Risk Assessment for Maintenance Salvage Yard, Fort Worth Corps of Engineers, August 1995
RRAD-59	D-AREA Y-SITE	198105	NFA because found not eligible for IRP, this is MMRP site RRAD-006-R-01.
RRAD-69	BLDG 319 PIPELINE	199703	UST Removals and Contaminated Soil, Laidlaw, Jan 1994
RRAD-70	BLDG 388, DISCHARGE LINE (SINK)	199909	RCRA Facility Assessment Building 388, Fort Worth Corps, Dec 1998
RRAD-74	BLDG 411, ANNEALING VATS UNDER FLOOR	199701	This is an active site not eligible for IRP. Was in original BRAC 1995 footprint, BRAC study canceled when footprint was changed and made a non-BRAC site.
RRAD-76	BLDG 421, RAD EMMITTING SOURCES PRESENT	199609	This is an active site not eligible for IRP. Was in original BRAC 1995 footprint, BRAC study canceled when footprint was changed and made a non-BRAC site.
RRAD-78	BLDG 443, RADIOLOGICAL SOURCE PRESENT	199609	This is an active site not eligible for IRP. Was in original BRAC 1995 footprint, BRAC study canceled when footprint was changed and made a non-BRAC site.
RRAD-81	AMMUNITION SURVEILLANCE TRACER TEST RNG	199705	This site is addressed under MMRP site RRAD-010-R-01.
RRAD-83	COMP BUILDING 413	199707	This is an active site not eligible for IRP. Was in original BRAC 1995 footprint, BRAC study canceled when footprint was changed and made a non-BRAC site.
RRAD77	BLDG 431, RADIOLOGICAL SOURCE PRESENT	199609	This is an active site not eligible for IRP. Was in original BRAC 1995 footprint,

## **Site Closeout (No Further Action) Summary**

Site ID	Site Name	NFA Date	Documentation
			BRAC study canceled when footprint was
			changed and made a non-BRAC site.

Date of IRP Inception: 197803

#### **Past Phase Completion Milestones**

1978

CS (RRAD-15 - RAD STGE (BLDGS B12-3,G5-6,G-14-7,E13-5), RRAD-16 - RAD STG(F14-1,A14-5,C3-

5,C6-1,C9-7,E4-1), RRAD-17 - RAD FIRE BUILDING S-661 (OLD T-6), RRAD-18 - RAD FIRE BUILDING 421, RRAD-19 - RAD WASTE STORAGE, RRAD-21 - FLM MATL STG (S-257,327,329,S-402), RRAD-28 -

WOODYARD LANDFILL, RRAD-39 - FINAL LAGOON, IWTP)

PA (RRAD-22 - FLM MAT STG (S-547,S-648,T-1190), RRAD-59 - D-AREA Y-SITE)

RFA (RRAD-07 - OTC HOSPITAL, RRAD-08 - OTC RIFLE RANGE, RRAD-09 - SURVEILLANCE AREA, RRAD-

10 - SURVEILLANCE AREA (1953), RRAD-11 - SURVEILLANCE AREA (PISTOL RANGE), RRAD-15 - RAD STGE (BLDGS B12-3,G5-6,G-14-7,E13-5), RRAD-16 - RAD STG(F14-1,A14-5,C3-5,C6-1,C9-7,E4-1), RRAD-17 - RAD FIRE BUILDING S-661 (OLD T-6), RRAD-18 - RAD FIRE BUILDING 421, RRAD-19 - RAD WASTE STORAGE, RRAD-21 - FLM MATL STG (S-257,327,329,S-402), RRAD-26 - AERATION LAGOONS (4) IN AREA K, RRAD-28 - WOODYARD LANDFILL, RRAD-30 - POPPING FURNACE BLDG #1025, RRAD-35 - SOIL UNDERLYING BLDG 345, NORTH WASHRACK, RRAD-37 - SOILS UNDERLYING BLDG 373(DYNAMOMET, RRAD-38 - WASTE PILES, RRAD-39 - FINAL LAGOON, IWTP, RRAD-40 - RAW PHOSPHATE DETENTION LAGOON, IWTP, RRAD-41 - SOILS NEAR BLDG 430, RRAD-55 - CHROMATE EQUALIZATION LAGOON, RRAD-62 - POPPING FURNACE BLDG# 722, RRAD-63 - POPPING FURNACE

BLDG #1027)

SI (RRAD-22 - FLM MAT STG (S-547,S-648,T-1190))

1981

CS (RRAD-07 - OTC HOSPITAL, RRAD-08 - OTC RIFLE RANGE, RRAD-09 - SURVEILLANCE AREA, RRAD-

10 - SURVEILLANCE AREA (1953), RRAD-11 - SURVEILLANCE AREA (PISTOL RANGE), RRAD-30 - POPPING FURNACE BLDG #1025, RRAD-38 - WASTE PILES, RRAD-40 - RAW PHOSPHATE DETENTION LAGOON, IWTP, RRAD-41 - SOILS NEAR BLDG 430, RRAD-55 - CHROMATE EQUALIZATION LAGOON,

RRAD-62 - POPPING FURNACE BLDG# 722, RRAD-63 - POPPING FURNACE BLDG #1027)

SI (RRAD-59 - D-AREA Y-SITE)

1987

PA (RRAD-45 - SOILS UNDER BLDG 341) ISC (RRAD-54 - SOILS AT BLDG 420) INV (RRAD-54 - SOILS AT BLDG 420)

RFA (RRAD-14 - BUILDING 311 (X-RAY FACILITY), RRAD-46 - BIG CREEK, RRAD-49 - TNT WASHOUT

FACILITY SOILS, RRAD-50 - OB/OD AREA, RRAD-56 - BUILDING 315 TRANSFER STATION)

SI (RRAD-45 - SOILS UNDER BLDG 341)

CS (RRAD-14 - BUILDING 311 (X-RAY FACILITY), RRAD-46 - BIG CREEK, RRAD-56 - BUILDING 315

TRANSFER STATION)

1988

DES (RRAD-55 - CHROMATE EQUALIZATION LAGOON)

1989

CMI(C) (RRAD-41 - SOILS NEAR BLDG 430) RFI/CMS (RRAD-41 - SOILS NEAR BLDG 430)

RFA (RRAD-43 - SOILS NEAR TRANSFER PUMPS, BLDG 473)

DES (RRAD-41 - SOILS NEAR BLDG 430)

1990

CMI(C) (RRAD-55 - CHROMATE EQUALIZATION LAGOON)

1992

RFA (RRAD-36 - BLDG 371 (BATTERY SHOP) SOILS)

RFI/CMS (RRAD-46 - BIG CREEK)

CAP (RRAD-54 - SOILS AT BLDG 420)

1993

CS (RRAD-49 - TNT WASHOUT FACILITY SOILS, RRAD-50 - OB/OD AREA)

#### **IRP Schedule**

IMP(C) (RRAD-54 - SOILS AT BLDG 420)

1994

IRA (RRAD-28 - WOODYARD LANDFILL)

RFA (RRAD-57 - MAINTENANCE SALVAGE YARD, RRAD-60 - BLDG 433, FORMER RUBBER PRODUCTS BL)

RFI/CMS (RRAD-38 - WASTE PILES)

CS (RRAD-26 - AERATION LAGOONS (4) IN AREA K)

1995

IRA (RRAD-30 - POPPING FURNACE BLDG #1025, RRAD-40 - RAW PHOSPHATE DETENTION

LAGOON, IWTP)

CS (RRAD-60 - BLDG 433, FORMER RUBBER PRODUCTS BL)

1996

PA (RRAD-76 - BLDG 421, RAD EMMITTING SOURCES PRESENT, RRAD-78 - BLDG 443, RADIOLOGICAL

SOURCE PRESENT, RRAD77 - BLDG 431, RADIOLOGICAL SOURCE PRESENT)

1997

RFA (RRAD-69 - BLDG 319 PIPELINE, RRAD-70 - BLDG 388, DISCHARGE LINE (SINK), RRAD-71 - BLDG 350,

FORMER NI-CAD BATTERY SHO, RRAD-73 - BLDG 414, GEN STORAGE BLDG, DIRT FLOOR, RRAD-74 - BLDG 411, ANNEALING VATS UNDER FLOOR, RRAD-81 - AMMUNITION SURVEILLANCE TRACER TEST

RNG)

PA (RRAD-83 - COMP BUILDING 413)
IRA (RRAD-39 - FINAL LAGOON, IWTP)
RA(C) (RRAD-83 - COMP BUILDING 413)
RD (RRAD-83 - COMP BUILDING 413)

1998

CS (RRAD-37 - SOILS UNDERLYING BLDG 373(DYNAMOMET, RRAD-70 - BLDG 388, DISCHARGE LINE

(SINK), RRAD-71 - BLDG 350, FORMER NI-CAD BATTERY SHO)

1999

RFI/CMS (RRAD-57 - MAINTENANCE SALVAGE YARD, RRAD-70 - BLDG 388, DISCHARGE LINE (SINK), RRAD-73

- BLDG 414, GEN STORAGE BLDG, DIRT FLOOR)

CS (RRAD-73 - BLDG 414, GEN STORAGE BLDG, DIRT FLOOR)

2001

RFI/CMS (RRAD-30 - POPPING FURNACE BLDG #1025)

RFA (PBC Red River - PBC)

2002

RI/FS (RRAD-45 - SOILS UNDER BLDG 341)

2003

RFI/CMS (RRAD-28 - WOODYARD LANDFILL, RRAD-62 - POPPING FURNACE BLDG# 722)

2004

IRA (RRAD-71 - BLDG 350, FORMER NI-CAD BATTERY SHO)

RFI/CMS (RRAD-63 - POPPING FURNACE BLDG #1027)
DES (RRAD-62 - POPPING FURNACE BLDG# 722)

2005

CMI(C) (RRAD-62 - POPPING FURNACE BLDG# 722)

2006

LTM (RRAD-28 - WOODYARD LANDFILL)

IRA (RRAD-56 - BUILDING 315 TRANSFER STATION)

#### **IRP** Schedule

2007

RFI/CMS (RRAD-35 - SOIL UNDERLYING BLDG 345, NORTH WASHRACK, RRAD-36 - BLDG 371 (BATTERY SHOP)

SOILS, RRAD-37 - SOILS UNDERLYING BLDG 373(DYNAMOMET, RRAD-43 - SOILS NEAR TRANSFER PUMPS, BLDG 473, RRAD-56 - BUILDING 315 TRANSFER STATION, RRAD-60 - BLDG 433, FORMER

RUBBER PRODUCTS BL, RRAD-71 - BLDG 350, FORMER NI-CAD BATTERY SHO)

DES (RRAD-43 - SOILS NEAR TRANSFER PUMPS, BLDG 473, RRAD-60 - BLDG 433, FORMER RUBBER

PRODUCTS BL, RRAD-63 - POPPING FURNACE BLDG #1027)

CMI(C) (PBC Red River - PBC, RRAD-35 - SOIL UNDERLYING BLDG 345, NORTH WASHRACK, RRAD-36 - BLDG

371 (BATTERY SHOP) SOILS, RRAD-37 - SOILS UNDERLYING BLDG 373(DYNAMOMET, RRAD-43 - SOILS NEAR TRANSFER PUMPS, BLDG 473, RRAD-56 - BUILDING 315 TRANSFER STATION, RRAD-63 -

POPPING FURNACE BLDG #1027, RRAD-71 - BLDG 350, FORMER NI-CAD BATTERY SHO)

2008

RFA (RRAD-99 - DRMO Scrap Yard)

2011

CMI(C) (RRAD-60 - BLDG 433, FORMER RUBBER PRODUCTS BL)

RFI/CMS (RRAD-99 - DRMO Scrap Yard)

2012

CMI(C) (RRAD-99 - DRMO Scrap Yard)

#### **Projected Phase Completion Milestones**

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

Site ID Site Name ROD/DD Title ROD/DD Date

Final RA(C) Completion Date: 201207

Schedule for Next Five-Year Review: 2018

Estimated Completion Date of IRP at Installation (including LTM phase): 204509

#### **RED RIVER ARMY DEPOT IRP Schedule**

SITE ID								= phase u	ınderway
SITE ID				FY14	FY15	FY16	FY17	FY18	FY19+
RRAD-35   SOIL UNDERLYING BLDG 345, NORTH WASHRACK   LTM		. = •	` ′						
NORTH WASHRACK				FY14	FY15	FY16	FY17	FY18	FY19+
RRAD-36   BLDG 371 (BATTERY SHOP) SOILS   CMI(O)			` '						
SITE ID	SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
SITE ID	RRAD-36	BLDG 371 (BATTERY SHOP) SOILS	CMI(O)						
SITE ID   SITE NAME   PHASE   FY14   FY15   FY16   FY17   FY18   FY19+			LTM						
SITE ID				FY14	FY15	FY16	FY17	FY18	FY19+
SITE ID	RRAD-37								
RRAD-43   SOILS NEAR TRANSFER PUMPS, BLDG 473   LTM		373(DYNAMOWE)	LTM						
SITE ID   SITE NAME   PHASE   FY14   FY15   FY16   FY17   FY18   FY19+				FY14	FY15	FY16	FY17	FY18	FY19+
SITE ID	RRAD-43	•	` ′						
SITE ID		BLDG 473							
SITE ID   SITE NAME   PHASE   FY14   FY15   FY16   FY17   FY18   FY19+				FY14	FY15	FY16	FY17	FY18	FY19+
SITE ID	RRAD-55	•	LTM						
SITE ID	SITE ID		PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           RRAD-60         BLDG 433, FORMER RUBBER PRODUCTS BL         CMI(O)         LTM         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           RRAD-63         POPPING FURNACE BLDG #1027         LTM         FY14         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           RRAD-71         BLDG 350, FORMER NI-CAD BATTERY SHO         CMI(O)         LTM         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           RRAD-73         BLDG 414, GEN STORAGE BLDG, DIRT FLOOR         LTM         LTM         FY15         FY16         FY17         FY18         FY19+	RRAD-56	BUILDING 315 TRANSFER STATION	CMI(O)						
RRAD-60   BLDG 433, FORMER RUBBER PRODUCTS BL   LTM   LTM     LTM     FY15   FY16   FY17   FY18   FY19+   RRAD-62   POPPING FURNACE BLDG# 722   LTM   LTM   LTM   FY15   FY16   FY17   FY18   FY19+   RRAD-63   POPPING FURNACE BLDG #1027   LTM   LTM   LTM   LTM   LTM   FY15   FY16   FY17   FY18   FY19+   RRAD-71   BLDG 350, FORMER NI-CAD BATTERY SHO   LTM   L			LTM						
SITE ID   SITE NAME   PHASE   FY14   FY15   FY16   FY17   FY18   FY19+	SITE ID			FY14	FY15	FY16	FY17	FY18	FY19+
SITE ID   SITE NAME   PHASE   FY14   FY15   FY16   FY17   FY18   FY19+	RRAD-60		` ′						
RRAD-62         POPPING FURNACE BLDG# 722         LTM         FY15         FY16         FY17         FY18         FY19+           RRAD-63         POPPING FURNACE BLDG #1027         LTM         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           RRAD-71         BLDG 350, FORMER NI-CAD BATTERY SHO         CMI(O)         LTM         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+		PRODUCTS BL	LTM						
SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           RRAD-63         POPPING FURNACE BLDG #1027         LTM         LTM         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           RRAD-73         BLDG 414, GEN STORAGE BLDG, DIRT FLOOR         LTM         LTM         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+				FY14	FY15	FY16	FY17	FY18	FY19+
RRAD-63         POPPING FURNACE BLDG #1027         LTM         FY15         FY16         FY17         FY18         FY19+           RRAD-71         BLDG 350, FORMER NI-CAD BATTERY SHO         CMI(O)         LTM         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           RRAD-73         BLDG 414, GEN STORAGE BLDG, DIRT FLOOR         LTM         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+		POPPING FURNACE BLDG# 722							
SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           RRAD-71         BLDG 350, FORMER NI-CAD BATTERY SHO         CMI(O)         LTM         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+				FY14	FY15	FY16	FY17	FY18	FY19+
RRAD-71         BLDG 350, FORMER NI-CAD BATTERY SHO         CMI(O)         LTM         LTM         LTM         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+									
BATTERY SHO         LTM         LTM         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+				FY14	FY15	FY16	FY17	FY18	FY19+
SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+           RRAD-73         BLDG 414, GEN STORAGE BLDG, DIRT FLOOR         LTM         LTM         FY15         FY16         FY17         FY18         FY19+           SITE ID         SITE NAME         PHASE         FY14         FY15         FY16         FY17         FY18         FY19+	RRAD-71		` ′						
RRAD-73 BLDG 414, GEN STORAGE BLDG, DIRT FLOOR SITE ID SITE NAME PHASE FY14 FY15 FY16 FY17 FY18 FY19+									
DIRT FLOOR SITE ID SITE NAME PHASE FY14 FY15 FY16 FY17 FY18 FY19+				FY14	FY15	FY16	FY17	FY18	FY19+
SITE ID SITE NAME PHASE FY14 FY15 FY16 FY17 FY18 FY19+	RRAD-73		LIM						
RRAD-99 DRMO Scrap Yard LTM		SITE NAME		FY14	FY15	FY16	FY17	FY18	FY19+
	RRAD-99	DRMO Scrap Yard	LTM						

# RED RIVER ARMY DEPOT Army Defense Environmental Restoration Program Military Munitions Response Program

#### **MMRP Summary**

#### Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 11/5

#### Installation Site Types with Future and/or Underway Phases

1 Drainage Ditch

(RRAD-011-R-01)

1 Firing Range

(RRAD-001-R-01)

1 Open Burning/Open Detonation (OB/OD)

(RRAD-011-R-03)

2 Unexploded Munitions/Ordnance

(RRAD-006-R-01, RRAD-010-R-01)

1 Washrack

(RRAD-011-R-02)

#### **Most Widespread Contaminants of Concern**

Explosives, Metals, Munitions and explosives of concern (MEC), Munitions constituents (MC), Perchlorate, White Phosphorous

#### **Media of Concern**

Building Decontamination, Groundwater, Sediment, Soil

#### Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
RRAD-001- R-01	VULCAN RANGE	FRA	WASTE REMOVAL - SOILS	2013
RRAD-001- R-01	VULCAN RANGE	FRA	INSTITUTIONAL CONTROLS	2013
RRAD-001- R-01	VULCAN RANGE	FRA	UXO CLEARANCE	2013
RRAD-006- R-01	D-AREA Y-SITE D060201	FRA	WASTE REMOVAL - SOILS	2013
RRAD-006- R-01	D-AREA Y-SITE D060201	FRA	UXO CLEARANCE	2013
RRAD-006- R-01	D-AREA Y-SITE D060201	FRA	INSTITUTIONAL CONTROLS	2013
RRAD-010- R-01	TRACER TEST RANGE	FRA	WASTE REMOVAL - SOILS	2013

#### **Duration of MMRP**

Date of MMRP Inception 199911

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201709/201709

Date of MMRP completion including Long Term Management (LTM): 204207

#### **MMRP Contamination Assessment**

#### **Contamination Assessment Overview**

In FY02, preliminary assessments (PAs) were conducted for MMRP sites. SIs were conducted from FY02 through FY05. In May 2005, fieldwork occurred to determine the potential presence of MEC. In November 2005, a draft SI report was submitted to the TCEQ in November 2005 and was concurred with in 2006.

In November 2010, final RI reports were submitted to the TCEQ for the Vulcan Range transferred (TD) and Grenade Range sites. The recommendation of the November 2010 RI reports indicate NFAs will be necessary for the Vulcan Range-TD and Grenade Range sites.

The RI/FS reports for three MMRP sites were sent to the TCEQ in November 2010, with recommendations that RAs were necessary. The Vulcan Range and Y Site (D area) will need remediation (soil and MEC respectively) and institutional controls, and the Tracer Test Range will need a MC contaminated soil removal.

#### **Cleanup Exit Strategy**

Data results from the RI indicate NFA will be necessary for the Vulcan Range-TD and Grenade Range sites.

## **MMRP Previous Studies**

	Title	Author	Date
2001			
	US Army Active/Inactive Range Inventory, Red River Army Depot	USAEC	AUG-2001
2002		1	
	Final Closed, Transferred, and Transferring Range (CTT)/Site Inventory Report, Red River Army Depot, Texas, Camp Stanley Storage Activity, US Army Materiel Command	e2M Inc.	MAR-2002
2004			
	Historical Records Review For Other Than Operational Ranges	US Army Corps of Engineers -Omaha District	AUG-2004
	Draft Conceptual Site Model Military Munitions Response Program Site Inspection, Red River Army Depot, Texas	e2M Inc.	DEC-2004
2005			
	Final Historical Records Review for Other Than Operational Ranges	US Army Corps of Engineers	JAN-2005
2006			
	Final Site Inspection Report, MMRP	e2M/US Army Corps of Engineers, Omaha District	AUG-2006
2010			
	Final Remedial Investigation Report - Grenade Range	Parsons	NOV-2010
	Final Remedial Investigation Report - Vulcan Range TD	Parsons	NOV-2010
	Final Remedial Investigation Report and Feasibility Study - Vulcan Range	Parsons	NOV-2010
	Final Remedial Investigation Report and Feasibility Study - Tracer Test Range	Parsons	NOV-2010
	Final Remedial Investigation Report and Feasibility Study - Y-Site (RRAD-006-R-01)	Parsons	NOV-2010
2011		1	
	Proposed Plan Grenade Range, Tracer Test Range, Vulcan Range, Vulcan Range-TD, and Y Site	Parsons	APR-2011
	Final Decision Document Vulcan Range-TD MRS	Parsons, Austin Texas	JUN-2011
	Final Decision Document Grenade Range MRS	Parsons, Austin Texas	JUL-2011
	Final Decision Document Tracer Test Range MRS	Parsons, Austin Texas	JUL-2011
	Final Decision Document Vulcan Range MRS	Parsons, Austin Texas	JUL-2011
	Final Decision Document Y-Site MRS	Parsons, Austin Texas	JUL-2011
2012		1	
	Final Historical Records Review for the Unpermitted Demolition Areas and Associated Munitions Response Sites	Parsons - Austin Texas	JAN-2012
	Site Inspection at the Unpermitted Demolition Areas and Associated Munitions Response Sites	Parsons	OCT-2012

### **RED RIVER ARMY DEPOT**

Military Munitions Response Program
Site Descriptions

Site ID: RRAD-001-R-01
Site Name: VULCAN RANGE

**STATUS** 

Regulatory Driver: CERCLA

MRSPP Score: 04

Contaminants of Concern: Metals, Munitions and explosives of

concern (MEC)

Media of Concern: Soil

Phases	Start	End
PA	200202	200305
SI	200309	200608
RI/FS	200803	201102
RA(C)	201112	201307
LTM	201307	204207

RIP Date: N/A RC Date: 201307

#### SITE DESCRIPTION

The Vulcan Test Range is located in the southeast portion of the installation and was used from 1969 until the 1990s. The Vulcan Test Range was used for annual qualifying with small caliber handguns and surveillance testing of pistol ammunition and rebuilt weapons testing of 7.62 millimeter (mm), 20 mm, 40 mm rounds, and 155 mm systems, and possibly 105 mm cannons. This range consists of a range fan from the Vulcan Test Range. Maps identifying the firing point and range fans for these munitions were located, but target locations and impact areas were not shown in these maps and, therefore, are unknown. A portion of the Vulcan Test Range lies in an area that is classified as an operational range. The Vulcan Test Range is 480 acres. The Vulcan Test Range is classified as a closed range. Industrial and production facilities are currently located in this former range area. Pb sample measurements range from 141 to 1,930 milligrams per kilogram (mg/kg), and Toxic Characteristic Leaching Procedure (TCLP) Pb sample measurements range from 5.7 to 21.8 mg/kg. Sediment sampling detected Pb concentrations ranging from 251 to 1,010 mg/kg.

In July 2005, a change to the footprint and size of the inactive Vulcan Range and the adjacent active 25 mm weapons test range was requested and was approved by all parties by November 2005.

In 2006, the SI was finalized.

In, November 2010, the RI/FS was. The recommendations for RAs and institutional controls are detailed in the FS. The PP was made available for public comment beginning Feb. 6, 2011, but no public comments were received. The TCEQ approved the RI/FS Feb. 24, 2011.

A contract for RAs was awarded September 21, 2011. A DD was signed on Jan. 17, 2012.

#### **CLEANUP/EXIT STRATEGY**

The RI/FS Report was completed in November 2010. Recommended actions by the FS include a Pb contaminated soil RA with screening for UXO and munitions debris, then warning signs and education and institutional controls, and long term construction support.

The PP dated January 2011 was available through a Public Notice for public viewing and comment in February and March 2011, and no public comments were received.

The TCEQ approved the RI/FS report on Feb. 24, 2011.

The RA (contaminated soil excavation with MEC screening and warning signs) is under contract and has been funded. LUCs such as construction support and five-year reviews will be established as part of LTM phase after the remedial actions are completed.

**Site ID: RRAD-001-R-01** 

**Site Name: VULCAN RANGE** 

Site ID: RRAD-006-R-01

Site Name: D-AREA Y-SITE D060201



Regulatory Driver: CERCLA

MRSPP Score: 04

Contaminants of Concern: Metals, Munitions and explosives of

concern (MEC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	200202	200305
SI	200309	200608
RI/FS	200803	201102
RA(C)	201112	201307
LTM	201307	204207

RIP Date: N/A RC Date: 201307

#### SITE DESCRIPTION

This site is a magazine storage area. An explosion occurred here in 1954, apparently as a result of a lightning strike. The Y site area was used for storage of cluster bombs at the time of the explosion. The final SI report states the site is 411.8 acres. This is based upon a drawing showing maximum distribution of debris found after the bomb site explosion. The site is part of the RRMC, which is a tenant activity that has been identified for mission transfer from RRAD under BRAC 2005, and the property will be retained by RRAD after the BRAC 2005 action is complete.

In 2006, the SI was finalized.

The RI/FS report was completed in November 2010. An RA was contracted and funded in FY11/FY12. The FS recommendation (alternative No.4a) is for LUCs (signage and public education), partial MEC removal in Explosion Site (surface MEC removal for 73 acres and removal to depth of detection for 10 acres), construction support for 73 acres of explosion Site and Buffer, with on call construction support in 10 acres of the explosion site and five-year reviews.

The RI/FS report was approved by the TCEQ Feb. 24, 2011. No public comments were received on the January 2011 PP through the public comment period.

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#### **CLEANUP/EXIT STRATEGY**

The PP, dated January 2011, was available through a public notice for public viewing and comment in February and March 2011, and no public comments were received.

The TCEQ approved the RI/FS report on Feb. 24, 2011. The recommended alternative included a RA to address munitions debris/possible unexploded cluster bombs, and institutional controls to include warning signs, education, and long term construction support.

The RA (searching for and removing ordnance and installing warning signs) was funded and contract fieldwork was completed in 2013. LUCs such as construction support and five-year reviews will be established as part of LTM phase.

Site ID: RRAD-010-R-01
Site Name: TRACER TEST RANGE



Regulatory Driver: CERCLA

MRSPP Score: 05

Contaminants of Concern: Metals, Munitions and explosives of

concern (MEC)

Media of Concern: Soil

Phases	Start	End
PA	200202	200305
SI	200309	200608
RI/FS	200803	201112
RA(C)	201112	201309

RIP Date: N/A RC Date: 201407

#### SITE DESCRIPTION

The (Ammunition Surveillance) Tracer Test Range, formerly known as RRAD-81, is located one-quarter mile northeast of the rifle range. Based upon the aerial footprint of the range, it appears to be approximately 56.84 acres. The 2001 Active/Inactive (A/I) Range Inventory report for RRAD states that the range was used from 1956 to 1973; however, there is a memorandum with an estimated cost for a "Trace Test Range" with drawings from July 1958. The July 29, 1958 RRAD memorandum states "a suitable location for the establishment of a trace test range is available at Red River Arsenal and is located south of LSAAP." It is uncertain if the range was constructed at that time. In November 1963, drawings were made for the barricade backstop of the Tracer Test Range. It is unclear if the site plan represents a new structure or possible modifications to an earlier facility. The Tracer Test Range safety fan is depicted on the 1972 Installation Woodland Management Plan. Aerial photographs from 1955 and 1960 show a road leading to the site location; however, the area appears to be wooded. An aerial photograph from 1968 shows the site location had been cleared of vegetation, suggesting that the site was in use. The 1978 installation assessment refers to the site as "Tracer Bullet Test Range 1940s/1950." The 2001 A/I Range Inventory Report for RRAD classified this range as inactive and referred to it as Range No. 2172-Tracer Test Range.

In 1996, RRAD personnel collected soil and sediment samples in the Tracer Test Area from the target tunnel and adjacent stream bank and bed. The RRAD laboratory analyzed all samples for total Pb, cadmium, and chromium. In addition, the tunnel soil samples were analyzed for total barium (87.9 mg/kg), potassium (160.8 mg/kg), magnesium (204.0 mg/kg), sodium (35.1 mg/kg), strontium (79.6 mg/kg), zinc (57.4 mg/kg), and TCLP Pb (17.8 mg/kg). Soil sample measurements of Pb ranged from 3.2 to 1600 mg/kg. In August 2001, a soil sample was collected from the Tracer Test Range by RRAD personnel and analyzed at the RRAD laboratory for explosives. Explosives were not detected.

In May 2005, e2M Inc. personnel collected samples. Upon analysis a portion had copper, Pb, and antimony above Texas Risk Reduction Program (TRRP) Tier 1 PCL's and RRAD installation-specific background levels.

In 2006, the SI was finalized.

In 2009, fieldwork for the RI/FS was completed.

The Final Remedial Investigation Report and Feasibility Study (November 2010) and Proposed Plan (January 2011) recommends excavation (dig and haul) of a .069 acre [~1000 cubic yards (cy)] area in and around the target tunnel, to remove to off-post Pb and copper contaminated soil after sifting bullet debris from that soil, then restore site with clean fill.

The area of the range needing remediation, around the former shot trap tunnel, is in a remote wooded area with access available through unimproved fire trails.

The TCEQ approved the RI/FS Feb. 24, 2011. There were no public comments received on the January 2011 PP. The DD was signed Aug. 21, 2011. A contract for the RA(C) has been awarded, and funding was received in FY12 to accomplish the remediation.

Site ID: RRAD-010-R-01
Site Name: TRACER TEST RANGE

#### **CLEANUP/EXIT STRATEGY**

The PP dated January 2011 was available through a Public Notice for public viewing and comment in February and March 2011, but no public comments were received.

The TCEQ approved the RI/FS report on Feb. 24, 2011. Approved actions included a soil removal to include excavation, and off-site transportation and disposal.

Based upon RI data, the excavation action recommended by the FS was planned to be limited to excavating and removing the target tunnel and contents, and nearby Pb and copper contaminated soil.

Under contract the soil was excavated and stabilized in 2012, and the stockpiled soil is covered at the site and awaiting dry weather for calendar year (CY) 2013 hauling to a landfill for disposal. After landfilling, final site grading and removal of storm water controls will be completed by the contractor and a report will be prepared.

## Site ID: RRAD-011-R-01 Site Name: DEMOLITION AREA CREEKS

STATUS

Regulatory Driver: CERCLA

MRSPP Score: Evaluation pending

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC), Perchlorate

Media of Concern: Sediment, Surface Water

Phases	Start	End
PA	199911	200001
RI/FS	201301	201501
RD	201502	201503
RA(C)	201503	201709

RIP Date: N/A RC Date: 201709

#### SITE DESCRIPTION

Intermittent drainage creeks around the OB/OD area have been the subject of storm water sampling since the mid-1990s, and perchlorate was commonly detected during analysis. Shrapnel and other metallic debris are commonly observed in creeks. The OB/OD areas ceased permitted operations in March 2011. The OB/OD is probably the source of creek contamination as a result of decades of demolition of obsolete, off-specification, or unneeded ammunition and ammunition components. A contracted SI report was completed dated October 2012. At this site the SI Report states that there was detection of contaminants of potential concern (COPC) in surface water for cadmium, copper, lead, and perchlorate, and in sediment the COPCs detected and with an unacceptable risk to ecological receptors were barium, cadmium, copper, lead, and mercury. Per the SI Report areas of the intermittent drainage creeks were of such high density of MEC that it is classified as saturated. A contract was awarded in FY11 with options for performing a RFI and CMS, which are contract options that have not yet been completed. The RFI is under contract and funded (fieldwork will begin in FY13). The SI Report results indicate that it will be necessary to do a design engineering study (DES) and a CMI(C).

#### **CLEANUP/EXIT STRATEGY**

An RFI will be underway beginning in FY13. A CMS is planned as a contract option in FY14. A DES is planned in FY15, and MEC removal and contaminated sediment removal actions are planned beginning in FY15.

## Site ID: RRAD-011-R-02 Site Name: DEMO. AREA WASHRACK/STORAGE/TRAILS

STATUS

Regulatory Driver: CERCLA MRSPP Score: Evaluation pending

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC), Perchlorate,

Petroleum, Oil and Lubricants (POL)

Media of Concern: Building Decontamination, Soil

Phases	Start	End
PA	200603	200604
RI/FS	201110	201501

RIP Date: N/A RC Date: 201501

#### SITE DESCRIPTION

This site consists of an inactive washrack, a bulldozer parking area, and dirt trails for bulldozers and other vehicles leading from the permitted OD and two OB areas (which ceased operating in March 2011) to the washrack and adjacent parking area. A washrack (structure No. 1056) is approximately 1000 feet from the permitted areas, and was used to clean bulldozers and other mobile equipment utilized for OB/OD operations. Potentially contaminated vehicles were typically driven on dirt trails to the washrack and adjacent parking areas. The OB/OD areas were used for several decades of demolition of obsolete, off-specification, or unneeded ammunition and ammunition components.

A SI report dated October 2012 stated that an unacceptable risk to ecological receptors is possible due to exposure to copper, lead, and mercury in surface soil, and a human health risk due to exposure to nitroglycerine in surface soil.

A RF) has been contractually funded and will begin fieldwork in FY13. Operations potentially affected by OB/OD operations have to be fully environmentally investigated as the OB/OD mission requirement has ended, and that further investigation during FY13-FY14 during the RFI phase will refine the extent of the RAs necessary. The OB/OD mission, which was the probable contamination source, ceased operations due to a BRAC 2005 realignment. The RRAD-011-R-02 site may have been considered in the past part of the never investigated former RRAD-50 active site (OB/OD Area). This estimate is separate from an OB/OD Areas (permitted) site CC-002-RR, and also separate from Demolition Area Creeks site RRAD-011-R-01 and Unpermitted Demolition Areas site RRAD-011-R-03, all of which are separate adjacent sites.

The SI report identified contamination of risk to ecological receptors and human health so a RFI has been funded. The SI sampling was not of sufficient extent to exactly determine the areas of the site that will require RA. The completion of the RFI and CMS will identify any necessary RAs.

#### **CLEANUP/EXIT STRATEGY**

An RFI will be beginning in FY13. The results of the RFI will determine if further future actions are necessary.

# Site ID: RRAD-011-R-03 Site Name: UNPERMITTED DEMOLITION AREAS

**STATUS** 

Regulatory Driver: CERCLA

MRSPP Score: Evaluation pending

Contaminants of Concern: Explosives, Metals, Munitions and explosives of concern (MEC), Munitions constituents (MC).

Perchlorate

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	.200304	.200305
RI/FS	.201009	.201501

**RIP Date:** N/A **RC Date:** 201501

#### SITE DESCRIPTION

This is an inactive unpermitted portion surrounding the formally permitted OB/OD areas, and includes possible ammunition trench or pit burning areas, a white phosphorus burning area, debris storage areas, and areas affected by permitted OB/OD fragmentation and kick-out. The areas are a mixture of pine forested and grassy/brushy fields. The OB/OD demilitarization mission was identified as excess to Army requirements and the permitted portion ceased operations in March 2011 due to BRAC 2005.

The unpermitted OB/OD area will have to be fully environmentally investigated. The actual permitted acreage of the OB/OD area is 30.54 acres, but the area observed effected within explosive fragmentation distance along with adjacent areas suspected of having similar demilitarization operations has been estimated at 590.7 acres per the Final Site Inspection Report, Unpermitted Demolition Areas and Associated Munitions Response Sites, dated Oct. 24, 2012. The site does not include storm water drainage channels and equipment trails associated with a washrack, both of which have been split into separate estimates.

From sampling conducted during the SI, there was determined to be an unacceptable risk to human health from 2,4-dinitrotoluene and lead in surface soil, and to ecological receptors in surface soil from 2,4-dinitrotoluene, chromium, copper, lead and mercury.

It has been decided that this contamination will need to be fully investigated. The SI report dated October 2012 has been submitted to the TCEQ for review.

An RFI phase that includes a full investigation for both MEC and MC contamination was funded in FY13 as task 9 under contract W912DY-09-D-0062-0007 at a cost of \$269,679.00, with a contract expiration date of Nov. 30 2014. The RFI/CMS contract tasks that are applicable numbers nine and 12. Note that the contract denotes phases RI/FS instead of RFI/CMS. AEDB-R is possibly incorrect as CERCLA terminology RI/FS might be more proper than RCRA terminology RFI/CMS.

The CMS has not yet been funded.

Before the SI, this site was estimated as 251.46-acres. The HRR estimated the area as 609 acres. The SI report estimates the size from approximately 590.7-acres to 600.8-acres.

#### **CLEANUP/EXIT STRATEGY**

In FY11 a contract was awarded for an HRR archival search report as the start of the RFI phase.

A "Final SI Report, Unpermitted Demolition Areas and Associated Munitions Response Sites" was completed dated Oct. 24 2012, which determined for this MRS based upon limited sampling that there were concentrations of dinitroluene and metals of unacceptable risk, and further (RFI)investigation was warranted.

Fieldwork for the RFI will be conducted in FY13.

If RFI results do warrant further action funding for the CMS is planned as a contract option in FY14.

# Site ID: RRAD-011-R-03 Site Name: UNPERMITTED DEMOLITION AREAS

If necessary , other possibilities are a DES in FY15, and MEC and soil removal actions performed beginning in FY15, followed by LTM for UXO Construction Support.

# **Site Closeout (No Further Action) Summary**

Site ID	Site Name	NFA Date	Documentation
RRAD-002-R- 01	VULCAN RANGE - TD	201109	The Texas Commission on Environmental Quality concurred with the November 2010 Vulcan Range-TD Remedial Investigation Report recommendation of No Further Action per a letter dated February 24, 2011.
RRAD-003-R- 01	POPPING FURNACE, BLDG 722	200305	Covered under IRP site RRAD-62
RRAD-004-R- 01	POPPING FURNACE, BLDG 1027	200305	Covered under IRP site RRAD-63
RRAD-005-R- 01	POPPING FURNACE, BLDG 1025	200305	Covered under IRP site RRAD-63
RRAD-007-R- 01	GRENADE RANGE	201109	The Texas Commission on Environmental Quality concurred with the November 2010 Grenade Range Remedial Investigation Report recommendation of No Further Action per a letter dated February 24, 2011.

### **MMRP Schedule**

#### Date of MMRP Inception 199911

#### **Past Phase Completion Milestones**

2000

PA (RRAD-011-R-01 - DEMOLITION AREA CREEKS)

2003

PA (RRAD-001-R-01 - VULCAN RANGE, RRAD-002-R-01 - VULCAN RANGE - TD, RRAD-003-R-01 -

POPPING FURNACE, BLDG 722, RRAD-004-R-01 - POPPING FURNACE, BLDG 1027, RRAD-005-R-01 - POPPING FURNACE, BLDG 1025, RRAD-006-R-01 - D-AREA Y-SITE D060201, RRAD-007-R-01 - GRENADE RANGE, RRAD-010-R-01 - TRACER TEST RANGE, RRAD-011-R-03 - UNPERMITTED

**DEMOLITION AREAS)** 

2006

SI (RRAD-001-R-01 - VULCAN RANGE, RRAD-002-R-01 - VULCAN RANGE - TD, RRAD-006-R-01 - D-

AREA Y-SITE D060201, RRAD-007-R-01 - GRENADE RANGE, RRAD-010-R-01 - TRACER TEST RANGE)

PA (RRAD-011-R-02 - DEMO. AREA WASHRACK/STORAGE/TRAILS)

2011

RI/FS (RRAD-001-R-01 - VULCAN RANGE, RRAD-002-R-01 - VULCAN RANGE - TD, RRAD-006-R-01 - D-

AREA Y-SITE D060201, RRAD-007-R-01 - GRENADE RANGE)

2012

RI/FS (RRAD-010-R-01 - TRACER TEST RANGE)

#### **Projected Phase Completion Milestones**

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

Site ID Site Name ROD/DD Title ROD/DD Date

Final RA(C) Completion Date: 201709

Schedule for Next Five-Year Review: 2018

Estimated Completion Date of MMRP at Installation (including LTM phase): 204207

#### **RED RIVER ARMY DEPOT MMRP Schedule**

						= phase u	ınderway
SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
VULCAN RANGE	LTM						
SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
D-AREA Y-SITE D060201	LTM						
SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
DEMOLITION AREA CREEKS	RI/FS						
	RD						
	RA(C)						
SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
DEMO. AREA	RI/FS						
WASHRACK/STORAGE/TRAILS							
SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
UNPERMITTED DEMOLITION AREAS	RI/FS						
	SITE NAME D-AREA Y-SITE D060201  SITE NAME DEMOLITION AREA CREEKS  SITE NAME DEMO. AREA WASHRACK/STORAGE/TRAILS SITE NAME	VULCAN RANGE  SITE NAME D-AREA Y-SITE D060201  LTM  SITE NAME DEMOLITION AREA CREEKS  RD RA(C)  SITE NAME DEMO. AREA WASHRACK/STORAGE/TRAILS SITE NAME PHASE PHASE RI/FS RI/FS	VULCAN RANGE  SITE NAME D-AREA Y-SITE D060201  SITE NAME DEMOLITION AREA CREEKS  RD RA(C)  RA(C)  SITE NAME DEMO. AREA WASHRACK/STORAGE/TRAILS SITE NAME PHASE FY14  RI/FS  RD RA(C)  RA(C)  PHASE FY14  RI/FS  PHASE FY14	VULCAN RANGE  SITE NAME D-AREA Y-SITE D060201  SITE NAME DEMOLITION AREA CREEKS  RD RA(C)  SITE NAME DEMO. AREA WASHRACK/STORAGE/TRAILS SITE NAME PHASE RI/FS	VULCAN RANGE         LTM           SITE NAME         PHASE         FY14         FY15         FY16           D-AREA Y-SITE D060201         LTM         FY15         FY16           SITE NAME         PHASE         FY14         FY15         FY16           DEMOLITION AREA CREEKS         RI/FS         RD         RA(C)         RA(C)         RA(C)         RA(C)         RI/FS         FY14         FY15         FY16           DEMO. AREA WASHRACK/STORAGE/TRAILS SITE NAME         PHASE         FY14         FY15         FY16	VULCAN RANGE         LTM           SITE NAME         PHASE         FY14         FY15         FY16         FY17           D-AREA Y-SITE D060201         LTM         FY15         FY16         FY17           SITE NAME         PHASE         FY14         FY15         FY16         FY17           DEMOLITION AREA CREEKS         RI/FS         RD         RA(C)         RA(C)         RA(C)         RA(C)         RI/FS         FY14         FY15         FY16         FY17           DEMO. AREA WASHRACK/STORAGE/TRAILS SITE NAME         PHASE         FY14         FY15         FY16         FY17	VULCAN RANGE

# RED RIVER ARMY DEPOT Army Defense Environmental Restoration Program Compliance Restoration

## **CR Summary**

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 2/1

Installation Site Types with Future and/or Underway Phases

1 Above Ground Storage Tank (CC-006-RR)

**Most Widespread Contaminants of Concern** 

Petroleum, Oil and Lubricants (POL)

**Media of Concern** 

Groundwater, Soil

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID Site Name Action Remedy FY

N/A

**Duration of CR** 

Date of CR Inception: 200304

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201401/201401

Date of CR completion including Long Term Management (LTM): 201401

### **CR Contamination Assessment**

#### **Contamination Assessment Overview**

Leaking underground fuel lines from ASTs to the pump island were discovered in 2010. The fuel lines were purged, disconnected, replaced, and soil in immediate vicinity of trenching was replaced, but during soil investigation (Weston report, March 2011) soil samples above Texas Petroleum Storage Tank (PST) action levels for benzene were noted.

During preparation of an Assessment Report (Baer Engineering, November 2011) there were 15 monitoring wells installed. The groundwater constituents exceeding Texas Target Cleanup Goals were: benzene, ethylbenzene, and napthalene. During this assessment the soil constituents exceeding Texas Cleanup Goals were: benzene. The sampling for the Assessment Report was not able to fully determine rate and extent of the contamination. Current plans are for further assessment and quarterly groundwater sampling.

#### **Cleanup Exit Strategy**

Complete an assessment of soil and groundwater contaminant plumes and evaluate site conditions to determine the need for corrective action.

# **CR Previous Studies**

	Title	Author	Date
2010			
	Red River Army Depot, Texas, Facility 393 Site Characterization	U.S. Army Corps of Engineers, Omaha District	SEP-2010
2011			
	Release Determination Report	Weston Solutions Inc, Omaha NE	MAR-2011
	Petroleum Storage Tank Assessment Report	Baer Engineering	NOV-2011
2012		1	
	Assessment Report Form Addendum, Bldg 393	Baer Engineering	MAY-2012
	Response to Comments and Site Closure Request Form Submittal, Building 393	Baer Engineering	SEP-2012

# **RED RIVER ARMY DEPOT**

**Compliance Restoration Site Descriptions** 

Site ID: CC-006-RR

Site Name: Fuel Station, Building 393

STATUS

Regulatory Driver: RCRA

Contaminants of Concern: Petroleum, Oil and Lubricants

(POL)

Media of Concern: Groundwater, Soil

Phases	Start	End
ISC	201006	201103
CAP	201108	201401

RIP Date: N/A RC Date: 201401

#### SITE DESCRIPTION

The Fuel Station is the current dispensing station for fueling vehicles and a supply site for fuel piped to the nearby Dynamometer Shop, Bldg 373 (AEDB-R site RRAD-37). The central office building associated with the Fuel Station is Bldg 393. The site has nine ASTs (7 currently in use) and a pump island supplied by underground lines from two on-site AST farms. The fenced acreage of the Fuel Station is about 0.87 acres. Soil and groundwater boring samples associated with repair of a leaking underground line discovered in 2009 resulted in a July 11, 2011 letter from the TCEQ requiring additional investigation with assignment as Leaking Petroleum Storage Site (LPST) identification number 118592. Additional samples during a completed 2011 Corrective Action Plan assessment exceeded state soil (benzene and toluene) and groundwater (benzene) action levels. This was reported in a November 2011 assessment report which had TCEQ concurrence in December 2012. Responding to a Nov. 15, 2012 TCEQ request, during the week of Jan. 7, 2013, the 19 monitor wells at the site were resampled and additional soil sampling occurred.

During January and February 2013 there were explosive vapor levels detected in the building 393 men's restroom floor drain, which has been closed with a non-vented cap as a result. The vapors which set off the lower-explosive-limit portable meters may have been from methane from sewage decomposition in the drain line.

The results of the January 2013 groundwater and soil sampling are pending.

Documentation is not yet available to determine an estimate for a CTC for any further environmental actions. The fact that there are ASTs, concrete berms, buildings and pavement could make remediation projects very expensive.

#### **CLEANUP/EXIT STRATEGY**

The cleanup/exit strategy is to complete an assessment of soil and groundwater contaminant plumes and evaluate site conditions to determine the need for corrective action.

# Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
CC-002-RR	Open Burning/Open Detonation Areas	201103	

## **CR Schedule**

Date of CR Inception: 200304

**Past Phase Completion Milestones** 

2003

RFA (CC-002-RR - Open Burning/Open Detonation Areas)

2011

ISC (CC-006-RR - Fuel Station, Building 393)

**Projected Phase Completion Milestones** 

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

To Be Determined

Final RA(C) Completion Date:

Schedule for Next Five-Year Review: 2018

Estimated Completion Date of CR at Installation (including LTM phase): 201401

#### **RED RIVER ARMY DEPOT CR Schedule**

							= phase u	ınderway
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
CC-006-RR	Fuel Station, Building 393	CAP						

## **Community Involvement**

Technical Review Committee (TRC): None

Community Involvement Plan (Date Published): 201211

Restoration Advisory Board (RAB): RAB established 199602

RAB Adjournment Date: N/A RAB Adjournment Reason: None

#### **Additional Community Involvement Information**

A Community Involvement Plan (CIP) for Red River Army Depot dated November 2012 was prepared by PB&A Inc. Part of the CIP preparation involved community interviews conducted September 24-27, 2012.

The RRAD established an active RAB on Feb. 2, 1996 for BRAC 1995. The RAB has been inactive throughout the BRAC 2005 process due to a lack of public interest.

The Proposed Plan for Grenade Range, Tracer Test Range, Vulcan Range, Vulcan Range-TD and Y Site, dated January 2011, was available for public comment for 30 days (from Feb. 6, 2011 through March 9th, 2011). The Plan was referenced by the newspaper legal notice as being available for review at the Texarkana College Library RRAD information depository and was referenced as available for viewing at a web site. The RRAD published legal notice asked for public comments and input, and there were no public comments.

On June 8, 2011, RRAD published a legal notice in the Texarkana Gazette newspaper concerning the renewal application and major amendments to our hazardous/solid waste permit and Compliance Plan. The only response was a concurrence received from the ARK TEX Council of governments on July 5, 2011. There was no public response or interest received. The compliance major amendments concerned addition of IRP sites (RRAD-35, -36, -37, -43, -56, -60, and -71) groundwater monitoring formerly to the Compliance Plan.

On Oct. 12, 2011, a legal notice published in the Texarkana Gazette newspaper for an Air Permit Renewal for Boiler Plant Permit No. 8315A received a favorable response from ARK-TEX Council of governments (Nov. 2, 2011). There was no public response (no interest expressed).

As part of waste permit/compliance plan 10 year renewal with major amendment, there was on Oct. 18, 2012 a legal notice in the Texarkana Gazette newspaper and broadcast on radio station KKYR. No comments or queries were received by RRAD during the following 30 day comment period, and subsequently TCEQ issued the renewed permit on Dec. 14, 2012. This was the most recent equivalent to soliciting for public involvement.

New interest is gauged through newspaper legal notices and public meetings on permit modifications and there has not been any public response, thus RRAD has not re-established a RAB for BRAC 2005 or the active side. There has not been any public response or attendance to any legal notices in the last several years.

Other past newspaper advertisements soliciting public interest for environmental permit changes ran on Dec. 19, 2005, Jan. 2, 2007, Oct. 5, 2007, Dec. 21, 2007, March 26, 2009, Dec. 9, 2010, Feb. 6, 2011, June 8, 2011, and Oct. 18, 2012. Public meetings for environmental permit changes were held Jan. 25, 2006 and Jan. 29, 2007. The only non-Army response to newspaper public legal notices or attendance at meetings was by a representative for the ARK-LA-TEX Council of governments, who had no negative comments.

The RRAD has a Public Affairs Program Plan, which was last updated in July 2003.

#### Administrative Record is located at

Red River Army Depot Environmental Division ATTN: TARR-OL Texarkana, Texas 75507-5000 Phone (903)-334-4984

#### Information Repository is located at

# **Community Involvement**

Texarkana College Palmer Memorial Library 2500 N. Robison Road (library parking is off of Tucker St.) Texarkana, Texas 75599 Phone (903)-334-4984

Current Technical Assistance for Public Participation (TAPP):N/A

TAPP Title: N/A

Potential TAPP: N/A

# EXHIBIT D - PRELIMINARY WETLAND DETERMINATION

#### PRELIMINARY WETLAND DETERMINATION & DELINEATION

#### FOR THE

#### **TEXAMERICAS CENTER CENTRAL CAMPUS**

#### **CREATED FOR:**

MTG ENGINEERS & SURVEYORS 5930 SUMMERHILL ROAD TEXARKANA, TEXAS 75503

PREPARED BY:



PO Box 452 Sulphur Springs, Texas 75483

**DECEMBER 2014** 

#### Preliminary Wetland Determination & Delineation TexAmericas Center Central Campus New Boston, Bowie County, Texas

#### **SUMMARY**

Hoffman Environmental, Inc. (HEI) has been requested and authorized by MTG Engineers & Surveyors (MTG) to conduct a preliminary wetland determination and delineation associated with mostly undeveloped, vacant property, located south of Hwy. 82, and east of New Boston, Texas, for the purpose of identifying potentially jurisdictional waters of the U.S. The purpose of the investigation is to collect data for use in making a preliminary jurisdictional wetland determination pursuant to federal regulations and guidance set forth by the Clean Water Act and the Fort Worth District - U.S. Army Corps of Engineers (USACE).

The project site is located south of Hwy. 82, approximately 3.5 miles east of New Boston, Bowie County, Texas. The site consists of approximately 101 acres of mostly undeveloped property that was previously part of the Red River Army Depot. The northwest corner of the property is currently being utilized as a power pole storage yard. In a broad, landscape context, the project site consists of tertiary uplands located on the second terrace adjacent to an alluvial valley. This area is located in the South Central Ecoregion of Texas which consists mostly of irregular plains that were once blanketed by oak-hickory-pine forests, but are now predominantly in loblolly and shortleaf pine

Based on the field investigation, it appears that the project site contains potentially jurisdictional waters of the U.S. as defined by the USACE. These features consist of two ephemeral stream channels, three areas of emergent wetland habitat, and nine areas of forested wetland habitat. No other waters of the U.S. were identified within the project boundaries. No threatened or endangered species habitat was encountered during the investigation. Preliminary archival research indicated that no documented archaeological sites or historic properties occur within the project site. However, based on the topographic setting of the project site, the likelihood of finding currently unidentified archaeological sites is moderate.

This investigation and report have been prepared on behalf of, and for the exclusive use of, MTG Engineers & Surveyors., solely for use in the preliminary wetland determination & delineation and threatened/endangered species investigation of the project site. This report and the findings contained herein shall not in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior written consent of MTG Engineers and Surveyors.

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- B Wetland Delineation Data Sheets
- C Cultural Resources Archival Review

#### I. INTRODUCTION

Hoffman Environmental, Inc. (HEI) was requested and authorized by MTG Engineers & Surveyors (MTG) to conduct a preliminary wetland determination & delineation (PWD) of an approximate 101-acre project site located near New Boston, Bowie County, Texas. The purpose of the investigation is to collect data for use in making an on-site preliminary wetland determination and delineation of waters of the U.S. boundaries consistent with the regulations and guidelines set forth by the Clean Water Act and the USACE - Fort Worth District. On-site investigations were conducted on November 3 and 6, 2014.

#### II. PROJECT SITE & LOCATION

The project site is located south of Hwy. 82, approximately 3.5 miles east of New Boston, Bowie County, Texas (Figure 1). The site consists of approximately 101 acres of mostly undeveloped property that was previously part of the Red River Army Depot. The northwest corner of the property is currently being utilized as a power pole storage yard. In a broad, landscape context, the project site consists of tertiary uplands located on the second terrace adjacent to an alluvial valley. This area is located in the South Central Ecoregion of Texas which consists mostly of irregular plains that were once blanketed by oakhickory-pine forests, but are now predominantly in loblolly and shortleaf pine.

#### III. INVESTIGATION METHODS

#### **Agency Resource Information**

Prior to the field investigation, HEI personnel gathered and reviewed information from various sources to identify and map potential waters of the U.S. within and adjacent to the project site, as well as in the general vicinity of the project. Additionally, information was gathered and reviewed regarding known and/or potential populations of threatened and endangered species. Specifically, the information reviewed prior to the field investigation was obtained from, but not limited to, the following sources:

- 2004 2010 National Agriculture Imagery Program (NAIP) Aerial Imagery
- United States Geological Survey (USGS) 7.5-Minute Topographic Maps
- United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey
- United States Fish and Wildlife Service's (USFWS) threatened and endangered species list for Bowie County, Texas
- Texas Parks and Wildlife species list for Bowie County, Texas

#### **Wetland Delineation**

The wetland investigation was performed in association with this project were conducted in accordance with the "Routine On-Site Determination Method" as described in the *U.S. Army Corps of Engineers Wetland Manual* (1987) and the *U.S. Army Corps of Engineers - Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* (Version 2.0) (November 2010). Plant identifications were made using several sources of information, including *Aquatic and Wetland Plants of the Southeastern United States* (Godfrey and Wooten, 1979). Munsell Soil Color Charts (Revised 2009) were used to identify the hue, value, and chroma of soil profiles.

The objectives of the investigation included the following tasks:

- Review of available historical aerial photographs, topographical maps, and soil surveys of the project site; and
- On-site inspection to identify dominant plant species, soil properties, and hydrological characteristics typical of a wetland environment; and
- On-site inspection to conduct a threatened & endangered species investigation; and
- Create a final report that includes a general description of the project site, methodology, and a statement of results and discussion.

Following the resource review, the project site was inspected by HEI biologists to document the presence, location, and nature of potential jurisdictional waters of the U.S. The project site was traversed utilizing pedestrian surveys and all-terrain equipment. The on-site inspection consisted of locating and documenting dominant plant species, soil properties, and hydrological characteristics typical of a wetland environment. Soil properties were evaluated with an adequate number of on-site sampling locations (Appendix B – Data Sheets).

Potential jurisdictional waters of the U.S. were identified on the project site during the investigation. HEI representatives designated each of these areas on the ground with pink flagging and/or pin flags, and on the accompanying Waters of the U.S. maps. A correlating description and photographs (Appendix A) for each area are included in the following section of this report. Each description includes the type of jurisdictional feature encountered and acreage of the area occurring within the project site.

#### **Threatened & Endangered Species Investigation**

HEI personnel investigated the proposed project area for the presence of federally listed threatened and endangered species habitat, or those proposed for listing, and render an opinion regarding the likely presence, or lack of presence of these species. Vegetative communities were characterized based on dominant species and were used to determine if habitat suitable for federally listed species was present.

#### **Cultural Resources Review**

As part of this investigation, information from the Texas Historical Commission's (THC) *Texas Archeological Sites Atlas* website was reviewed on-line to determine if any historic properties are recorded on or in close proximity to the project site.

#### IV. RESULTS

#### Waters of the U.S.

Using the investigation methods mentioned above, as well as our professional judgment, HEI personnel identified fourteen potentially jurisdictional features located within the proposed project site (Figures 2 & 3). These features consisted of two ephemeral stream channels, three areas of emergent wetland habitat, and nine areas of forested wetland habitat. No other waters of the U.S. were identified within the project boundaries. These features are described in detail below and in Table 1 of this report.

#### Ephemeral Streams – 2,700 linear feet

Two ephemeral tributaries of Panther Creek, totaling 0.4 acres, were identified during the investigation. The first ephemeral stream identified on the project site was 1,995 feet (ft) in length and crosses the site

on the west side and runs in a north-south direction. The majority of this stream channel's bed and bank characteristics appear to be natural and unaltered. This stream had an ordinary high water mark (OHWM) of 4 to 6 ft and 1 to 2 ft banks (Photographs 3 & 4). The watershed for this stream is very small and does not appear to have groundwater influence. The habitat adjacent to this stream consists of upland native mixed pine/hardwood and forested wetland habitat described in the sections on *Non-Jurisdictional Habitat* and *Forested Wetlands*, respectively.

The second ephemeral stream is located in the northeast corner of the project site and is approximately 705 ft in length. This stream had an OHWM of 6 to 8 ft and 1 ft banks. Based on channel characteristics, course of the stream, and site topography, it appears the channel was created many years ago to facilitate adequate drainage for property to the east for the site (Photographs 1 & 2). The channel is located in primarily flatwoods habitat with little to no topographic relief. Due to the age of the constructed channel, naturalized channel characteristics, and the connectivity to downstream drainage features, it is the opinion of HEI that this channel would likely be considered as jurisdictional as an other waters of the U.S. The watershed for this stream is very small and does not appear to have groundwater influence. The habitat adjacent to this stream consists of upland, native, mixed pine/hardwood. A more detailed description of this habitat can be found in the section on *Non-Jurisdictional Habitat*.

Both of these streams were characterized as ephemeral due to the lack of groundwater influence, small watershed size, normal flows that typically occur in conjunction with stormwater runoff, and the runoff characteristics of the soils. For these reasons, surface water is available in these stream channels only after storm events or during the wetter periods of winter and spring.

#### Emergent Wetlands – 8.5 acres

The project site contains approximately 8.5 acres of emergent wetland habitat. The emergent wetland habitat is characterized as maintained, native, field habitat. The vegetative community consists of predominantly native species and is regularly maintained by mowing (Photographs 5-11). Dominant vegetation within this habitat type consists of vasey grass (*Paspalum urvillei*), bushy bluestem (*Andropogon glomeratus*), broomsedge bluestem (*Andropogon virginicus*), round-head rush (*Juncus validus*), smartweed (*Polygonum* spp.), panic grass (*Panicum* spp.), beaked panicum (*Panicum anceps*), Louisiana caric sedge (*Carex louisianica*), eastern annual saltmarsh aster (*Symphyotrichum subulatum*), Bermuda grass (*Cynodon dactylon*), swamp sunflower (*Helianthus angustifolius*), threeawn (*Aristida* spp.), slender wood-oats (*Chasmanthium laxum*), and smutgrass (*Sporobolus indicus*).

The mapped soils within this habitat type consist of the Adaton-Muskogee complex (1) and the Annona loam, 1 to 3 percent slopes (4). Both of these series are listed as hydric soils on the state and national hydric soils list. The mapped soils within this habitat type consist of the Adaton-Muskogee complex (1) and the Annona loam, 1 to 3 percent slopes (4). Both of these series are listed as hydric soils on the state and national hydric soils list. Several soil sample locations were also evaluated within this habitat type across the project site. The typical soil profile observed from 0 to 18 inches, had a matrix color of 10YR 6/2 (80%), with 10YR 4/6 (20%) redox features, and a silt loam texture (Data Sheet EWL). Primary and secondary indicators of wetland hydrology observed within this habitat type included oxidized root channels in the upper 12 inches of the soil profile and crayfish burrows.

#### Forested Wetlands – 3.1 acres

The project site contains nine areas of forested wetland habitat that total approximately 3.1 acres. All of the forested wetland habitat located within the project site is located outside the 100-year floodplain, and was associated with rainfall-dependent, flatwoods landforms. A general characterization for this habitat is an uneven-aged, hardwood community dominated by oak species (Photographs 12-16). As mentioned, this habitat consists of an oak-dominated, uneven-age forest that has remained undisturbed for many years. The midstory and understory condition is relatively open with very little herbaceous growth on the

forest floor. The dominant vegetation consists of willow oak (*Quercus phellos*), water oak (*Quercus nigra*), red maple (*Acer rubrum*), common persimmon (*Diospyros virginiana*), green ash (*Fraxinus pennsylvanica*), Louisiana caric sedge, broomsedge bluestem, cat greenbrier (*Smilax glauca*), smartweed, common deerberry (*Vaccinium stamineum*), possumhaw (*Ilex decidua*), Indian woodoats (*Chasmanthium latifolium*), and climbing star-jasmine (*Trachelospermum difforme*).

The mapped soils within this habitat type consist of the Adaton-Muskogee complex (1) and the Annona loam, 1 to 3 percent slopes (4). Both of these series are listed as hydric soils on the state and national hydric soils list. Several soil sample locations were also evaluated within this habitat type across the project site. The typical soil profile observed from 0 to 18 inches, had mixed matrix colors of 10YR 7/1 (80%) and 10YR 6/2 (5%), with 10YR 4/6 (15%) redox features, and a silt loam texture (Data Sheet FWL). Primary and secondary indicators of wetland hydrology observed within this habitat type included sediment deposits, oxidized root channels in the upper 12 inches of the soil profile, water-stained leaves, and crayfish burrows.

Table 1. Summary of potential jurisdictional waters of the U.S. and non-jurisdictional features located within the TexAmericas Center Central Campus Project.

Feature	Water Body	OHWM	Length	Acreage	
Waters of the U.S.					
Forested Wetland	Depression	-	-	3.1	
Emergent Wetland	Depression	-	-	8.5	
Ephemeral Streams (2)	Tributary of Panther Creek	4-8	2,700	0.4	
Total			2,700	12.0	
Non-Jurisdictional Habitat					
Native Pine/Hardwood	NA	-	-	10	
Cleared & Maintained Field	NA	-	-	79	
Total				89	
Total			2,700	101	

#### **Non-Jurisdictional Habitat**

The remainder of the project site, approximately 89 acres, consists of upland habitat typical of the region. Upland portions of the project site consist of native mixed pine/hardwood forested habitat and cleared and maintained field habitat. In general, the upland habitats encountered within the project site boundaries contained soils that exhibited no hydric characteristics, vegetative communities commonly found on upland to mesic sites, and no signs of hydrology that would indicate frequent flooding, ponding, or saturation.

Based on review of the NRCS Web Soil Survey, the mapped soil types within the upland portions of the project site consist of the Adaton-Muskogee complex (1), Annona loam, 1 to 3 percent slopes (4), and Sawyer silt loam, 0 to 3 percent slopes (36). All of these series are listed as hydric soils on the state and national hydric soils list; however, no hydric soils were observed within the upland portions of the project site.

#### Cleared & Maintained Field – 79 acres

The first non-jurisdictional habitat to be described consists of cleared and maintained fields or open ground (Photographs 17-23). Based upon review of historical aerial photographs, this habitat appears to have been dominated by native, pine/hardwood forest, similar to the habitat described in the previous section.

The vegetative community in this habitat type was dominated by ragweed (Ambrosia artemisiafolia), wooly croton (Croton capitatus), horse-nettle (Solanum carolinense), broomsedge bluestem, dogfennell (Eupatorium capillifolium), Aster (Aster spp.), little bluestem (Schizachyrium scoparium), silk-grass (Heterotheca graminifolia), bahia grass (Paspalum notatum), buttonweed (Diodia teres), saw greenbrier (Smilax bona-nox), purpletop (Tridens flavus), threawn, Bermuda grass, knotroot bristle grass (Setaria geniculata), and southern dewberry (Rubus trivialis).

Several soil sample locations were also evaluated within this habitat type across the project site. In general, there were no hydric soil characteristics observed at any of the sampling locations. However, one primary indicator of wetland hydrology observed at several sampling locations consisted of oxidized rhizospheres on iving roots. The typical soil profile observed from 0 to 18 inches, had mixed matrix colors of 10YR 6/3 (60%), 10YR 6/2 (10%), and 10YR 5/3 (25%), with 10YR 5/6 (5%) redox features, and a silt loam texture (Data Sheet UPL Field).

#### Native Mixed Pine/Hardwood – 10 acres

The second non-jurisdictional habitat to be described consists of native, uneven-aged, mixed, pine/hardwood, forest (Photographs 24-27). This habitat type is primarily located adjacent to the previously described ephemeral streams, and functions as riparian corridors. The remaining habitat is located on the eastern edge of the project site and adjacent to forested wetland habitat located in swales. The overstory component is dominated mature pine and hardwood species. The midstory vegetation is sparse and the understory vegetation consists primarily of herbaceous and shrub species.

The vegetative community in this habitat type is dominated by water oak, black hickory (*Carya texana*), mockernut hickory (*Carya tomentosa*), black oak (*Quercus velutina*), sweetgum (*Liquidambar styraciflua*), saw greenbrier, common greenbrier (*Smilax rotundifolia*), tree sparkleberry (*Vaccinium arboreum*), winged elm (*Ulmus alata*), rusty blackhaw (*Viburnum rufidulum*), gum bumelia (*Bumelia lanuginosa*), St. Andrews-cross (*Ascyrum hypericoides*), Indian woodoats, slender wood-oats, Alabama supplejack (*Berchemia scandens*), Japanese honeysuckle (*Lonicera japonica*), Carolina jessamine (*Gelsemium sempervirens*), and post oak (*Quercus stellata*).

Several soil sample locations were also evaluated within this habitat type across the project site. In general, there were no hydric soil characteristics observed at any of the sampling locations. However, one primary indicator of wetland hydrology observed at several sampling locations consisted of oxidized rhizospheres on iving roots. The typical soil profile observed from 0 to 18 inches, had mixed matrix colors of 10YR 6/4 (90%) and 10YR 5/4 (10%), with no redox features, and a silt loam texture (Data Sheet UPL PHW).

#### **Threatened & Endangered Species Investigation**

Potential impacts to threatened and endangered species were assessed in conjunction with the wetland investigation. According to county lists provided by the USFWS, the interior least tern (*Sterna antillarum athalassos*) and the Louisiana black bear (*Ursus americanus luteolus*) are federally listed as a threatened or endangered species in Bowie County. The bald eagle (*Haliaeetus leucocephalus*) was removed from the federal list of threatened and endangered species in 2007. Even though they are

delisted, bald eagles are still protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. These Acts require some measures to continue to prevent bald eagle "take" resulting from human activities. Due to these Acts, the bald eagle is included in this assessment.

#### **Interior Least Tern**

This species' nests are typically near large water bodies in shallow holes in open sandy areas, gravelly patches, or exposed flats. Primary food sources include small fish from nearby water sources. No signs of suitable habitat for this species or activity were encountered during the field investigations. No impacts to this species are expected as a result of any future construction activities associated with the project site.

#### Louisiana Black Bear

The Louisiana black bear may be found primarily in bottomland hardwoods and floodplain forests and also in upland hardwoods, mixed pine/hardwoods, coastal flatwoods, and marshes in East Texas, Louisiana and Mississippi. Today, the Louisiana black bear occurs only within the boundaries of the state of Louisiana with solitary, juvenile males occasionally and temporarily moving into western Mississippi and eastern Texas. A resident breeding population does not currently exist in Texas. Key habitat requirements of black bears include food, water, cover, and denning sites spatially arranged across sufficiently large, relatively remote blocks of land. Habitat suitability for the Louisiana black bear is significantly and negatively affected by the presence of roads, fragmented landscapes and other human disturbances. There were no signs of this species, evidence of its activity, or suitable habitat encountered during the field investigations. Based on the human population density and fragmented landscape of the project site, it is unlikely that impacts to this species would occur in association with future construction activities.

#### **Bald Eagle**

The bald eagle's habitat is most commonly found in areas close to bodies of water that reflect the general availability of primary food sources including fish, waterfowl, and seabirds. This species usually nests in tall trees or on cliffs near water and typically selects the larger, more accessible trees. Communal roost sites used by two or more eagles are common, and some may be used by 100 or more eagles during periods of high use. The bald eagle avoids areas near human activity and development. There was no suitable bald eagle habitat observed during the field investigation. Impacts to this species are not anticipated as a result of future construction activities associated with this project.

#### **Cultural Resources Review**

As part of this investigation, HEI contracted Horizon Environmental Services, Inc. (Horizon) to conduct a cultural resources archival review of the project site. Their review revealed the presence of five previously recorded historic properties, and no cemeteries located within a 1.0 mile perimeter of the project site. Additionally, no previously recorded archeological sites or cemeteries, including any listed on the National Register of Historic Places (NRHP), are located within the boundaries of the project site. While preliminary archival research indicated that no documented archaeological sites or historic properties occur within the project site, based on the topographic setting, it is the opinion of Horizon that the likelihood of finding as of yet unknown archaeological site is moderate.

If any archeological sites are discovered in association with future construction activities, all work should cease and a qualified archeologist should be contacted. A copy of Horizon's cultural resources review is included as Appendix C to this report.

#### V. CONCLUSIONS

#### Waters of the U.S.

HEI biologists identified several features within the project site that may have the potential to fall within USACE jurisdiction as waters of the U.S. These features include potential waters of the U.S. in the form of two ephemeral streams (2,700 lf), 3.1 acres of forested wetland habitat, and 8.5 acres of emergent wetland habitat.

#### **Non-Jurisdictional Habitat**

Approximately 89 acres of the project site consisted of upland habitat typical of the region. The habitat types consisted of native, mixed pine/hardwood forest, and cleared and maintained field. These areas contained soils with no hydric characteristics, a vegetative community more commonly found on mesic to upland sites, and no indicators of wetland hydrology.

#### **Threatened/Endangered Species & Cultural Resources**

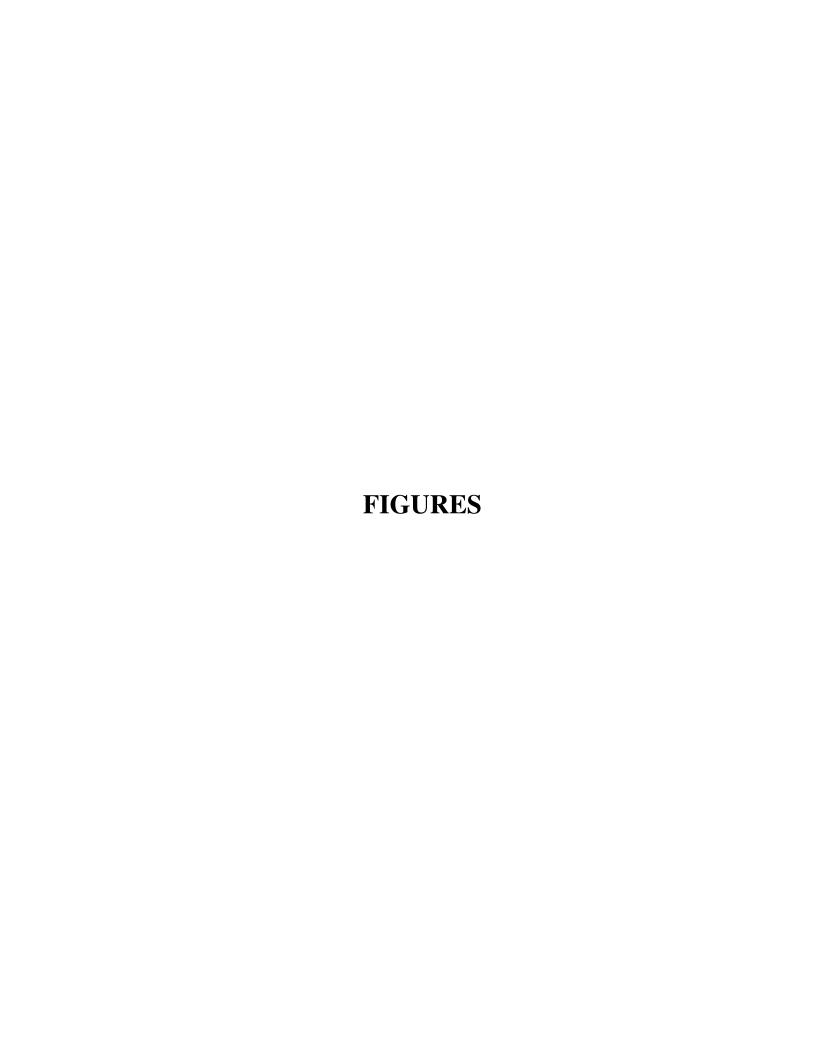
HEI observed no potential suitable habitat for endangered or threatened species within the project site boundaries during the field investigation. Future activities conducted within the project site, which may impact any listed species or their habitat, may require consultation with the USFWS in regard to potential impacts to these species.

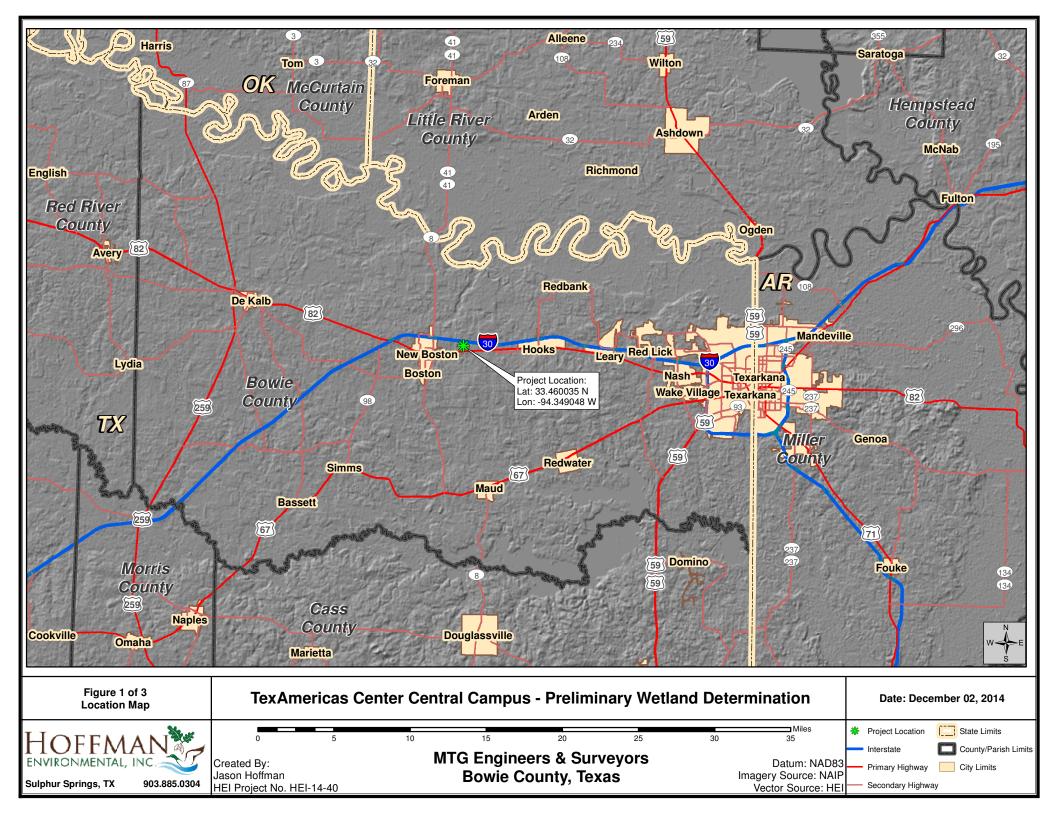
Preliminary archival research indicated, that while no documented archaeological sites or historic properties occur within the project site, based on the topographic setting, the likelihood of finding as of yet unknown archaeological site is moderate.

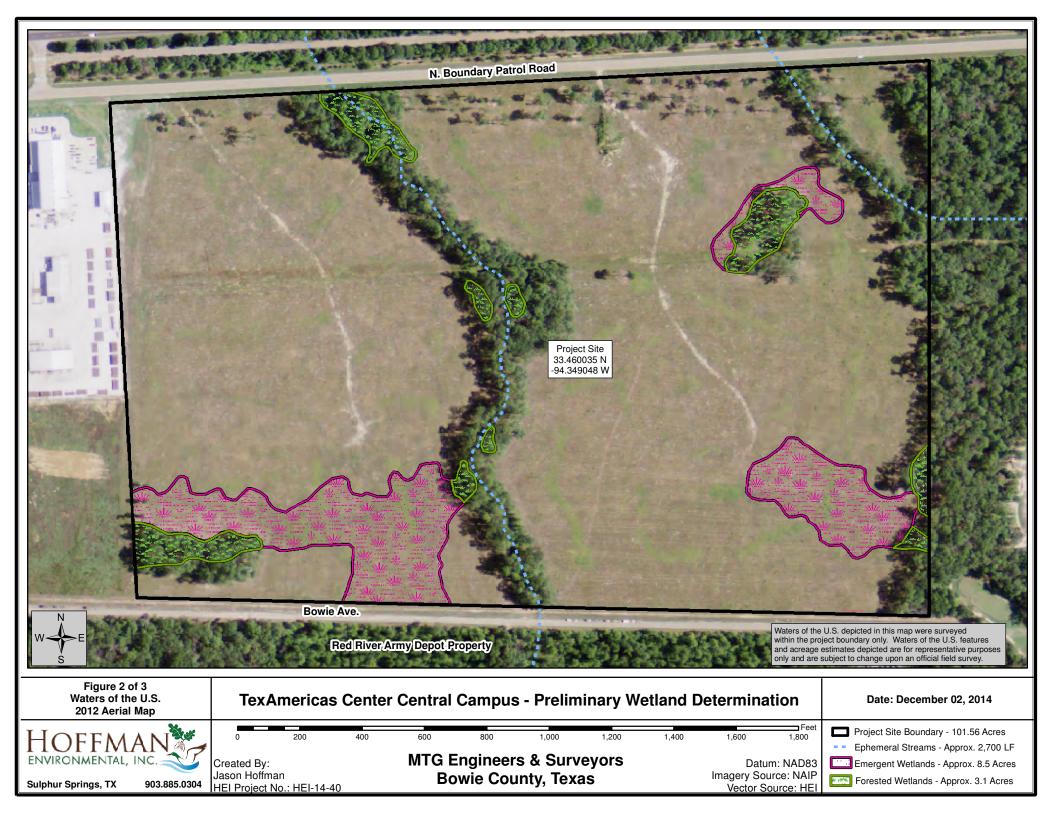
#### **Limiting Terms and Conditions**

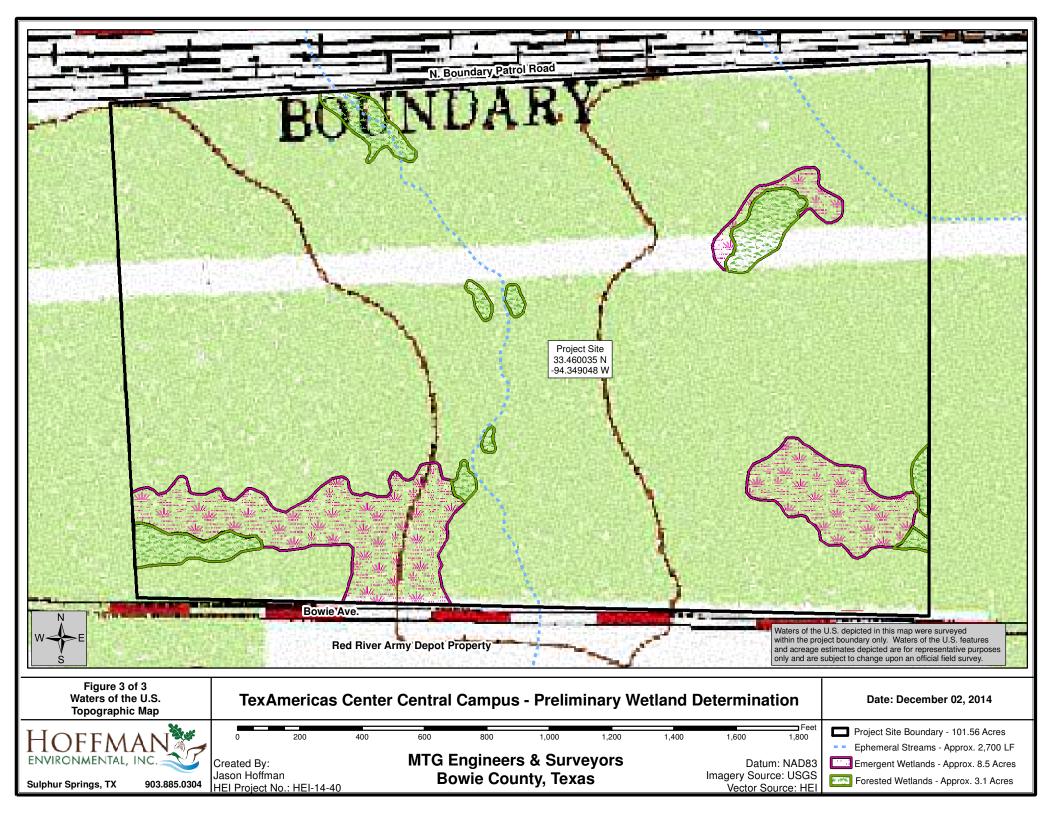
This wetland investigation was based on current federal procedures for identifying and delineating potential jurisdictional wetlands as outlined in Technical Report Y-87-1, otherwise known as the USACE Wetlands Delineation Manual. It should be noted that the above tasks identify potential jurisdictional waters of the U.S. It should also be clarified that the USACE has final authority in establishing jurisdictional status of waters of the U.S. as well as the type of permit, if any, that may be required to complete a particular project. The observations, findings and opinions of Hoffman Environmental, Inc. must not be considered as scientific certainties, but solely as opinions based upon our professional judgment concerning the significance of the data gathered during the course of the project. The acreage estimates for the previously described waters of the U.S. were calculated using non-survey grade GPS equipment. HEI recommends that the waters of the U.S. boundaries be surveyed by a licensed professional in order to obtain accurate acreages.

This preliminary wetland determination and delineation is based on generally accepted practices of professionals undertaking similar studies at the same time and in the same geographical area. HEI observed that same degree of care and skill generally exercised by professionals under similar circumstances and conditions. No other warranty is expressed or implied by copy of this report.









# APPENDIX A SITE PHOTOGRAPHS

#### **Project Photographs**



Photograph 1. View of the identified ephemeral stream located in the northeast corner of the project site.



Photograph 3. View of the identified ephemeral stream located in the western portion of the project site.



Photograph 5. View of cleared and maintained, emergent wetland habitat.



Photograph 2. Another view of the identified ephemeral stream located in the northeast corner of the project site.



Photograph 4. Another view of the identified ephemeral stream located in the western portion of the project site.



Photograph 6. Another view of cleared and maintained, emergent wetland habitat.

#### **Project Photographs**



Photograph 7. Another view of cleared and maintained, emergent wetland habitat.



Photograph 9. Another view of cleared and maintained, emergent wetland habitat.



Photograph 11. Another view of cleared and maintained, emergent wetland habitat.



Photograph 8. Another view of cleared and maintained, emergent wetland habitat.



Photograph 10. Another view of cleared and maintained, emergent wetland habitat.



Photograph 12. View of hardwood-dominated, flatwoods, forested wetland habitat.

#### **Project Photographs**



Photograph 13. Another view of hardwood-dominated, flatwoods, forested wetland habitat.



Photograph 15. Another view of hardwood-dominated, flatwoods, forested wetland habitat.



Photograph 17. View of upland, cleared and maintained field habitat.



Photograph 14. Another view of hardwood-dominated, flatwoods, forested wetland habitat.



Photograph 16. Another view of hardwood-dominated, flatwoods, forested wetland habitat.



Photograph 18. Another view of upland, cleared and maintained field habitat.

### **Project Photographs**



Photograph 19. Another view of upland, cleared and maintained field habitat.



Photograph 21. Another view of upland, cleared and maintained field habitat.



Photograph 23. Another view of upland, cleared and maintained field habitat.



Photograph 20. Another view of upland, cleared and maintained field habitat.



Photograph 22. Another view of upland, cleared and maintained field habitat.



Photograph 24. View of upland, native, uneven-aged, mixed, pine/hardwood forest habitat.

### **Project Photographs**



Photograph 25. Another view of upland, native, unevenaged, mixed, pine/hardwood forest habitat.



Photograph 27. Another view of upland, native, unevenaged, mixed, pine/hardwood forest habitat.



Photograph 29. Another view of upland, native, unevenaged, mixed, pine/hardwood forest habitat.



Photograph 26. Another view of upland, native, unevenaged, mixed, pine/hardwood forest habitat.



Photograph 28. Another view of upland, native, unevenaged, mixed, pine/hardwood forest habitat.



Photograph 30. Another view of upland, native, unevenaged, mixed, pine/hardwood forest habitat.

# APPENDIX B WETLAND DELINEATION DATA SHEETS

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: TexAmericas Center Central Campus City/C	ounty: Bowie County Sampling Date: 11/3/14
	State: TX Sampling Point: EWL
Investigator(s): Jason Hoffman Section	
Landform (hillslope, terrace, etc.): Terrace Local	
Subregion (LRR or MLRA): LRR-P Lat: 33.458779	Length -94.346364 Deturni NAD 83
Soil Map Unit Name: Adaton-Muskogee complex (1)	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly disturb	
Are Vegetation, Soil, or Hydrology naturally problema	
SUMMARY OF FINDINGS – Attach site map showing sam	
Hydrophytic Vegetation Present? Yes ✓ No Hydric Soil Present? Yes ✓ No	Is the Sampled Area
	within a Wetland? Yes No
Wetland Hydrology Present? Yes   ✓ No No	
	triand Sall All the constant to the inner to Citation
Habitat consists of emergent wetland habitat located in main	ained field. All three wetland criteria met. Site is a
wetland.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRF	
Saturation (A3) Hydrogen Sulfide Odor (C	
Water Marks (B1) ✓ Oxidized Rhizospheres a	
Sediment Deposits (B2)  Presence of Reduced Iron	_
Drift Deposits (B3) Recent Iron Reduction in	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remark	s) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No ✓ Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections) if available:
Describe Necorded Data (Stream gauge, monitoring well, aeriai photos, pre	nous inspections), ii available.
Remarks:	
	a share word Cuitania wast
One primary and one secondary wetland hydrology indicators	s observed. Criteria met.

VEGETATION (Four Strata) – Use scientific nam	nes of plants.	Sampling Point: EWL

20.4		Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft )	% Cover	Species?	Status	Number of Dominant Species	
1. None				That Are OBL, FACW, or FAC: 2 (A	١)
2				Total Number of Dominant	
3				Species Across All Strata: 3	3)
4					
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7%	VB)
6					
7				Prevalence Index worksheet:	
8				Total % Cover of: Multiply by:	
	0	= Total Cov	er	OBL species x 1 =	
50% of total cover: 0.0				FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30 ft )				FAC species x 3 =	
None				FACU species x 4 =	
2				UPL species x 5 =	
				Column Totals: 0 (A) 0	(B)
3					
4				Prevalence Index = B/A = 0.0	
5				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				✓ 2 - Dominance Test is >50%	
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
0.0		= Total Cov		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
50% of total cover: <u>0.0</u>	20% of	total cover:	0.0		
Herb Stratum (Plot size: 30 ft )		VE0	E40	<sup>1</sup> Indicators of hydric soil and wetland hydrology mus	st
1. Paspalum urvillei	25	YES	FAC	be present, unless disturbed or problematic.	
2. Andropogon virginicus	15	YES	FAC	Definitions of Four Vegetation Strata:	
3. Panicum spp.	10	YES	NO	Tree – Woody plants, excluding vines, 3 in. (7.6 cm	\ or
4. Panicum anceps	10	NO	FAC	more in diameter at breast height (DBH), regardless	
5. Helianthus angustifolia	9	NO	FACW	height.	
Sporobolus indicus	7	NO	FACU	Sapling/Shrub – Woody plants, excluding vines, lea	
7. Cynodon dactylon	7	NO	FACU	than 3 in. DBH and greater than 3.28 ft (1 m) tall.	33
8. Sympyotrichum subulatum	5	NO	OBL		
9. Andropogon glomeratus	5	NO	FACW	Herb – All herbaceous (non-woody) plants, regardle of size, and woody plants less than 3.28 ft tall.	ess
10. Chasmanthium laxum	3	NO	FACW	or size, and woody plants less than 5.25 it tall.	
11. Aristida spp.	2	NO	NO	Woody vine – All woody vines greater than 3.28 ft i	in
11. Polygonum spp.	2	NO	FAC	height.	
12. Folygonum spp.	100				
50.0		= Total Cov			
50% of total cover: <u>50.0</u>	20% of	total cover:	20.0		
Woody Vine Stratum (Plot size: 30 ft )					
1. None					
2					
3					
4					
5.				Hydrophytic	
-	0	= Total Cov	er	Hydrophytic Vegetation	
50% of total cover: 0.0				Present? Yes No	
		total cover.			
Remarks: (If observed, list morphological adaptations belo					
Habitat consists of emergent wetland habitat loc	cated in n	naintaine	d field. H	ydrophytic vegetation was dominant. Crite	ria
met.					

SOIL Sampling Point: EWL

Depth (inches)	Matrix Color (moist)	%	Color (moist)	ox Feature %	es Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
)-18	10YR 6/2	80	10YR 4/6	20	C C	M	Loam	Silt Loam Texture
	10111 0/2		1011( 4/0		- —	101	Louin	On Louis Texture
				_				
						- '		
					_	-		
					_	<del> </del>		
						<del></del>	2	
			=Reduced Matrix, M			rains.		PL=Pore Lining, M=Matrix.
-		cable to all	LRRs, unless othe			DD C T I		s for Problematic Hydric Soils <sup>3</sup> :
_ Histosol	(A1) hipedon (A2)		Polyvalue B					Muck (A9) <b>(LRR O)</b> Muck (A10) <b>(LRR S)</b>
_ Flistic Li _ Black Hi			Loamy Muck					ced Vertic (F18) (outside MLRA 150A,B
<del></del> *	n Sulfide (A4)		Loamy Gley	-		,		nont Floodplain Soils (F19) (LRR P, S, T)
-	Layers (A5)		Depleted Ma				Anoma	alous Bright Loamy Soils (F20)
	Bodies (A6) (LRR I		Redox Dark		•			RA 153B)
	cky Mineral (A7) (L		· <del></del> ·					Parent Material (TF2)
	esence (A8) (LRR		Redox Depr		-8)			Shallow Dark Surface (TF12)
<del></del>	ck (A9) <b>(LRR P, T)</b> Below Dark Surfa		Marl (F10) (I Depleted Oc		(MI RA 1	51)	Other	(Explain in Remarks)
_	ark Surface (A12)	00 (7111)	Iron-Mangar	•			T) <sup>3</sup> Indio	cators of hydrophytic vegetation and
<del></del>	rairie Redox (A16) (	(MLRA 150			. ,	•		tland hydrology must be present,
_ Sandy N	lucky Mineral (S1)	(LRR O, S)	Delta Ochric	(F17) <b>(M</b>	LRA 151)		unl	less disturbed or problematic.
-	leyed Matrix (S4)		Reduced Ve					
-	edox (S5)		Piedmont FI					
	Matrix (S6) face (S7) (LRR P,	C T II)	Anomalous	Bright Loa	amy Soils	(F20) <b>(MLF</b>	RA 149A, 153C	C, 153D)
	ayer (if observed							
Type:		•						
Depth (in			<del></del>				Hydric Soil	I Present? Yes No
Remarks:			<del></del>				,	
0	ne hydric soil in	dicator o	oserved. Criteria	a met.				

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: TexAmericas Center Central Campus	City/County: Bowie County	/ 5	Sampling Date: 11/3/14
Applicant/Owner: TexAmericas Center	. Only/obdinity.	State: TX	Sampling Date: 11/3/14 Sampling Point: FWL
• •	Section, Township, Range: N	A	
Landform (hillslope terrace etc.). Terrace	Local relief (concave, convex	none). Concave	Slone (%): 1-3
Subregion (LBD or MLDA); LRR-P	61297	94.347029	Olope (70)
Landform (hillslope, terrace, etc.): Terrace  Subregion (LRR or MLRA): LRR-P  Soil Map Unit Name: Annona loam, 1 to 3 percent slopes (4)	1) Long	NA/I -1:6	NA
Are climatic / hydrologic conditions on the site typical for this time of y			
Are Vegetation, Soil, or Hydrology significantl		Circumstances" pre	esent? Yes No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, e	explain any answers	in Remarks.)
SUMMARY OF FINDINGS - Attach site map showin	g sampling point location	ons, transects, i	important features, etc.
Hydrophytic Vegetation Present? Yes _ ✓ No			
Hydric Soil Present? Yes ✓ No	is the campied Area		No
Wetland Hydrology Present? Yes   ✓ No		Yes	No
Remarks:			
Habitat consists of hardwood-dominated, forested wetl	and habitat located in mai	ntained field. A	Il three wetland criteria
met. Site is a wetland.			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicato	ors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	)	Surface Soil Ci	racks (B6)
Surface Water (A1) Aquatic Fauna (B			tated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B1		Drainage Patte	
Saturation (A3) Hydrogen Sulfide		Moss Trim Line	
	heres along Living Roots (C3)		ater Table (C2)
✓ Sediment Deposits (B2) Presence of Redu Drift Deposits (B3) Recent Iron Redu	action in Tilled Soils (C6)	✓ Crayfish Burrov	ble on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surfac		Geomorphic Po	
Iron Deposits (B5) Other (Explain in		Shallow Aquita	
Inundation Visible on Aerial Imagery (B7)	,	FAC-Neutral To	
✓ Water-Stained Leaves (B9)			ss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No Depth (inche			
Water Table Present? Yes No Depth (inche	s):		,
Saturation Present? Yes No _ ✓ Depth (inche	s): Wetland H	lydrology Present?	? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if ava	ilable:	
3. 3.,	, ,		
Remarks:			
Three primary and one secondary wetland hydrology in	ndicators observed. Criter	ria met.	
, , , , , ,			

<b>VEGETATION</b>	(Four Strata)	) <b>–</b> Use	scientific	names	of plants.
4 - O - 17 (11 O 11 )	II OUI OLIULU	,	COLOTTUTO	Hallioo	or prairie.

<b>/EGETATION (Four Strata) –</b> Use scientific nar	mes of pl	ants.		Sampling Point: FWL
- 20 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft )		Species?		Number of Dominant Species
1. Quercus phellos	70	YES	FACW	That Are OBL, FACW, or FAC: 7 (A)
2. Quercus nigra	15	NO	FAC	Total Number of Dominant
3. Fraxinus pennsylvanica	5	NO	FACW	Species Across All Strata: 7 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100.0% (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
		= Total Cov		
50% of total cover: <u>45.0</u>	20% of	total cover:	18.0	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 ft )				FAC species x 3 =
1. Ilex decidua	5	YES	FACW	FACU species x 4 =
2. Acer rubrum	5	YES	FAC	UPL species x 5 =
3. Vaccinium stamineum	3	NO	FACU	Column Totals: $0$ (A) $0$ (B)
4. Diospyros virginiana	2	NO	FAC	Prevalence Index = B/A = 0.0
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	15	= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 7.5	20% of	total cover:	3.0	
Herb Stratum (Plot size: 30 ft )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Chasmanthium laxum	15	YES	FACW	be present, unless disturbed or problematic.
2. Carex Iouisianica	8	YES	OBL	Definitions of Four Vegetation Strata:
3. Andropogon virginicus	5	NO	FAC	Trans. We advantage a control of the control of the (7.0 and) and
4. Chasmanthium latifolium	3	NO	FAC	<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. Polygonum spp.	2	NO	FAC	height.
6.				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11.				height.
12.				
	33	= Total Cov	er	
50% of total cover: 16.5		total cover:		
Woody Vine Stratum (Plot size: 30 ft )		10101 00101		
1. Smilax glauca	5	YES	FAC	
2. Trachelospermum difforme	2	YES	FACW	
~· <del></del>				
3				
4				
5	7			Hydrophytic
2.5		= Total Cov		Vegetation Present? Yes No
50% of total cover: 3.5		total cover:	1.4	100
Remarks: (If observed, list morphological adaptations belo	w).			

Habitat consists of hardwood-dominated, forested wetland habitat. Hydrophytic vegetation was dominant. Criteria met.

SOIL Sampling Point: FWL

Indicator   No.   Texture   Remarks	Depth	Matrix			x Feature				
Toyre: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.   Cacation: PL=Pore Lining, M=Matrix.     Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problematic Hydric Soils <sup>3</sup> :     Histosol (A1)									
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Polyvalue Below Surface (S8) (LRR S, T, U)	J-18	-		10 Y R 4/6	15		M	Loam	Siit Loam Texture
Histosol (A1)		10YR 6/2	_ 5						
Histosol (A1)									
Histosol (A1)						_			
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)						-	· ——	-	
Histosol (A1)									
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)									
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)									
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)	vne. C=Co	oncentration D=De	nletion RM	=Reduced Matrix MS	S=Maske	d Sand Gi	ains	<sup>2</sup> Location:	PL=Pore Lining M=Matrix
Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR V) Depleted Dark Surface (F1) Depleted Depl									
Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR P, T) Depleted Dark Surface (F7) Loamy Sulface (F7) Muck Presence (A8) (LRR P, T) Depleted Dark Surface (F1) (LRR O) Muck Presence (A8) (LRR P, T) Depleted Dark Surface (F7) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed): Type: Depth (inches):  Hydric Soil Present? Yes No  Reduced Vertic (F18) (outside MLRA 150A, P) Reduced Vertic (F10) (LRR O, P, T) Reduced Vertic (F10) (LRR O, P, T) Pieldmont Floodplain Soils (F19) (LRR 150A) MRAN 153C, 153D)  Reduced Vertic (F18) (MLRA 149A) No	Histosol	(A1)		Polyvalue Be	low Surfa	ace (S8) (I	RR S, T, U	J) 1 cm l	Muck (A9) (LRR O)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B)  5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2)  Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12)  1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks)  Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)  Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Setrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No	_ Hydroge	n Sulfide (A4)		✓ Loamy Gleye	ed Matrix	(F2)		Piedm	ont Floodplain Soils (F19) <b>(LRR P, S</b>
									- , , ,
Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12)  1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks)  Depleted Below Dark Surface (A11) Iron-Manganese Masses (F12) (LRR O, P, T)  Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F18) (MLRA 150A, 150B)  Sandy Redox (S5) Reduced Vertic (F18) (MLRA 150A, 150B)  Stripped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No	-			_	,	,			
									, ,
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)   Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T)   Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U)   Sandy Mucky Mineral (S1) (LRR O, S)   Sandy Gleyed Matrix (S4)   Sandy Redox (S5)   Stripped Matrix (S6)   Dark Surface (S7) (LRR P, S, T, U)						-8)			
Thick Dark Surface (A12)						/MI DA 1	51)	Other	(Explain in Remarks)
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic.  Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  ### Restrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes No			CC (ATT)		. ,	•		T) <sup>3</sup> India	cators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic.  Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes No			(MLRA 150						
Sandy Gleyed Matrix (S4)							, -,		
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:  Hydric Soil Present? Yes No	-						50A, 150B)	)	·
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:  Hydric Soil Present? Yes No	Sandy R	tedox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 14	19A)	
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:  Hydric Soil Present? Yes No	Stripped	Matrix (S6)		Anomalous B	Bright Loa	my Soils (	F20) <b>(MLF</b>	RA 149A, 1530	c, 153D)
Type: Depth (inches): Remarks: Hydric Soil Present? Yes No								_	
Depth (inches): No	Restrictive I	_ayer (if observed	):						
Remarks:	Type:								
	Depth (inc	ches):						Hydric Soil	Present? Yes No
One nydric soil indicator observed. Criteria met.	Remarks:		-I:4	h   Oiti-					
	O	ne nyaric soli in	idicator o	bserved. Criteria	met.				

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: TexAmericas Center Central Campus City/0	County: Bowie County Sampling Date: 11/3/14
Applicant/Owner: TexAmericas Center	State: TX Sampling Point: UPL Field
Investigator(s): Jason Hoffman Section	
Landform (hillslope, terrace, etc.): Terrace Loca	
Subregion (LRR or MLRA): LRR-P	D Long: -94.346638 Datum: NAD 83
Soil Map Unit Name: Annona loam, 1 to 3 percent slopes (4)	0 Long: -94.346638 Datum: NAD 83  NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distu	rbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	
	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes No✓  Yes No✓	Is the Sampled Area
Hydric Soil Present? Yes No _✓	within a Wetland? Yes No
Wetland Hydrology Present? Yes _✓ No	
Habitat consists of upland, herbaceous-dominated, maintain	led field. One of three wetland criteria met. Site is not a
wetland.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LR	
Saturation (A3) Hydrogen Sulfide Odor (	
Water Marks (B1) ✓ Oxidized Rhizospheres	
Sediment Deposits (B2)  Presence of Reduced Iro	
Drift Deposits (B3) Recent Iron Reduction in	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	
Iron Deposits (B5) Other (Explain in Remar	ks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No ✓ Depth (inches):	
Water Table Present? Yes No ✓ Depth (inches):	
Saturation Present? Yes No ✓ Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections) if available:
besombe recorded bata (stream gauge, monitoring well, acrial priotos, pro	svious inspections), ii available.
Remarks:	
	mat
One primary wetland hydrology indicator observed. Criteria	met.

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: UPL Field Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: 30 ft ) % Cover Species? Status **Number of Dominant Species** 1. None That Are OBL, FACW, or FAC: Total Number of Dominant (B) Species Across All Strata: Percent of Dominant Species 50.0% That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: \_\_\_\_\_ x 1 = \_\_\_\_ OBL species = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: 0.0 20% of total cover: 0.0 FAC species \_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_ <sub>1</sub> None UPL species \_\_\_\_ x 5 = \_\_\_\_ Column Totals: 0 (A) 0Prevalence Index = B/A = 0.0**Hydrophytic Vegetation Indicators:** \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 = Total Cover Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: 0.020% of total cover: 0.0 Herb Stratum (Plot size: 30 ft <sup>1</sup>Indicators of hydric soil and wetland hydrology must YES **FACU** 1. Paspalum notatum 25 be present, unless disturbed or problematic. YES 2 Andropogon virginicus 15 **FAC** 3. Cynodon dactylon 12 YES **FACU** 

NO

NO

**FACU** 

**FACW** 

6. Croton capitatus	7	NO	NI
7. Ambrosia artemisiafolia	6	NO	FACU
8. Schizachyrium scoparium	5	NO	FACU
9. Rubus trivialis	5	NO	FACU
10. Solanum carolinense	4	NO	FACU
11. Eupatorium capillifolium	3	NO	FACU
12. Heterotheca graminifolia	2	NO	UPL
	100	= Total Cov	er
50% of total cover: <u>50.0</u>	20% of	total cover:	20.0
Woody Vine Stratum (Plot size: 30 ft )			
1. Smilax bona-nox	6	YES	FAC
2			
3			
4			
5			
	6	= Total Cov	er
50% of total cover: 3.0	20% of	total cover:	1.2

8

Definitions	of Four	Vegetation	Strata:

Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present?

'es	No_	✓
	 _	

Remarks: (If observed, list morphological adaptations below).

Habitat consists of upland, herbaceous-dominated, maintained field. Hydrophytic vegetation was not dominant. Criteria not met.

Tridens flavus

5 Setaria geniculata

SOIL Sampling Point: UPL Field

Profile Desc	ription: (Describ	e to the dep	oth needed to docu	ment the	indicator	or confir	m the absence	of indicators.)		
Depth	Matrix		Red	ox Featur						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	· ·	Remarks	
0-18	10YR 6/2	10	10YR 5/6	5	С	M	Loam	Silt Loam T	exture	
	10YR 6/3	60					· -			
	10YR 5/3	25								
	10110 3/3						· <del></del>	-		
				_		-				
1				_						<u> </u>
			=Reduced Matrix, M			rains.		PL=Pore Lining		
•		cable to all	LRRs, unless other		•			s for Problemati	-	oils":
Histosol			Polyvalue B					Muck (A9) (LRR	•	
	pipedon (A2)		Thin Dark S					Muck (A10) (LRF		
	stic (A3)			Loamy Mucky Mineral (F1) (LRR O)				Reduced Vertic (F18) (outside MLRA 150A,B)		
	n Sulfide (A4)		Loamy Gley				<del></del>	nont Floodplain S	. , ,	
	d Layers (A5)		Depleted Ma					alous Bright Loa	my Soils (F	20)
_	Bodies (A6) (LRR		· · · · · · · · · · · · · · · · · · ·	Redox Dark Surface (F6)				RA 153B)		
	icky Mineral (A7) (I							Parent Material (T		`
	esence (A8) (LRR		Redox Depr Marl (F10) (		(F8)		-	Shallow Dark Sur		)
	ick (A9) <b>(LRR P, T</b> ) d Below Dark Surfa		Depleted O		I) (MI RA 1	151)	Other	(Explain in Rema	aiks)	
	ark Surface (A12)	icc (ATT)	Iron-Manga	•	, .	•	T) <sup>3</sup> Indi	cators of hydroph	ovtic vegeta	ation and
	, ,	(MLRA 150	A) Umbric Surf		. ,	•		tland hydrology r		
	lucky Mineral (S1)							less disturbed or		
-	Gleyed Matrix (S4)	(,	Reduced Ve						p	
	Redox (S5)		Piedmont F							
-	Matrix (S6)		Anomalous					C, 153D)		
Dark Su	rface (S7) (LRR P,	S, T, U)		•	•					
Restrictive I	ayer (if observed	l):								
Type:										_
Depth (in	ches):						Hvdric Soi	l Present? Ye	s	No ✓
Remarks:	,									
N	o hydric soil inc	licator ob	served. Criteria	not me	t.					
	•									

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: TexAmericas Center Central Campus City	y/County: Bowie County Sampling Date: 11/3/14
Applicant/Owner: TexAmericas Center	State: TX Sampling Point: UPL PHW
Investigator(s): Jason Hoffman Se	
	cal relief (concave, convex, none): Convex Slope (%): 1-3
Subragina (LBB of MLRA), LRR-P	189 Long: -94.349581 Datum: NAD 83
Soil Map Unit Name: Adaton-Muskogee complex (1)	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly dis	
Are Vegetation, Soil, or Hydrology naturally proble	
	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No ✓ Wetland Hydrology Present? Yes No ✓	within a Wetland? Yes No
Remarks:	
Habitat consists of upland, native, mixed pine/hardwood, for	orested habitat. One of three wetland criteria met. Site is not
a wetland.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (L	
Saturation (A3) Hydrogen Sulfide Odo	
Water Marks (B1) Oxidized Rhizosphere:	
Sediment Deposits (B2)  Presence of Reduced	
Drift Deposits (B3) Recent Iron Reduction	
Algal Mat or Crust (B4) Thin Muck Surface (C7	
Iron Deposits (B5) Other (Explain in Rem	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No ✓ Depth (inches):	
Water Table Present? Yes No _ ✓ Depth (inches): _	
Saturation Present? Yes No _ ✓ Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, page 1.5)	provious inspections), if available:
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	previous inspections), ii available.
Remarks:	
	am and Oritoria wat was t
No primary or secondary wetland hydrology indicators obs	erved. Criteria not met.

# **VEGETATION (Four Strata) –** Use scientific names of plants.

EGETATION (Four Strata) - Use scientific na	mes or pr			Sampling Point: UPL Ph	
20.4		Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft )		Species?		Number of Dominant Species	
1. Quercus nigra	30	YES	FAC	That Are OBL, FACW, or FAC: 6	(A)
2. Quercus stellata	20	YES	UPL	Total Number of Dominant	
3. Liquidambar styraciflua	15	NO	FAC	Species Across All Strata: 9	(B)
<sub>4.</sub> Carya texana	15	NO	NI	Percent of Dominant Species	
<sub>5.</sub> Quercus velutina	10	NO	NI		(A/B)
<sub>6.</sub> Carya tomentosa	3 2	NO	NI		
<sub>7.</sub> Ulmus alata	2	NO	FACU	Prevalence Index worksheet:	
8				Total % Cover of: Multiply by:	
	95	= Total Co	ver	OBL species x 1 =	
50% of total cover: 47.5	20% of	total cover	<sub>-:</sub> 19.0	FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30 ft )				FAC species x 3 =	_
1. Vaccinium arboreum	12	YES	FACU	FACU species x 4 =	
Ulmus alata	5	YES	FACU	UPL species x 5 =	
Viburnum rufidulum	4	NO	UPL	Column Totals: 0 (A) 0	_ (B)
Ascyrum hypericoides	4	NO	NI	Prevalence Index = B/A = 0.0	
5. Bumelia lanuginosa	2	NO	FACU		_
				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				✓ 2 - Dominance Test is >50%	
	27	T 1 10		3 - Prevalence Index is ≤3.0 <sup>1</sup>	
8		= Total Co		3 - Prevalence Index is ≤3.0° Problematic Hydrophytic Vegetation¹ (Explain	า)
8					า)
8	20% of	total cover	5.4	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain <sup>1</sup> Indicators of hydric soil and wetland hydrology m	
50% of total cover: 13.5  Herb Stratum (Plot size: 30 ft  1. Chasmanthium sessiliflorum	20% of	total cover	5.4 FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain <sup>1</sup> Indicators of hydric soil and wetland hydrology makes the present, unless disturbed or problematic.	
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US Army Corps of Engineers

Criteria met.

SOIL Sampling Point: UPL PHW

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Stratified	d Layers (A5)		Depleted Mat	rix (F3)			Anoma	alous Bright	Loamy Soils	(F20)
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	ucky Mineral (A7) (L		Depleted Dar					arent Materi		
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# APPENDIX C CULTURAL RESOURCES ARCHIVAL REVIEW



#### **Environmental Services, Inc.**

18 November 2014

Mr. Jason Hoffman President/Owner Hoffman Environmental, Inc. PO Box 452 Sulphur Springs, TX 75482 jhoffman@hoffmanenv.com

Re: Cultural Resources Archival Review

**TexAmericas Center Central Campus** 

Bowie County, Texas HJN 140005 AR 18

Dear Jason,

Horizon Environmental Services, Inc. (Horizon) has completed the requested cultural resources archival review of the proposed TexAmericas Center Central Campus in Bowie County, Texas (Project Area). The results are presented below.

#### **Archival Research**

Archival research conducted via the Internet at the Texas Historical Commission's (THC) *Texas Archeological Sites Atlas* (Atlas) website indicated the presence of 5 previously recorded archeological sites within a 1.0-mile perimeter of the Project Area, while a review of the National Park Service's (NPS) National Register of Historic Places (NRHP) Google Earth map layer indicated the presence of no historic properties listed on the NRHP within the 1.0-mile review perimeter. The previously recorded archeological sites and their distances from the Project Area are summarized in Table 1 below. No documented cultural resources, including any listed on the NRHP, are located within or immediately adjacent to the boundaries of the Project Area. Based on the Atlas database, the Project Area has not been previously assessed for cultural resources.

#### **Probability Assessment**

Prehistoric archeological sites are commonly found in upland areas and on alluvial terraces near stream/river channels or drainages. Based on the location of the Project Area on elevated landforms south of Panther Creek, it is Horizon's opinion that there exists a moderate potential for undocumented prehistoric cultural deposits within the Project Area.



Table 1. Summary of documented cultural resources within 1.0 miles of Project Area

Site Trinomial or Cemetery	Site Type	NRHP Eligibility Status	Distance/Direction from Project Area	Potential to be Impacted by Project?
41BW760	Historic-era military chapel	Ineligible	1.0 miles west	No
41BW423	Historic-era homestead	Undetermined	0.2 miles southwest	No
41BW424	Historic-era homestead	Ineligible	0.5 miles southwest	No
41BW633	Historic-era homestead	Ineligible	0.2 miles east	No
41BW609	Historic-era homestead	Ineligible	0.5 miles southeast	No

In regard to historic-era resources, the lack of visible structures in immediate proximity to the Project Area on the relevant topographic quadrangle map suggests a decreased potential for historic-era standing structures within the limits of the Project Area. However, the presence of several previously recorded historic-era sites within the review perimeter suggests at least a moderate potential for historic-era cultural deposits within the boundaries of the Project Area.

#### **Governing Regulations**

Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, requires federal agencies to take into consideration the effects of their actions (funding or permitting) on historic properties. Historic properties include prehistoric archeological sites and historic-era structures and sites that are listed on, considered eligible for listing on, or have the potential for being eligible for listing on the NRHP, including previously unidentified properties. With this in mind, if the development of the Project Area requires the usage of Nationwide Permits (NWP) issued by the US Army Corps of Engineers (USACE) or coordination with the Federal Emergency Management Agency (FEMA) for floodplain modifications, these federal agencies may require a cultural resources survey of any portions of the Project Area that fall within their jurisdiction.

Specific to NWPs, General Condition 20(c) of the 2012 NWPs requires non-federal permittees to notify the USACE under the Pre-Construction Notification (PCN) procedures if a proposed project subject to Section 404 jurisdiction may have the potential to cause effects to any historic properties. In order to make this determination, the USACE may require a cultural resources survey in the immediate vicinity of any Section 404 regulated activity if at least a moderate potential for the occurrence of historic or prehistoric properties exists.

Additionally, General Condition 21 of the 2012 NWPs requires persons conducting an activity authorized by NWP to stop work and immediately notify the USACE if a previously unknown prehistoric or historic property (remains or artifacts) is discovered during the construction process.



In the event that the undertaking does not require any federal permitting/funding and is located on private property, cultural resources are not afforded protection under the regulations of Section 106 of the NHPA. However, unmarked burial sites (both prehistoric and historic-era) are still protected under the Texas Health and Safety Code.

#### Recommendations

A wetland determination conducted by Hoffman Environmental, Inc. identified several waters of the US (WOTUS) within the Project Area. Assuming the undertaking will utilize NWPs during construction efforts to impact these WOTUS, it is Horizon's opinion that a cultural resources survey is warranted within the USACE jurisdictional areas within the Project Area in compliance with Section 106 of the NHPA. Moreover, as the entire Project Area may consist of federal property (i.e. US Army base), the US Army may also require a full survey of the Project Area in compliance with Section 106 of the NHPA and the Archeological Resources Protection Act (ARPA) of 1979.

In addition to the federal regulations, field personnel should also be made aware of the unmarked burial regulations within the Texas Health and Safety Code. Specifically, if any human remains or grave offerings are encountered at any point during development, maintenance, or on-going use of the Project Area, all work at the location of the accidental discovery should cease immediately. Following the cessation of activity, the THC should be notified immediately and a qualified archeologist should be contacted to assess the find.

Should you have any questions, please do not he sitate to call me at (512) 328-2430.

Sincerely,

Russ Brownlow, MA, RPA

Hus Brownlow

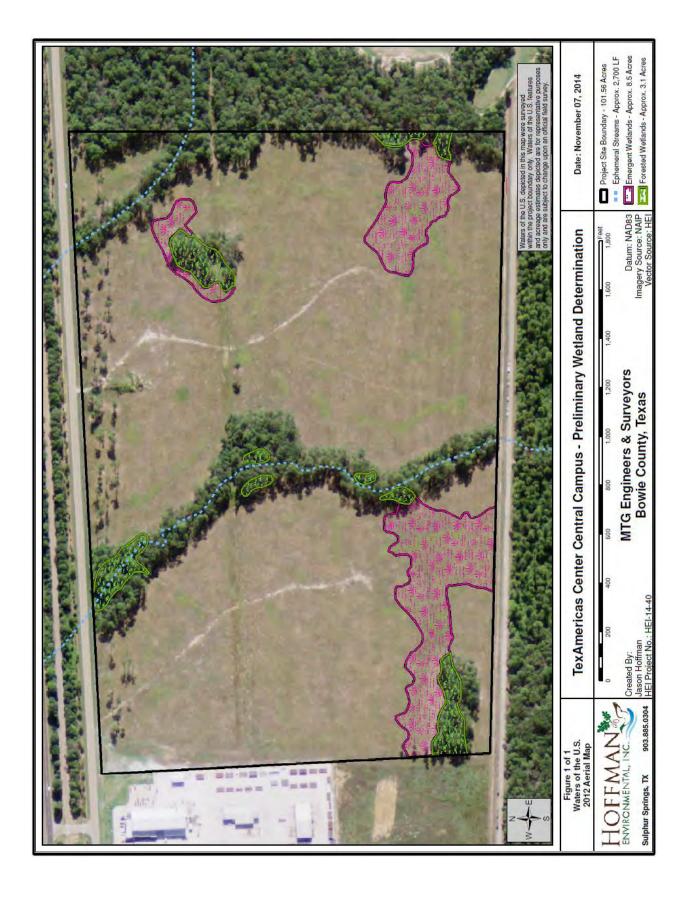
Principal / Cultural Resources Director Horizon Environmental Services, Inc.

#### References:

(Atlas) Texas Archeological Sites Atlas Restricted Database. Texas Historical Commission. <a href="https://nueces.thc.state.tx.us/">https://nueces.thc.state.tx.us/</a>. Accessed 18 November 2014.

National Park Service's National Register of Historic Places Google Earth Map Layer – South Region. <a href="http://nrhp.focus.nps.gov/natreg/docs/Google Earth Layers.html">http://nrhp.focus.nps.gov/natreg/docs/Google Earth Layers.html</a>. Accessed 18 November 2014.





# **EXHIBIT E - SHPO COORDINATION**

#### **TEXAS HISTORICAL COMMISSION**

JUN D 4 2015

REQUEST FOR SHPO CONSULTATION:

# Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas

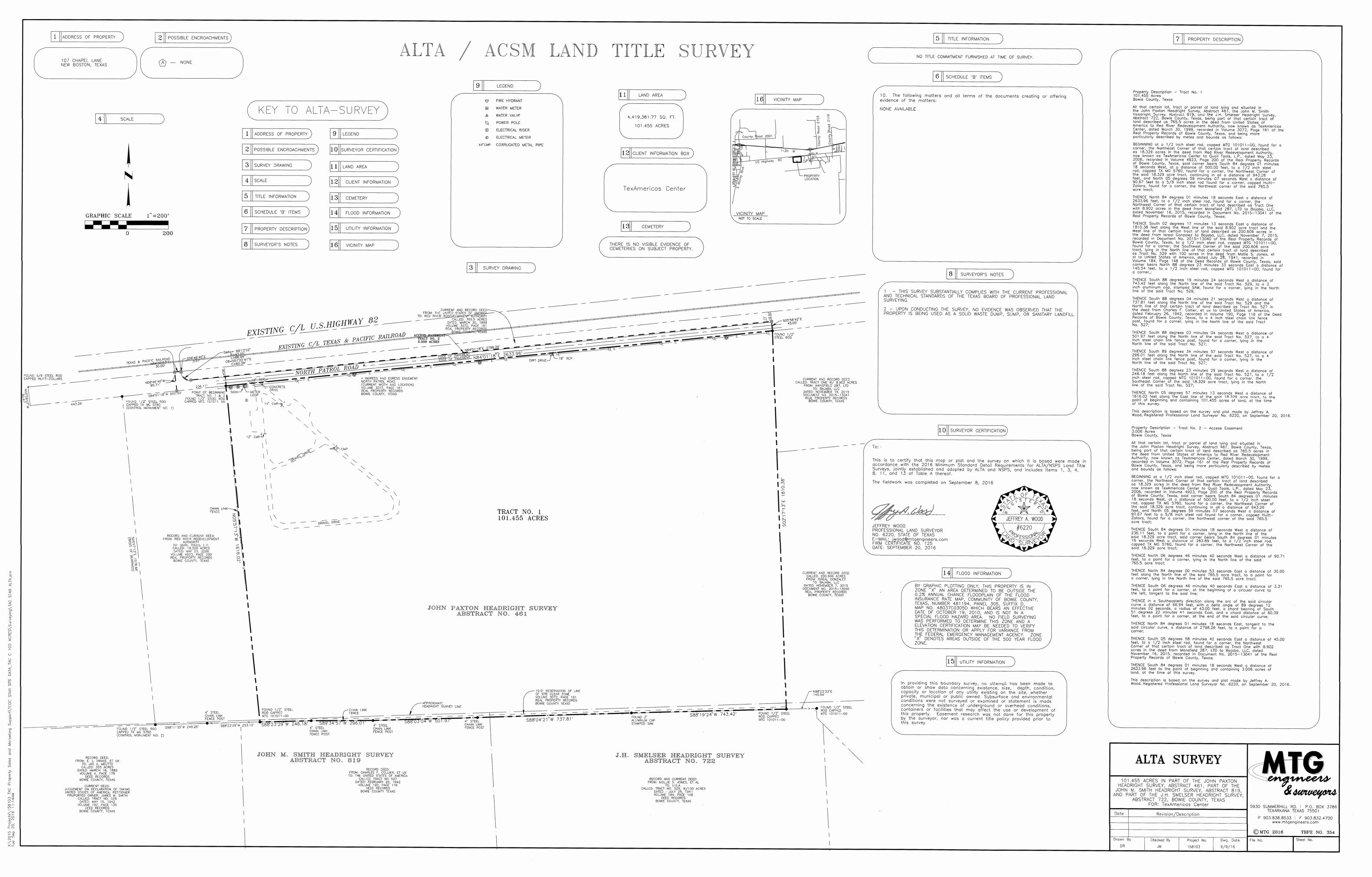
Please see instructions for completing this form and additional information on Section 106 and Antiquities Code consultation on the Texas Historical Commission website at <a href="http://www.thc.state.tx.us/crm/crmsend.shtml">http://www.thc.state.tx.us/crm/crmsend.shtml</a>.

This is a new submission.		
This is additional information relating to THC tra	acking number(s):	
Project Information		
PROJECT NAME FexAmericas Center Central Campus 100 Acre STAR Site		
ROJECT ADDRESS 000 Block of N Boundary Patrol Road	PROJECT CITY New Boston	PROJECT ZIP CODE(S) 75570
PROJECT COUNTY OR COUNTIES  Bowie		
PROJECT TYPE (Check all that apply)	C Danaia Bababilitati	on as Banavation of Structura(s)
Road/Highway Construction or Improvement		on, or Renovation of Structure(s)
Site Excavation	Addition to Existing	
Utilities and Infrastructure		cation of Existing Structure(s)
New Construction  BRIEF PROJECT DESCRIPTION: Please explain the project in one of	☐ None of these	
Project Contact Information		
PROJECT CONTACT NAME	TITLE	ORGANIZATION
David Williams	Project Manager CITY	MTG Engineers & Surveyors STATE ZIP CODE
ADDRESS 5930 Summerhill Road	Texarkana	TX 75503
PHONE 903-838-8533	EMAIL dwilliams@mtgenginee	ers.com
Federal Involvement (Section 106 of the Nation	nal Historic Preservation	Act)
Does this project involve approval, funding, permit	, or license from a federal	agency?
Yes (Please complete this section)	■ No (Skip to next s	section)
FEDERAL AGENCY	FEDERAL PROGRAM, FUI	NDING, OR PERMIT TYPE
CONTACT PERSON	PHONE	
ADDRESS	EMAIL	
State Involvement (Antiquities Code of Texas)		
Does this project occur on land or property owned		a political subdivision of the sta
Yes (Please complete this section)	☐ No (Skip to next)	section)
CURRENT OR FUTURE OWNER OF THE PUBLIC LAND TexAmericas Center		
CONTACT PERSON Eric Voyles	PHONE 903-334-6949	
ADDRESS 107 Chapel Lane New Boston, TX 75570	EMAIL eric.voyles@texamerio	cascenter.com

1000 Block of N Boundary Patrol Road

REQUEST FOR SHPO CONSULTATION -- PROJECT NAME: TexAmericas Center Central Campus 100 Acre STAR Site **New Boston** Bowie

Identification of Historic Properties: Archeology	
Does this project involve ground-disturbing activity?	
Yes (Please complete this section)	No (Skip to next section)
Describe the nature of the ground-disturbing activity, in- Currently the nature and extents of the ground-disturbing active developed as an industrial/commercial site and the ground-dis- type of construction.	vity is unknown. It is anticipated that the property will be
Describe the previous and current land use, conditions, The previous land use was a buffer zone for the Red River Arm western part of the site as a material storage yard and the remain timber clearing operations.	by Depot. The current land use includes a portion of the
Identification of Historic Properties: Structures	
Does the project area or area of potential effects includ features (such as parks or cemeteries) that are 45 year	rs of age or older?
Yes (Please complete this section)	■ No (Skip to next section)
Is the project area or area of potential effects within or eligible for listing in the National Register of Historic Pla  Yes, name of property or district:	adjacent to a property or district that is listed in or aces?
In the space below or as an attachment, describe each	
project area or area of potential effect that is 45 years	of age or older.
ADDRESS	DATE OF CONSTRUCTION SOURCE FOR CONSTRUCTION DATE
ADDRESS	DATE OF CONSTRUCTION SOURCE FOR CONSTRUCTION DATE
ADDRESS	DATE OF CONSTRUCTION SOURCE FOR CONSTRUCTION DATE
Attachments	For SHPO Use Only
Please see detailed instructions regarding attachments	
Include the following with each submission:	
■ Project Work Description	
■ Maps	NOHISTORIC
Identification of Historic Properties	PHOPERTIES AFFECTED
Photographs	PROJECT MAY PROCEED
For Section 106 reviews only, also include:	for Mark Wolfe
Consulting Parties/Public Notification	State Historic Preservation Officer
Area of Potential Effects	Dalo 6/29/15
Determination of Eligibility	Track#
Determination of Effect	
Submit completed form and attachments to the	
address below. Faxes and email are not acceptable	2.
Mark Wolfe	
State Historic Preservation Officer	
Texas Historical Commission P.O. Box 12276, Austin, TX 78711-2276 (mail service)	
108 W 16th Street Austin TX 78701 (courier service)	



#### DEED WITHOUT WARRANTY

Bowie County, Texas Velma Moore County Clerk On: Jun 03,1999 at 04:199

WHEREAS, pursuant to the Defense Base Closure and Realignment Act of 1990, Public Law 101-510, as amended, and codified at 10 U.S.C. 2687, note ("BRAC"), the Army has realigned the military installation known as the Red River Army Depot ("Red River"), and has made a final disposal decision with respect to the realigned portion thereof; and

WHEREAS, the Red River Redevelopment Authority, an authority of the State of Texas (the "RRRA"), as the federally-recognized local redevelopment authority for Red River, was granted the authority to oversee and implement the civilian reuse of the realigned portion of Red River in accordance with a locally-approved reuse plan; and

WHEREAS, the RRRA has made application for an Economic Development Conveyance ("EDC") for the purchase of the realigned portion of Red River; and

WHEREAS, the Army will retain the non-realigned portion of Red River (the "Retained Property"); and

WHEREAS, the Army, as authorized by BRAC and implementing regulations, has determined that the RRRA's EDC application for the realigned portion of Red River meets the criteria for conveyance to assist economic redevelopment and job creation and has accepted the RRRA's EDC application and made a final disposal decision with regard to the realigned portion of Red River; and

WHEREAS, pursuant to BRAC, the Army has the authority to convey and intends to convey the realigned portion of Red River to the RRRA, exclusive of the utility systems thereon; and

WHEREAS, as provided in the Memorandum of Agreement ("MOA") between the RRRA and the Army of even date herewith, consideration to be paid by the RRRA for the entire realigned portion of Red River, of which the buildings and appurtenances in this deed are a part, is eight hundred and fifty thousand dollars (\$850,000), and other good and valuable consideration.

KNOW ALL PERSONS BY THESE PRESENTS that the UNITED STATES OF AMERICA, acting by and through the SECRETARY OF THE ARMY (hereinafter the "Grantor"), under and pursuant to the Defense Base Closure and Realignment Act of 1990, as amended, (Public Law 101-510, as amended, 10 U.S.C. 2687, note), for

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Center Star Site is a tract of land within the confines of this property transferred from the United States of America to Red River Redevelopment Authority (now known as TexAmericas Center).

Note: The TexAmericas

consideration of eight hundred and fifty thousand dollars (\$850,000) paid and services in-kind to be provided, and subject to the reservations from and exceptions to conveyance as provided herein, has hereby granted, sold and conveyed unto the Red River Redevelopment Authority (hereinafter the "Grantee"), an authority of the State of Texas, having its principal place of business at Bowie County Court House, P.O. Box 248, New Boston, Texas 75570-0248, and its successors and assigns, without express or implied warranty, and exclusive of all warranties that might arise by common law and warranties in Section 5.023 of the Texas Property Code (or its successor), all that certain parcel of land located in Bowie County, Texas (the "Property"), which Property contains approximately six hundred and twenty-five (625) acres and is more particularly described in Exhibit A attached hereto and made a part hereof, specifically excepting from the Property parcels identified in Exhibit A.

The Property includes:

- a. all buildings, facilities, fixtures (including cranes), roadways, infrastructure, improvements thereon, and appurtenances thereto which constitute real property;
- b. all easements, reservations, and other rights appurtenant thereto;
- c. all hereditaments and tenements therein and reversions, remainders, issues, profits, and other rights belonging or related thereto; and
- d. all water rights, subject to third party rights, as their interest may appear. The Property does not include gas, oil and other mineral rights.

#### I. RESERVED RIGHTS AND EASEMENTS

The following rights and easements are hereby reserved by the Grantor:

#### A. Access to and from the Retained Property

For the purpose of providing ingress and egress by vehicle and on foot to and from the Retained Property, a nonexclusive right and easement is hereby reserved over Texas Avenue, Main Drive, Arkansas Drive, Ammo Drive and North Patrol Road at their current widths and locations. These reserved rights and easements will terminate with reference to said roads and/or streets set forth above when said roads and/or streets, or when other roads or streets providing substantially equivalent access to the Grantor, are legally designated and accepted as public ways pursuant to applicable law, and shall otherwise be perpetual. With regard to the access rights reserved by the Grantor

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herein, the Grantee shall retain the right to maintain, improve, repair, widen, alter, rename, or relocate any of the above-referenced roads and/or streets, so long as the Grantor is given continuous alternate access of similar quality during any periods of time any such road or street is not usable for the purposes specified herein.

#### B. Electric, Telephone, and other Utility Service

#### 1. Easements

For the purposes of providing and maintaining electric service, cable television, and telephone service to the Property and the Retained Property, the nonexclusive perpetual right and easement is hereby reserved within the Property, centered on the existing utility poles, lines, or appurtenances, the widths and dimensions as reasonably necessary to exercise the rights and perform the conditions set forth below, and in such other areas as may be necessary to provide such services, all as agreed upon in good faith by the Grantor and Grantee (collectively the "Easement Areas"):

- a. to operate, maintain, replace, and remove existing aboveground cables or poles, underground buried cables, handholes, conduits, cables, pipes, poles, anchors and guys, fixtures, appurtenances, and service connections, with the wires and cables therein or thereon, constituting a line or lines for the transmission and/or distribution of electricity, the transmission of intelligence by electricity, the provision of cable television service, and the provision of telephone service;
- b. to replace, repair, maintain and remove as necessary to provide electric, cable television, and telephone service to the Property, transformer pads or poles, with transformers thereon, handholes, wire distributing facilities, fixtures, apparatus, and service connections;
- c. to repair, replace, maintain and remove conduits, the necessary wires, underground buried cables, cables, fixtures, and appurtenances for service connections to said transformers, handholds, and wire distributing facilities;
- d. to use said line or lines for the transmission and/or distribution of electricity, the transmission of intelligence by electricity, the provision of cable television, and the provision of telephone service;
- e. to cut, trim, and remove trees, brush, overhanging branches, and any other obstructions to the extent that the Grantor deems reasonably necessary to clear up and keep clear and operate safely the said equipment;

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f. to use and operate such vehicles and equipment within the Easement Area as

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may be necessary to perform the functions authorized hereunder; and

- g. to enter upon and authorize or permit others to enter upon the Easement Area from time to time for all of the foregoing purposes.
  - 2. Conditions
- a. The Grantor shall, in the utilization of said utility line easement rights granted in this Subsection I.B.:
- (i) minimize interference with and disruption of the use and development of the Property by the Grantee, its successors and assigns;
- (ii) restore any areas disturbed in connection with work undertaken hereunder to a safe and usable condition:
- (iii) protect, in a workmanlike manner, at crossings and at all places in proximity to the Easement Area, in accordance with the National Electric Safety Code, all power transmission lines in such a manner as to not interfere with the use of the Property or menace life or property; and
- (iv) except in the case of an emergency, provide the Grantee, its successors and assigns, prior notice of its entry onto the Easement Area, and coordinate activities within the Easement Area, with representatives of the Grantee, its successors and assigns.
- b. The Grantee shall have the right to require the Grantor to relocate any of the Easement Areas and the lines or appurtenances therein, provided that the Grantee pays the reasonable cost of such relocation.
- C., Water, Sanitary Sewer, Industrial Wastewater, Gas, and Storm Sewer Service

#### 1. Easements

For the purposes of providing and maintaining water, sanitary sewer, industrial wastewater, gas, and storm water drainage services to the Property and the Retained Property, the nonexclusive perpetual right and easement is hereby reserved within the Property, centered on the existing utility lines (whether above or below ground), and appurtenances, the widths and dimensions as reasonably necessary to exercise the rights and perform the conditions set forth below, and in other areas as may be necessary to provide such services, all as agreed upon in good faith by the Grantor and Grantee (collectively the "Easement Areas"):

 a. to lay, construct, install, maintain, enlarge, remove, replace, operate, or repair waters, sanitary sewer, gas, industrial waste water or storm sewer mains, lines,

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# Volm 4Page 7509 3072 164 manholes, conduits, catch basins, and all related equipment and appurtenances thereto;

- b. to use said mains, lines, and appurtenances for their intended purposes, including the transmission of drinking water, storm water, gas, industrial waste and sanitary sewage:
- c. to make the excavations and improvements, above and below ground, as required to exercise the rights reserved above;
- d. to use and operate such vehicles and equipment within the Easement Area as may be reasonably necessary to perform the functions authorized hereunder; and
- e. to enter upon and authorize and permit others to enter upon said land of the Grantor from time to time for all of the foregoing purposes.

#### 2. Conditions

The conditions for the use of the above reserved easement rights shall be the same as the conditions set forth in Subsection 1.B.2. above, exclusive of paragraph 1.B.2.a. (iii).

#### D. Railroad Rights of Way

For the purposes of providing rail service to the Retained Property, the exclusive and perpetual right and easement is hereby reserved within the Property, centered on existing rail spurs and extending twenty-five (25) feet on either side of the center line of said rail spurs (the "Rail Spurs"), as follows:

The Rail Spurs which run parallel in a easterly and westerly fashion, and perpendicular in a northerly and southerly fashion to the Texas and Pacific Railroad main line as described in Map # E779.4 P E, dated 8 March 1948, entitled Railroad, Red River Division, Track and Switch Numbers and Location Map, more particularly described as:

Tract 68 as it currently exists;

Track 69 as it currently exists;

Tracks 71 and 71A as they currently exist;

Track 72 as it currently exists;

Track 73 as it currently exists; and,

Track 74 as it currently exists.

With regard to this reservation for the use of the Rail Spurs, the Grantor shall retain the right to maintain, improve, and repair said Rail Spurs as necessary for continued operations. In the use of these Rail Spurs, the Grantor shall (i) minimize the

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Page 165 interference with and disruption of the use and development of the Property by the Grantee, its successors and assigns, (ii) restore any areas disturbed in connection with work undertaken hereunder so that said areas are in a safe and useable condition, (iii) adequately protect intersections with existing streets to ensure the safe use of said streets, and (iv) not utilize the Rail Spurs for storage purposes. Furthermore, subject to conditions satisfactory to the Grantor, the Grantor agrees to allow use of the Rail Spurs by the Grantee.

#### E. Reservation of Line of Site Clear Zone

For purposes of maintaining the security of the Retained Property, the Grantor reserves a line of site clear zone in an area ten (10) feet from the existing fenceline currently separating the Retained Property from the Property, including the right to keep the area clear. This reservation and prohibition shall not be applicable in any way to existing buildings, structures or appurtenances within said ten (10) foot area as of the date of this Deed, which existing buildings, structures and appurtenances may be repaired, altered, maintained, or demolished, or rebuilt at their present locations, without regard to this reservation and prohibition.

#### F. Reservation of Use and Occupancy of Certain Buildings

The Grantor reserves the use and occupancy of the following signs and displays in their current locations and buildings, including parking and other facilities currently being used by the Grantor in connection with the use of said buildings and related facilities, as follows:

1. Buildings, including associated parking lots

Buildings No. 164, 110, 112, S- 123, 125, 135a, 137, 139, 219, S- 225, 228, S- 245, 245a, S-251, 260, 274, 275, 276, 277, S- 278, 279, 280, 283, 284, 288, 291 and 369.

#### 2. Signs and Displays

Main Gate Depot Sign, Main Gate Vehicle Displays, MWR, Electronic Sign.

The Grantor further reserves the right of ingress and egress to said buildings, signs and displays. The Grantor shall be responsible for (i) the operation, upkeep and interior maintenance, and (ii) the securing of utilities, for said buildings, displays and signs. The Grantor may relinquish the right to use and occupy said buildings, signs and displays at any time by giving the Grantee thirty (30) days written notice. The Grantor shall return said buildings to the Grantee in a clean and safe condition, damage by fire

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or other casualty and fair wear and tear excepted.

#### G. Future Confirmatory Instruments

The Grantor and the Grantee agree to cooperate in establishing more precise locations of the above easements and reservations, as the parties deem necessary and at no cost to the Grantor, and in filing confirmatory instruments as may be required in the future with regard thereto.

#### II. INSTALLATION RESTORATION PROGRAM ("IRP")

The Grantor acknowledges that Red River has not been identified as a National Priority List ("NPL") site under CERCLA, as defined below. Red River does have a Compliance Plan ("Compliance Plan") associated with the current Red River Hazardous or Solid Waste Facility Permit ("Permit") issued pursuant to the Resource Conservation and Recovery Act and the Texas Solid Waster Disposal Act ("RCRA"). There are no known Solid Waste Management Units (SWMU) nor known releases to groundwater within the Property. A copy of the Permit and Compliance Plan is available upon written request at the following address: Commander, Red River Army Depot, ATTN: SIORR-BTO, 100 Main Drive, Texarkana, TX 75507-5000. In addition, a copy can also be viewed during regular business hours at the Texas Natural Resource Conservation Commission Central Office, 12100 Park Thirty-Five Circle, Building A, Austin, Texas.

#### **III. CERCLA COVENANTS AND NOTICE**

Pursuant to Section 120(h)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. Section 9601 et seq. ("CERCLA"):

#### A. Notification and Covenants

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1. The Grantor hereby notifies the Grantee of the storage and release of hazardous substances on the Property. For the purpose of this Deed, "hazardous substances" shall have the same meaning as section 101(14) of CERCLA. Available information regarding the type, quantity, and location of such substances and action taken is at Exhibit B herein. The information regarding this storage and release indicates that there is no threat to human health or the environment on the Property.

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#### The Grantor hereby covenants that:

- a. all remedial action necessary to protect human health and the environment with respect to any such hazardous substances remaining on the Property has been taken before the date of conveyance hereunder; and
- b. any additional remedial action found to be necessary with regard to such hazardous substances remaining on the Property after the date of the conveyance that resulted from past activities of the Grantor shall be conducted by the Grantor. This covenant shall not apply to the extent such remedial actions are caused by activities of the Grantee, its successors or assigns.

#### B. Access Rights and Easement

The Grantor reserves a right and easement for access to the Property in any case in which remedial action or corrective action is found to be necessary after the date of this Deed. In exercising these rights of access, except in case of imminent endangerment to human health or the environment, the Grantor shall give the Grantee, or the then record owner, at least thirty (30) days prior written notice of actions to be taken in remediation of the Property, and shall use reasonable means, without significant additional cost to the Grantor, to avoid and/or minimize interference with the use of the Property by the Grantee, its successors and assigns. Furthermore, any such actions undertaken by the Grantor pursuant to this Section III.B will, to the maximum extent practicable, be coordinated with a representative of the Grantee, its successors and assigns. Grantee agrees that, notwithstanding any other provisions of the Deed, that the Grantor assumes no liability to the Grantee, its successors and assigns, or any other person, should remediation of the Property interfere with the use of the Property by the Grantee, its successors and assigns.

#### C. Transfer Documents

The Grantee and its successors and assigns covenant and agree that all leases, transfers or conveyances of the Property occurring subsequent to the date of this Deed shall be made expressly subject to, and shall have the benefit of, the provisions contained in this Article III.

IV. RESTRICTIVE COVENANTS

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#### A. PURPOSES

In order to protect human health and the environment, and promote community objectives, and further the common environmental objectives of the Grantor, the State of Texas, and the reuse plan of the Grantee, the parties agree to be bound by the covenants and restrictions set forth below in perpetuity, or until said covenants and restrictions are released by the Grantor, as provided for below. These restrictions and covenants (collectively, the "Restrictive Covenants") benefit the lands retained by the Grantor, the State of Texas and the public welfare generally and are consistent with state and federal environmental statutes.

#### **B. RESTRICTIONS**

#### 1. Residential Use Restriction

The Grantee and its successors and assigns coverant not to use the portion of the Property identified in Exhibit C as the Non-Residential Use Restriction Tract ("Non-Residential Tract") for residential purposes, residential purposes to include, but not be limited to, housing, day care facilities, schools (excluding education and training programs and schools for persons eighteen years of age or older) and assisted living facilities.

#### 2. Groundwater Use Restriction

In order to prevent the migration of groundwater from adjacent land, the Grantee and its successors and assigns covenant not to access or use groundwater underlying the portion of Property identified in Exhibit C as the Groundwater Use Restriction Tracts ("Groundwater Tracts") for any purpose, without the prior written approval of the Grantor, which approval will not be unreasonably withheld or delayed. For the purposes of this restriction, the term "groundwater" shall have the same meaning as in Section 101(12) of CERCLA.

#### C. MODIFICATIONS

Nothing contained herein shall preclude the Grantee from undertaking, in accordance with applicable law, such additional remediation necessary to allow for the release or modification of the above Restrictive Covenants. Any such additional remediation shall be undertaken at no significant cost to the Grantor as determined by the Grantor, and shall be subject to the prior written consent of the Grantor, which consent shall not be unreasonably withheld or delayed. This consent may be

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conditioned upon such terms and conditions the Grantor deems reasonable and appropriate, including the securing of performance or payment bonds, or insurance.

#### D. ENFORCEMENT

#### 1. Rights of the United States and the State of Texas

The Restrictive Covenants stated in Section IV.B. above benefit the public in general and the territory surrounding the Property, including lands retained by the Grantor, and, therefore, the Restrictive Covenants are binding on the Grantee, its successors and assigns; shall run with the land; and are forever enforceable by the United States government and the State of Texas.

#### 2. Liability of the Grantee

Notwithstanding any other provision of this Deed, any agreement between the Grantee and the Grantor, the provisions of CERCLA or Section 330 of the National Defense Authorization Act of 1993, as amended, the Grantee and its successors and assigns covenant and agree to be fully responsible for any investigation and/or remediation of hazardous substances, pollutants or contaminants, or petroleum or petroleum derivatives, to the extent that such investigation and/or remediation results from a violation of the Restrictive Covenants set forth in this Article IV.

#### 3. Indemnification

The Grantee and its successors and assigns, as may be permitted by applicable Texas law and subject to the availability of appropriated or legally authorized funds, agree to indemnify and hold the Grantor, its officers, agents, and employees harmless from and against all suits, claims, demands, judgments, fines or penalties, liabilities, costs, or attorneys' fees to the extent such suits, claims, demands, judgments, fines or penalties arise out of a violation of the Restrictive Covenants contained in this Article IV by the Grantee, its successors and assigns.

#### 4. Transfer Documents

The Grantee and its successors and assigns covenant and agree that all leases, transfers, or conveyances of all or portions of the Non-Residential Tract and the Groundwater Tracts occurring subsequent to the date of this Deed shall be made expressly subject to, and shall have the benefit of, the provisions contained in this Article IV.

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# V. ENVIRONMENTAL BASELINE STUDY ("EBS") AND FINDING OF SUITABILITY TO TRANSFER ("FOST")

The Grantee has received the technical environmental reports, including the Environmental Baseline Survey for the Property dated December 18, 1996, as supplemented on February 5, 1998 (collectively the "EBS") and the FOST for the property dated March 1999, prepared by the Grantor, and agrees, to the best of the Grantee's knowledge, that they accurately describe the environmental condition of the Property. The Grantee has inspected the Property and accepts the physical condition and current level of environmental hazards on the Property and deems the Property to be safe for the Grantee's intended use. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the Property after the date of the conveyance, whether or not such substance was set forth in the technical environmental reports, including the EBS, Grantee or its successors or assigns shall be responsible for such release or newly discovered substance unless Grantee is able to ... demonstrate that such release or such newly discovered substance was due to Grantor's activities, ownership, use, or occupation of the Property. Grantee, its successors and assigns, as consideration for the conveyance, agree to release Grantor from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of this Deed, where such substance or product was placed on the Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This Article V shall not affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations, or the Grantor's indemnification obligations under applicable laws.

# VI. NOTICE OF THE PRESENCE OF LEAD BASED PAINT AND COVENANT AGAINST THE USE OF THE PROPERTY FOR RESIDENTIAL PURPOSES.

A. The GRANTEE is hereby informed and does acknowledge that all buildings on the Property, which were constructed or rehabilitated prior to 1978, are presumed to contain lead-based paint. Lead from paint, paint chips, and paint dust can pose health hazards if not managed properly. Every purchaser of any interest in Residential Real Property on which a residential dwelling was built prior to 1978 is notified that such property may present exposure to lead from lead-based paint that may place young children at risk of

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developing lead poisoning. Lead poisoning in young children may produce permanent neurological damage, including learning disabilities, reduced intelligence quotient, behavioral problems, and impaired memory. Lead poisoning also poses a particular risk to pregnant women. The seller of any interest in residential real property is required to provide the buyer with any information on lead-based paint hazards from risk assessments or inspections in the seller's possession and notify the buyer of any known lead-based paint hazards. "Residential Real Property" means any housing constructed prior to 1978, except housing for the elderly (households reserved for and composed of one or more persons 62 years of age or more at the time of initial occupancy) or persons with disabilities (unless any child who is less than 6 years of age resides or is expected to reside in such housing) or any 0-bedroom dwelling.

- B. Available information concerning known lead-based paint and/or lead-based paint hazards, the location of lead-based paint and/or lead-based paint hazards, and the condition of painted surfaces is contained in the Environmental Baseline Survey. All purchasers of Residential Real Property must receive the federally-approved pamphlet on lead poisoning prevention. The GRANTEE hereby acknowledges receipt of all of the information described in this subparagraph.
- C. The GRANTEE acknowledges that it has received the opportunity to conduct its own risk assessment or inspection for the presence of lead-based paint and/or lead-based paint hazards prior to execution of this document.
- D. The GRANTEE covenants and agrees that it shall not permit the occupancy or use of any buildings or structures on the Property as Residential Real Property without complying with this section and all applicable federal, state, and local laws and regulations pertaining to lead-based paint and/or lead-based paint hazards. Prior to permitting the occupancy of the Property where its use subsequent to sale is intended for residential habitation, the GRANTEE specifically agrees to perform, at its sole expense, the Army's abatement requirements under Title X of the Housing and Community Development Act of 1992 (Residential Lead-Based Paint Hazard Reduction Act of 1992) (hereinafter Title X). In complying with these requirements, the GRANTEE covenants and agrees to be responsible for any abatement or remediation of lead-based

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paint or lead-based paint hazards on the Property found to be necessary as a result of the subsequent use of the property for residential purposes. The GRANTEE covenants and agrees to comply with solid or hazardous waste laws that may apply to any waste that may be generated during the course of lead-based paint abatement activities.

E. The GRANTEE further agrees to indemnify and hold harmless the Army, its officers, agents and employees, as may be permitted by applicable Texas law, and subject to the availability of appropriated of legally authorized funds, from and against all suits, claims, demands, or actions, liabilities, judgments, costs and attorney's fees arising out of, or in a manner predicated upon personal injury, death or property damage resulting from, related to, caused by or arising out of lead-based paint or lead-based paint hazards on the Property if used for residential purposes.

F. The covenants, restrictions, and requirements of this Article VI shall be binding upon the GRANTEE, its successors and assigns and all future owners of Residential Real Property, and shall be deemed to run with the land on which the Residential Real Property is situated. The GRANTEE on behalf of itself, its successors and assigns, covenants that it will include and make legally binding, this Article VI in all subsequent transfers, leases, or conveyance documents that include Residential Real Property.

#### VII. NOTICE OF THE PRESENCE OF ASBESTOS AND COVENANT

A. The GRANTEE is hereby informed and does acknowledge that friable and non-friable asbestos or asbestos-containing materials ("ACM") has been found in buildings and structures on the Property, as described in the final base-wide EBS Environmental Baseline Survey for Red River Army Depot dated December 1996. The ACM in buildings and structures on the Property does not currently pose a threat to human health or the environment, and all friable asbestos that posed a risk to human health has either been removed or encapsulated.

B. The GRANTEE covenants and agrees that its use and occupancy of the Property will be in compliance with all applicable laws relating to asbestos; and that the Grantor assumes no liability for future remediation of asbestos or damages for personal injury, illness, disability, or death, to the GRANTEE, its successors or assigns, or to any other

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person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with asbestos on the Property, whether the GRANTEE, its successors or assigns, have properly warned or failed to properly warn the individual(s) injured. The GRANTEE agrees to be responsible for any future remediation of asbestos in buildings and structures found to be necessary on the Property.

- C. Unprotected or unregulated exposures to asbestos in product manufacturing, shipyard, and building construction workplaces have been associated with asbestos-related diseases. Both the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA) regulate asbestos because of the potential hazards associated with exposure to airborne asbestos fibers. Both OSHA and EPA have determined that such exposure increases the risk of asbestos-related diseases, which include certain cancers and which can result in disability or death.
- D. The GRANTEE acknowledges that it has inspected the Property as to its asbestos content and condition and any hazardous or environmental conditions relating thereto. The GRANTEE shall be deemed to have relied solely on its own judgment in assessing the overall condition of all or any portion of the Property, including, without limitation, any asbestos hazards or concerns.
- E. The GRANTOR assumes no liability for any damages to person or property, and gives no warranties, either express or implied, with regard to the presence or absence of asbestos or asbestos containing materials (ACM) in buildings and structures, or whether the property is or is not suitable for a particular purpose. The Grantee further agrees to indemnify and hold harmless the Grantor, its officers, agents and employees, as may be permitted by applicable Texas law, and subject to the availability of appropriated or legally authorized funds, from and against all suits, claims, demands or actions, liabilities, judgments, penalties, costs and attorneys' fees arising out of, or in any manner predicated upon, future asbestos abatement or remediation from within buildings and structures on the Property; disposal of ACM or asbestos after conveyance to the Grantee; personal injury, death or property damages resulting from, related to,

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caused by or arising out of exposure to asbestos within buildings or structures on the Property after the conveyance of such portion of the Property to the Grantee. The Grantee's obligation hereunder shall apply whatever the United States incurs costs or liabilities for actions giving rise to liability under this Section. The Grantee shall not be responsible for indemnifying or holding the Grantor harmless from any loss, claims, liabilities, judgments, penalties, costs, or damages arising out of exposure to asbestos occurring prior to the date of this Deed.

#### VIII. NOTICE OF NON-DISCRIMINATION

With respect to activities related to the Property, The Grantee shall not discriminate against any person or persons or exclude them from participation in the Grantee's operations, programs or activities conducted on the Property, because of race, color, religion, sex, age, handicap, or national origin.

## IX. INDEMNIFICATION

Not withstanding any other provision of this Deed, except for Articl IV.D.2, the Grantor recognizes its obligation to comply with Section 330 of the Department of Defense Authorization Act of 1993, as amended.

## X. ANTI-DEFICIENCY ACT

The Grantor's obligation to pay or reimburse any money under this Deed is subject to availability of appropriated funds to the Department of the Army, and nothing in this Deed shall be interpreted to require obligations or payments by the United States in violation of the Anti-Deficiency Act.

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## **UNITED STATES OF AMERICA**

Vouis Caldera

Secretary of the Army

**COMMONWEALTH OF VIRGINIA** 

) SS

**COUNTY OF ARLINGTON** 

I, undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, whose commission as such expires on the 26 day of 675 do hereby certify that this day personally appeared before me in the Commonwealth of Virginia, County of Arlington, Secretary of the Army, whose name is signed to the foregoing instrument, acknowledged the foregoing instrument to be his free act and deed, dated 26 day of 700, 1991, and acknowledged the same for and on behalf of the United States of America.

MY COMMISSION EXPIRES ON SEPTEMBER 30, 1999

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ACCEPTANCE: Red River Redevelopment Authority, by its duly qualified and authorized Executive Director, Richard Hall, does hereby accept and approve this Deed Without Warranty and agrees to all of the terms and conditions thereof as of the 20 day of March, 1999.

RED RIVER REDEVELOPMENT AUTHORITY

Richard Hall

Its: Executive Director

## **ACKNOWLEDGMENT**

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COUNTY OF BOWIE

On 30 Mark 1999 before me, LORA I. EASTERLING personally appeared Richard W. Hall, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

NOTARY PUBLIC

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Exhibits:

A. Description of the Property

B. CERCLA Notice

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# EXHIBIT A

#### LAND DESCRIPTION - 765.5 Acres

A tract of land situated in the Charles Collom Survey, Abstract No. 108, Jonathan Collom Survey, Abstract No. 109, C. M. Akin Survey, Abstract No. 2, J. H. Smelser Survey, Abstract No. 722, John M. Smith Survey, Abstract No. 819, and the John Paxton Survey, Abstract No. 461, Bowie County, Texas, and being all of a one tract of land, Tract No. 503 as described in Warranty Deed to the United States of America as recorded in Volume 192, Page 92 (Tract No. 2) of the Deed Records of Bowie County, Texas, and being a portion of nine tracts of land, Tract No. 504 as described in Judgement on Declaration of Taking No. 1 as recorded in Volume 184, Page 148 of the Deed Records of Bowie County, Texas, Tract No. 501 as described in Warranty Deed to the United States of America as recorded in Volume 188, Page 342 of the Deed Records of Bowie County, Texas, Tract No. 502 as described in Warranty Deed to the United States of America as recorded in Volume 190, Page 372 of the Deed Records of Bowie County, Texas, Tract No. 537 as described in Warranty Deed to the United States of America as recorded in Volume 190, Page 372 of the Deed Records of Bowie County, Texas, Tract No. 503 as described in Warranty Deed to the United States of America as recorded in Volume 192, Page 92 (Tract No. 1) of the Deed Records of Bowie County, Texas, Tract No. 531 as described in Warranty Deed to the United States of America as recorded in Volume 186, Page 121 of the Deed Records of Bowie County, Texas, and Tract No. 529 as described in Judgement on Declaration of Taking No. 1 as recorded in Volume 184, Page 148 of the Deed Records of Bowie County, Texas, Tract No. 527 as described in Warranty Deed to the United States of America as recorded in Volume 190, Page 116 of the Deed Records of Bowie County, Texas, and Tract No. 526 as described in Judgement on Declaration of Taking No. 4 as recorded in Volume 192, Page 135 of the Deed Records of Bowie County, Texas. and being more particularly described as follows: COMMENCING at a PK nail set in concrete fence post base at the intersection of the southerly right-of-way line of the Texas Pacific Railroad with the east line of the said the completion report for the Red River Ordinance Depot, dated November 30, 1942, from which a one inch brass rod stamped "R.R.O.D. #2, 1942" found in a four inch by

Charles Collom Survey and being the northeast corner of the Red River Army Depot as reference in four inch concrete base bears South 19 degrees 26 minutes 24 seconds West a distance of 7.21 feet;

THENCE, South 86 degrees 22 minutes 15 seconds West along the southerly right-of-way line of the Texas & Pacific Railroad a distance of 3,664.42 feet to a five-eighths inch iron rod set with "Huitt-Zollars" cap at the POINT OF BEGINNING, said POINT OF BEGINNING also being North 00 degrees 18 minutes 22 seconds West 2,827.78 feet and North 86 degrees 21 minutes 50 seconds East 1,017.50 feet from the Southeast Corner of the Jonathan Collum Headright Survey, A-108;

THENCE, South 03 degrees 53 minutes 26 seconds East and along a chain link fence a distance of 457.13 feet to a five-eighths inch iron rod set with "Huitt-Zollars" cap, said rod being southwesterly of the centerline of a spur railroad track a perpendicular distance of 10,00 feet and being the beginning of a non-tangent curve to the right;

THENCE, in a southerly direction parallel with and 10.00 foot from said spur track and along said curve to the right through a central angle of 22 degrees 08 minutes 35 seconds

EXHIBIT A

and having a radius of 643.04 feet and an arc length of 248.52 feet, being subtended by a chord of South 14 degrees 45 minutes 12 seconds East a distance of 246.97 feet to a

five-eighths inch iron rod set with "Huitt-Zollars" cap at the end of said curve;

THENCE, South 04 degrees 00 minutes 36 seconds East parallel with and 10.00 foot from said spur track a distance of 232.21 feet to a five-eighths inch iron rod set with "Huit-Zollars" cap;

THENCE, South 86 degrees 32 minutes 05 seconds West a distance of 49.86 feet to a chain tink fence corner post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 48 degrees 34 minutes 56 seconds West a distance of 14.17 feet;

THENCE, with said chain link fence the following bearings and distances:

South 03 degrees 41 minutes 59 seconds East a distance of 1,285.86 feet to a fence corner post from which a Mag nail set bears North 48 degrees 36 minutes 24 seconds West a distance of 14.17 feet:

South 86 degrees 29 minutes 10 seconds West a distance of 387.63 feet to a fence corner post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 19 degrees 35 minutes 50 seconds West a distance of 10.87 feet;

North 47 degrees 17 minutes 25 seconds West a distance of 199.70 feet to a fence corner post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 63

degrees 55 minutes 37 seconds East a distance of 10.73 feet;

North 04 degrees 51 minutes 15 seconds West a distance of 243.22 feet to a fence corner post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 40 degrees 36 minutes 11 seconds East a distance of 14.03 feet;

South 86 degrees 03 minutes 42 seconds West a distance of 51.40 feet to a gate post from which a PK nail set bears North 06 degrees 09 minutes 13 seconds West a distance of 10.01 feet:

THENCE, South 81 degrees 37 minutes 54 seconds West along said fence and an extension thereof a distance of 425.22 feet to a fence corner post from which a cut cross set bears

North 04 degrees 53 minutes 09 seconds West a distance of 10.02 feet;

THENCE, South 88 degrees 35 minutes 51 seconds West along a chain link fence a distance of 237.60 feet to a fence post from which a five-eighths inch iron rod set with

"Huit-Zollars" cap bears North 02 degrees 40 minutes 08 seconds West a distance of 10.00 feet; THENCE, South 86 degrees 03 minutes 56 seconds West continuing along said fence a distance of 867.95 feet to a five-eighths inch iron rod set with "Huitt-Zollars" cap in fence

line from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 10 degrees 33 minutes 59 seconds West a distance of 10.07 feet;

THENCE, South 72 degrees 48 minutes 06 seconds West and along a chain link fence a distance of 485.28 feet to a fence corner post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 07 degrees 09 minutes 32 seconds West a distance of 10.16

THENCE, North 87 degrees 07 minutes 08 seconds West along said chain link fence a distance of 128.15 feet to a fence post from which a five-eighths inch iron rod set with

"Huitt-Zollars" cap bears North 04 degrees 11 minutes 40 seconds East a distance of 10.00 feet; THENCE, North 84 degrees 29 minutes 27 seconds West along said fence a distance of 196.24 feet to a fence corner post from which a five-eighths inch iron rod set with

"Huitt-Zollars" cap bears North 05 degrees 24 minutes 10 seconds East a distance of 10.00 feet;

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THENCE, departing said fence North 84 degrees 42 minutes 09 seconds West a distance of 390.24 feet to a gate post from which a five-eighths inch iron rod set with

"Huitt-Zollars" cap bears North 05 degrees 27 minutes 21 seconds East a distance of 10.00 feet; THENCE, North 84 degrees 23 minutes 06 seconds West along a chain link fence a distance of 210.73 feet to a five eighths inch iron rod set with "Huitt-Zollars" cap in fence line

from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 25 degrees 53 minutes 04 seconds West a distance of 11.73 feet;

THENCE, South 32 degrees 36 minutes 57 seconds West and along a chain link fence a distance of 184.63 feet to a fence corner post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 75 degrees 49 minutes 06 seconds West a distance of 10.54

THENCE, along said chain link fence the following bearings and distances:

South 04 degrees 15 minutes 19 seconds East a distance of 620.46 feet to a fence corner post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears South 85 degrees 55 minutes 26 seconds West a distance of 10.00 feet;

South 03 degrees 54 minutes 00 seconds East a distance of 1,558.07 feet to a fence corner post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 48 degrees 46 minutes 22 seconds West a distance of 14.17 feet;

South 86 degrees 21 minutes 13 seconds West a distance of 2,707.77 feet to a fence corner post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 03 degrees 40 minutes 03 seconds West a distance of 10.00 feet;

South 86 degrees 18 minutes 46 seconds West a distance of 1,512.49 feet to a fence corner post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North

43 degrees 40 minutes 37 seconds East a distance of 14.76 feet; North 01 degree 02 minutes 38 seconds East a distance of 952.37 feet to a five eighths inch iron rod set with "Huitt-Zollars" cap in fence line from which a five-eighths inch iron

rod set with "Huitt-Zollars" cap bears North 20 degrees 55 minutes 59 seconds East a distance of 29.39 feet:

THENCE, North 43 degrees 37 minutes 50 seconds West and along a barbed wire fence a distance of 1,644.70 feet to a fence corner post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 68 degrees 38 minutes 36 seconds East a distance of 10.81 feet:

THENCE, North 01 degree 43 minutes 49 seconds East a distance of 45.19 feet to a point for corner on an extension of an east-west barbed wire fence, from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 46 degrees 00 minutes 47 seconds East a distance of 14.24 feet;

THENCE, North 89 degrees 22 minutes 15 seconds West and along a barbed wire fence a distance of 888.96 feet to a fence post from which a five-eighths inch iron rod set with

"Huitt-Zollars" cap bears North 00 degrees 28 minutes 32 seconds East a distance of 10.00 feet; THENCE, along said barbed wire fence the following bearings and distances:

North 89 degrees 40 minutes 40 seconds West a distance of 1,235.50 feet to a fence post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 00 degrees 44 minutes 29 seconds East a distance of 10.00 feet;

North 88 degrees 50 minutes 21 seconds West a distance of 800.02 feet to a fence post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 00 degrees 48 minutes 04 seconds East a distance of 10.00 feet;

North 89 degrees 33 minutes 32 seconds West a distance of 389.35 feet to a fence post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 00 degrees 12 minutes 54 seconds East a distance of 10.00 feet;

South 89 degrees 59 minutes 20 seconds West a distance of 396.21 feet to a fence corner post from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 46 degrees 59 minutes 42 seconds East a distance of 14.66 feet;

THENCE, North 04 degrees 00 minutes 07 seconds East along said barbed wire fence and an extension thereof a distance of 970.05 feet to a five-eighths inch iron rod set with

"Huitt-Zollars" cap from which a five-eighths inch iron rod set with "Huitt-Zollars" cap bears North 88 degrees 27 minutes 49 seconds East a distance of 10.04 feet;

THENCE, North 06 degrees 43 minutes 48 seconds West and along a barbed wire fence and extension thereof a distance of 673.70 feet to a five-eighths inch iron rod set with "Huitt-Zollars" cap on the south right-of-way line of the Texas & Pacific Railroad;

THENCE, North 86 degrees 18 minutes 33 seconds East along the south right-of-way line of the Texas & Pacific Railroad a distance of 4,094.41 feet to a five-eighths inch iron rod set with "Huitt-Zollars" cap;

THENCE, North 86 degrees 22 minutes 15 seconds East continuing along the south right-of-way line of the Texas & Pacific Railroad a distance of 8,298.52 feet to the POINT OF BEGINNING and CONTAINING 765.5 acres of land, more or less.

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#### EXCEPTED TRACTS

SAVE and EXCEPT and there is hereby excepted from the conveyance the following described tracts:

### Tract #01

Commencing at the POINT OF BEGINNING of the above-described 765.5 acre tract; THENCE South 86 degrees 22 minutes 15 seconds West 1,453.11 feet to a point; THENCE South 32 degrees 55 minutes 43 seconds East 1,084.96 feet to a point; THENCE North 86 degrees 19 minutes 37 seconds East 923.59 feet to a point; THENCE North 03 degrees 41 minutes 59 seconds West 46.00 feet to a point; THENCE North 86 degrees 32 minutes 21 seconds East 49.86 feet to a point; THENCE North 0 degrees 90 minutes 35 seconds West 232.21 feet to a point; THENCE in a northerly direction parallel with and 10 feet from the center line of a spur railroad tract and along said curve to the left to a certral angle of 22 degrees 8 minutes 35 seconds and having a radius of 643.04 feet and an arc length of 248.52 feet being subtended by a chord of North 14 degrees 45 minutes 12 seconds West a distance of 246.97 feet to a point; THENCE North 03 degrees 53 minutes 26 seconds West 457.13 feet to the POINT OF BEGINNING of this tract.

#### Tract #02

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract; THENCR South 03 degrees 41 minutes 42 s conds East 997.46 feet to a point, the POINT OF BEGINNING of this described tract; THENCE South 03 degrees 41 minutes 42 seconds East 280.6 feet to a point; THENCE South 86 degrees 31 minutes 07 set onds West 90.95 feet to a point; THENCE South 03 degrees 04 minutes 37 seconds East 57.89 feet to a point; THENCE South 03 degrees 04 minutes 37 seconds East 5.00 feet to a point; THENCE North 85 degrees 54 minutes 27 seconds East 91.19 feet to a point; THENCE South 03 degrees 44 minutes 04 seconds East 875.36 feet to a point; THENCE South 86 degrees 31 minutes 20 seconds West 387.75 feet to a point; THENCE North 47 degrees 17 minutes 09 seconds West 199.52 feet to a point; THENCE North 04 degrees 51 minutes 11 seconds West 243.26 feet to a point; THENCE South 86 degrees 25 minutes 17 seconds West 51.69 feet to a point; THENCE North 05 degrees 42 minutes 11 seconds West 213.71 feet to a point; THENCE South 89 degrees 37 minutes 06 seconds West 76,21 feet to a point; THENCE North 00 degrees 40 minutes 50 seconds West 198.27 feet to a point; THENCE North 35 degrees 42 minutes 21 seconds West 96.78 feet to a point; THENCE South 88 degrees 33 minutes 57 seconds West 266.19 feet to a point; THENCE North 09 degrees 12 minutes 00 seconds West 61.68 feet to a point; THENCE North 26 degrees 51 minutes 45 seconds West 212.88 feet to a point; THENCE North 17 degrees 27 minutes 11 seconds West 66.37 feet to a point;

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THENCE North 86 degrees 23 minutes 2 seconds East 1,077.63 feet to the POINT OF BEGINNING of this tract.

#### Tract #03

COMMENCING at the POINT OF BEGINN ING of the above described 765.5 acre tract; THENCE South 86 degrees 22 minutes 15 seconds West 1,453.11 feet to a point, the POINT OF BEGINNING of this described tract; THENCE South 86 degrees 22 minutes 15 seconds West 542.05 feet to a point; THENCE South 03 degrees 40 minutes 27 seconds East 947.33 feet to a point; THENCE North 86 degrees 19 minutes 36 seconds East \$25.24 feet to a point; THENCE South 03 degrees 40 minutes 24 seconds East 917.8 feet to a point; THENCE North 86 degrees 19 minutes 36 se conds East 166.41 feet to a point; THENCE North 81 degrees 37 minutes 56 se conda East 425.22 feet to a point; THENCE North 05 degrees 42 minutes 11 sc ands West 213.71 feet to a point; THENCE South 89 degrees 37 minutes 06 se conda West 76.21 feet to a point; THENCE North 00 degrees 40 minutes 50 so ands West 198.27 feet to a point; THENCE North 35 degrees 42 minutes 21 seconds West 96.78 feet to a point; THENCE South 88 degrees 33 minutes 57 so conds West 266.19 feet to a point; THENCE North 09 degrees 12 minutes 00 so ands West 61.68 feet to a point; THENCE North 26 degrees 51 minutes 45 seconds West 212.88 feet to a point; THENCE North 17 degrees 27 minutes 11 seconds West 66,37 feet to a point; THENCE North 86 degrees 23 minutes 12 seconds East 183.18 feet to a point; THENCE North 32 degrees 55 minutes 4( seconds West 1,084.96 feet to the POINT OF BEGINNING of this tract,

#### Tract #04

Commencing at the POINT OF BEGINNING of the above described 765.5 acres tract;
THENCE South 71 degrees 35 minutes 11 seconds West 7,960.42 fect to a point, the POINT OF
BEGINNING of this described tract;
THENCE North 89 degrees 26 minutes 38 seconds West 500.98 feet to a point;
THENCE South 01 degree 44 minutes 36 seconds West 138.56 feet to a point;
THENCE South 88 degrees 09 minutes 55 seconds East 497.06 feet to a point;
THENCE North 03 degrees 12 minutes 15 seconds East 149.78 feet to the POINT OF
BEGINNING of this tract.

#### Tract #05 (East)

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract;
THENCE South 61 degrees 54 minutes 16 seconds West 3,727.87 feet to the POINT OF
BEGINNING of this described tract;
THENCE North 89 degrees 32 minutes 41 seconds West 87.44 feet to a point;
THENCE North 81 degrees 44 minutes 44 seconds West 132.88 feet to a point;
THENCE South 10 degrees 21 minutes 07 seconds East 61.64 feet to a point;

Passaged Tracts

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THENCE South 28 degrees 06 minutes 10 sec ands East 286.04 feet to a point;

THENCE South 84 degrees 23 minutes 10 seconds East 228.88 feet to a point;
THENCE North 15 degrees 44 minutes 34 seconds East 17.45 feet to a point;
THENCE South 44 degrees 49 minutes 24 seconds East 20.55 feet to a point;
THENCE South 84 degrees 40 minutes 50 seconds East 183.48 feet to a point;
THENCE North 37 degrees 32 minutes 13 seconds West 382.27 feet to the POINT OF BEGINNING of this described tract.

#### Tract #05 (West)

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract;
THENCE South 73 degrees 05 minutes 01 seconds West 4,247.59 feet to a point, the POINT OF
BEGINNING of this described tract;
THENCE South 04 degrees 04 minutes 14 seconds East 482.63 feet to a point;
THENCE South 89 degrees 39 minutes 39 seconds East 452.88 feet to a point;
THENCE South 14 degrees 36 minutes 27 seconds East 82.56 feet to a point;
THENCE South 03 degrees 40 minutes 23 seconds West 216.62 feet to a point;
THENCE South 86 degrees 19 minutes 34 seconds West 563.18 feet to a point;
THENCE North 03 degrees 40 minutes 23 seconds West 124.66 feet to a point;
THENCE South 86 degrees 21 minutes 25 seconds West 481.48 feet to a point;
THENCE North 03 degrees 38 minutes 35 seconds West 206.92 feet to a point;
THENCE North 86 degrees 29 minutes 40 seconds East 376.70 feet to a point;
THENCE North 04 degrees 04 minutes 14 seconds West 480.69 feet to a point;
THENCE North 65 degrees 55 minutes 15 seconds East 70.36 feet to the POINT OF
BEGINNING of this described tract.

# Tract #06 (East)

Commencing at the POINT OF BEGINNING of the above-described 765.5 acre tract;
THENCE South 62 degrees 44 minutes 39 seconds West 2,982.17 feet to a point, the POINT OF
BEGINNING of this described tract;
THENCE South 84 degrees 21 minutes 57 seconds West 161.52 feet to a point;
THENCE South 02 degrees 57 minutes 15 seconds East 105.92 feet to a point;
THENCE South 03 degrees 05 minutes 53 seconds East 125.67 feet to a point;
THENCE South 02 degrees 56 minutes 41 seconds West 422.25 feet to a point;
THENCE North 86 degrees 24 minutes 23 seconds West 422.25 feet to a point;
THENCE North 02 degrees 33 minutes 58 seconds West 360.31 feet to a point;
THENCE North 15 degrees 13 minutes 08 seconds West 68.07 feet to a point;
THENCE North 15 degrees 13 minutes 05 seconds West 130.58 feet to a point;
THENCE North 15 degrees 13 minutes 07 seconds West 106.92 feet to the POINT OF
BEGINNING of this described tract.

## Tract #06 (West)

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract; THENCF South 61 degrees 55 minutes 03 seconds West 3,727.74 feet to a point, the POINT OF BEGINNING of this described tract;

Expensed Tracts
Page 3

7509 3072 Page 185 THENCE South 23 degrees 32 minutes 48 st conds East 109.23 fect to a point;
THENCE South 66 degrees 27 minutes 13 st conds West 84.19 feet to a point;
THENCE North 23 degrees 32 minutes 46 st conds West 109.23 feet to a point;
THENCE North 66 degrees 27 minutes 12 seconds East 84.19 feet to the POINT OF BEGINNING of this described tract.

#### Tract #07 (Past)

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract;
THENCE South 86 degrees 22 minutes 15 seconds West 5,010.80 feet to a point, the POINT OF
BEGINNING of this described tract;
THENCE South 86 degrees 22 minutes 15 seconds West 208.57 feet to a point;
THENCE South 03 degrees 31 minutes 41 seconds East 341.72 feet to a point;
THENCE North 86 degrees 03 minutes 34 seconds East 213.04 feet to a point;
THENCE North 04 degrees 16 minutes 50 seconds West 340.59 feet to the POINT OF
BEGINNING of this described tract.

#### Tract #07 (Wcst)

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract; IHENCE South 86 degrees 22 minutes 15 seconds West 5,245.75 feet to a point, the POINT OF BEGINNING of this described tract; IHENCE South 86 degrees 22 minutes 15 seconds West 377.55 feet to a point; IHENCE South 03 degrees 32 minutes 17 seconds East 343.92 feet to a point; IHENCE North 86 degrees 03 minutes 34 seconds East 377.5 feet to a point; IHENCE North 03 degrees 31 minutes 39 seconds West 341.87 feet to the POINT OF BEGINNING of this described tract.

#### Tract #08

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract;
THENCE South 72 degrees 35 minutes 02 seconds West 5,349.29 feet to a point, the POINT OF
BEGINNING of this described tract;
THENCE South 05 degrees 26 minutes 48 seconds East 181.26 feet;
THENCE North 86 degrees 29 minutes 40 seconds East 114.41 feet to a point;
THENCE South 01 degrees 23 minutes 59 seconds East 333.50 feet to a point;
THENCE South 86 degrees 25 minutes 02 seconds West 376.24 feet to a point;
THENCE North 04 degrees 15 minutes 23 seconds West 514.02 feet to a point;
THENCE North 86 degrees 17 minutes 41, seconds East 274.46 feet to the POINT OF
BEGINNING of this described tract.

## Tract #09

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract; THENCE South 21 degrees 18 minutes 43 se conds West 4,794.5 feet to a point, the POINT OF BEGINNING of this described tract;

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THENCE South 03 degrees 38 minutes 35 st conds East 206.92 feet to a point;
THENCE South 86 degrees 21 minutes 25 st conds West 504.95 feet to a point;
THENCE North 01 degree 23 minutes 59 set onds West 208.71 feet to a point;
THENCE North 86 degrees 29 minutes 40 seconds East 496.78 feet to the POINT OF BEGINNING of this described tract.

#### Tract #10

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract;
THENCE South 24 degrees 09 minutes 07 accords West 5,197.35 feet to a point, the POINT OF
BEGINNING of this described tract;
THENCE South 05 degrees 04 minutes 27 se conds East 74.9 feet to a point;
THENCE South 86 degrees 57 minutes 12 se conds West 290.4 feet to a point;
THENCE North 03 degrees 13 minutes 36 se conds West 74.65 feet to a point;
THENCE North 86 degrees 54 minutes 46 seconds East 287.98 feet to the POINT OF
BEGINNING of this described tract.

#### Tract #11

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract; THENCE South 86 degrees 22 minutes 15 seconds West 2,017.17 feet to a point, the POINT OF BEGINNING of this described tract; THENCE South 86 degrees 22 minutes 15 seconds West 1,737.82 feet to a point; THENCE South 03 degrees 54 minutes 53 seconds East 652.02 feet to a point; THENCE North 87 degrees 13 minutes 10 seconds East 589.44 feet to a point; THENCE South 04 degrees 19 minutes 49 seconds East 287.53 feet to a point; THENCE North 86 degrees 19 minutes 28 seconds East 1,142.43 feet to a point; THENCE North 03 degrees 40 minutes 27 seconds West 947.33 feet to the POINT OF BEGINNING of this described tract.

#### Tract #12

Commencing at the POINT OF BEGINNING of the above described 765.5 sure tract;
THENCE South 58 degrees 39 minutes 10 seconds West 6,495.13 feet to a point, the POINT OF
BEGINNING of this described tract;
THENCE South 05 degrees 57 minutes 36 seconds East 169.85 feet to a point;
THENCE South 86 degrees 25 minutes 37 seconds West 166.37 feet to a point;
THENCE North 02 degrees 45 minutes 27 seconds West 169.76 feet to a point;
THENCE North 86 degrees 26 minutes 24 seconds East 156.88 feet to the POINT OF
BEGINNING of this described tract.

## Tract #13

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract; THENCE South 21 degrees 2 minutes 48 seconds West 5,799.02 feet to a point, the POINT OF BEGINNING of this described tract;

Encepted Tracts Page 5

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# EXHIBIT B

# ATTACHMENT B

# TABLE 2

Notification of Hazardous Substances Storage, Release, Treatment and/or Disposal\*

Facility Identification & Description of Activities	Identify Hazardous Substance	Date of Storage, Release or Disposal	Planned Remedial Actions
Facility 39, swimming pool maintenance facility, constructed in 1975	Storage: Chlorine	Facility 39 stores chemicals for pool chlorination and cleaning (muriatic acid). Pipelines run between this building and the swimming pool. No documented evidence exists to conclude that any release, disposal, or migration of a hazardous substance has occurred.	попе
Bldg 125, currently in layaway status, is a light industrial maintenance shop constructed in 1943 composed of 1075 sq ft	Potential storage: POL and solvent	During the EBS site visit, it was noted that this building was a standby generator facility which housed a large stationary engine. A trench or sump existed around the generator until it was filled with concrete in approximately 1978. Blueprints indicate that this trench drained to the sanitary sewer system. No documented evidence exists to conclude that a release, disposal, or migration of hazardous substance has occurred.	None
Bldg 161 is a heavy equipment repair building constructed in 1942	Potential storage: solvents	It was observed during the EBS that contaminated diesel, oil, and antifreeze were stored in 55-gallon drums in this building which has subsequently been removed. Used parts and other pieces of equipment stored in boxes were also noted. This building contains a floor drain and was used as a wash rack prior to construction of Building S-163. This drain flows into the sanitary sewer system. No documented evidence exists to conclude that a release, disposal, or migration of a hazardous substance or petroleum product has occurred. Past operations have required storage of paint, oil, antifreeze and solvents in small quantities.	None
Bldg 164, constructed in 1942 and consisting of 4299 sq ft, was utilized as	Storage: cleaning solvents	The building contains no floor drains or sumps. Numerous solvents, POLs, and other	None
a carpenter shop between	1	cleaners were observed in	

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## **EXHIBIT O**

## RESTRICTED TRACTS

## Groundwater Restriction Tract

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract;
THENCE South 46 degrees 24 minutes 55 seconds West 1,556.44 feet to a point, the POINT OF
BEGINNING of this described tract;
THENCE South 86 degrees 19 minutes 36 seconds West 1,648.26 feet to a point;
THENCE South 42 degrees 12 minutes 28 seconds East 1,092.25 feet to a point;
THENCE North 86 degrees 03 minutes 56 seconds East 701.54 feet to a point;
THENCE North 03 degrees 40 minutes 24 seconds West 917.8 feet to the POINT OF
BEGINNING of this described tract.

#### Tract 11B-Groundwater

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract;
THENCE South 86 degrees 22 minutes 15 seconds West 1,995.96 feet to a point, the POINT OF
BEGINNING of this described tract;
THENCE South 03 degrees 40 minutes 27 seconds East 947.33 feet to a point;
THENCE South 86 degrees 19 minutes 28 seconds West 883.27 feet to a point;
THENCE North 03 degrees 40 minutes 32 seconds West 943.83 feet to a point;
THENCE North 86 degrees 22 minutes 15 seconds East 920.48 feet to the POINT OF
BEGINNING of this described tract.

## Non-Residential Use Restriction Tract

Commencing at the POINT OF BEGINNING of the above described 765.5 acre tract; THENCE South 46 degrees 24 minutes 55 seconds West 1,556.44 feet to a point, the POINT OF BEGINNING of this described tract; THENCE South 86 degrees 17 minutes 27 seconds West 4,362.05 feet; THENCE South 03 degrees 48 minutes 15 seconds East 992.73 feet to a point; THENCE North 86 degrees 19 minutes 26 seconds East 1,945.67 feet to a point; THENCE North 32 degrees 36 minutes 57 seconds East 133.3 feet to a point: THENCE South 84 degrees 23 minutes 06 seconds East 210.79 feet to a point; THENCE South 84 degrees 42 minutes 09 seconds East 390.24 feet to a point; THENCE South 84 degrees 29 minutes 27 seconds East 196.24 feet to a point; THENCE South 87 degrees 07 minutes 08 seconds East 128.15 feet to a point; THENCE North 72 degrees 48 minutes 06 seconds East 485.28 feet to a point; THENCE North 86 degrees 03 minutes 56 seconds East 867.95 feet to a point; THENCE North 88 degrees 35 minutes 51 seconds East 81.08 feet to a point; THENCE North 03 degrees 40 minutes 24 seconds West 917.8 feet to the POINT OF BEGINNING of this tract.

EXHIBIT C

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