

APPENDIX D
EDMS FILES
(ELECTRONIC COPY)



**OFFICE OF ENVIRONMENTAL COMPLIANCE
UNDERGROUND STORAGE TANK AND REMEDIATION DIVISION**
Routing/Approval Slip



AI No.	6290	Facility:	ENTERGY CORP	Date Routed:	
Other ID No.		Location:	GOVERNMENT STREET B. R.		
Activity No.		Originator:	Todd Thibodeaux		
Section/Group:	Rem 1	Attachments:	Yes		
Description/Type of Document(s):					

Closure ☐ Comfort Letter ☐ Correspondence ☐ Corrective Action ☐ Conveyance Notice ☐

NFA ☒ NOD ☐ Personnel ☐ Other ☐




Technical Review	Req'd.	Initials	Date	Return to Originator?	Comments
Environmental Scientist	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Geology	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Legal	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Technical Advisor	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Other (_____)	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Additional Comments					

Management Review	Req'd.	Initials	Date	Return to Originator?	Comments
Supervisor	<input checked="" type="checkbox"/>	ECU	11/15/13	<input type="checkbox"/> Y <input type="checkbox"/> N	
Manager	<input checked="" type="checkbox"/>	ECU for Clinton	11/15/13	<input type="checkbox"/> Y <input type="checkbox"/> N	
Administrator	<input checked="" type="checkbox"/>	TRD	11/15/13	<input type="checkbox"/> Y <input type="checkbox"/> N	copy for Vivian
Assistant Secretary	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Deputy Secretary	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Secretary	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Other (_____)	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Additional Comments					

☐ TEMPO Data Entry Completed (Date Document Completed): _____

Office of Environmental Compliance
Underground Storage Tank and Remediation Division
NFA, COC, or NFI Letters ONLY

(Use this form as an attachment to the OEC Route Slip for NFA, COC, or NFI Letters)

Originator:	Todd Thibodeaux	Check One or Both as Applicable:	<input checked="" type="checkbox"/> NFA Letter <input type="checkbox"/> COC Letter or <input type="checkbox"/> No Further Interest Letter
Required Cost/Fee Info			
Final Invoicing Verification Contact		Fee Payment Verification Contact	
PRP – Bridget Jones		Solid Waste – Vicki Thibodeaux	
Environmental Conditions Review – Jennifer Bounds		Environmental Conditions Review – Jennifer Bounds	
VRP – Vicki Thibodeaux		GW Fee – Vicki Thibodeaux	
Date Fee Paid:		Fee Type:	<input type="checkbox"/> SW (\$1320) <input type="checkbox"/> ECR (\$1500) <input type="checkbox"/> GW (\$ _____)
Date Final Invoice Paid:	VRP cost Waiver	Invoice Type:	<input type="checkbox"/> PRP <input checked="" type="checkbox"/> VRP <input type="checkbox"/> ECR (if costs incurred > \$1500 fee)
Technical Criteria Checklist for NFA/COC			
Document that vertical and lateral extent of impact has been defined to extent required. Check one:		<input type="checkbox"/> Industrial/Commercial <input checked="" type="checkbox"/> Non-Industrial (residential)	
Available information documents constituent concentrations in all media are less than or equal to the limiting RS at this time; OR Exceedance is addressed under a VRP Partial Remedial Action by Use Restrictions. <u>Verified by Team Leader (TL)</u>			 TL initials
Explain any unusual conditions or allowed exceedance.			
Controls in Place			
Are either LaDEQ-approved Controls (Engineering or Institutional) or Use Restrictions (VRP) part of the remedy? If "YES", attach a Clerk of Court Certified Copy, and select which types of control:			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Engineering Controls		Institutional Controls	
<input type="checkbox"/> Access Controls (Fences, etc.)	<input type="checkbox"/> Access Restrictions	<input type="checkbox"/> GW Use Restriction	
<input type="checkbox"/> Cap/Surface Soil Barrier Construction/Maintenance	<input type="checkbox"/> Building/Construction Restrictions	<input type="checkbox"/> Land Restriction	
<input type="checkbox"/> Impervious Cap	<input type="checkbox"/> City Ordinance	<input type="checkbox"/> Mortgage Notice (SW Industrial/Commercial)	
<input type="checkbox"/> Signage	<input type="checkbox"/> Conveyance Notice (all Industrial/Commercial)	<input type="checkbox"/> Non-Residential Use Restriction	
<input type="checkbox"/> Subsurface Containment	<input type="checkbox"/> Excavation Restriction	<input type="checkbox"/> Servitudes	
	<input type="checkbox"/> Partial Remediation Agreement	<input type="checkbox"/> Other	
Monitoring wells and/or borings were properly plugged and abandoned. <u>Verified by Team Leader (TL)</u>			 TL initials
Waste from investigation and/or corrective actions were properly disposed of, and disposal manifests or other documentation has been provided to LDEQ. <u>Verified by Team Leader (TL)</u>			 TL initials
Final inspection has been performed verifying conditions for NFA/COC.			<input checked="" type="checkbox"/> YES (Attach copy of FIF)

BOBBY JINDAL
GOVERNOR



PEGGY M. HATCH
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE

NOV 15 2013

Mr. Fernando J. Calle, REM
5564 Essen Lane
Baton Rouge, Louisiana 70809

RE: No Further Action Notification
Entergy Corp Government Street; AI Number (6290)
1509 Government Street
Baton Rouge, East Baton Rouge Parish, LA

Dear Mr.Calle:

The Louisiana Department of Environmental Quality – Underground Storage Tank and Remediation Division (LDEQ-USTRD) has completed its review of your Remedial Investigation Report dated May 2012, Results of Supplemental Investigation dated September 16, 2013 and Report of Site Remediation and Sampling Activities dated September 2013 for the above referenced area of investigation located at 1509 Government Street, Baton Rouge in East Baton Rouge Parish. Based on our review of this document and all previously submitted information, we have determined that no further action is necessary at this time. The Basis of Decision for this notification is attached.

If you have any questions or need further information, please call Todd Thibodeaux at (225) 219-3516. Thank you for your cooperation in addressing this area.

Sincerely,

A handwritten signature in black ink, appearing to read "T. F. Harris".

Thomas F. Harris,
Administrator
Underground Storage Tank and Remediation Division

jtt

Attachment *BOD*

c: Imaging Operations – Solid Waste
Terri Gibson
Bridget Jones (for sites with RCAT numbers)

BASIS OF DECISION FOR NO FURTHER ACTION

Entergy Corp. Government Street
AI# 6290

The Louisiana Department of Environmental Quality – Underground Storage Tank and Remediation Division (LDEQ-USTRD) has determined that Entergy Corp. Government Street requires No Further Action At This Time.

The property is currently unused. The property had a wholesale hay and feed store developed in the northwest corner of the property in 1908 until 1911. A residence was developed along Government Street in 1911. A lumber yard operated on the western portion of the property from 1911 until the 1940s. Baton Rouge Electric Light Plant operated an electrical generation plant from 1916 until the 1940s. During this time there were also two dwellings on the eastern portion of the property. Gulf States Utilities Co. operated an electrical substation at the property from the 1940s until the 1970s. Gulf States Utilities Co. used the property for storage, day to day operations, and business operations from the 1970s until the 1990s. Entergy used the property for financial, business, and paperwork activities, maintenance and repair operations, and storage from the 1990s until 2011. The property has been vacant and unused since the end of 2011. A complete soil and groundwater investigation report with a date of May 2012, a supplemental soil and groundwater investigation report with a date of September 16, 2013 and a site remediation report with a date of September 2013 covered all remedial and investigation activities performed on site.

Remedial standards were developed for this property using LDEQ's RECAP Management Option 1 standards. The standards that were applied to this site are listed in the table that appears at the end of this BOD. The site at present contains 10 buildings, paved areas, storage areas, and a communication tower. The site is considered an industrial use property; however, it is being evaluated under a non-industrial (residential) scenario for unrestricted future use of the property. According to the Louisiana Department of Natural Resources (LDNR) there are 98 registered wells located within a one-mile radius of the site. Of the 98 registered wells, 66 of the wells were registered as plugged and abandoned, abandoned, inactive, or destroyed and 32 are active wells. Of the 32 active wells, 11 are monitor wells, nine are observation wells, five are piezometers, three are heat pumps, two are public supply wells, one is an irrigation well, and one is a cathodic well. Of the registered water wells, one power generation and one public supply well were in close proximity to the subject property. The 1,820-foot bgs power generation well is registered to Gulf States Utilities, and the 2,284-foot bgs public supply well is registered to Baton Rouge WW. Based on depths, the power generation and public supply wells were not hydraulically connected to the upper transmissive zone at the site. Results from a sample analyzed for total dissolved solids (TDS) revealed a TDS concentration of 392 milligrams per liter (mg/l). Slug tests results revealed the well yield in the shallow aquifer is less than one gallon per day (gpd). Based upon a TDS concentration of 392 mg/l and a well yield of <1 gpd, the shallow groundwater at the site is classified as Class 3A. The nearest surface water body is Capitol Lake located approximately 4,000 feet northeast of the site, which is classified as a non-drinking water source. Therefore, the appropriate GW₃ designation is Groundwater Classification 3 Non-Drinking Water (GW_{3NDW}).

BOD

Page 2

Remedial actions taken included the removal and disposal of approximately 29,374 gallons of fluid from two concrete USTs, pressure washing of USTs and filling in USTs with 324 cubic yards of concrete grout mixture. Also, three hydraulic lifts were removed and disposed of along with 26.2 tons of contaminated soil. The lifts were transported to Southern Recycling in Port Allen, La. and the contaminated soil was disposed of at Woodside Landfill in Walker, La. Material manifest sent to LDEQ verified that the contaminated material has been disposed of properly. Confirmatory soil samples confirmed that the source has been mitigated. TPH, RECAP metals, VOCs, and SVOCs samples taken in the tank area were below RECAP non-industrial screening standards. TPH fractions and SVOCs samples taken in the lift areas were below RECAP non-industrial screening standards. No Further Action At This Time is granted when contamination is reduced to the extent necessary to achieve the established standards.

There are no institutional controls on this property, because all remaining COC concentrations were below non-industrial standards

An inspection of the site was performed on November 14, 2013 confirming that no investigation derived waste remains on site.

All investigation wells were plugged and abandoned in accordance with applicable sections of *Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook*, prepared by the LDEQ and the LDOTD, dated December 2000.

The impacted media, constituents of concern, maximum concentration remaining on site and limiting RECAP standards established for this site are listed in the following table:

Medium	Constituent of Concern	Maximum Remaining Concentration (mg/kg)	Limiting RECAP Standard (mg/kg)
Soil	1,2 Dichlorobenzene	.00046	310 MO-1 Soilesni
	1,1 Dichlorethane	.0019	47 MO-1 Soilesni
	1,2 Dichloroethene	.018	3.4 MO-1 Soilesni
	1,3 Dichloropropene	.0063	3.1 MO-1 Soilni
	Acetone	.34	130 MO-1 Soilesni
	Benzene	.006	1 MO-1 Soilesni
	Carbon Disulfide	.0088	.31 MO-1 Soilesni
	Carbon Tetrachloride	.0068	.26 MO-1 Soilesni
	Cis-1,2-Dichloroethene	.018	1.2 MO-1 Soilesni
	Cis-1,3-Dichloropropene	.0063	1.7 MO-1 Soilesni
	Ethylbenzene	.0016	230 MO-1 Soilsat
	M,p-Xylene	.0028	15 MO-1 Soilesni
	Methyl Ethyl Ketone	.040	2000 MO-1 Soilni
	Methylene Chloride	.0015	13 MO-1 Soilesni
	Toluene	.0037	11 MO-1 Soilesni
	Benz(a)anthracene	.051	.62 MO-1 Soilni
	Benzo(a)pyrene	.281*	.33 MO-1 Soilni
	Benzo(b)fluoranthene	.568*	.62 MO-1 Soilni
	Dibenz(a,h)anthracene	.13	.33 MO-1 Soilni
	Indeno(1,2,3-cd)Pyrene	.45	.62 MO-1 Soilni
	Lead	180	400 MO-1 Soilni**

* Calculated 95% UCL

** SPLP Standard of 0.300 mg/L therefore Limiting Standard in Soilni

Medium	Constituent of Concern	Maximum Remaining Concentration	Limiting RECAP Standard
Groundwater	Arsenic	.052	1000 MO-1 GW3NDW
	Lead	.058	8.7 MO-1 GW3NDW
	Vanadium	.027	779 MO-1 GW3NDW

Additional information on the details of the investigation and evaluation of this site may be obtained from LDEQ's Public Records Center located in the Galvez Building, Room 127, 602 N. Fifth Street, Baton Rouge, LA 70802. Additional information regarding the Public Records may be obtained by calling (225) 219-3168 or by emailing publicrecords@la.gov

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
FIELD INTERVIEW FORM**

AGENCY INTEREST#: 6290 INSPECTION DATE: 11-14-13 TIME OF ARRIVAL: 1:30 PM
 ALTERNATE ID#: _____ DEPARTURE DATE: 11-14-13 TIME OF DEPARTURE: 2:00 PM
 FACILITY NAME: (ID Type/Number) Entergy Corp PH #: _____
 LOCATION: 1509 Government Street
Baton Rouge 70802 PARISH NAME: L. Baton Rouge
 RECEIVING STREAM (BASIN/SUBSEGMENT): _____
 MAILING ADDRESS: _____
 FACILITY REPRESENTATIVE: (Street/P.O. Box) Fernando Calle (City) _____ (State) _____ (ZIP) _____
 FACILITY REPRESENTATIVE PHONE NUMBER: _____
 NAME, TITLE, ADDRESS and TELEPHONE of RESPONSIBLE OFFICIAL (if different from above): _____

INSPECTION TYPE: Rem PROGRAM INVOLVED: AIR WASTE WATER OTHER ZAS

INSPECTOR'S OBSERVATIONS: (e.g. AREAS AND EQUIPMENT INSPECTED, PROBLEMS, DEFICIENCIES, REMARKS, VERBAL COMMITMENTS FROM FACILITY REPRESENTATIVES)

I arrived onsite and met with Fernando Calle (Entergy) and Jim Fort Votick (CBAI). We inspected the lift area. All lift areas were backfilled. All temporary wells have been ~~for~~ PVA'd. The concrete USTs were filled in with concrete. The site is ready for NFA status.

AREAS OF CONCERN:

REGULATION	EXPLANATION	CORRECTED?
_____	_____	YES NO
_____	_____	YES NO

PHOTOS TAKEN: ☐ YES ☒ NO SAMPLES TAKEN: ☐ YES ☒ NO (Attach Chain-of-custody)

RECEIVED BY: SIGNATURE: F. J. Calle

PRINT NAME: FERNANDO J. CALLE

(NOTE: SIGNATURE DOES NOT NECESSARILY INDICATE AGREEMENT WITH INSPECTOR'S STATED OBSERVATIONS)

INSPECTOR(S): Todd Thibodeaux CROSS REFERENCE: _____

ATTACHMENTS: _____

REVIEWER: _____

NOTE: The information contained on this form reflects only the preliminary observations of the inspector(s). It should not be interpreted as a final determination by the Department of Environmental Quality or any of its officers or personnel as to any matter, including, but not limited to, a determination of compliance or lack thereof by the facility operator with any requirements of statutes regulations or permits. Each day of non-compliance constitutes a separate violation of the regulations and/or the Louisiana Environmental Quality Act.

East Baton Rouge Redevelopment Authority
801 North Boulevard, Suite 200
Baton Rouge, Louisiana 70802

Remediation Services Division
Mr. [Signature]
[Signature]
6290
[Signature]
[Signature]

EAST BATON ROUGE
REDEVELOPMENT
AUTHORITY

September 12, 2013

Mr. Duane Wilson
Louisiana Department of Environmental Quality
Environmental Technology
P.O. Box 4314

RE: 1509 Government Street (A.I. 6290)

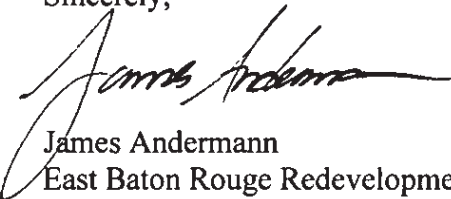
Dear Mr. Wilson:

As discussed in our August 22, 2013 meeting, the East Baton Rouge Redevelopment Authority ("Authority") respectfully withdraws from the Voluntary Remediation Program, an application for which we submitted to Mr. Thomas F. Harris on September 4, 2012.

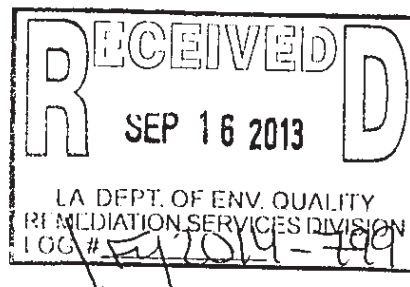
Due to a positive modification by the current owner of the subject property, it's in the best interest of the Authority to withdraw from the VRP program.

Should you have any questions, please call.

Sincerely,



James Andermann
East Baton Rouge Redevelopment Authority
Director of Real Estate



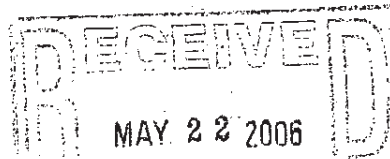


PYBURN & ODOM MCA

Engineering & Related Services Since 1948

SPLP

May 16, 2006



FY2006-4651

Keith L. Casanova, Administrator
Remediation Services
Post Office Box 4314
Baton Rouge, Louisiana 70821-4314

Remediation Services Division	
Manager	S. Odom
Team Leader	Lamie P.
AI #	139360 - 9911
MRMPO Task #	2034420
Desk Copy	File Room

Attention: Keith Casanova

RE: Submittal for Review of the Phase II Environmental Site Assessment for the O'Brien House Site located at the corner of Laurel and N. 12th Street in Baton Rouge, Louisiana
P&O Project No. 14-754

Dear Mr. Casanova:

On behalf of Domain-Design, Pyburn & Odom, MCA is please to submit this Phase II Environmental Site Assessment for the above referenced Site for your review and feed back.

Please do not hesitate to call with any additional questions or comments you may have.

Sincerely,

PYBURN & ODOM, MCA

Jonathan Vavasseur
Project Environmental Specialist

Enclosures: Phase II ESA Report

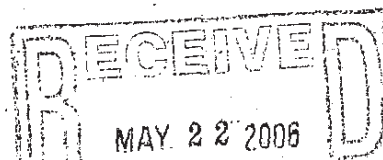


PYBURN & ODOM MCA

Engineering & Related Services Since 1948

SPLP

May 16, 2006



EX-2006-4651

Keith L. Casanova, Administrator
Remediation Services
Post Office Box 4314
Baton Rouge, Louisiana 70821-4314

Remediation Services Division	
Manager:	SIDNA
Team Leader:	Louie P.
AI #:	139360
PMPO Task #:	2034420
Desk Copy File Room:	

Attention: Keith Casanova

RE: Submittal for Review of the Phase II Environmental Site Assessment for the O'Brien House Site located at the corner of Laurel and N. 12th Street in Baton Rouge, Louisiana
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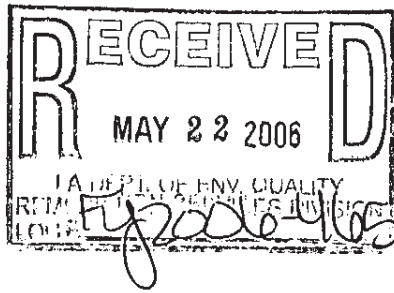
Please do not hesitate to call with any additional questions or comments you may have.

Sincerely,

PYBURN & ODOM, MCA

Jonathan Vavasseur
Project Environmental Specialist

Enclosures: Phase II ESA Report



Remediation Services Division	
Manager:	<u>Silva</u>
Team Leader:	
AI #:	<u>139300</u>
TEMPO Task #:	
<input type="checkbox"/> Desk Copy	File Room:

**PHASE II
ENVIRONMENTAL SITE ASSESSMENT
FOR A PROPERTY
LOCATED AT THE CORNER OF
LAUREL AND NORTH 12TH STREET
EAST BATON ROUGE PARISH, LOUISIANA**

PREPARED FOR:

**DOMAIN - DESIGN
9131 INTERLINE AVENUE SUITE 4B
BATON ROUGE, LOUISIANA 70809**

PREPARED BY:

**PYBURN & ODOM MCA
8178 G.S.R.I. AVENUE
BATON ROUGE, LA 70820**

P&O PROJECT NO. 14-754

MAY 15, 2006

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1.0 INTRODUCTION

This report summarizes the results of the Phase II Environmental Site Assessment Services performed by Pyburn & Odom MCA, LLC at the location of the circular concrete slab on the O'Brien House Site determined to be the foundation for a gas storage tank for the former Baton Rouge Electric Company Gas Plant. The Site is located at the corner of Laurel and N 12th Street in Baton Rouge, Louisiana. The assessment was performed for Domain-Design Inc. of Baton Rouge, Louisiana.

The recommendation for a Phase II Site Assessment to determine if there is any contamination on the Site, was based on the condition that the circular concrete slab was used as a foundation for a gas storage tank for the former Baton Rouge Electric Company Gas Plant that occupied the Site in the early to mid 1900's. This tank was used for balancing purposes rather than storage of gas. This facility used the coal gassification process to convert coal partially or completely to combustible gases.

The Scope of Work for this project was as follows:

- Visually inspect the Site for any visible evidence of contamination.
- Obtain soil samples at 1-2 foot intervals at a maximum depth of four feet.
- Place soil samples in resealable bags for on-site analysis of the sample headspace with a Photo Ionization Detector (PID).
- Submit the soil samples to a laboratory for analysis of Toxicity Characteristic Leaching Procedure (TCLP) and Semi Volatile Organic Compounds (SVOC's)

Field work for this investigation was completed on April 20, 2006. This report summarizes the results of the sampling and analysis completed during this project. Background information on the property is also included.

2.0 BACKGROUND INFORMATION

2.1 SITE LOCATION AND DESCRIPTION

The Site is located at the corner of Laurel and N 12th Street in Baton Rouge, Louisiana. The circular concrete slab is located in the cleared southern portion of the Site and was used in the past by the former Baton Rouge Electric Company Gas Plant as the foundation of a gas storage tank (See Attached Vicinity Map in Appendix A for the Site Location).

The study area is bordered to the north by the Department of Health and Hospitals building, to the east by the O'Brien House, to the west by N. 12th St. and to the south by Laurel St. The study area was part of the Baton Rouge Electric Company Gas Works in the late 19th century and in the early decades of the 20th century. It most recently served as a residential/commercial property and contained a residential building that has recently been demolished and removed. The circular concrete slab was discovered after the Site was cleared.

A letter received from the Department of Culture Recreation and Tourism dated March 17, 2006 stated that the circular concrete slab served as a foundation for a gas storage tank (geometer) associated with the former Baton Rouge Electric Company Gas Plant.

The geometer was used for balancing purposes to insure that the pipes operated within a safe range of pressure. This letter also contained a sanborn map dated 1923 that shows the facility and gasometer located on the Site at the corner of Laurel and N 12th Street (See Department of Culture Recreation and Tourism letter in Appendix G).

3.0 SOIL SAMPLING

Sub-surface sampling activities at this Site were conducted on April 20, 2006. The soil boring activities were conducted utilizing a manual hand auger. This type of field sampling equipment utilizes a five foot steel auger that is manually twisted into the ground to obtain a soil core sample. At the desired sampling depth, a portion of the core sample is extracted to obtain an undisturbed sample for analysis.

Soil boring locations close to and surrounding the circular concrete slab were originally planned such that, they would most likely indicate the presence of contamination from the coal gasification process should it exist. A total of six soil borings were taken, four around the periphery of the concrete slab, one sample to the east against the O'Brien House building, and one sample for quality assurance (See Site Map in Appendix B for Sample locations).

The Scope of Work for these soil borings called for the six borings to be advanced to a maximum depth of four feet. Shallow ground water was encountered in three of the six soil borings. The soil boring depths are as follows: Boring No. 1 to 3.5 ft., Boring No. 2 to 3.0ft., Boring No.3 to 2.5ft., Boring No.4 to 2.5 ft., Boring No. 5 to 3.5 ft., and Boring No. 6 to 2.5 feet.

Soil samples were retrieved at varying depths from each boring and were field-analyzed for physical characteristics including: texture, grain size, color, moisture content, possible staining, and any unusual odors. The shallow soils underlying the study area were found to consist primarily of deposited fill material to depths ranging from 0-2 ft. Boring No. 1 encountered a black fibrous fowl smelling layer at 2.0 ft. that persisted to 3.0 ft. Geological and field observations are included on field boring logs in Appendix E.

In addition each retrieved soil sample was field-screened for the presence of Volatile Organic Compounds (VOC's) using a photo ionization detector (PID). The soil samples were placed in resealable containers as they were collected and allowed to reach ambient temperature. The headspace of each container was then probed with a PID to provide an approximate measure of the concentration of VOC's present in the soil. PID readings were recorded on the boring logs. These PID values ranged from 0.0 parts per million (PPM) in samples taken at variable depths in boring 2-5. The highest PID reading was 38.5 ppm at boring No. 1. The soil samples from each boring were then placed in the provided clean glass sample jar with a resealable screw-on lid, labeled, stored in a cooler and sent to the laboratory.

A bulk sample of a light gray siding material was collected. This material was found on the site in small pieces and is suspect-asbestos-containing material. The material was placed into a labeled bag and was submitted to CA Laboratory under a Chain of Custody for analysis via polarized light microscopy. .

All sampling equipment was decontaminated prior to and between each sampling interval to prevent cross-contamination of soil samples. Decontamination was accomplished by thoroughly washing all equipment with tap water and non-phosphate detergent, then rinsing clean with distilled water. After the samples were taken, the holes were back filled to grade with the remainder of soil excavated from the boring.

4.0 LABORATORY ANALYTICAL RESULTS

4.1 SOILS ANALYSIS

Soil samples from each of the five borings were submitted to a laboratory for analysis of Toxicity Characteristic Leaching Procedure (TCLP) and Semi Volatile Organic Compounds (SVOC's). All TCLP concentrations from SP1-1, SP1-3, SP2-1, SP2-2, SP3-1, SP3-2, SP4-1, and SP5-1 ranged from <0.0020 to <1.0 mg/l. All soil sample TCLP metals results were below the regulatory level set forth by the Environmental Protection Agency (EPA). All soil analysis was by USEPA method 6010B and was performed by EMSL Analytical, of Westmont, NJ. (See Laboratory Results in Appendix F).

Soil sample SP1-2, SP1-4, SP2-2, SP2-2, SP3-1, SP4-2, SP5-2, and SP6-1 were tested for concentrations of Semi Volatile Organic Compounds. All soils analysis were by USEPA method 8270 ABN and were performed by EMSL Analytical, of Westmont, NJ (See Laboratory Results in Appendix F).

The results of the laboratory concentrations were then compared to the Industrial Soils Concentration Limits found in the Louisiana Department of Environmental Quality (LADEQ) RECAP Table Screening Standards for Soil and Ground water. Our comparison showed that soil samples SP1-2, SP1-4, SP2-2, SP3-1, SP4-2, SP2-2, SP3-1, SP4-2, and SP5-2 had concentrations of certain compound above the accepted limits set forth by the LDEQ RECAP Screening Standards (Tables 1-6 show the elevated concentrations of each compound for that particular sample).

The results of the analysis of the light gray material revealed 25% Chrysotile Asbestos. The sample analysis was performed by CA Labs, LLC. of Baton Rouge, Louisiana via polarized light microscopy. CA Labs is a successful participant in the National Institute of Standards and Technology (NIST), National Voluntary Laboratory Accreditation Program (NVLAP) and LEFEQ, LELAP certified.

TABLE 1

**Elevated Semi Volatile Organic Compound Concentrations (SVOC's)
in Soils for SP-1-2**

O'Brien House Site, Baton Rouge, Louisiana

Case #	Compound	Lab Concentration Mg/kg	RECAP (Soil I) Table Concentration Mg/kg
91-20-3	Naphthalene	290	43
206-44-0	fluoran thene	670	220
56-55-3	Benzo (a) anthracene	260	2.9
205-99-2	Benzo (b) fluoran thene	220	2.9
207-08-9	Benzo (k) fluoranthene	93	29
50-32-8	Benzo (a) pyrene	180	0.33
193-39-5	idena (1,2,3-cd) pyrene	130	2.9
53-70-3	Dibenz (a,h) anthracene	37	0.33

TABLE 2

**Elevated Semi Volatile Organic Compound (SVOC's)
Concentrations in Soils for SP1-2**

O'Brien House Site, Baton Rouge, Louisiana

Case #	Compound	Lab Concentration Mg/kg	RECAP (Soil I) Table Concentration Mg/kg
91-20-3	Naphthalene	290	43
56-55-3	Benzo (a) anthracene	260	2.9
218-01-4	Chrysene	530	290
205-99-2	Benzo (b) fluoranthene	500	2.9
207-08-9	Benzo (k) fluoranthene	180	29
50-32-8	Benzo (a) pyrene	410	0.33

193-39-5	idena (1,2,3-cd) pyrene	310	2.9
----------	----------------------------	-----	-----

TABLE 3

**Elevated Semi Volatile Organic Compound (SVOC's)
Concentrations in Soils for SP2-2**

O'Brien House Site, Baton Rouge, Louisiana

Case #	Compound	Lab Concentration Mg/kg	RECAP (Soil I) Table Concentration Mg/kg
50-32-8	Benzo (a) pyrene	410	0.33

TABLE 4

**Elevated Semi Volatile Organic Compound (SVOC's)
Concentrations in Soils for SP3-1**

O'Brien House Site, Baton Rouge, Louisiana

Case #	Compound	Lab Concentration Mg/kg	RECAP (Soil I) Table Concentration Mg/kg
205-99-2	Benzo (b) fluoranthene	92	2.9
207-08-9	Benzo (il) fluoranthene	32	29
50-32-8	Benzo (a) pyrene	84	0.33
193-39-5	idena (1,2,3-cd) pyrene	81	2.9
53-70-3	Dibenz (a,h) anthracene	9	0.33

TABLE 5

**Elevated Semi Volatile Organic Compound (SVOC's)
Concentrations in Soils for SP4-2**

O'Brien House Site, Baton Rouge, Louisiana

Case #	Compound	Lab Concentration Mg/kg	RECAP (Soil I) Table Concentration Mg/kg
50-32-8	Benzo (a) pyrene	0.47	0.33

TABLE 6

**Elevated Semi Volatile Organic Compound (SVOC's)
Concentrations in Soils for SP5-2**

O'Brien House Site, Baton Rouge, Louisiana

Case #	Compound	Lab Concentration Mg/kg	RECAP (Soil I) Table Concentration Mg/kg
205-99-2	Benzo (b) fluoranthene	82	2.9
207-08-9	Benzo (k) fluoran thene	30	29
50-32-8	Benzo (a) pyrene	76	0.33
193-39-5	idena (1,2,3-cd) pyrene	76	2.9
53-70-3	Dibenz (a,h) anthracene	22	0.33

5.0 SUMMARY AND CONCLUSIONS

A Phase II Environmental Site Assessment was performed by Pyburn & Odom in the southern portion of the O'Brien House Site located at the corner of Laurel and N 12th Street in Baton Rouge, Louisiana. The recommendation for a Phase II Environmental Assessment was based on the condition that the Site was formerly occupied by the Baton Rouge Electric Company Gas Plant and the large concrete slab discovered was used as the foundation for a gas storage tank in the coal gasification process for converting coal partially or completely to gas.

Subsurface soil sampling was conducted to determine if any contamination may be present at the subject property. Four soil borings were drilled around the periphery of the circular concrete slab, one boring was done to the east of the slab against the O'Brien House building, and another boring was done off site for quality assurance.

Soil samples were retrieved at varying depths ranging from 1-4 feet and the headspace of each sample was field screened for VOC's utilizing a PID. PID field screening values ranged from 0.0 ppm in the soils retrieved from borings 2-5 to 38.5 ppm in soil boring 1.

Shallow soils at the boring locations chosen for this study up to 2.5 feet consisted of fill material and below consisted of olive gray silty clay. Ground water was observed in soil borings 1,2 and 3 at a depth of 1.5 feet.

Laboratory Analytical results indicate that the concentrations of TCLP metals in the soil samples taken were below the regulatory level set forth by the USEPA.

Laboratory Analysis also indicate that soil samples SP1-2, SP1-4, SP2-2, SP3-1, SP4-2 and SP5-2 contain concentrations of SVOC's above the acceptable limits defined in the LDEQ Screening standards for soil and ground water.

The source of contamination at this Site has not been confirmed. The past use of this Site as the former Baton Rouge Electric Company Gas Plant and the coal gasification process may have caused the SVOC contamination detected in the laboratory analysis.

The results of the analysis of the light gray siding material revealed 25% Chrysotile Asbestos. The material is found on the site mixed with the loose surface soil and stockpiled materials.

6.0 RECOMMENDATIONS

Pyburn & Odom recommends the following action be taken at this Site:

- 1). Notify the State of Louisiana Department of Environmental Quality (LDEQ) that soil contamination has been detected at the subject site.

- 2). Following the investigation to define the extent of contamination, evaluate whether corrective action will be required by LDEQ. If LDEQ requires more definition of the contamination we propose to conduct a Phase III Investigation. If so, prepare a corrective action plan to address the contamination problem at the Site.

APPENDIX A
P&O PROJECT TEAM

PYBURN & ODOM, INC.
PHASE I – ENVIRONMENTAL SITE ASSESSMENTS
PROJECT TEAM

Charles A. Steele, P.E.
Harry A. Rayner
Brian Miller
Jonathan Vacasseur

Senior Environmental Engineer
Environmental Specialist
Biologist
Biologist

Mr. Charles A. Steele. Mr. Steele received his degree in Chemical Engineering from the University of Tennessee. Mr. Steele has over 25 years of experience in environmental assessments and corrective action plans. His early employment with the Tennessee Department of Health and Environment as an Environmental Engineer has provided him with the skills and experience necessary to solve environmental problems of all types, including environmental investigations and site remediation. Mr. Steele is a Registered Professional Engineer in the State of Louisiana.

Mr. Harry A. Rayner. Mr. Rayner received his degree in Construction Technology from Louisiana State University. Over the past twenty-five years, Mr. Rayner has served as Project Manager for hundreds of environmental assessments and remediation projects. He has developed and administered projects for industrial and commercial facilities, and for schools and hospitals. Mr. Rayner has directed and conducted hundreds of environmental site assessments including Phase I's, II's and III's. He is a Registered Environmental Assessor in the State of California, and an AHERA Accredited Asbestos Designer, Inspector, Management Planner and Contractor Supervisor, and has performed environmental site inspections throughout the West Coast, Canada and the State of Louisiana. Mr. Rayner is a LADEQ Accredited Asbestos Designer and Inspector.

Mr. Brian K. Miller. Mr. Miller has his B.S. degree in Wildlife and Fisheries Science and his M.S. in Wildlife Ecology and has successfully completed the Wetlands Identification Course. Mr. Miller has conducted numerous Phase I Environmental Site Assessments and Wetland Delineations.

Mr. Jonathan Vavasseur. Mr. Vavasseur has his B.S. degree in Wildlife and Fisheries Science. Mr. Vacasseur has conducted numerous Phase I Environmental Site Assessments and Wetland Delineations.

**APPENDIX B
VICINITY MAP**

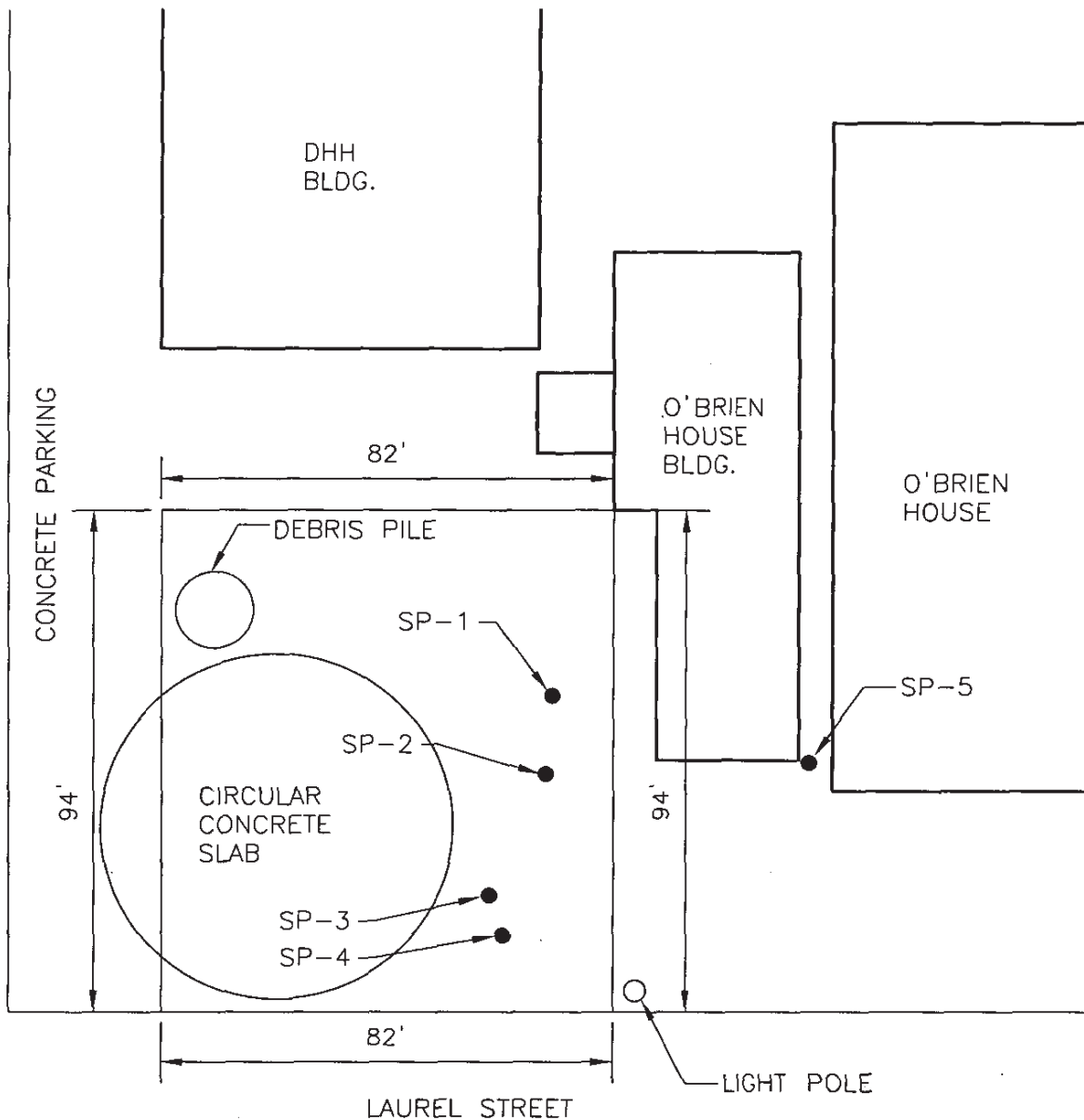


G:\CAD\ACAD\14-754domain2\permits\VICINITY.dwg (Layout1) Plotted on: May 16, 2006 - 10:45am by Susan Brogan

BY	DOMAIN-DESIGN	
	BATON ROUGE, LOUISIANA	
REVISIONS	PHASE II ENVIRONMENTAL SITE ASSESSMENT	
	VICINITY MAP	
DATE	CORNER OF LAUREL ST. AND N. 12th ST.	
	EAST BATON ROUGE PARISH, LOUISIANA	
DATE	PYBURN & ODOM, INC.	
	CONSULTING ENGINEERS	
DATE	BATON ROUGE, LOUISIANA	
	DRAWN BY: P&O CHECKED BY: HAR APPROVED BY: HAR	
DATE	DATE: MAY, 2006	
	PROJECT NO. : 14-754	

APPENDIX C
SITE MAP

N. 12TH STREET



LEGEND:

● SAMPLE POINT

DATE	REVISIONS	BY	DOMAIN-DESIGN		
			BATON ROUGE, LOUISIANA		
			PHASE II ENVIRONMENTAL SITE ASSESSMENT		
			SITE MAP		
			CORNER OF LAUREL ST. AND N. 12th ST.		
			EAST BATON ROUGE PARISH, LOUISIANA		
			PYBURN & ODOM, INC. CONSULTING ENGINEERS		
BATON ROUGE, LOUISIANA					
DRAWN BY: P&O		CHECKED BY: HAR		APPROVED BY: HAR	
DATE: APRIL, 2006		PROJECT NO. : 14-754			

APPENDIX D
SITE PHOTOGRAPHS



PHOTO NO. 1

LOOKING NORTH AT THE CLEARED SOUTHEAST PORTION OF
THE SITE.



PHOTO NO. 2

LOOKING WEST AT THE CIRCULAR CONCRETE SLAB IN THE
SOUTHERN PORTION OF THE SITE.



PHOTO NO. 3

LOOKING EAST AT SP-1.



PHOTO NO. 4

LOOKING EAST AT SP-2.



PHOTO NO. 5

LOOKING SOUTHEAST AT SP-3.



PHOTO NO. 6

LOOKING SOUTH AT SP-4.



PHOTO NO. 7

LOOKING EAST AT SP-5 AGAINST THE OBRIEN HOUSE
BUILDING.



PHOTO NO. 8






LOOKING NORTH AT SP-1 - SP-4 AROUND THE PERIPHERY
OF THE CIRCULAR CONCRETE SLAB.

APPENDIX E
FIELD BORING LOGS

BORING LOG NO. 1PROJECT NO. 14-754

Test Assignments	Soil Samples		Groundwater Levels	Depth (Feet)	Samples	PHOTO IONIZATION DETECTOR (PPM)	Torvane or Penetrometer Readings (TSF)	LOCATION: <u>SP-1</u> DATE: <u>4/24/06</u> TIME BEGINNING: <u>10:18</u> TIME ENDING: <u>10:55</u>	SURFACE ELEVATION: <u>GROUND</u> DRY AUGER: <u>✓</u> WET ROTARY: <u>N/A</u> COMPLETION DEPTH: <u>3.5 FT</u>
	No.	Type							
GENERAL MATERIAL DESCRIPTION AND STRATIGRAPHY									
								BROWN FILL MATERIAL	
TCLP SV	1-1 1-2	GRAB		1					
				2				BLACK ODOROUS FIBROUS CLAY MATERIAL WET	
TCLP SV	1-3 1-4	GRAB		3		58ppm			
								OLIVE GRAY SILTY CLAY	
				4				BOTTOM OF BORING	

KEY

-  THIN-WALLED TUBE
-  SPLIT-BARREL SAMPLER
-  GROUNDWATER FIRST ENCOUNTERED
-  GROUNDWATER LEVEL (After 30 MIN)
-  HAND AUGER

REMARKS

SAMPLE 2'-3' - STRONG ORGANIC CREOSOTE SMELL

WATER ENCOUNTERED AT 242 FEET

BORING LOG NO. 2PROJECT NO. 14-754

Test Assignments	Soil Samples		Groundwater Levels	Depth (Feet)	Samples	PHOTO IONIZATION DETECTOR (PPM)	Torvane or Penetrometer Readings (TSF)	LOCATION: <u>SP-2</u> DATE: <u>4/20/06</u> TIME BEGINNING: <u>10:15</u> TIME ENDING: <u>10:24</u>	SURFACE ELEVATION: <u>Ground</u> DRY AUGER: <u>✓</u> WET ROTARY: <u>N/A</u> COMPLETION DEPTH: <u>3.0'</u>
	No.	Type							
								GENERAL MATERIAL DESCRIPTION AND STRATIGRAPHY	
								Brown Fill material	
TCLP SV	2-1	GRAB		1					
TCLP SV	2-2	GRAB		2		OPPM			
				3				Olive Grey Silty Clay	
								Bottom of Boring	
				4					

KEY



THIN-WALLED TUBE



HAND AUGER



SPLIT-BARREL SAMPLER



GROUNDWATER FIRST ENCOUNTERED



GROUNDWATER LEVEL (After ____ Hours)

REMARKS

BORING LOG NO. 3PROJECT NO. 14-754

Test Assignments	Soil Samples		Groundwater Levels	Depth (Feet)	Samples	PHOTO IONIZATION DETECTOR (PPM)	Torvane or Penetrometer Readings (TSF)	LOCATION: <u>SP-3</u>	SURFACE ELEVATION: <u>Ground</u>
	No.	Type							
								DATE: <u>4/20/00</u>	DRY AUGER: <u>✓</u>
								TIME BEGINNING: <u>10:24</u>	WET ROTARY: <u>N/A</u>
								TIME ENDING: <u>10:37</u>	COMPLETION DEPTH: <u>2.5'</u>
GENERAL MATERIAL DESCRIPTION AND STRATIGRAPHY									
								Brown Fill material	
TCLP SV	3-1	GRAB		1.5		OPPM			
TCLP SV	3-2	GRAB		2		OPPM		Olive Grey Silty Clay	
			2.5					Bottom of Boring	
				3					

KEY



THIN-WALLED TUBE



HAND AUGER



SPLIT-BARREL SAMPLER



GROUNDWATER FIRST ENCOUNTERED



GROUNDWATER LEVEL (After ____ Hours)

REMARKS

BORING LOG NO. 4PROJECT NO. 14-754

Test Assignments	Soil Samples		Groundwater Levels	Depth (Feet)	Samples	PHOTO IONIZATION DETECTOR (PPM)	Torvane or Penetrometer Readings (TSF)	LOCATION: <u>SO-4</u> DATE: <u>4/20/06</u> TIME BEGINNING: <u>10:37</u> TIME ENDING: <u>10:48</u>	SURFACE ELEVATION: <u>Ground</u> DRY AUGER: <u>✓</u> WET ROTARY: <u>N/A</u> COMPLETION DEPTH: <u>2.5'</u>
	No.	Type							
				0.5				Brown Fill material	
TCLP SV	4-1	GRAB		1	0ppm				
				1.5	0ppm				
TCLP SV	4-2	GRAB		2					
				2.5				Olive Grey Silty Clay	
								Bottom of Boring	

KEY



THIN-WALLED TUBE



HAND AUGER



SPLIT-BARREL SAMPLER








GROUNDWATER FIRST ENCOUNTERED



GROUNDWATER LEVEL (After ____ Hours)

REMARKS






BORING LOG NO. 5PROJECT NO. 14-754

Test Assignments	Soil Samples		Groundwater Levels	Depth (Feet)	Samples	PHOTO IONIZATION DETECTOR (PPM)	Torvane or Penetrometer Readings (TSF)	LOCATION: <u>SP-5</u>	SURFACE ELEVATION: <u>Ground</u>
	No.	Type						DATE: <u>4/20/06</u>	DRY AUGER: <u>✓</u>
								TIME BEGINNING: <u>10:48</u>	WET ROTARY: <u>N/A</u>
								TIME ENDING: <u>10:55</u>	COMPLETION DEPTH: <u>3.5'</u>
GENERAL MATERIAL DESCRIPTION AND STRATIGRAPHY									
				1				Brown Fill material	
				2		0ppm		Light Grey Silty Clay	
TELP SV	5-1	GRAB				0ppm			
TELP SV	5-2	GRAB		3					
				3.5					
				4				Bottom of Boring	
KEY								REMARKS	
	THIN-WALLED TUBE				HAND AUGER				
	SPLIT-BARREL SAMPLER								
	GROUNDWATER FIRST ENCOUNTERED								
	GROUNDWATER LEVEL (After ____ Hours)								

PROJECT NO. 14-754

Test Assignments	Soil Samples		Groundwater Levels	Depth (Feet)	Samples	PHOTO IONIZATION DETECTOR (PPM)	Torvane or Penetrometer Readings (TSF)	GENERAL MATERIAL DESCRIPTION AND STRATIGRAPHY	
	No.	Type							
TCLP SV	G-1	GRAB		1				Olive Gray Silt loam	
				1.5				Bottom of Boring	

KEY

- | | | | |
|---|---------------------------------------|---|------------|
|  | THIN-WALLED TUBE |  | HAND AUGER |
|  | SPLIT-BARREL SAMPLER | | |
|  | GROUNDWATER FIRST ENCOUNTERED | | |
|  | GROUNDWATER LEVEL (After _____ Hours) | | |

REMARKS

APPENDIX F
LABORATORY ANALYTICAL RESULTS
AND CHAIN OF CUSTODY

EMSL Analytical

<http://www.emsl.com>

3 Cooper St.
Westmont, NJ 08108
Phone: (856) 858-4800
Fax: (856) 858-4571

EMSL

Attn: **Harry Raynor**
Pyburn & Odom, Inc
8178 GSRI Avenue
Baton Rouge, LA 70820

4/28/2006

Phone
Fax: (713) 686-3845

The following report covers the analysis performed on samples submitted to EMSL Analytical on 4/21/2006. The results are tabulated on the attached data pages for the following client designated project:

The reference number for these samples is EMSL Order #010602145. Please use this reference when calling about these samples.

If you have any questions, please do not hesitate to contact me at (856) 858-4800.

Reviewed and Approved By:

Laboratory Director or other
approved signatory
NJ-NELAP Accredited:04653



test results contained within this report meet the requirements of NELAP
for the specific certification program that is applicable, unless otherwise noted.

EMSL Analytical

3 Cooper St., Westmont, NJ 08108

Phone: (856) 855-4800 Fax: (856) 855-4571 Email: swessan@emsl.com**EMSL**

Attn: **Harry Raynor**
Pyburn & Odom, Inc
8178 GSRI Avenue
Baton Rouge, LA 70820

Customer ID: PYOD50
Customer PO: 14-754
Received: 04/21/06 9:29 AM
EMSL Order: 010602145

Fax: (713) 686-3845 Phone:

EMSL Proj:

Report Date: 4/28/2006

Client Sample Description SP-1-1

Collected: 4/20/2006
10:55:00 AM

Lab ID: 0001

Test	Method	Parameter	Concentration	Units	RL	Analysis Date/Time	Analyst
TCLP Metals-Arsenic, TCLP	6010B	Arsenic	<0.080	mg/L	0.080 ✓	4/25/2006 12:04 PM	IAcevedo
ICV = 93%							
TCLP Metals-Barium, TCLP	6010B	Barium	<1.0	mg/L	1.0 ✓	4/25/2006 12:04 PM	IAcevedo
TCLP Metals-Cadmium, TCLP	6010B	Cadmium	<0.040	mg/L	0.040 ✓	4/25/2006 12:04 PM	IAcevedo
TCLP Metals-Chromium, TCLP	6010B	Chromium	<0.10	mg/L	0.10 ✓	4/25/2006 12:04 PM	IAcevedo
RLs = 148% and 158%							
TCLP Metals-Lead, TCLP	6010B	Lead	0.20	mg/L	0.10 ✓	4/25/2006 12:04 PM	IAcevedo
TCLP Metals-Selenium, TCLP	6010B	Selenium	<0.20	mg/L	0.20 ✓	4/25/2006 12:04 PM	IAcevedo
TCLP Metals-Silver, TCLP	6010B	Silver	<0.10	mg/L	0.10 ✓	4/25/2006 12:04 PM	IAcevedo
ICV = 106%							
TCLP Metals-Mercury, TCLP	7471A	Mercury	<0.0020	mg/L	0.002 ✓	4/25/2006 09:12 AM	rferrer

Client Sample Description SP-1-2

Collected: 4/20/2006
10:55:00 AM

Lab ID: 0002

Test	Method	Parameter	Concentration	Units	RL	Analysis Date/Time	Analyst
Total Solids	2540B	Total Solids	71	%	0.5	4/24/2006 04:45 PM	ssamayam
SVOA	8270C	See Attached			n/a	4/27/2006 12:22 PM	wfink

EMSL Analytical

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4571 Email: swanson@emsl.com**EMSL**

Attn: **Harry Raynor**
Pyburn & Odom, Inc
8178 GSRI Avenue
Baton Rouge, LA 70820

Fax: (713) 686-3645

Phone:

Customer ID: PYOD50
Customer PO: 14-754
Received: 04/21/06 9:29 AM
EMSL Order: 010602145

EMSL Proj:

Report Date: 4/28/2006

Client Sample Description SP-1-3

Collected: 4/20/2006
10:55:00 AM

Lab ID: 0003

Test	Method	Parameter	Concentration	Units	RL	Analysis Date/Time	Analyst
TCLP Metals-Arsenic, TCLP	6010B	Arsenic	<0.080	mg/L	0.080	4/25/2006 01:05 PM	IAcevedo
Insufficient sample provided. As ICV = 93%							
TCLP Metals-Barium, TCLP	6010B	Barium	<1.0	mg/L	1.0	4/25/2006 01:05 PM	IAcevedo
Insufficient sample provided.							
TCLP Metals-Cadmium, TCLP	6010B	Cadmium	<0.040	mg/L	0.040	4/25/2006 01:05 PM	IAcevedo
Insufficient sample provided.							
TCLP Metals-Chromium, TCLP	6010B	Chromium	<0.10	mg/L	0.10	4/25/2006 01:05 PM	IAcevedo
Insufficient sample provided. Cr RLs = 148% and 158%							
TCLP Metals-Lead, TCLP	6010B	Lead	<0.10	mg/L	0.10	4/25/2006 01:05 PM	IAcevedo
Insufficient sample provided.							
TCLP Metals-Selenium, TCLP	6010B	Selenium	<0.20	mg/L	0.20	4/25/2006 01:05 PM	IAcevedo
Insufficient sample provided.							
TCLP Metals-Silver, TCLP	6010B	Silver	<0.10	mg/L	0.10	4/25/2006 01:05 PM	IAcevedo
Insufficient sample provided. Ag ICV = 108%							
TCLP Metals-Mercury, TCLP	7471A	Mercury	<0.0020	mg/L	0.002	4/25/2006 09:12 AM	rferrer
Insufficient sample provided.							

Client Sample Description SP-1-4

Collected: 4/20/2006
10:55:00 AM

Lab ID: 0004

Test	Method	Parameter	Concentration	Units	RL	Analysis Date/Time	Analyst
Total Solids	2540B	Total Solids	79	%	0.5	4/24/2006 04:45 PM	ssamayam
SVOA	8270C	See Attached			n/a	4/27/2006 12:59 PM	wfink

EMSL Analytical

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4671 Email: swanson@emsl.com**EMSL**

Attn: **Harry Raynor**
Pyburn & Odom, Inc
8178 GSRI Avenue
Baton Rouge, LA 70820

Fax: (713) 686-3645 Phone:

Customer ID: PYOD50
 Customer PO: 14-754
 Received: 04/21/06 9:29 AM
 EMSL Order: 010602145

EMSL Proj:

Report Date: 4/28/2006

Client Sample Description		SP-2-1		Collected:		4/20/2006		Lab ID: 0005	
						10:15:00 AM			
Test	Method	Parameter	Concentration	Units	RL	Analysis Date/Time	Analyst		
TCLP Metals-Arsenic, TCLP	6010B	Arsenic	<0.080	mg/L	0.080	4/25/2006 01:12 PM	IAcevedo		
ICV = 93%									
TCLP Metals-Barium, TCLP	6010B	Barium	<1.0	mg/L	1.0	4/25/2006 01:12 PM	IAcevedo		
TCLP Metals-Cadmium, TCLP	6010B	Cadmium	<0.040	mg/L	0.040	4/25/2006 01:12 PM	IAcevedo		
TCLP Metals-Chromium, TCLP	6010B	Chromium	<0.10	mg/L	0.10	4/25/2006 01:12 PM	IAcevedo		
RLs = 148% and 159%									
TCLP Metals-Lead, TCLP	6010B	Lead	<0.10	mg/L	0.10	4/25/2006 01:12 PM	IAcevedo		
TCLP Metals-Selenium, TCLP	6010B	Selenium	<0.20	mg/L	0.20	4/25/2006 01:12 PM	IAcevedo		
TCLP Metals-Silver, TCLP	6010B	Silver	<0.10	mg/L	0.10	4/25/2006 01:12 PM	IAcevedo		
ICV = 108%									
TCLP Metals-Mercury, TCLP	7471A	Mercury	<0.0020	mg/L	0.002	4/25/2006 09:12 AM	rferrer		

Client Sample Description		SP-2-2		Collected:		4/20/2006		Lab ID: 0006	
						10:15:00 AM			
Test	Method	Parameter	Concentration	Units	RL	Analysis Date/Time	Analyst		
Total Solids	2540B	Total Solids	78	%	0.5	4/24/2006 04:45 PM	ssamayam		
SVQA	8270C	See Attached			n/a	4/25/2006 11:29 AM	wfink		

Client Sample Description		SP-3-1		Collected:		4/20/2006		Lab ID: 0007	
						10:26:00 AM			
Test	Method	Parameter	Concentration	Units	RL	Analysis Date/Time	Analyst		
Total Solids	2540B	Total Solids	66	%	0.5	4/24/2006 04:45 PM	ssamayam		
SVQA	8270C	See Attached			n/a	4/25/2006 12:06 PM	wfink		

EMSL Analytical

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4571 Email: swesson@emsl.com**EMSL**

Attn: **Harry Raynor**
Pyburn & Odom, Inc
8178 GSRI Avenue
Baton Rouge, LA 70820

Fax: (713) 686-3845

Phone:

Customer ID: PYOD50
 Customer PO: 14-754
 Received: 04/21/06 9:29 AM
 EMSL Order: 010602145

EMSL Proj:

Report Date: 4/28/2006

Client Sample Description SP-3-2

Collected: 4/20/2006
 10:26:00 AM

Lab ID: 0008

Test	Method	Parameter	Concentration	Units	RL	Analysis Date/Time	Analyst
TCLP Metals-Arsenic, TCLP	6010B	Arsenic	<0.080	mg/L	0.080	4/25/2006 01:20 PM	IAcevedo
ICV = 92%							
TCLP Metals-Barium, TCLP	6010B	Barium	<1.0	mg/L	1.0	4/25/2006 01:20 PM	IAcevedo
TCLP Metals-Cadmium, TCLP	6010B	Cadmium	<0.040	mg/L	0.040	4/25/2006 01:20 PM	IAcevedo
TCLP Metals-Chromium, TCLP	6010B	Chromium	<0.10	mg/L	0.10	4/25/2006 01:20 PM	IAcevedo
RLs = 149% and 158%							
TCLP Metals-Lead, TCLP	6010B	Lead	<0.10	mg/L	0.10	4/25/2006 01:20 PM	IAcevedo
TCLP Metals-Selenium, TCLP	6010B	Selenium	<0.20	mg/L	0.20	4/25/2006 01:20 PM	IAcevedo
TCLP Metals-Silver, TCLP	6010B	Silver	<0.10	mg/L	0.10	4/25/2006 01:20 PM	IAcevedo
ICV = 106%							
TCLP Metals-Mercury, TCLP	7471A	Mercury	<0.0020	mg/L	0.002	4/25/2006 09:12 AM	rterrer

Client Sample Description SP-4-1

Collected: 4/20/2006
 10:38:00 AM

Lab ID: 0009

Test	Method	Parameter	Concentration	Units	RL	Analysis Date/Time	Analyst
TCLP Metals-Arsenic, TCLP	6010B	Arsenic	<0.080	mg/L	0.080	4/25/2006 01:28 PM	IAcevedo
As ICV = 93%							
TCLP Metals-Barium, TCLP	6010B	Barium	<1.0	mg/L	1.0	4/25/2006 01:28 PM	IAcevedo
TCLP Metals-Cadmium, TCLP	6010B	Cadmium	<0.040	mg/L	0.040	4/25/2006 01:28 PM	IAcevedo
TCLP Metals-Chromium, TCLP	6010B	Chromium	<0.10	mg/L	0.10	4/25/2006 01:28 PM	IAcevedo
Cr RLs = 148% and 158%							
TCLP Metals-Lead, TCLP	6010B	Lead	<0.10	mg/L	0.10	4/25/2006 01:28 PM	IAcevedo
TCLP Metals-Selenium, TCLP	6010B	Selenium	<0.20	mg/L	0.20	4/25/2006 01:28 PM	IAcevedo
TCLP Metals-Silver, TCLP	6010B	Silver	<0.10	mg/L	0.10	4/25/2006 01:28 PM	IAcevedo
ICV = 106%							
TCLP Metals-Mercury, TCLP	7471A	Mercury	<0.0020	mg/L	0.002	4/25/2006 09:12 AM	rterrer

Client Sample Description SP-4-2

Collected: 4/20/2006
 10:38:00 AM

Lab ID: 0010

Test	Method	Parameter	Concentration	Units	RL	Analysis Date/Time	Analyst
Total Solids	2540B	Total Solids	83	%	0.5	4/24/2006 04:45 PM	ssameyam
SVOA	8270C	See Attached			n/a	4/25/2006 10:50 AM	wfink

EMSL Analytical

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4571 Email: awasson@emsl.com**EMSL**

RM

Attn: **Harry Raynor**
Pyburn & Odom, Inc
8178 GSRI Avenue
Baton Rouge, LA 70820

Customer ID: PYOD50
Customer PO: 14-754
Received: 04/21/06 9:29 AM
EMSL Order: 010602145

EMSL Proj:

Report Date: 4/28/2006

Fax: (713) 686-3645 Phone:

Client Sample Description		SP-5-1	Collected:		4/20/2006 10:44:00 AM		Lab ID: 0011	
Test	Method	Parameter	Concentration	Units	RL	Analysis Date/Time	Analyst	
TCLP Metals-Arsenic, TCLP ICV = 83%	6010B	Arsenic	<0.080	mg/L ✓	0.080	4/25/2006 01:35 PM	IAcevedo	
TCLP Metals-Barium, TCLP	6010B	Barium	<1.0	mg/L ✓	1.0	4/25/2006 01:35 PM	IAcevedo	
TCLP Metals-Cadmium, TCLP	6010B	Cadmium	<0.040	mg/L ✓	0.040	4/25/2006 01:35 PM	IAcevedo	
TCLP Metals-Chromium, TCLP RL = 148% and 158%	6010B	Chromium	<0.10	mg/L	0.10	4/25/2006 01:35 PM	IAcevedo	
TCLP Metals-Lead, TCLP	6010B	Lead	<0.10	mg/L	0.10	4/25/2006 01:35 PM	IAcevedo	
TCLP Metals-Selenium, TCLP	6010B	Selenium	<0.20	mg/L	0.20	4/25/2006 01:35 PM	IAcevedo	
TCLP Metals-Silver, TCLP ICV = 108%	6010B	Silver	<0.10	mg/L	0.10	4/25/2006 01:35 PM	IAcevedo	
TCLP Metals-Mercury, TCLP	7471A	Mercury	<0.0020	mg/L	0.002	4/25/2006 09:12 AM	rferrer	

Client Sample Description		SP-5-2		Collected:		4/20/2006		Lab ID: 0012	
						10:44:00 AM			
	Method	Parameter	Concentration	Units	RL	Analysis Date/Time	Analyst		
Total Solids	2540B	Total Solids	79	%	0.5	4/24/2006 04:45 PM	ssamayam		
SVOA	8270C	See Attached			n/a	4/25/2006 12:44 PM	wfink		

Client Sample Description		SP-6-1		Collected:		4/20/2006		Lab ID: 0013	
						10:50:00 AM			
	Method	Parameter	Concentration	Units	RL	Analysis Date/Time	Analyst		
Total Solids	2540B	Total Solids	79	%	0.5	4/24/2006 04:45 PM	ssamayam		
SVOA	8270C	See Attached			n/a	4/25/2006 03:02 PM	wfink		

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-1-2	
Lab Name:	EMSL Analytical Inc.	Project:	
EMSL Sample ID:	010602145-0002	Sample Matrix:	Soils
Lab File ID:	C10680.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date:	4/27/2006 12:22:00
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.04 G
Level (low/med):	LOW	Dilution Factor:	40
% Moisture:	29	Conc. Extract Volume:	5000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	8270ABN		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
62-75-9	N-nitrosodimethylamine	9400		UD
108-95-2	Phenol	17000		UD
100-51-6	Benzyl alcohol	19000		UD
111-44-4	bis(2-Chloroethyl)ether	19000		UD
95-57-8	2-Chlorophenol	14000		UD
541-73-1	1,3-Dichlorobenzene	13000		UD
106-46-7	1,4-Dichlorobenzene	15000		UD
95-50-1	1,2-Dichlorobenzene	18000		UD
95-48-7	2-Methylphenol	17000		UD
106-60-1	bis(2-chloroisopropyl)ether	17000		UD
106-44-5	3+4-Methylphenol	23000		UD
821-64-7	N-Nitroso-Di-n-propylamine	21000		UD
67-72-1	Hexachloroethane	7400		UD
98-95-3	Nitrobenzene	18000		UD
78-59-1	Isophorone	18000		UD
88-75-5	2-Nitrophenol	20000		UD
105-67-9	2,4-Dimethylphenol	19000		UD
111-91-1	bis(2-Chloroethoxy)methane	18000		UD
120-83-2	2,4-Dichlorophenol	18000		UD
120-82-1	1,2,4-Trichlorobenzene	18000		UD
91-20-3	Naphthalene	16000	290000	D
106-47-8	4-Chloroaniline	21000		UD
87-68-3	Hexachlorobutadiene	19000		UD
59-50-7	4-Chloro-3-methylphenol	22000		UD
91-58-7	2-Chloronaphthalene	18000		UD
77-47-4	Hexachlorocyclopentadiene	16000		UD
88-06-2	2,4,6-Trichlorophenol	24000		UD
95-95-4	2,4,5-Trichlorophenol	21000		UD
131-11-3	Dimethylphthalate	17000		UD
208-96-8	Acenaphthylene	16000	100000	D
506-20-2	2,6-Dinitrotoluene	18000		UD
83-32-9	Acenaphthene	19000	38000	D

Printed: 04/28/06 04:16:36 PM

FORM1-SV

1 of 3

SampleList: 042706C

ERM: C:\Program Files\EMSL_ENV_Pes\PP+NJDEP.em

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-1-2	
Lab Name:	EMSL Analytical Inc.	Project:	
EMSL Sample ID:	010602145-0002	Sample Matrix:	Soils
Lab File ID:	C10660.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date:	4/27/2006 12:22:00
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.04 G
Level (low/mod):	LOW	Dilution Factor:	40
% Moisture:	29	Conc. Extract Volume:	5000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	8270ABN		

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
51-28-5	2,4-Dinitrophenol	15000		UD
100-02-7	4-Nitrophenol	26000		UD
121-14-2	2,4-Dinitrotoluene	20000		UD
84-66-2	Diethylphthalate	20000		UD
86-73-7	Fluorene	17000	220000	D
7005-72-3	4-Chlorophenyl-phenylether	20000		UD
534-52-1	4,6-Dinitro-2-methylphenol	13000		UD
86-30-6	n-Nitrosodiphenylamine	23000		UD
101-55-3	4-Bromophenyl-phenylether	21000		UD
118-74-1	Hexachlorobenzene	15000		UD
87-86-5	Pentachlorophenol	21000		UD
85-01-08	Phenanthrene	20000	820000	D
120-12-7	Anthracene	18000	290000	D
84-74-2	Di-n-butylphthalate	31000		UD
206-44-0	Fluoranthene	26000	670000	D
92-87-5	Benzidine	100000		UD
129-00-0	Pyrene	20000	450000	D
85-68-7	Butylbenzylphthalate	23000		UD
56-55-3	Benzo[a]anthracene	25000	260000	D
81-84-1	3,3'-Dichlorobenzidine	82000		UD
218-01-9	Chrysene	21000	240000	D
117-81-7	bis(2-Ethylhexyl)phthalate	23000		UD
117-84-0	Di-n-octylphthalate	22000		UD
205-99-2	Benzo[b]fluoranthene	19000	220000	D
207-08-9	Benzo[k]fluoranthene	22000	93000	D
50-32-8	Benzo[a]pyrene	22000	180000	D
193-39-5	Indeno[1,2,3-cd]pyrene	23000	130000	D
53-70-3	Dibenz[a,h]anthracene	25000	37000	D
191-24-2	Benzo[g,h,i]perylene	24000	110000	D

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:		Customer Sample#:		SP-1-2
EMSL Sample ID:	010602145-0002	Project:		
Lab File ID:	C10660.D	Sample Matrix:	Soils	
Instrument ID:	MSD-C	Sampling Date:	4/20/2006	
Analyst:	WRF	Date Extracted:	4/24/2006	
GC Column:	ZB-5MS (0.25 mm)	Analysis Date:	4/27/2006 12:22:00	
Level (low/med):	LOW	Sample wt/vol:	30.04 G	
% Moisture:	29	Dilution Factor:	40	
PH:		Conc. Extract Volume:	5000 (ul)	
GPC Cleanup(Y/N):	N	Injection Volume:	1 (ul)	
Method:	8270ABN			

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-1-4	
Lab Name:	EMSL Analytical Inc.	Project:	
EMSL Sample ID:	010802145-0004	Sample Matrix:	Soils
Lab File ID:	C10861.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date:	4/27/2006 12:59:00
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.02 G
Level (low/med):	LOW	Dilution Factor:	100
% Moisture:	21	Conc. Extract Volume:	5000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	8270ABN		

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
62-75-9	N-nitrosodimethylamine	21000		UD
108-95-2	Phenol	39000		UD
100-51-8	Benzyl alcohol	43000		UD
111-44-4	bis(2-Chloroethyl)ether	42000		UD
95-57-8	2-Chlorophenol	31000		UD
541-73-1	1,3-Dichlorobenzene	30000		UD
108-46-7	1,4-Dichlorobenzene	33000		UD
95-50-1	1,2-Dichlorobenzene	42000		UD
95-48-7	2-Methylphenol	38000		UD
108-60-1	bis(2-chloroisopropyl)ether	39000		UD
106-44-5	3+4-Methylphenol	51000	31000	JD
621-84-7	N-Nitroso-Di-n-propylamine	47000		UD
67-72-1	Hexachloroethane	17000		UD
98-95-3	Nitrobenzene	36000		UD
78-59-1	Isophorone	35000		UD
88-75-5	2-Nitrophenol	44000		UD
105-67-9	2,4-Dimethylphenol	42000	40000	JD
111-91-1	bis(2-Chloroethoxy)methane	40000		UD
120-83-2	2,4-Dichlorophenol	36000		UD
120-82-1	1,2,4-Trichlorobenzene	40000		UD
91-20-3	Naphthalene	37000	1200000	D
106-47-8	4-Chloroaniline	47000		UD
87-58-3	Hexachlorobutadiene	43000		UD
59-50-7	4-Chloro-3-methylphenol	50000		UD
91-58-7	2-Chloronaphthalene	41000		UD
77-47-4	Hexachlorocyclopentadiene	36000		UD
88-06-2	2,4,6-Trichlorophenol	53000		UD
95-95-4	2,4,5-Trichlorophenol	47000		UD
131-11-3	Dimethylphthalate	36000		UD
208-96-8	Acenaphthylene	36000	320000	D
808-20-2	2,6-Dinitrotoluene	40000		UD
83-32-9	Acenaphthene	42000	110000	D

Printed: 04/28/06 04:24:00 PM

FORM1--SV

1 of 3

SampleList: 042706C

ERM: C:\Program Files\EMSL_ENV_Pest\PP+NJDEP.erm

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:

SP-1-4

Lab Name: EMSL Analytical Inc.

EMSL Sample ID: 010802145-0004

Lab File ID: C10881.D

Instrument ID: MSD-C

Analyst: WRF

GC Column: ZB-5MS (0.25 mm)

Level (low/med): LOW

% Moisture: 21

PH:

GPC Cleanup(Y/N): N

Method: 8270ABN

Project:

Sample Matrix:

Sampling Date:

Data Extracted:

Analysis Date

Sample wt/vol:

Dilution Factor:

Conc. Extract Volume:

Injection Volume:

Soils

4/20/2006

4/24/2006

4/27/2006 12:59:00

30.02 G

100

5000 (ul)

1 (ul)

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
51-28-8	2,4-Dinitrophenol	34000		UD
100-02-7	4-Nitrophenol	58000		UD
121-14-2	2,4-Dinitrotoluene	46000		UD
84-66-2	Diethylphthalate	46000		UD
86-73-7	Fluorene	37000	570000	D
7009-72-3	4-Chlorophenyl-phenylether	46000		UD
534-52-1	4,6-Dinitro-2-methylphenol	28000		UD
88-30-6	n-Nitrosodiphenylamine	52000		UD
101-55-3	4-Bromophenyl-phenylether	46000		UD
118-74-1	Hexachlorobenzene	33000		UD
87-86-5	Pentachlorophenol	48000		UD
85-01-08	Phenanthrene	48000	2100000	D
120-12-7	Anthracene	43000	680000	D
84-74-2	Di-n-butylphthalate	71000		UD
206-44-0	Fluoranthene	57000	1500000	D
92-87-5	Benzidine	230000		UD
129-00-0	Pyrene	45000	1100000	D
85-68-7	Butylbenzylphthalate	52000		UD
58-55-3	Benzo[a]anthracene	55000	810000	D
91-94-1	3,3'-Dichlorobenzidine	180000		UD
218-01-9	Chrysene	47000	530000	D
117-81-7	bis(2-Ethylhexyl)phthalate	51000		UD
117-84-0	Di-n-octylphthalate	50000		UD
205-99-2	Benzo[b]fluoranthene	42000	500000	D
207-08-9	Benzo[k]fluoranthene	49000	180000	D
50-32-8	Benzo[a]pyrene	50000	410000	D
193-39-5	Indeno[1,2,3-cd]pyrene	52000	310000	D
53-70-3	Dibenz[a,h]anthracene	56000		UD
191-24-2	Benzo[g,h,i]perylene	55000	270000	D

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-1-4		
Lab Name:	EMSL Analytical Inc.	Project:		
EMSL Sample ID:	010802145-0004	Sample Matrix:	Soils	
Lab File ID:	C10681.D	Sampling Date:	4/20/2006	
Instrument ID:	MSD-C	Date Extracted:	4/24/2006	
Analyst:	WRF	Analysis Date	4/27/2006 12:59:00	
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.02 G	
Level (low/med):	LOW	Dilution Factor:	100	
% Moisture:	21	Conc. Extract Volume:	5000 (ul)	
PH:		Injection Volume:	1 (ul)	
GPC Cleanup(Y/N):	N			
Method:	8270ABN			

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-2-2	
Lab Name:	EMSL Analytical Inc.	Project:	
EMSL Sample ID:	010602145-0006	Sample Matrix:	Soils
Lab File ID:	C10847.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date:	4/25/2006 11:29:00
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.03 G
Level (low/med):	LOW	Dilution Factor:	10
% Moisture:	22	Conc. Extract Volume:	1000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	8270ABN		

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
62-75-9	N-nitrosodimethylamine	430		UD
108-95-2	Phenol	790		UD
100-61-6	Benzyl alcohol	860		UD
111-44-4	bis(2-Chloroethyl)ether	850		UD
95-57-8	2-Chlorophenol	640		UD
541-73-1	1,3-Dichlorobenzene	610		UD
106-46-7	1,4-Dichlorobenzene	660		UD
95-50-1	1,2-Dichlorobenzene	640		UD
95-48-7	2-Methylphenol	770		UD
108-60-1	bis(2-chloroisopropyl)ether	780		UD
106-44-6	3+4-Methylphenol	1000		UD
621-64-7	N-Nitroso-Di-n-propylamine	950		UD
67-72-1	Hexachloroethane	340		UD
98-95-3	Nitrobenzene	730		UD
78-59-1	Isophorone	710		UD
88-75-5	2-Nitrophenol	890		UD
106-67-9	2,4-Dimethylphenol	850		UD
111-91-1	bis(2-Chloroethoxy)methane	810		UD
120-83-2	2,4-Dichlorophenol	730		UD
120-82-1	1,2,4-Trichlorobenzene	820		UD
91-20-3	Naphthalene	740		UD
106-47-8	4-Chloroaniline	950		UD
87-68-3	Hexachlorobutadiene	860		UD
59-50-7	4-Chloro-3-methylphenol	1000		UD
91-58-7	2-Chloronaphthalene	830		UD
77-47-4	Hexachlorocyclopentadiene	740		UD
88-06-2	2,4,6-Trichlorophenol	1100		UD
95-95-4	2,4,5-Trichlorophenol	960		UD
131-11-3	Dimethylphthalate	760		UD
208-98-8	Acenaphthylene	730		UD
608-20-2	2,6-Dinitrotoluene	820		UD
83-32-9	Acenaphthene	850		UD

Printed: 04/26/06 09:25:46 AM

FORM1-SV

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SampleList: 042506C

ERM: C:\Program Files\EMSL_ENV_Pest\PP+NJDEP.erm

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-2-2	
Lab Name:	EMSL Analytical Inc.	Project:	
EMSL Sample ID:	010602145-0006	Sample Matrix:	Soils
Lab File ID:	C10647.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date:	4/25/2006 11:29:00
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.03 G
Level (low/med):	LOW	Dilution Factor:	10
% Moisture:	22	Conc. Extract Volume:	1000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	8270ABN		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
51-28-5	2,4-Dinitrophenol	680		UD
100-02-7	4-Nitrophenol	1200		UD
121-14-2	2,4-Dinitrotoluene	930		UD
84-68-2	Diethylphthalate	930		UD
86-73-7	Fluorene	760		UD
7005-72-3	4-Chlorophenyl-phenylether	920		UD
534-52-1	4,6-Dinitro-2-methylphenol	570		UD
86-30-8	n-Nitrosodiphenylamine	1000		UD
101-55-3	4-Bromophenyl-phenylether	940		UD
118-74-1	Hexachlorobenzene	670		UD
87-86-5	Pentachlorophenol	980		UD
85-01-08	Phenanthrene	930	760	JD
120-12-7	Anthracene	860		UD
84-74-2	Di-n-butylphthalate	1400		UD
208-44-0	Fluoranthene	1200	2000	D
92-87-5	Benzidine	4600		UD
129-00-0	Pyrene	920	1800	D
85-68-7	Butylbenzylphthalate	1100		UD
56-55-3	Benzo[a]anthracene	1100	2100	D
91-94-1	3,3'-Dichlorobenzidine	3700		UD
218-01-9	Chrysene	940	1900	D
117-81-7	bis(2-Ethylhexyl)phthalate	1000		UD
117-84-0	Di-n-octylphthalate	1000		UD
205-99-2	Benzo[b]fluoranthene	850	2400	D
207-08-9	Benzo[k]fluoranthene	990	880	JD
50-32-8	Benzo[a]pyrene	1000	2100	D
193-39-5	Indeno[1,2,3-cd]pyrene	1100	1300	D
53-70-3	Dibenz[a,h]anthracene	1100		UD
191-24-2	Benzo[g,h,i]perylene	1100	1200	D

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-2-2	
Lab Name:	EMSL Analytical Inc.	Project:	
EMSL Sample ID:	010602145-0006	Sample Matrix:	Soils
Lab File ID:	C10847.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date	4/25/2006 11:29:00
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.03 G
Level (low/med):	LOW	Dilution Factor:	10
% Moisture:	22	Conc. Extract Volume:	1000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	8270ABN		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:

SP-3-1

Lab Name: EMSL Analytical Inc.

EMSL Sample ID: 010602145-0007

Lab File ID: C10648.D

Instrument ID: MSD-C

Analyst: WRF

GC Column: ZB-5MS (0.25 mm)

Level (low/med): LOW

% Moisture: 34

PH:

GPC Cleanup(Y/N): N

Method: 8270ABN

Project:

Sample Matrix:

Sampling Date:

Date Extracted:

Analysis Date

Sample wt/vol:

Dilution Factor:

Conc. Extract Volume:

Injection Volume:

Soils

4/20/2006

4/24/2006

4/25/2006 12:06:00

30.01 G

10

5000 (ul)

1 (ul)

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
62-75-9	N-nitrosodimethylamine	2500		UD
108-95-2	Phenol	4800		UD
100-51-8	Benzyl alcohol	5100		UD
111-44-4	bis(2-Chloroethyl)ether	5000		UD
95-57-8	2-Chlorophenol	3800		UD
541-73-1	1,3-Dichlorobenzene	3600		UD
106-46-7	1,4-Dichlorobenzene	3900		UD
95-50-1	1,2-Dichlorobenzene	5000		UD
95-48-7	2-Methylphenol	4500		UD
108-60-1	bis(2-chloroisopropyl)ether	4800		UD
108-44-5	3+4-Methylphenol	6100		UD
621-64-7	N-Nitroso-Di-n-propylamine	5600		UD
67-72-1	Hexachloroethane	2000		UD
98-95-3	Nitrobenzene	4300		UD
78-59-1	Isophorone	4200		UD
88-75-5	2-Nitrophenol	5300		UD
105-67-9	2,4-Dimethylphenol	5000		UD
111-91-1	bis(2-Chloroethoxy)methane	4800		UD
120-83-2	2,4-Dichlorophenol	4300		UD
120-82-1	1,2,4-Trichlorobenzene	4800		UD
91-20-3	Naphthalene	4400	4800	D
108-47-8	4-Chloroaniline	5800		UD
87-68-3	Hexachlorobutadiene	5100		UD
59-50-7	4-Chloro-3-methylphenol	6000		UD
91-58-7	2-Chloronaphthalene	4900		UD
77-47-4	Hexachlorocyclopentadiene	4400		UD
88-06-2	2,4,6-Trichlorophenol	6300		UD
95-95-4	2,4,5-Trichlorophenol	5700		UD
131-11-3	Dimethylphthalate	4500		UD
208-96-8	Acenaphthylene	4300	44000	D
806-20-2	2,8-Dinitrotoluene	4800		UD
83-32-9	Acenaphthene	5000	4800	JD

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SampleList: 042506C

ERM: C:\Program Files\EMSL_ENV_Pest\PP+NJDEP.erm

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-3-1	
Lab Name:	EMSL Analytical Inc.	Project:	
EMSL Sample ID:	010602145-0007	Sample Matrix:	Soils
Lab File ID:	C10648.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date:	4/25/2006 12:06:00
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.01 G
Level (low/med):	LOW	Dilution Factor:	10
% Moisture:	34	Conc. Extract Volume:	5000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	8270ABN		

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
51-28-5	2,4-Dinitrophenol	4000		UD
100-02-7	4-Nitrophenol	7000		UD
121-14-2	2,4-Dinitrotoluene	5500		UD
84-86-2	Diethylphthalate	5500		UD
86-73-7	Fluorene	4500	28000	D
7005-72-3	4-Chlorophenyl-phenylether	5500		UD
534-52-1	4,6-Dinitro-2-methylphenol	3400		UD
88-30-6	n-Nitrosodiphenylamine	6200		UD
101-55-3	4-Bromophenyl-phenylether	5800		UD
118-74-1	Hexachlorobenzene	4000		UD
87-86-5	Pentachlorophenol	5800		UD
85-01-08	Phenanthrene	5500	140000	D
120-12-7	Anthracene	5100	73000	D
84-74-2	Di-n-butylphthalate	8500		UD
206-44-0	Fluoranthene	6900	180000	D
92-87-5	Benzidine	27000		UD
129-00-0	Pyrene	5400	120000	D
85-68-7	Butylbenzylphthalate	6300		UD
56-55-3	Benzo[a]anthracene	6600	96000	D
91-94-1	3,3'-Dichlorobenzidine	22000		UD
218-01-9	Chrysene	5600	83000	D
117-81-7	bis(2-Ethylhexyl)phthalate	6100		UD
117-84-0	Di-n-octylphthalate	6000		UD
205-99-2	Benzo[b]fluoranthene	5000	92000	D
207-08-9	Benzo[k]fluoranthene	5800	32000	D
50-32-8	Benzo[a]pyrene	6000	84000	D
193-39-5	Indeno[1,2,3-cd]pyrene	6200	81000	D
53-70-3	Dibenz[a,h]anthracene	6700	9000	D
191-24-2	Benzo[g,h,i]perylene	6600	75000	D

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-3-1	
Lab Name:	EMSL Analytical Inc.	Project:	
EMSL Sample ID:	010602145-0007	Sample Matrix:	Soils
Lab File ID:	C10648.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date	4/25/2006 12:06:00
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.01 G
Level (low/med):	LOW	Dilution Factor:	10
% Moisture:	34	Conc. Extract Volume:	5000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	8270ABN		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:

SP-4-2

Lab Name: EMSL Analytical Inc.

EMSL Sample ID: 010602145-0010

Lab File ID: C10646.D

Instrument ID: MSD-C

Analyst: WRF

GC Column: ZB-SMS (0.25 mm)

Level (low/med): LOW

% Moisture: 17

PH:

GPC Cleanup(Y/N): N

Method: 8270ABN

Project:

Sample Matrix:

Sampling Date:

Date Extracted:

Analysis Date

Sample wt/vol:

Dilution Factor:

Conc. Extract Volume:

Injection Volume:

Soils

4/20/2008

4/24/2008

4/25/2008 10:50:00

30.04 G

3

1000 (ul)

1 (ul)

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
62-75-9	N-nitrosodimethylamine	120		UD
108-95-2	Phenol	220		UD
100-81-8	Benzyl alcohol	240		UD
111-44-4	bis(2-Chloroethyl)ether	240		UD
95-57-8	2-Chlorophenol	180		UD
541-73-1	1,3-Dichlorobenzene	170		UD
108-46-7	1,4-Dichlorobenzene	190		UD
95-50-1	1,2-Dichlorobenzene	240		UD
95-48-7	2-Methylphenol	220		UD
108-60-1	bis(2-chloroisopropyl)ether	220		UD
106-44-5	3+4-Methylphenol	290		UD
621-84-7	N-Nitroso-Di-n-propylamine	270		UD
67-72-1	Hexachloroethane	95		UD
98-95-3	Nitrobenzene	210		UD
78-59-1	Isophorone	200		UD
88-75-5	2-Nitrophenol	250		UD
105-67-9	2,4-Dimethylphenol	240		UD
111-91-1	bis(2-Chloroethoxy)methane	230		UD
120-83-2	2,4-Dichlorophenol	200		UD
120-82-1	1,2,4-Trichlorobenzene	230		UD
91-20-3	Naphthalene	210		UD
106-47-8	4-Chloroaniline	270		UD
87-68-3	Hexachlorobutadiene	240		UD
59-50-7	4-Chloro-3-methylphenol	290		UD
91-58-7	2-Chloronaphthalene	230		UD
77-47-4	Hexachlorocyclopentadiene	210		UD
88-08-2	2,4,6-Trichlorophenol	300		UD
95-95-4	2,4,5-Trichlorophenol	270		UD
131-11-3	Dimethylphthalate	220		UD
208-96-8	Acenaphthylene	210		UD
608-20-2	2,6-Dinitrotoluene	230		UD
83-32-9	Acenaphthene	240		UD

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SampleList: 042506C

ERM: C:\Program Files\EMSL_ENV_Pest\PP+NJDEP.erm

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-4-2	
Lab Name:	EMSL Analytical Inc.	Project:	
EMSL Sample ID:	010602145-0010	Sample Matrix:	Soils
Lab File ID:	C10846.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date	4/25/2006 10:50:00
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.04 G
Level (low/med):	LOW	Dilution Factor:	3
% Moisture:	17	Conc. Extract Volume:	1000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	8270ABN		

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
51-28-5	2,4-Dinitrophenol	190		UD
100-02-7	4-Nitrophenol	330		UD
121-14-2	2,4-Dinitrotoluene	260		UD
84-68-2	Diethylphthalate	260		UD
86-73-7	Fluorene	210		UD
7005-72-3	4-Chlorophenyl-phenylether	260		UD
534-52-1	4,6-Dinitro-2-methylphenol	160		UD
86-30-6	n-Nitrosodiphenylamine	290		UD
101-35-3	4-Bromophenyl-phenylether	260		UD
118-74-1	Hexachlorobenzene	190		UD
87-86-5	Pentachlorophenol	280		UD
85-01-08	Phenanthrene	260	230	JD
120-12-7	Anthracene	240		UD
84-74-2	Di-n-butylphthalate	400	210	JBD
208-44-0	Fluoranthene	330	570	D
92-87-5	Benzidine	1300		UD
129-00-0	Pyrene	260	500	D
85-68-7	Butylbenzylphthalate	300		UD
56-55-3	Benzo[a]anthracene	320	510	D
91-94-1	3,3'-Dichlorobenzidine	1000		UD
218-01-9	Chrysene	270	470	D
117-81-7	bis(2-Ethylhexyl)phthalate	290		UD
117-84-0	Di-n-octylphthalate	290		UD
205-99-2	Benzo[b]fluoranthene	240	570	D
207-08-9	Benzo[k]fluoranthene	280	200	JD
50-32-8	Benzo[a]pyrene	290	470	D
193-39-5	Indeno[1,2,3-cd]pyrene	300	280	JD
53-70-3	Dibenz[a,h]anthracene	320		UD
191-24-2	Benzo[g,h,i]perylene	310	280	JD

EMSL Analytical Inc.**SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET**

Customer Sample#:		SP-4-2		
Lab Name:	EMSL Analytical Inc.	Project:		
EMSL Sample ID:	010602145-0010	Sample Matrix:	Soils	
Lab File ID:	C10646.D	Sampling Date:	4/20/2006	
Instrument ID:	MSD-C	Date Extracted:	4/24/2006	
Analyst:	WRF	Analysis Date:	4/25/2006 10:50:00	
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.04 G	
Level (low/med):	LOW	Dilution Factor:	3	
% Moisture:	17	Conc. Extract Volume:	1000 (ul)	
PH:		Injection Volume:	1 (ul)	
GPC Cleanup(Y/N):	N			
Method:	8270ABN			

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-5-2	
Lab Name:	EMSL Analytical Inc.	Project:	
EMSL Sample ID:	010602145-0012	Sample Matrix:	Soils
Lab File ID:	C10648.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date:	4/25/2006 12:44:00
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30 G
Level (low/med):	LOW	Dilution Factor:	10
% Moisture:	21	Conc. Extract Volume:	5000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	8270ABN		

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
62-75-9	N-nitrosodimethylamine	2100		UD
108-95-2	Phenol	3900		UD
100-51-6	Benzyl alcohol	4300		UD
111-44-4	bis(2-Chloroethyl)ether	4200		UD
95-57-8	2-Chlorophenol	3100		UD
541-73-1	1,3-Dichlorobenzene	3000		UD
106-46-7	1,4-Dichlorobenzene	3300		UD
95-50-1	1,2-Dichlorobenzene	4200		UD
95-48-7	2-Methylphenol	3800		UD
108-60-1	bis(2-chloroisopropyl)ether	3900		UD
106-44-5	3+4-Methylphenol	5100		UD
821-64-7	N-Nitroso-Di-n-propylamine	4700		UD
87-72-1	Hexachloroethane	1700		UD
98-95-3	Nitrobenzene	3600		UD
78-59-1	Isophorone	3500		UD
88-75-5	2-Nitrophenol	4400		UD
106-67-9	2,4-Dimethylphenol	4200		UD
111-91-1	bis(2-Chloroethoxy)methane	4000		UD
120-83-2	2,4-Dichlorophenol	3600		UD
120-82-1	1,2,4-Trichlorobenzene	4100		UD
81-20-3	Naphthalene	3700		UD
106-47-8	4-Chloroaniline	4700		UD
87-88-3	Hexachlorobutadiene	4300		UD
59-50-7	4-Chloro-3-methylphenol	5000		UD
91-58-7	2-Chloronaphthalene	4100		UD
77-47-4	Hexachlorocyclopentadiene	3600		UD
88-08-2	2,4,6-Trichlorophenol	5300		UD
95-95-4	2,4,5-Trichlorophenol	4700		UD
131-11-3	Dimethylphthalate	3800		UD
208-98-8	Acenaphthylene	3600	3200	JD
608-20-2	2,6-Dinitrotoluene	4100		UD
83-32-9	Acenaphthene	4200		UD

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SampleList: 042506C

ERM: C:\Program Files\EMSL_ENV_Pest\PP+NJDEP.erm

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-5-2	
Lab Name:	EMSL Analytical Inc.	Project:	
EMSL Sample ID:	010602145-0012	Sample Matrix:	Soils
Lab File ID:	C10849.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date:	4/25/2006 12:44:00
GC Column:	ZB-SMS (0.25 mm)	Sample wt/vol:	30 G
Level (low/med):	LOW	Dilution Factor:	10
% Moisture:	21	Conc. Extract Volume:	5000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	8270ABN		

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
51-28-5	2,4-Dinitrophenol	3400		UD
100-02-7	4-Nitrophenol	5800		UD
121-14-2	2,4-Dinitrotoluene	4600		UD
84-68-2	Diethylphthalate	4600		UD
86-73-7	Fluorene	3700		UD
7005-72-3	4-Chlorophenyl-phenylether	4600		UD
534-52-1	4,6-Dinitro-2-methylphenol	2800		UD
88-90-6	n-Nitrosodiphenylamine	5200		UD
101-55-3	4-Bromophenyl-phenylether	4600		UD
118-74-1	Hexachlorobenzene	3300		UD
87-86-5	Pentachlorophenol	4800		UD
85-01-08	Phenanthrene	4600	27000	D
120-12-7	Anthracene	4300	11000	D
84-74-2	Di-n-butylphthalate	7100		UD
208-44-0	Fluoranthene	5700	64000	D
92-87-5	Benzidine	23000		UD
129-00-0	Pyrene	4500	59000	D
85-68-7	Butylbenzylphthalate	5200		UD
56-55-3	Benzo[a]anthracene	5500	73000	D
91-94-1	3,3'-Dichlorobenzidine	18000		UD
218-01-9	Chrysene	4700	65000	D
117-81-7	bis(2-Ethylhexyl)phthalate	5100		UD
117-84-0	Di-n-octylphthalate	5000		UD
205-99-2	Benzo[b]fluoranthene	4200	82000	D
207-08-9	Benzo[k]fluoranthene	4900	30000	D
50-32-8	Benzo[a]pyrene	5000	76000	D
193-39-5	Indeno[1,2,3-cd]pyrene	5200	76000	D
53-70-3	Dibenz[a,h]anthracene	5600	22000	D
191-24-2	Benzo[g,h,i]perylene	5500	61000	D

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-5-2		
Lab Name:	EMSL Analytical Inc.	Project:		
EMSL Sample ID:	010602145-0012	Sample Matrix:	Soils	
Lab File ID:	C10649.D	Sampling Date:	4/20/2006	
Instrument ID:	MSD-C	Date Extracted:	4/24/2006	
Analyst:	WRF	Analysis Date	4/25/2006 12:44:00	
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30 G	
Level (low/med):	LOW	Dilution Factor:	10	
% Moisture:	21	Conc. Extract Volume:	5000 (ul)	
PH:		Injection Volume:	1 (ul)	
GPC Cleanup(Y/N):	N			
Method:	8270ABN			

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-6-1	
Lab Name:	EMSL Analytical Inc.	Project:	
EMSL Sample ID:	010802148-0013	Sample Matrix:	Soils
Lab File ID:	C10853.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date	4/25/2006 15:02:00
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.01 G
Level (low/med):	LOW	Dilution Factor:	1
% Moisture:	21	Conc. Extract Volume:	1000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	8270ABN		

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
82-75-8	N-nitrosodimethylamine	42		U
108-95-2	Phenol	78		U
100-51-6	Benzyl alcohol	85		U
111-44-4	bis(2-Chloroethyl)ether	84		U
95-57-8	2-Chlorophenol	63		U
541-73-1	1,3-Dichlorobenzene	60		U
106-46-7	1,4-Dichlorobenzene	65		U
95-50-1	1,2-Dichlorobenzene	83		U
95-48-7	2-Methylphenol	76		U
108-80-1	bis(2-chloroisopropyl)ether	77		U
108-44-5	3+4-Methylphenol	100		U
621-64-7	N-Nitroso-Di-n-propylamine	94		U
67-72-1	Hexachloroethane	33		U
88-85-3	Nitrobenzene	72		U
78-59-1	Isophorone	70		U
88-75-5	2-Nitrophenol	88		U
105-67-9	2,4-Dimethylphenol	84		U
111-91-1	bis(2-Chloroethoxy)methane	80		U
120-83-2	2,4-Dichlorophenol	72		U
120-82-1	1,2,4-Trichlorobenzene	81		U
91-20-3	Naphthalene	73		U
106-47-8	4-Chloroaniline	94		U
87-68-3	Hexachlorobutadiene	85		U
59-50-7	4-Chloro-3-methylphenol	100		U
91-58-7	2-Chloronaphthalene	82		U
77-47-4	Hexachlorocyclopentadiene	73		U
88-08-2	2,4,6-Trichlorophenol	110		U
95-95-4	2,4,5-Trichlorophenol	94		U
131-11-3	Dimethylphthalate	76		U
208-96-8	Acenaphthylene	72		U
606-20-2	2,6-Dinitrotoluene	81		U
83-32-9	Acenaphthene	84		U

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FORM1-SV

SampleList: 042506C

ERM: C:\Program Files\EMSL_ENV_Pest\PP+NJOEP.erm

EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		SP-6-1	
Lab Name:	EMSL Analytical Inc.	Project:	
EMSL Sample ID:	010602145-0013	Sample Matrix:	Soils
Lab File ID:	C10653.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date:	4/25/2006 15:02:00
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.01 G
Level (low/med):	LOW	Dilution Factor:	1
% Moisture:	21	Conc. Extract Volume:	1000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	8270ABN		

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
51-28-5	2,4-Dinitrophenol	67		U
100-02-7	4-Nitrophenol	120		U
121-14-2	2,4-Dinitrotoluene	92		U
84-66-2	Diethylphthalate	92		U
88-73-7	Fluorene	75		U
7005-72-3	4-Chlorophenyl-phenylether	91		U
534-52-1	4,6-Dinitro-2-methylphenol	57		U
86-30-6	n-Nitrosodiphenylamine	100		U
101-55-3	4-Bromophenyl-phenylether	93		U
118-74-1	Hexachlorobenzene	67		U
87-88-5	Pentachlorophenol	97		U
85-01-08	Phenanthrene	92		U
120-12-7	Anthracene	85		U
84-74-2	Di-n-butylphthalate	140	59	JB
206-44-0	Fluoranthene	110		U
92-87-5	Benzidine	450		U
129-00-0	Pyrene	91		U
85-68-7	Butylbenzylphthalate	100		U
56-55-3	Benzo[a]anthracene	110		U
91-94-1	3,3'-Dichlorobenzidine	370		U
218-01-9	Chrysene	93		U
117-81-7	bis(2-Ethylhexyl)phthalate	100		U
117-84-0	Di-n-octylphthalate	100		U
205-99-2	Benzo[b]fluoranthene	84		U
207-08-9	Benzo[k]fluoranthene	97		U
50-32-8	Benzo[a]pyrene	100		U
193-39-5	Indeno[1,2,3-cd]pyrene	100		U
53-70-3	Dibenz[a,h]anthracene	110		U
191-24-2	Benzo[g,h,i]perylene	110		U

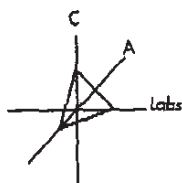
EMSL Analytical Inc.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

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EMSL Sample ID:	010602145-0013	Sample Matrix:	Soils
Lab File ID:	C10653.D	Sampling Date:	4/20/2006
Instrument ID:	MSD-C	Date Extracted:	4/24/2006
Analyst:	WRF	Analysis Date:	4/25/2006 15:02:00
GC Column:	ZB-5MS (0.25 mm)	Sample wt/vol:	30.01 G
Level (low/med):	LOW	Dilution Factor:	1
% Moisture:	21	Conc. Extract Volume:	1000 (ul)
PH:		Injection Volume:	1 (ul)
GPC Cleanup(Y/N):	N		
Method:	B270ABN		

CAS NO	COMPOUND	Report Limit (ug/Kg)	CONC. (ug/Kg)	Q
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

Chain of Custody / Analysis Request Form				EMSL Project # 0100001145 Account Rep: 2012 Indicate State where samples collected:	
EMSL Analytical, Inc. Chemistry Lab 3 Cooper St., Westmont, NJ 08108 TEL: (856) 838-4800 FAX: (856) 838-4571				Print ALL Information. Put N/A in blanks not applicable	
REPORT RESULTS TO: Name: <u>HARRY RAYNER</u> Company: <u>RAYNER & CO INC MCA</u> Address: <u>8178 GERRI AVE</u> City: <u>BATON ROUGE</u> State: <u>LOUISIANA</u> ZIP: <u>70820</u> TEL: <u>225-769-7880</u> FAX: <u>225-769-7880</u> Sampled by: (Signature) <u>[Signature]</u>				SEND INVOICE TO: Name: <u>PO# 14-354</u> Company: <u>SAVVE</u> Address: <u>SAVVE</u> City: <u>ZIP</u> State: <u>FAX:</u>	
REPORT RESULTS TO: Name: <u>HARRY RAYNER</u> Company: <u>RAYNER & CO INC MCA</u> Address: <u>8178 GERRI AVE</u> City: <u>BATON ROUGE</u> State: <u>LOUISIANA</u> ZIP: <u>70820</u> TEL: <u>225-769-7880</u> FAX: <u>225-769-7880</u> Sampled by: (Signature) <u>[Signature]</u>				SEND INVOICE TO: Name: <u>PO# 14-354</u> Company: <u>SAVVE</u> Address: <u>SAVVE</u> City: <u>ZIP</u> State: <u>FAX:</u>	
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**Crisp Analytical Laboratories, L.L.C.**

2081 Hutton Dr., Suite 301
Carrollton, TX 75006
PH: (972) 488-1414
Fax: (972) 488-8006

CA Labs, LLC

12232 Industriplex, Suite 32
Baton Rouge, LA 70809
PH: (225) 751-5632
Fax: (225) 751-5634

Crisp Analytical Laboratories of Houston, L.L.C.

5829 West Sam Houston Parkway North, Suite 803
Houston, TX 77041
PH: (713) 983-6336
Fax: (713) 983-6776

Polarized Light Microscopy Report

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)

Preparation Method: HCL acid washing the carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / booke use method.

Client Information:

PyBurn & Odom, Inc.
8178 GSRI Avenue
Baton Rouge, LA 70820
Phone: 225-766-6330
Fax: 225-769-7680

Client Project:
14-754

CA Labs Project #: CBR06041506

Date: 04/27/06

Turnaround Time: 3 day
Attn: Harry A. Rayner

Samples Received: 04/24/06
Purchase Order #:

Sample#	Layer #	Analysis Physical Description of Subsample	Homo-geneous (Y/N)	Asbestos type / calibrated visual estimate percent (none detected = absent / ash and visual% - present)	Non-asbestos fiber type / percent	Non-fibrous type / percent
---------	---------	--	--------------------	---	-----------------------------------	----------------------------

04200601	1	white transite	y	25% Chrysotile		75% other
----------	---	----------------	---	----------------	--	-----------

NVLAP # 200452-0
LDEQ LELAP # 03069
TDH # 30-0256

Approved Signatories:

Terrance LeBlanc
Analyst

Arthur Hernandez
General Manager

Cody Newton
Laboratory Director

Page 1 of 1

Notes:

Some samples (floor tiles, surfacing, etc.) may contain fibers too small to be detectable by PLM. TEM/Chenfield analysis of bulk material is recommended in this case. All asbestos percentages are based on calibrated visual estimates traceable to NIST standards for regulated asbestos types. Analysis' percentages fall within a range of acceptable percentages, depending on the actual concentration of asbestos. CA Labs is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for selected test methods for bulk asbestos fiber analysis (PLM) and airborne fiber analysis (TEM). This test report relates only to the items tested. CA Labs participates in the ADHA EMPAT proficiency program. This test reports relates only to the items tested. Neither NVLAP nor EPA accreditation implies endorsement by any US Government agency. This report may not be reproduced except in full without written permission from CA Labs.

These results are submitted pursuant to CA Labs' current terms and condition of sale, including the company's standard warranty and limitation of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping and handling fee may be assessed for the return of any samples.

Analysis performed at CA Labs, Inc. 12232 Industriplex, Suite 32, Baton Rouge, LA 70809; phone (225) 751-5632, fax (225) 751-5634, mobile (225) 806-7051.

Approved



PYBURN & ODOM, INC.
CONSULTING ENGINEERS

ASBESTOS BULK SAMPLE ANALYSIS RECORD

PAGE

LO

OF

SAMPLING DATA				LABORATORY DATA			
No.	Sample ID No.	Building & Sampling Location	Sample Type	Material Description	Analytical Method	Asbestos Content %	Content Type
1	04200601	O'Brien House	B	Asphalt Shingles Material			
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

SAMPLE CHAIN OF CUSTODY RECORD

[illegible]

Sample Type	Asbestos Type	Method
A. Microvac	1. Amosite	1. Polarized Light Microscopy (PLM)
B. Bulk	2. Chrysotile	2. PLM & Dispersion Staining
	3. Crocidolite	3. X-Ray Diffraction
C. Debris	4. Anthophyllite	4. Transmission Electroscop
	5. Tremolite	
	6. Actinolite	

APPENDIX G
DEPARTMENT OF RECREATION AND TOURISM
LETTER



MITCHELL J. LANBRIEU
LIEUTENANT GOVERNOR

State of Louisiana
OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF CULTURAL DEVELOPMENT
DIVISION OF ARCHAEOLOGY

ANGÈLE DAVIS
SECRETARY

PAM BREAUX
ASSISTANT SECRETARY

RECEIVED

MAR 20 2006

OFFICE OF
COMMUNITY DEVELOPMENT

March 17, 2006

Mr. Robert McNeese
Urban Development Director
Office of Community Development
East Baton Rouge Parish
P.O. Box 1471
Baton Rouge, LA 70821-1471

Re: Unanticipated Discovery, O'Brien House,
Baton Rouge, East Baton Rouge Parish,
Louisiana

Dear Mr. McNeese:

Thank you for contacting our office about the cultural remains discovered during construction at the O'Brien House.

After personal inspection and a review of historic maps of the area, we have determined that the concrete slab encountered is likely the remaining foundation of a gasometer associated with the Baton Rouge Electric Company Gas Plant. Although the Gas Plant is shown on maps from 1903, the gasometer in question does not appear on maps until 1923. We believe that this gasometer foundation has no significant research potential. Therefore, we agree that the current construction project should proceed. However, because the majority of the historic Electric Company and Gas Plant was located to the east of the current project, any construction in that area may encounter significant cultural remains. We request that you contact our office prior to any construction work in that area.

For: Joey

From: Tonya

@

O'Brien House

Mar. 27. 2006 3:59PM

domain design

FAX NO. :2253440119

No. 0983 P. 4

Mar. 27 2006 03:25PM P2

Mr. Robert McNeese
March 17, 2006
Page 2

We have included a copy of the 1923 Sanborn map showing the gasometer, as well as a diagram and description of a gasometer, for your information. If you have any additional questions, please contact Cheraki Williams in the Division of Archaeology at (225) 342-8170.

Sincerely,

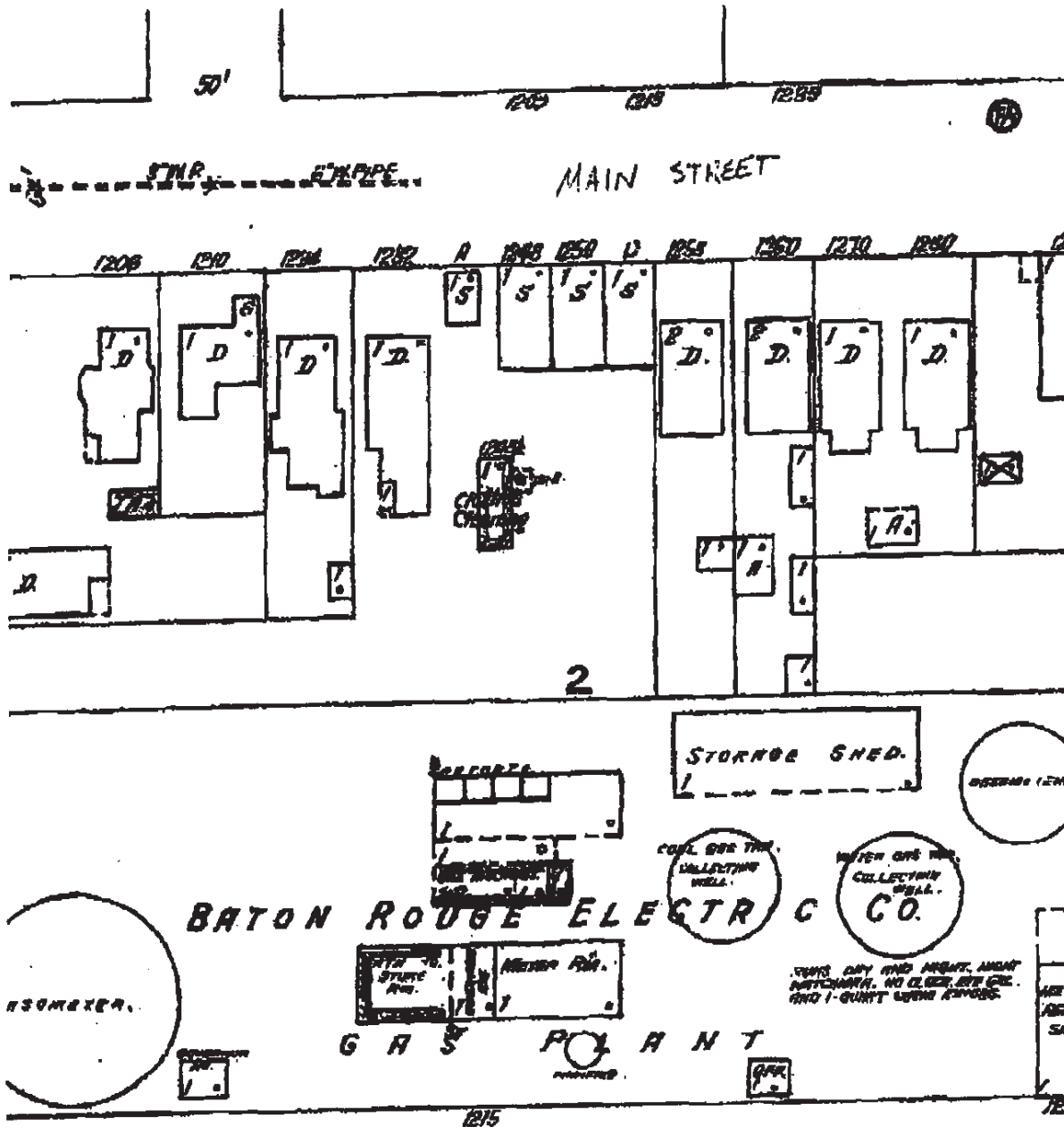
Pam Breaux

Pam Breaux
State Historic Preservation Officer

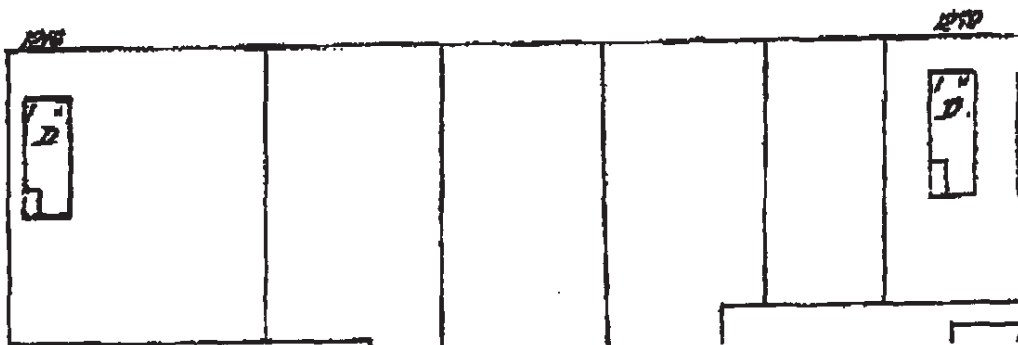
PB:CW:s

Enclosures: as stated

Received Time Mar. 27. 3:23PM



LAUREL

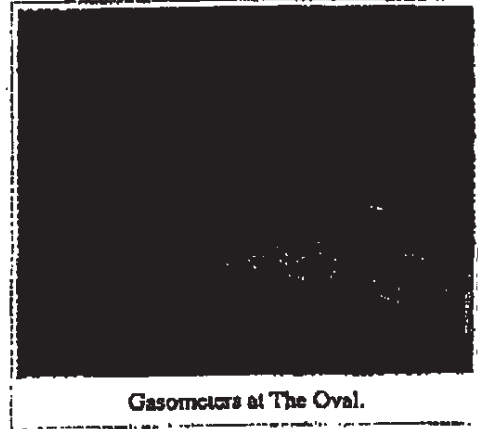
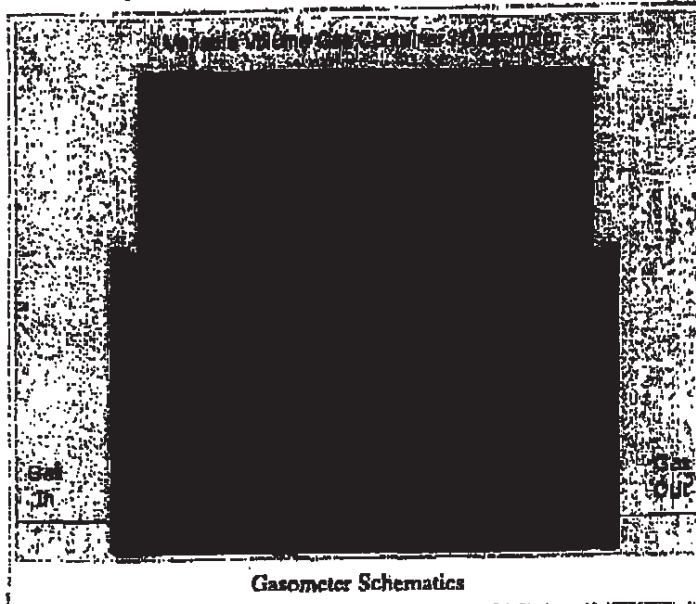


isometer - Wikipedia, the free encyclopedia

Gasometer

on Wikipedia, the free encyclopedia

gasometer
gas-holder
a large
ntainer
here gas is
red near
rmal
ssure and
nperature.
is volume of
: container
lows the
ntity of
red gas, the
ssure comes
m the
ight of the
ivable cap.
pical



lumes for large gasometers are about 50000 m³, with 60 m diameter structures.

isometers tend to be used for balancing purposes (making sure gas pipes operate within a safe range of pressures) rather than for usually storing gas for later use. Gas is nowadays stored in large underground reservoirs such as salt caverns. Often gas is stored in : summer when it is cheap and sold in the winter when the price goes up.

isometers are often a major part of the skylines of low-rise British cities, due to their large distinctive shape and central location.

so a gasometer is a meter for measuring the amount of gas flowing through a particular pipe.

he term 'gasometer', was originally coined by William Murdoch, the inventor of gas lighting, in the early 1800s. Despite the objections of his associates that his "gazometer" was not a meter but a container the name was retained and came into general use.

se also

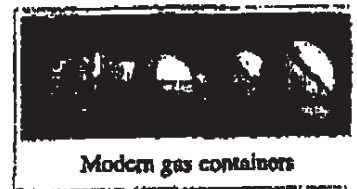
- Gasometer Vienna, Austria

External links

- Gasometer Oberhausen, Germany (<http://www.gasometer.de/>)
- Gasometer Vienna, Austria (<http://www.gasometer.org/en/>)
- Gasometer Schlieren, Switzerland (<http://www.gasometer.ch/>)

rieved from "<http://en.wikipedia.org/wiki/Gasometer>"

egories: Buildings and structures | Architecture stubs | Industry stubs



Wikimedia Commons has media related to:
Gasometer

APPENDIX H
LIMITATIONS

LIMITATIONS

The findings and recommendations of this report are based upon the scope of work for this project as agreed to by the client. This investigation is limited strictly to identifying the potential presence of the specified contaminants of concern in the chosen locations of the borings, monitoring wells, and other samples. Identifying and quantifying these specified contaminants in the chosen locations is not to be interpreted as a guarantee of the nature and occurrence of these substances or other substances of concern elsewhere on the site.

All conclusions and recommendations regarding the findings of the investigation represent the professional opinions of Pyburn & Odom personnel involved with the project: the results of this report are not to be considered a legal interpretation of existing environmental regulations. Pyburn & Odom assumes no responsibility or liability for errors in data from sources outside of Pyburn & Odom or developments arising from situations outside the scope of this project.

No warranty is expressed or implied with the usage of such data since this information is subject to limitations, availability and accuracy of these records, reports, historical documentation and personal recollection of these persons contacted and interviewed by Pyburn & Odom.



July 27, 2007

LDEQ RECEIPT

2007 JUL 27 PM 2 42

RECEIVED	
JUL 27 2007	
LA. DEPT. OF ENV. QUALITY	
REM. # 2008-434	
Remediation Services Division	
Manager:	Dunham
Team Leader:	Placenta
AI #:	CR.11
TEMPOTask #:	
Desk Copy	File Room: TAS

Mr. Duane Wilson
Louisiana Department of Environmental Quality
Remediation Services Division
P.O. Box 4314
Baton Rouge, LA 70821-4314

Re: Final Report: Phase II Environmental Site Assessment
O'Brien House Property
1217 Laurel Street
Baton Rouge, Louisiana
LDEQ Contract No. 614825
Work Order No. 18
URS File No. 19228029.00001

Dear Mr. Wilson:

URS Corporation (URS) is pleased to submit three hard copies and one electronic copy of the final report, Phase II Phase II Environmental Site Assessment of the O'Brien House Property located at 1217 Laurel Street, Baton Rouge, Louisiana.

URS is pleased to be assisting LDEQ on this project. If you have questions or need additional information, please call us at (225) 922-5700.

Very truly yours,
URS Corporation

Charles B. Dartez, CHMM
Vice President

W. John Allen
Senior Scientist

SK:rdm

Enclosure

URS Corporation
7389 Florida Boulevard, Suite 300
Baton Rouge, LA 70806
Tel: 225.922.5700
Fax: 225.922.5701

FINAL REPORT

**PHASE II ENVIRONMENTAL SITE
ASSESSMENT**

**O'BRIEN HOUSE PROPERTY
BATON ROUGE, LOUISIANA
AGENCY INTEREST NO.: 9911
LDEQ CONTRACT NO. 614825
WORK ORDER # 18**

Prepared for

Louisiana Department of Environmental Quality
Baton Rouge, Louisiana

July 26, 2007

File No. 19228029.00001

URS

URS Corporation
7389 Florida Boulevard
Baton Rouge, Louisiana 70806
225/922-5700

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Table 5	Summary of Analytical Results for Metals and Screening Standards for Soils
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Table 7	Summary of Analytical Results for SVOA and Screening Standards for Groundwater
Table 8	Summary of Analytical Results for Metals and Screening Standards for Groundwater

FIGURES

Figure 1	Site Location Map
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Figure 3	Cross Section Location Map
Figure 3A	Cross Section A-A'
Figure 4	Potentiometric Map
Figure 5	Detections of Constituents in Soils Exceeding Respective Screening Standards

APPENDICES

Appendix A	Boring Logs
Appendix B	Temporary Well Installation Reports
Appendix C	Groundwater Collection Reports
Appendix D	Analytical Data Quality Assurance Review

VOLUME II (TO BE PROVIDED WITH FINAL REPORT)

Appendix E	GCAL Analytical Laboratory Data Reports
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URS has completed field sampling for soil and groundwater at the O'Brien House Property (LDEQ Agency Interest No.: 9911). The work was consistent with the Louisiana Department of Environmental Quality's Targeted Brownfields Assessment (LDEQ/TBA) Contract 614825 and Work Order Number 18 dated October 4, 2006 requesting additional assessment activities at the site. The property is located at 1217 Laurel Street, Baton Rouge, Louisiana. The closest major waterway is the Mississippi River approximately 0.8 miles to the west. Figure 1 shows the site location of the property.

According to information provided by the LDEQ, the site was used by the Baton Rouge Gas Works in the late 1800s. The current site use is the O'Brien House. It was established in 1971 to serve adult recovering alcoholics and drug addicts. It is a halfway house that works with alcoholics and educates the public about alcoholism. The O'Brien House provides a comprehensive continuum of care that includes treatment, prevention and community development initiatives.

EPA conducted an investigation of the site in 2002 (report available upon request from the EPA). Phase I and II Environmental Site Assessments (ESA) of the site were conducted during April and May 2006, respectively. Results of sampling and analysis from the Phase II ESA indicated the presence of Semi-Volatile Organic Analytes in concentrations exceeding LDEQ Risk Evaluation Corrective Action (RECAP) Industrial Screening Standards in soil samples collected during this previous ESA. The site owner, O'Brien House, requested further assessment of the property under the LDEQ/TBA Program.

The work plan, dated February 23, 2007, for implementation of this Phase II Site Assessment called for the installation, sampling and plugging and abandonment of six 1-inch PVC monitor wells for soil and groundwater sampling purposes to an approximate depth below ground surface (BGS) of 18 feet. The sample locations, as shown on Figure 2, were determined per discussions with the LDEQ and per results of the previous Phase II ESA.

This report describes the procedures followed for sample collection, handling and documentation of samples; analytical parameters and methods; a description of geologic conditions encountered; and comparison to RECAP Screening Standards. Copies of the soil boring logs, monitor well installation reports and monitor well groundwater collection reports are presented in Appendices A through C respectively. Complete laboratory analytical data reports are available for review in Appendix D. This Site Investigation was completed in accordance with the ASTM E-1903-97 Standard Guide for Phase II Site Investigation. The

SECTION ONE

Introduction

field activities at the O'Brien House property began on April 2, 2007 and were completed on April 5, 2007.

2.1 SAMPLE COLLECTION PROCEDURES

Six soil borings were drilled at the O'Brien House property site. All of the soil borings were completed using GeoprobeTM direct-push methods. The GeoprobeTM drill rig was operated by Walker-Hill Environmental Services, Inc. (Walker Hill), a Louisiana Licensed Water Well Contractor as required under Louisiana Revised Statute R.S. 38:3098 through R.S. 38:3098.8, for contractors conducting borings. All sampling equipment was decontaminated prior to use in accordance with the procedures described in URS Sampling and Analysis Plan (dated February, 2007). Walker-Hill containerized all soil cuttings, well development and wash water, and disposable materials on site for proper disposal.

2.1.1 Drilling and Sampling of Soil Borings

Six soil borings were installed as shown on Figure 2. Prior to drilling, each location was probed to identify unmarked utilities or other subsurface obstruction hazards. Each boring was advanced approximately 18 feet below ground surface (bgs) for soil sample collection, until the confining clay unit was encountered. Coordinates for the borings were determined using a hand-held GPS device and are noted on the Boring Logs presented in Appendix A.

Soil samples were collected continuously at 2-foot intervals. All soil samples were placed in jars and screened using an organic vapor meter (OVM) to sample the headspace after it has been allowed to stabilize for a minimum of 15 minutes. Each boring was continuously sampled and visually logged to the bottom of the boring in the field by a URS geologist. The soil boring logs are included in Appendix A.

At each soil boring, three soil samples were collected from the following intervals:

1. The sample from the 0- to 2-foot interval
2. The sample with the highest OVM reading, or if there are not vapors detected or all readings are similar; the sample collected at the soil/groundwater interface
3. The bottom borehole sample from the base of the first permeable zone

From each boring, samples were collected and submitted using Encore® samplers for volatiles analysis; in addition other samples were collected for SVOA and metals in

appropriate containers. The soil samples were placed on ice in a laboratory supplied ice chest to maintain the required temperature of 4 degrees Celsius and shipped to Pace Analytical Laboratory (Pace) in Saint Rose, LA via a Pace courier.

2.1.2 Monitor Well Installation and Sampling

Temporary monitoring wells were installed in each of the borings. The wells were set to screen the interval where groundwater was encountered. Each well was constructed of 1-inch diameter, flush threaded, Schedule 40 PVC well casing and screen. The well screen consisted of 5 feet of 1-inch diameter Schedule 40 PVC pipe with 0.010-inch slots. The blank/riser pipe was a 1 inch Schedule 40 blank PVC pipe.

Upon completion of the installation of the well construction materials into the borehole, a 20/40 sieve-size clean silica filter sand was placed in the annulus between the borehole and the screen to a minimum depth equivalent to 2 feet above the top of the well screen (if feasible). A bentonite pellet seal was then placed above the sand and extended at least 2 feet above the filter pack. The remainder of each borehole was then grouted to ground surface using a Portland cement/sodium bentonite slurry. Monitor well installation reports are included in Appendix B. Each temporary monitor well was developed via surface pumping of the groundwater until indicator parameters stabilize.

Prior to sampling, a water level measurement was made using an electronic indicator with accuracy to ± 0.01 feet. The groundwater sample was collected from each monitoring well after purging at least three well volumes from the well, and after the specific conductivity, temperature and pH measurements of the purged water have stabilized. All sampling activities were recorded on the Groundwater Collection Report forms, presented in Appendix C. All purged water was drummed and stored on site in a limited access area.

A groundwater sample was collected from each well, with the exception of the well set in boring B-5. Temporary well B-5 did not produce sufficient water to collect a sample. Groundwater samples were collected for VOA, SVOA and metals analysis. The metals sample from each well was filtered using a 0.45 micron filter prior to containerization. All samples were shipped to Pace via courier for analysis.

2.1.3 Well Plugging and Abandonment

All six temporary wells installed by URS were plugged and abandoned following implementation of field work and once all required samples had been collected. Wells were plugged and abandoned in accordance with the "Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook," Final Version, December 2000, as prepared by the Louisiana Department of Transportation and Development (LDOTD).

2.2 QUALITY ASSURANCE/QUALITY CONTROL

The data collection and Quality Assurance/Quality Control (QA/QC) procedures followed during the Site Investigation were consistent with LDEQ RECAP and the sampling work plan. QA/QC samples were collected to assess the potential for contamination of samples due to field activities and/or handling and transport and were analyzed to evaluate precision and accuracy of the analytical data from the off-site laboratory. QC samples included field duplicate soil and groundwater samples to evaluate sample-to-sample analytical precision, matrix spike (MS), and matrix spike duplicate (MSD) samples of soil and groundwater to evaluate analytical accuracy; rinsate samples to demonstrate the effectiveness of decontamination of sampling equipment; and field blanks and trip blanks to evaluate potential cross contamination of samples.

Laboratory analyses were performed by Pace Analytical Laboratories of Saint Rose, Louisiana. Pace is certified by the LDEQ Environmental Laboratory Accreditation Program (Certificate Number 02006). All samples were analyzed using methods consistent with LDEQ RECAP Appendix B requirements.

Soil and groundwater samples collected from B-1 through B-6 were analyzed for the following "site-specific" parameters as designated in the Sampling and Analysis Work Plan:

- Target Compound List (TCL) Volatile Organic Analytes by Method 8260B/5035.
- TCL Semi-Volatile Organic Analytes (includes Chlorinated Organics) by Method 8270C.
- Target Analyte List (TAL) Metals by Methods 6010C/7000/9012.

2.3 DOCUMENTATION AND RECORDS

A field logbook was kept during field activities by the Field Team on-site. Information recorded in the field notebook includes the following:

- Facility name and location;
- Arrival and departure times;
- Sample personnel;
- Date, time and place of sampling;
- Sample identification numbers;
- Weather conditions; and
- Analyses and required preservation techniques.

All soil and groundwater samples were identified at the time of collection with a sample label affixed to the sample container. The sample labels were written legibly and in indelible ink and included the following:

- The project name and number;
- Sample identification numbers;
- Date, time, and place of collection;
- Identification of preservatives used;
- Analysis requested; and
- Sampler's initials.

Each soil sample was labeled with the boring number and the depth interval that was collected, for example B-1(0-2) was the label used for Boring B-1, depth interval 0 to 2-feet bgs. Groundwater samples were labeled with the boring number and then with a W to identify that it was a water sample. The labeled sample jars were placed in an ice chest with ice to maintain the required 4 degrees Celsius temperature. The sample ice chest was maintained in custody at all times. Chain-of-Custody seals were used to secure sample ice chests for shipment.

After samples were collected, a chain-of-custody form was completed to document sample collection, handling, and transport to the laboratory facilities, and acceptance by authorized laboratory personnel. URS completed a chain-of-custody form for each sample ice chest. Additional documentation maintained during field activities included soil boring logs;

SECTION TWO

Investigation Activities

monitor well installation reports, groundwater collection forms, and daily safety meeting report forms.

3.1 SITE GEOLOGY AND HYDROGEOLOGY

Soils encountered in the six Borings B-1 through B-6 advanced at the site consisted of a tan, brown and gray silty clay that had iron staining and was stiff to very stiff. Some black cinder-like material was encountered in the upper soils at boring B-1, B-2, B-3 and B-4. The first permeable zone, a gray to light gray silt was encountered in all borings except B-5. Water was observed at depths ranging from 3 to 18 feet bgs. The bottom confining layer, a stiff, brown and tan clay to silty clay was present at a depth of approximately 18 bgs in all borings. Figure 3 and 3A depict the cross section transect and a typical cross section of subsurface stratigraphy for the site.

The apparent potentiometric surface as measured from the temporary monitor well static water levels is shown in Figure 4. Based on these data, a hydraulic gradient of 0.12 ft/ft is present at the site and groundwater flow is generally to the north. Well development and groundwater sampling data for the sixteen temporary monitoring wells are located in Appendix C.

3.2 EVALUATION AND PRESENTATION OF RESULTS

All soil and water samples were shipped to Pace for analysis. The laboratory reports are included as Appendix E. Analytes detected above Practical Quantitation Limits (PQLs) were compared to their respective RECAP Screening Standards (SS); in this sampling event, the soil screening standards for the constituent concentrations in surface soils (0 feet to 15 feet bgs) that are protective of human health for industrial/commercial land use (Soil_SSi) and the constituent concentrations in soil that are protective of groundwater (Soil_SSGW) were considered for surface soils. The lesser value of the Industrial Soil Screening Standards or Soil Protective of Groundwater Screening Standards (Soil_SSi and Soil_SSGW respectively) for each constituent, listed as the Screening Standards in RECAP Table 1, were selected for comparison to analytical results from soil samples. For groundwater samples, the Groundwater Screening Standards protective of human health (GW_SS) were selected for comparison to analytical results from groundwater samples.

3.3 SOIL ANALYTICAL RESULTS

Soil samples were screened in the field using an OVM. The only screened sample interval having a detectable reading for organic vapor was from Boring B4 in the 2 to 4-foot interval with an OVM reading of 31.3 ppm. All other OVM readings were 0.0 ppm.

Each soil sample was labeled with the boring number and the depth interval that was collected, for example B-1(0-2) was the label used for boring 1, depth interval 0 to 2-feet bgs. As discussed, three soil samples from each boring were collected. VOA readings were detected in 4 of the 18 samples. Xylene was detected in sample B-4(2-4) at a concentration of 66.4 mg/kg, which exceeded the SS of 2.191 mg/kg. No other VOA detections exceeded their respective SS. Acetone was detected at a concentration of 0.0144 mg/kg in the sample from B-1(0-2). In the sample B-3(0-2), acetone was detected at a concentration of 0.0734 mg/kg and methylene chloride was detected at a concentration of 0.00496 mg/kg. Sample B-3(2-4) also had acetone detected at 0.011 mg/kg and methylene chloride at 0.00557 mg/kg. Ethylbenzene was detected at a concentration of 6.38 mg/kg in sample B-4(2-4). Soil analytical results for VOA are presented in Table 3.

SVOA were detected in 7 of the 18 soil samples. Acenaphthylene was detected in B-1(0-2) at a concentration of 0.473 mg/kg and detected in B-2 (0-2) at a concentration of 0.573 mg/kg. Both of these concentrations are below their respective SS. Anthracene was detected in B-2(0-2) at a concentration of 0.738 mg/kg and detected in B-3(2-4) at a concentration of 0.482 mg/kg. Both of these detections are below the applicable SS. Benzaldehyde was detected at a concentration of 1.3 mg/kg in B-1(16-18). There is no SS listed in RECAP Table 1 for this constituent. Benzo(k)fluoranthene was detected in B-1(0-2) at a concentration of 0.987 mg/kg, in B-2(0-2) at a concentration of 2.36 mg/kg, in B-3 (2-4) at a concentration of 0.575 mg/kg, and in B-4(0-2) at a concentration of 2.16 mg/kg. All of these results are below the applicable SS. Benzo(g,h,i)perylene was detected in B-1(0-2) at a concentration of 0.514 mg/kg, in B-1(16-18) at a concentration of 0.89 mg/kg, and in B-2(0-2) at a concentration of 0.642 mg/kg. No SS is listed in RECAP Table 1 for this constituent. Carbazole was detected in B-3(2-4) at a concentration of 0.421 mg/kg. No SS is listed in RECAP Table 1 for this constituent. Chrysene was detected in six soil samples, all detections were at concentrations below the applicable SS. Chrysene was detected at a concentration of 1.4 mg/kg in B-1(0-2), 1.06 mg/kg in B-1(16-18), 3.96 mg/kg in B-2(0-2), 0.533 mg/kg in B-3(0-2), 1.17 mg/kg in B-3(2-4), and 3.32 mg/kg in B-4(0-2). Fluoranthene was detected in six samples, all detections were at concentrations below the applicable SS. Fluoranthene was detected at a concentration of 2.55 mg/kg in B-1(0-2), 1.61 mg/kg in B-1(16-18), 6.17 mg/kg in B-2(0-2), 1.12 mg/kg in B-3(0-2), 3.01 mg/kg in B-3(2-4), and 4.78 mg/kg in B-4(0-2). Indeno(1,2,3-cd)pyrene was detected in B-1(0-2) at a concentration of 0.479 mg/kg, and B-2(0-2) at a concentration of 0.724 mg/kg; both detections are below the applicable SS. Phenanthrene was detected in five samples, all detections were at concentrations below the applicable SS. Phenanthrene was detected in B-1(0-2) at a concentration of 0.742 mg/kg, in B-2(0-2) at a

concentration of 3.35 mg/kg, in B-3(0-2) at a concentration of 0.778 mg/kg, in B-3(2-4) at a concentration of 2.34 mg/kg, and in B-4(0-2) at a concentration of 1.9 mg/kg. Pyrene was detected in B-1(0-2) at a concentration of 2.33 mg/kg, in B-1(16-18) at a concentration of 1.34 mg/kg, in B-2(0-2) at a concentration of 5.34 mg/kg, in B-3(0-2) at a concentration of 0.948 mg/kg, in B-3(2-4) at a concentration of 2.55 mg/kg, and in B-4(0-2) at a concentration of 5.86 mg/kg. These detections of pyrene were all below the applicable SS. Soil analytical results for SVOA are presented in Table 4. SVOA detected in concentrations that exceeded their respective SS are summarized below:

- Benzo(a)pyrene was detected B-1 (0-2) at a concentration of 1.6 mg/kg, which exceeded the SS of 0.33 mg/kg.
- Benzo(a)anthracene was detected in B-2 (0-2) at a concentration of 4.05 mg/kg, which exceeded the SS of 2.9 mg/kg. Benzo(b)fluoranthene was detected in B-2 (0-2) at a concentration of 3.91 mg/kg, which exceeded the SS of 2.9 mg/kg. Benzo(a)pyrene was detected in B-2 (0-2) at a concentration of 3.04 mg/kg, which exceeded the SS of 0.33 mg/kg.
- Benzo(a)pyrene was detected in B-3 (0-2) and (2-4) at a concentrations of 0.444 mg/kg and 1.1 mg/kg respectively, which exceeded the SS of 0.33 mg/kg.
- Benzo(a)anthracene was detected in B-4 (0-2) at a concentration of 3.17 mg/kg, which exceeded the SS of 2.9 mg/kg. Benzo(b)fluoranthene was detected in B-4 (0-2) at a concentration of 5.59 mg/kg, which exceeded the SS of 2.9 mg/kg.
- Benzo(a)pyrene detected in B-4 (0-2) and (16-18) at concentrations of 3.36 mg/kg and 1.65 mg/kg respectively, which exceeded the SS of 0.33 mg/kg.

No detections of metals in soil samples exceeded their respective SS with the exception of lead. Lead was detected in B-4 (0-2) at a concentration of 439 mg/kg, which exceeded the SS of 100 mg/kg. The following are the highest concentrations of metals detected in soil samples that have SS listed in RECAP Table 1 with their respective concentrations and sample intervals: arsenic, 6.67 mg/kg, B-3 (16-18); barium, 1080 mg/kg, B-4 (2-4); beryllium, 2.58 mg/kg, B-1 (6-8); cadmium, 0.995 mg/kg, B-5 (16-18); chromium, 17.10, B-4 (0-2); cobalt, 15.1 mg/kg, B-6 (16-18); copper, 90.9 mg/kg, B-4 (0-2); mercury, 3.45

mg/kg, B-4 (0-2); nickel, 25.7 mg/kg, B-6 (16-18); vanadium, 39.4 mg/kg, B-3 (2-4); and zinc, 142 mg/kg, B-4 (0-2). Metals having no SS listed in RECAP Table 1, aluminum, calcium, iron, magnesium, manganese, potassium and sodium were detected in all soil samples at concentrations generally consistent with background concentrations for soils. Soil analytical results for Metals are presented in Table 5. Reports of Laboratory Analysis of soil samples are included as Appendix E.

3.4 GROUNDWATER ANALYTICAL RESULTS

As noted, a groundwater sample was collected from each borehole with the exception of B-5 which did not produce water. Each of the 5 samples was analyzed for VOA, SVOA and Metals. Each metals sample was filtered in the field prior to shipment to the laboratory.

The groundwater results for VOA indicate that only two constituents were present above the detection limit. Trans-1,3-Dichloropropene was detected in monitor well B-4W at a concentration of 0.00613 mg/L, which exceeded the SS of 0.005 mg/L. Total xylene was detected in the groundwater sample from well B-4W at a concentration of 0.0526 mg/L, which was below the RECAP standard of 10 mg/L. Groundwater analytical results for VOA are presented in Table 6.

SVOA constituents were all below the detection limits for groundwater samples collected from wells B-1W, B-2W and B-6W. Naphthalene was detected in B-3W at a concentration of 0.028 mg/L, which exceeded the SS of 0.010 mg/L. Five SVOA constituents were detected above their respective SS in groundwater samples from B-4W. Dibenzofuran was detected in B-4W at a concentration of 0.046 mg/L (SS of 0.01 mg/L), fluorine at a concentration of 0.0498 mg/L (SS of 0.024 mg/L), naphthalene at a concentration of 0.381 mg/L (SS of 0.01 mg/L), and pyrene at a concentration of 0.024 mg/L (SS of 0.018 mg/L). Groundwater analytical results for SVOA are presented in Table 7.

No metals detected in any groundwater samples exceeded their respective SS. The maximum concentration of Copper detected in groundwater samples was 0.0135 mg/L in well B-6W. The maximum concentration of lead detected in groundwater samples was 0.00967 mg/L in B-1W. The maximum concentration of zinc detected in groundwater samples was 0.033 mg/L in B-6W. Metals having no SS listed in RECAP Table 1, aluminum, calcium, iron, magnesium, manganese, and sodium were detected in all groundwater samples at concentrations generally consistent with expected background concentrations. No potassium was detected in any groundwater sample. Groundwater analytical results for Metals are

presented in Table 8. Reports of Laboratory Analysis of soil samples are included as Appendix E.

3.5 QA/QC RESULTS

During the sampling event QA/QC samples were collected including trip blanks, soil and water duplicate samples, matrix spike and matrix spike duplicate samples, a rinsate blank and a field blank. Analytical results for QA/QC samples are presented in Appendix E.

Four trip blanks were collected and analyzed for VOA. Trip blank results generally indicated that contaminants were not acquired during the transport and storage of samples. VOA were not detected in any of the trip blanks. A soil duplicate B-1D (0-2) was collected from the 0 to 2-foot interval of Boring B-1. The results are similar but show some variation which is most likely explained by the inconsistencies in the sample matrix. A duplicate water sample B-1WD was collected from groundwater in Boring B-1. The results of the groundwater duplicate are similar to the sample but also show some variation in metals content. A matrix spike and matrix spike duplicate soil sample was collected from Boring B-2 at the 16 to 18-foot interval. A groundwater matrix spike and matrix spike duplicate sample was collected from boring B-3.

A rinsate sample, collected by pouring deionized water over sampling equipment was collected at the location of Boring B-5. A field blank was also collected at the location of Boring B-5. All of the parameters for both the rinsate and the field blank were below detection limits providing verification that analytes were not introduced by sampling equipment or procedures.

4.1 DISCUSSION OF FINDINGS AND CONCLUSIONS

In summary, URS Corporation (URS) developed and subsequently implemented a Phase II Environmental Site Assessment (Phase II ESA) Sampling Work Plan (SWP) to target identification of impacted areas within the site limits. Performance of this Site Investigation was consistent with Louisiana's Risk Evaluation/Corrective Action Program (RECAP) and was completed in accordance with the ASTM 1903-97 Standard Guide for Environmental Site Assessments.

According to information provided by the LDEQ, the site was used by the Baton Rouge Gas Works in the late 1800's. The current site use is the O'Brien House. It was established in 1971 to serve adult recovering alcoholics and drug addicts. It is a halfway house that works with alcoholics and educates the public about alcoholism. The O'Brien House provides a comprehensive continuum of care that includes treatment, prevention and community development initiatives.

The potentiometric surface as measured from the temporary monitor well static water levels is shown in Figure 4. Based on these data, a hydraulic gradient of 0.12 ft/ft is present at the site and groundwater flow is generally to the north. The closest major waterway is the Mississippi River approximately 0.8 miles to the west.

EPA conducted an investigation of the site in 2002 (report available upon request from the EPA). Phase I and II Environmental Site Assessments (ESA) of the site were conducted during April and May 2006 respectively. Results of sampling and analysis from the Phase II ESA indicated the presence of Semi-Volatile Organic Analytes in concentrations exceeding LDEQ Risk Evaluation Corrective Action (RECAP) Industrial Screening Standards (SS) in soil samples collected during this previous ESA.

Soil and groundwater samples collected from B-1 through B-6 for this assessment were analyzed for the following "site-specific" parameters as designated in the Sampling and Analysis Work Plan:

- Target Compound List (TCL) Volatile Organic Analytes by Method 8260B/5035.
- TCL Semi-Volatile Organic Analytes (includes Chlorinated Organics) by Method 8270C.

- Target Analyte List (TAL) Metals by Methods 6010C/7000/9012.

Six soil borings were drilled at the O'Brien House property site. Three soil samples and one groundwater sample were collected from each boring location with the exception of B-5 where a groundwater sample could not be obtained. The samples were sent to Pace Analytical Laboratory for VOA, SVOA and Metals analysis. Each groundwater sample collected for Metals analysis was filtered in the field.

From each boring, samples were collected and submitted using Encore[®] samplers for VOA analysis; in addition other samples were collected for SVOA and Metals in appropriate containers. The soil samples were placed on ice in a laboratory supplied ice chest to maintain the required temperature of 4 degrees Celsius and shipped to Pace Analytical Laboratory (Pace) in Saint Rose, LA via a Pace courier.

Each soil sample was labeled with the boring number and the depth interval that was collected, for example B-1(0-2) was the label used for Boring B-1, depth interval 0 to 2-feet bgs. VOA were detected in 4 of the 18 samples. Xylene was detected in sample B-4(2-4) at a concentration of 66.4 mg/kg, which exceeded the SS of 2.191 mg/kg. No other VOA exceeded their respective SS in soil samples.

SVOA were detected in 7 of the 18 soil samples. SVOA detected in concentrations that exceeded their respective SS are summarized below:

- Benzo(a)pyrene was detected B-1 (0-2) at a concentration of 1.6 mg/kg, which exceeded the SS of 0.33 mg/kg.
- Benzo(a)anthracene was detected in B-2 (0-2) at a concentration of 4.05 mg/kg, which exceeded the SS of 2.9 mg/kg. Benzo(b)fluoranthene was detected in B-2 (0-2) at a concentration of 3.91 mg/kg, which exceeded the SS of 2.9 mg/kg. Benzo(a)pyrene was detected in B-2 (0-2) at a concentration of 3.04 mg/kg, which exceeded the SS of 0.33 mg/kg.
- Benzo(a)pyrene was detected in B-3 (0-2) and (2-4) at a concentrations of 0.444 mg/kg and 1.1 mg/kg respectively, which exceeded the SS of 0.33 mg/kg.

- Benzo(a)anthracene was detected in B-4 (0-2) at a concentration of 3.17 mg/kg, which exceeded the SS of 2.9 mg/kg. Benzo(b)fluoranthene was detected in B-4 (0-2) at a concentration of 5.59 mg/kg, which exceeded the SS of 2.9 mg/kg.
- Benzo(a)pyrene detected in B-4 (0-2) and (16-18) at concentrations of 3.36 mg/kg and 1.65 mg/kg respectively, which exceeded the SS of 0.33 mg/kg.

No Metals detected in soil samples exceeded their respective SS with the exception of lead. Lead was detected in B-4 (0-2) at a concentration of 439 mg/kg, which exceeded the SS of 100 mg/kg.

A groundwater sample was collected from each borehole with the exception of B-5 which did not produce water. Each of the 5 samples was analyzed for VOA, SVOA and Metals. Each Metals sample was filtered in the field prior to shipment to the laboratory.

The VOA results for groundwater analyses indicate that two constituents were detected above the detection limit. Trans-1,3-Dichloropropene was the only VOA detected above the respective SS. Trans-1,3-Dichloropropene was detected in well B-4W at a concentration of 0.00613 mg/L, which exceeded the SS of 0.005 mg/L.

SVOA were all below the detection limits for groundwater samples collected from wells B-1W, B-2W and B-6W. Naphthalene was detected in B-3W at a concentration of 0.028 mg/L, which exceeded the SS of 0.010 mg/L. Five SVOA constituents were detected above their respective SS in groundwater samples from B-4W. Dibenzofuran was detected in B-4W at a concentration of 0.046 mg/L (SS of 0.01 mg/L), fluorine at a concentration of 0.0498 mg/L (SS of 0.024 mg/L), naphthalene at a concentration of 0.381 mg/L (SS of 0.01 mg/L), and pyrene at a concentration of 0.024 mg/L (SS of 0.018 mg/L).

No metals detected in any groundwater samples exceeded their respective SS. Figures 5 and 6 show constituents by boring on the Site Map that were detected in soil and groundwater samples at concentrations exceeding their respective Screening Standards.

SECTION FIVE

References

Phase I Environmental Site Assessment, O'Brien House Property, 1200 Main Street, Baton Rouge, Louisiana, Pyburn and Odom, April 4, 2006.

Phase II Environmental Site Assessment, O'Brien House Property, 1200 Main Street, Baton Rouge, Louisiana, Pyburn and Odom, May 15, 2006.

Risk Evaluation/Corrective Action Program (RECAP), Louisiana Department of Environmental Quality, Corrective Action Group, October 20, 2003.

The Louisiana Voluntary Remediation Regulations (LAC 33:VI.Chapter 9).

U.S. Geological Survey. 7.5-Minute Series Topographic Quadrangle Maps, "Baton Rouge West, Louisiana," Photorevised 1995.

TABLES

TABLE 1

PHASE II SITE INVESTIGATION
SUMMARY OF ANALYTICAL RESULTS FOR CONSTITUENTS IN GROUNDWATER SAMPLES
EXCEEDING RECAP SCREENING STANDARDS
1217 LAUREL STREET
BATON ROUGE, LOUISIANA
SAMPLES COLLECTED IN APRIL 2007

Method	Analyte	CAS	GW_SSi	Units	B-3W	B-4W
SW-846 8260B/5030	trans-1,3-Dichloropropene	10061-02-6	5.0E-03	mg/L	ND	0.00613
SW-846 8270C	Dibenzofuran	132-64-9	1.0E-02	mg/L	ND	0.0462
SW-846 8270C	Fluorene	86-73-7	0.024	mg/L	ND	0.0498
SW-846 8270C	Naphthalene	91-20-3	0.010	mg/L	0.028	0.381
SW-846 8270C	Pyrene	129-00-0	0.018	mg/L	ND	0.024

Notes:

Bold indicates constituents that exceed RECAP Screening Standards.

ND - Analyte not detected in any sample above the respective method detection limits.

TABLE 2

PHASE II SITE INVESTIGATION
SUMMARY OF ANALYTICAL RESULTS FOR CONSTITUENTS IN SOIL SAMPLES
EXCEEDING RECAP SCREENING STANDARDS
1217 LAUREL STREET
BATON ROUGE, LOUISIANA
SAMPLES COLLECTED IN APRIL 2007

Method	Analyte	CAS	SOIL_SSI	SOIL_SSGW	Units	B-1(0-2)	B-2(0-2)	B-3(0-2)	B-3(2-4)	B-4(0-2)	B-4(2-4)	B-4(16-18)
SW-846 8260b/5030	Xylene (total)	1330-20-7	2.2E+00	1.5E+02	mg/kg	ND	ND	ND	ND	ND	66.4	ND
SW-846 8270C	Benzo(a)anthracene	56-55-3	2.9E+00	3.3E+02	mg/kg	1.49*	4.05	0.503*	1.26*	3.17	ND	1.79*
SW-846 8270C	Benzo(b)fluoranthene	205-99-2	2.9E+00	2.2E+02	mg/kg	1.96*	3.91	0.627*	2.06*	5.59	ND	2.34*
SW-846 8270C	Benzo(a)pyrene	50-32-8	3.3E-01	2.3E+01	mg/kg	1.6	3.04	0.444	1.1	3.36	ND	1.65
SW-846 6010B	Lead	7439-92-1	1.4E+03	1.0E+02	mg/kg	48.8*	27.7*	16.5*	28.7*	439.0	16.9*	19.2*

Notes:

Bold indicates constituents that exceed RECAP Screening Standards.

ND - Analyte not detected in any sample above the respective method detection limits.

* Detected above PQL but did not exceed RECAP Screening Standard.

TABLE 3
PHASE II SITE INVESTIGATION
SUMMARY OF ANALYTICAL RESULTS FOR VOA AND SCREENING STANDARDS FOR SOIL
1217 LAUREL STREET
BATON ROUGE, LOUISIANA
SAMPLES COLLECTED IN APRIL 2007

Analyte	CAS	RECAP SOIL_SSI	RECAP SOIL_SSGW	Units	Maximum Exceeds Limiting Standard?	Maximum Detected Concentration	Minimum Detected Concentration	B-10-2	B-10-4	B-116-16	B-210-2	B-214-16	B-216-16	B-310-2	B-312-4	B-316-16	B-410-2	B-412-4	B-416-16	B-510-2	B-516-16	B-518-20	B-610-2	B-616-16
Axetone	67-64-1	1.4E-03	1.5E+00	mg/kg	No	0.0734	0.011	0.0144	<0.00762	<0.00598	<0.00855	<0.00443	<0.00596	0.7134	0.011	<0.00443	<0.0108	<0.00943	<0.00926	<0.00888	<0.00931	<0.00937	<0.00983	<0.00974
Benzene	71-43-2	3.1E+00	5.1E+02	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,2-Dichloroethane	78-37-2	4.2E+00	7.2E+01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,1,2,2-Tetrachloroethane	79-57-5	4.2E+00	7.2E+01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
Bromobenzene	74-83-9	3.0E+00	4.0E+00	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
2-Bromonaphthalene	78-23-3	4.4E-03	5.6E+00	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
Carbon disulfide	75-15-0	2.5E-02	1.1E+01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
Carbon tetrachloride	55-23-5	1.1E+00	1.1E+01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
Chlorobenzene	108-90-7	1.2E-02	3.0E+00	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
Chloroform	75-00-3	8.2E+00	3.5E+02	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
Chloromethane	31-05-3	3.0E-01	9.0E+01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
Chloroacetaldehyde	71-65-3	3.0E-01	9.0E+01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
Dibromochloromethane	724-48-1	5.1E+00	1.9E+02	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,1-Dichloroethane	75-35-4	1.9E+00	3.5E+02	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,2-Dichloroethane (Total)	75-35-4	9.1E-01	8.5E-02	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,1,1,2-Tetrachloroethane	146-59-2	3.4E-01	4.9E-01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,1,2,2-Tetrachloroethane	78-37-2	4.8E-01	7.7E-01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,1,1,2-Tetrachloroethane	79-57-5	4.6E-02	6.0E-02	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,3-Dichloropropene	10661-02-5	1.0E-01	1.0E-01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
trans-1,3-Dichloropropene	10061-02-6	1.0E-01	1.0E-01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,1,1-Trichloroethane	100-41-4	2.3E-02	1.9E-01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
Ethylbenzene	100-11-9	NSS	NSS	mg/kg	NSS	6.38	6.38	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,2-Hexanediol	501-78-6	NSS	NSS	mg/kg	NSS	6.38	6.38	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
Methylene chloride	75-09-2	4.4E-01	1.7E-02	mg/kg	No	0.00557	0.00496	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,1,1,2-Tetrachloroethane	108-10-1	3.1E-03	6.4E+00	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,1,2,2-Tetrachloroethane	79-57-5	2.0E-02	1.1E+01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,1,2,2-Tetrachloroethane	727-18-4	3.5E-01	1.8E+01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
Toluene	108-88-3	4.7E-02	2.0E+01	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,1,1-Trichloroethane	71-55-6	7.0E-02	4.0E+00	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,1,2-Trichloroethane	79-00-5	4.3E+00	6.8E-02	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,1,1-Trichloroethane	79-01-6	2.1E-01	7.3E-02	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
1,1,2-Trichloroethane	79-01-6	7.0E-01	1.3E+02	mg/kg	No	ND	ND	<0.00413	<0.00391	<0.00449	<0.00433	<0.00422	<0.00448	<0.00456	<0.00442	<0.00442	<0.00542	<0.00472	<0.00463	<0.00463	<0.00466	<0.00466	<0.00462	<0.00468
Xylene (Total)	1330-20-7	2.3E+00	1.5E+02	mg/kg	Yes	66.4	66.4	<0.00556	<0.00762	<0.00598	<0.00855	<0.00443	<0.00596	<0.00912	<0.00557	<0.00443	<0.0108	<0.00943	<0.00926	<0.00888	<0.00931	<0.00937	<0.00983	<0.00974

Notes:
Method = All samples were analyzed using EPA Method 8260.
NSS = No Screening Standard listed in LDEQ RECAP Table 1.
ND = Analyte not detected in any sample above the respective method detection limits.
N/A = Not analyzed for this constituent.

PHASE II SITE INVESTIGATION
SUMMARY OF ANALYTICAL RESULTS FOR SVOC AND SCREENING STANDARDS FOR SOILS
1217 LAUREL STREET
BATON ROUGE, LOUISIANA
SAMPLES COLLECTED IN APRIL 2007

Analyte	CAS	SOIL_SSI	SOIL_SSGW	Units	Maximum Detect Exceeds Limiting RECAP Concentration?	Maximum Detected Concentration	B-(0-2)	B-(16-8)	B-(16-18)	B-(20-3)	B-(214- 16)	B-(216- 18)	B-(30-2)	B-(316- 18)	B-(312-4)	B-(40-2)	B-(42-4)	B-(46- 18)	B-(50-2)	B-(516- 18)	B-(518- 20)	B-(60-2)	B-(610)	B-(618- 18)
Acenaphthene	83-32-9	6.1E+03	2.2E+02	mg/g	No	ND	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Acenaphthylene	208-96-8	5.1E+03	8.0E+01	mg/g	ND	0.473	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Acenaphthylene	198-86-2	NSS	1.0E+02	mg/g	No	0.573	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Anthracene	120-21-7	1.0E+04	1.0E+02	mg/g	No	0.482	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	151-24-9	NSS	1.0E+02	mg/g	ND	0.738	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-52-7	NSS	1.0E+02	mg/g	ND	0.482	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	66-55-3	2.9E+00	3.3E+02	mg/g	Yes	0.563	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	205-99-2	2.9E+00	2.2E+02	mg/g	Yes	4.05	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	207-08-9	2.9E+00	1.2E+02	mg/g	No	0.475	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	191-24-8	NSS	1.0E+02	mg/g	No	0.575	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	50-32-6	3.3E+01	2.3E+01	mg/g	Yes	0.814	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	1.6	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
Benzo[a]anthracene	100-55-3	2.2E+02	1.0E+02	mg/g	ND	0.444	<0.330	<0.330																

Notes:
Method = EPA 8270
NSS - No Screening Standard listed in LDEQ RECAP Table 1.
ND - Analyte not detected in any sample above the respective method detection limits.

TABLE 5

PHASE II SITE INVESTIGATION
SUMMARY OF ANALYTICAL RESULTS FOR METALS AND SCREENING STANDARDS FOR SOILS
1217 LAUREL STREET
BATON ROUGE, LOUISIANA
SAMPLES COLLECTED IN APRIL 2007

Analyte	CAS	SOIL_SSI	SOIL_SSOW	Units	Maximum Exceeds Limiting RECAP Standard?	Maximum Detected Concentration	Minimum Detected Concentration	B-1 S (6-8)	B-1 S (16-18)	B-2 S (0-2)	B-2 S (14-16)	B-2 S (16-18)	B-3 S (0-2)	B-3 S (2-4)	B-3 S (16-18)	B-4 S (0-2)	B-4 S (2-4)	B-4 S (16-18)	B-5 S (0-2)	B-5 S (16-18)	B-5 S (18-20)	B-6 S (0-2)	B-6 S (8-10)	B-6 S (16-18)
Aluminum	7429-90-5	NSS	NSS	mg/kg	NSS	11,800	4,280	7,500	9,540	6,540	8,420	11,200	4,800	11,500	5,760	7,720	7,160	7,150	11,800	11,300	7,120	6,150	10,700	
Antimony	7440-36-0	8.2E-01	1.2E-01	mg/kg	No	ND	ND	45.36	<6.00	<5.17	<5.17	<6.00	<5.56	<5.26	<5.77	<5.00	<5.36	<5.86	<5.88	<5.88	<5.36	<5.77	<5.77	
Arsenic	7440-38-2	1.4E-01	1.0E-01	mg/kg	No	6.67	1.37	<0.893	4.04	1.37	<0.862	3.50	<0.928	4.31	6.67	<0.962	1.51	1.59	<0.96	1.55	1.76	<0.893	<0.862	
Barium	7440-39-3	1.4E-04	2.0E-03	mg/kg	No	1,080	48.8	153	48.8	113	99.5	129	72.0	162	71	249	1,080.0	73	81	165.0	326	115.0	288	
Beryllium	7440-11-7	4.1E-02	8.0E-00	mg/kg	No	2,560	0.500	0.60	2,580	0.511	0.656	0.957	<0.463	<0.472	1.160	0.56	0.881	0.821	1.000	1.060	0.639	1.210	0.925	
Cadmium	7440-43-9	1.0E-02	2.0E-01	mg/kg	No	0.995	0.0773	<0.446	<0.50	<0.481	<0.431	<0.50	<0.463	<0.472	<0.439	0.771	<0.417	<0.463	<0.49	0.995	<0.490	<0.446	<0.481	
Calcium	7440-70-2	NSS	NSS	mg/kg	NSS	5,530	1,360	5,530	2,980	2,560	2,680	4,070	4,060	2,700	5,530	2,620	2,390	1,380	4,690	4,960	1,980	2,000	3,910	
Chromium	7440-47-3	1.0E-02	1.0E-02	mg/kg	No	17.10	4.21	9.51	9.19	8.93	12.10	9.13	11.90	6.35	14.40	12.30	17.10	6.01	8.17	13.60	13.00	8.37	4.21	
Cobalt	7440-48-4	1.2E-04	1.4E-03	mg/kg	No	15.10	3.32	5.96	10.80	4.52	3.51	5.16	7.47	5.40	3.32	7.53	12.10	10.40	6.53	6.56	8.00	8.06	3.39	
Copper	7440-50-8	8.2E-03	1.9E-03	mg/kg	No	90.90	3.99	13.80	9.48	8.80	9.79	9.40	17.40	6.72	15.70	19.40	90.90	4.32	9.68	10.80	17.90	13.30	15.10	
Iron	7439-89-6	NSS	NSS	mg/kg	NSS	33,540	4,340	12,300	18,200	13,600	12,100	10,600	17,700	8,600	33,400	21,900	22,600	10,100	9,230	12,900	17,300	13,700	17,500	
Lead	7439-92-1	1.4E-03	1.0E-02	mg/kg	Yes	439	4.90	48.80	12.20	49.40	27.70	13.60	16.50	28.70	22.10	439.0	16.90	19.20	12.60	10.90	8.22	4.20	12.70	
Magnesium	7439-95-4	NSS	NSS	mg/kg	NSS	4,240	711	2,170	2,010	1,160	773	2,420	3,750	2,860	1,280	3,770	711	1,630	1,640	1,300	1,400	1,320	3,880	
Manganese	7439-96-5	NSS	NSS	mg/kg	NSS	3,470	71	462	303	190	137	215	276	276	172	114	334	328	209	845	780	71	1,070	
Mercury	7439-97-6	6.1E-01	4.0E+00	mg/kg	No	3.45	0.021	0.0619	<0.0182	0.0323	0.0264	<0.0194	0.0251	0.0272	0.0213	3.4500	<0.0188	0.0569	0.0328	<0.0194	<0.0171	<0.0171		
Nickel	7440-02-0	4.1E-03	1.5E-03	mg/kg	No	25.7	5.9	11.6	25.1	7.3	5.9	10.9	17.9	11.7	7.6	20.0	9.16	17.7	10.7	19.8	19.1	14.0	6.0	
Potassium	9777-40-0	NSS	NSS	mg/kg	NSS	1,620	468	548	<500	<481	<472	778	1,300	681	749	<481	<417	468	883.00	1,520	1,420	829	<1,190	
Selenium	7762-49-2	1.0E-03	2.0E-01	mg/kg	No	ND	ND	<3.12	<3.50	<3.37	<3.30	<3.02	<3.30	<3.24	<3.37	<2.92	<3.43	<3.43	<3.43	<3.43	<3.12	<3.37	<3.37	
Silver	7440-22-4	1.0E-03	1.0E-02	mg/kg	ND	ND	ND	<0.863	<1.00	<0.962	<0.862	<1.00	<0.926	<0.943	<0.877	<0.962	<0.833	<0.926	<0.96	<0.98	<0.893	<0.862		
Sodium	7440-23-5	NSS	NSS	mg/kg	NSS	ND	ND	<446	<500	<472	<431	<500	<463	<472	<439	<481	<417	<463	<490	<490	<446	<481		
Thallium	7440-28-0	1.4E-01	4.0E+00	mg/kg	No	ND	ND	<0.893	<1.00	<0.962	<0.862	<1.00	<0.926	<0.943	<0.877	<0.962	<0.833	<0.926	<0.96	<0.98	<0.893	<0.862		
Vanadium	7440-62-2	1.4E-03	5.2E-02	mg/kg	No	39.4	6.7	18.2	31.0	18.1	22.1	23.0	12.2	39.4	35.1	21.4	16.9	15.9	19.5	26.6	20.4	6.7	22.6	
Zinc	7440-66-6	6.1E-04	2.8E+03	mg/kg	No	142.0	12.3	52.4	29.9	27.1	44.1	32.0	40.5	39.6	55.4	142.0	20.3	33.0	35.5	57.5	31.6	12.3	52.4	

Notes:

- NSS - All metals were analyzed using method SW-846 60108, except mercury which was run using method SW-846 7471A
- NSS - No Screening Standard listed in LDEC RECAP Table 1.
- ND - Analyte not detected in any sample above the respective method detection limits.
- N/A - Not analyzed for this constituent.

PHASE II SITE INVESTIGATION
SUMMARY OF ANALYTICAL RESULTS FOR VOA AND SCREENING STANDARDS FOR GROUNDWATER
1217 LAUREL STREET
BATON ROUGE, LOUISIANA
SAMPLES COLLECTED IN APRIL 2007

Notes:
Method = All samples were analyzed using EPA Method 8260.
N/NA - No Screening Standard listed in LDEQ RECAP Table 1.
NND - Analyte not detected in any sample above the respective method detection limits.
N/A - Not analyzed for this constituent.
No water sample was collected from temporary well B-5. Water was not present in the borehole.

TABLE 7

PHASE II SITE INVESTIGATION
SUMMARY OF ANALYTICAL RESULTS FOR SVOA AND SCREENING STANDARDS FOR SOILS
1217 LAUREL STREET
BATON ROUGE, LOUISIANA
SAMPLES COLLECTED IN APRIL 2007

Analyte	CAS	GW_SSI	Units	Maximum Detect Exceeds Limiting RECAP Standard?	Maximum Detected Concentration	Minimum Detected Concentration	B-1 W	B-2 W	B-3 W	B-4 W	B-6 W
Acenaphthene	83-32-9	0.0365	mg/L	No	0.026	0.026	<0.01	<0.01	<0.01	0.0258	<0.01
Acenaphthylene	208-96-8	0.100	mg/L	No	0.011	0.011	<0.01	<0.01	<0.01	0.0107	<0.01
Acetophenone	98-86-2	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Anthracene	120-12-7	0.043	mg/L	No	0.019	0.019	<0.01	<0.01	<0.01	0.019	<0.01
Atrazine (Aatrex)	1912-24-9	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Benzaldehyde	100-52-7	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a)anthracene	56-55-3	0.008	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(b)fluoranthene	205-99-2	0.005	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(k)fluoranthene	207-08-9	0.003	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(g,h,i)perylene	191-24-2	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a)pyrene	50-32-8	0.00020	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Biphenyl	92-52-4	0.030	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
4-Bromophenyl phenyl ether	101-55-3	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Butyl benzyl phthalate	85-68-7	0.73	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Caprolactam	105-60-2	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Carbazole	86-74-6	NSS	mg/L	NSS	0.043	0.043	<0.01	<0.01	<0.01	0.043	<0.01
4-Chloro-3-methylphenol	59-50-7	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
4-Chloroaniline	106-47-8	0.020	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Bis(2-Chloroethoxy)methane	111-91-1	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Bis(2-Chloroethyl)ether	111-44-4	0.006	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
2-Chloronaphthalene	91-58-7	0.049	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
2-Chlorophenol	95-57-8	0.010	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
4-Chlorophenyl phenyl ether	7005-72-3	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Chrysene	218-01-9	0.0016	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Dibenz(a,h)anthracene	53-70-3	0.0025	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Dibenzofuran	132-64-9	0.0100	mg/L	Yes	0.046	0.046	<0.01	<0.01	<0.01	0.046	<0.01
3,3'-Dichlorobenzidine	91-94-1	0.0200	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
2,4-Dichlorophenol	120-83-2	0.0110	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Diethyl phthalate	84-66-2	2.92	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
2,4-Dimethylphenol	105-67-9	0.073	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Dimethyl phthalate	131-11-3	36.50	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Di-n-butyl phthalate	84-74-2	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
4,6-Dinitro-2-methylphenol	534-52-1	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
2,4-Dinitrophenol	51-28-5	0.050	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
2,4-Dinitrotoluene	121-14-2	0.010	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
2,6-Dinitrotoluene	606-20-2	0.010	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Di-n-octyl phthalate	117-84-0	0.020	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Bis(2-Ethylhexyl)phthalate	117-81-7	0.006	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Fluoranthene	206-44-0	0.146	mg/L	No	0.033	0.033	<0.01	<0.01	<0.01	0.033	<0.01
Fluorene	86-73-7	0.024	mg/L	Yes	0.050	0.050	<0.01	<0.01	<0.01	0.0498	<0.01
Hexachloro-1,3-butadiene	87-68-3	0.0007	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorobenzene	118-74-1	0.0010	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorocyclopentadiene	77-47-4	0.050	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Hexachloroethane	67-72-1	0.010	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	193-39-5	0.0037	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Isophorone	78-59-1	0.0699	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methylnaphthalene	91-57-6	0.0130	mg/L	No	0.038	0.038	<0.01	<0.01	<0.01	0.038	<0.01
2-Methylphenol (o-Cresol)	95-48-7	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methylphenol (p-Cresol)	106-44-5	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Naphthalene	91-20-3	0.010	mg/L	Yes	0.381	0.028	<0.01	<0.01	0.028	0.381	<0.01
2-Nitroaniline	88-74-4	0.050	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
3-Nitroaniline	99-09-2	0.050	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
4-Nitroaniline	100-01-6	0.050	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrobenzene	98-95-3	0.0019	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
2-Nitrophenol	88-75-5	NSS	mg/L	NSS	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
4-Nitrophenol	100-02-7	0.050	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
n-Nitrosodi-n-propylamine	621-64-7	0.010	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
n-Nitrosodiphenylamine	86-30-6	0.014	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
2,2'-Oxybis(1-chloropropane)	108-60-1	0.006	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Pentachlorophenol	87-86-5	0.001	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Phenanthrene	85-01-8	0.183	mg/L	No	0.096	0.096	<0.01	<0.01	<0.01	0.096	<0.01
Phenol	108-95-2	0.183	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
Pyrene	129-00-0	0.018	mg/L	Yes	0.024	0.024	<0.01	<0.01	<0.01	0.024	<0.01
2,4,5-Trichlorophenol	95-95-4	0.365	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01
2,4,6-Trichlorophenol	88-06-2	0.010	mg/L	No	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01

Notes:

Method = EPA 8270

NSS - No Screening Standard listed in LDEQ RECAP Table 1.

ND - Analyte not detected in any sample above the respective method detection limits.

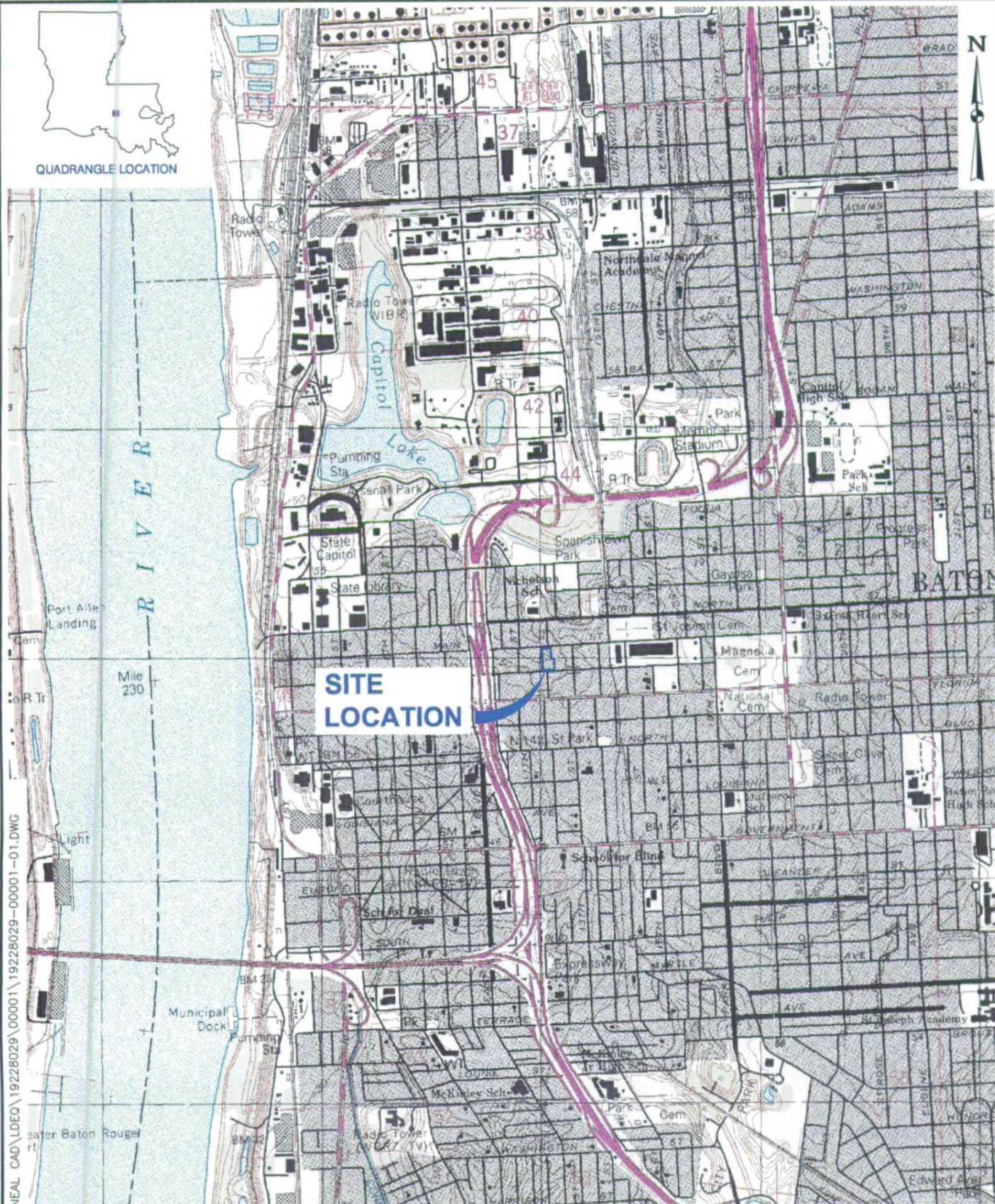
No water sample was collected from temporary well B-5. Water was not present in the borehole.

SUMMARY OF ANALYTICAL RESULTS FOR METALS AND SCREENING STANDARDS FOR GROUNDWATER
PHASE II SITE INVESTIGATION
1217 LAUREL STREET
BATON ROUGE, LOUISIANA
SAMPLES COLLECTED IN APRIL 2007

Notes:
Methods - All metals were analyzed using method SW-846 6010B, except mercury which was run using method SW-846 7471A
NSS - No Screening Standard listed in LDEQ RECAP Table 1.
ND - Analyte not detected in any sample above the respective method detection limits.
N/A - Not analyzed for this constituent.
No water sample was collected from temporary well B-5. Water was not present in the borehole.

FIGURES

QUADRANGLE LOCATION



REFERENCE: USGS 7.5 MINUTE SERIES QUADRANGLE. BATON ROUGE WEST, LOUISIANA. 1995.

LOUISIANA DEPARTMENT OF
ENVIRONMENTAL QUALITY
BATON ROUGE, LOUISIANA

URS

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Baton Rouge, Louisiana 70806
225/922-5700

SCALE:
1" = 2000'

DRAWN BY: PCG
CHKD. BY: YQ

DATE: 11/2/06
DATE: 12/19/05

O'BRIEN HOUSE
BATON ROUGE, LOUISIANA

SITE LOCATION MAP

PROJ. NO.

19228029

FIG. NO.

1

I:\ONEAL CAD\LEO\19228029\00001\19228029-00001-03.DWG (BORING LOCATIONS)



REFERENCE: INTERSEARCH, INGLEWOOD, COLORADO; 2002 IMAGERY.

LEGEND

 SOIL BORING LOCATIONS

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URS

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Baton Rouge, Louisiana 70806
225/922-5700

SCALE:

1" = 50'

DRAWN BY: GT

CHKD. BY: JA

DATE: 07/09/07

DATE: 07/09/07

O'BRIEN HOUSE
BATON ROUGE, LOUISIANA

**BORING LOCATION
MAP**

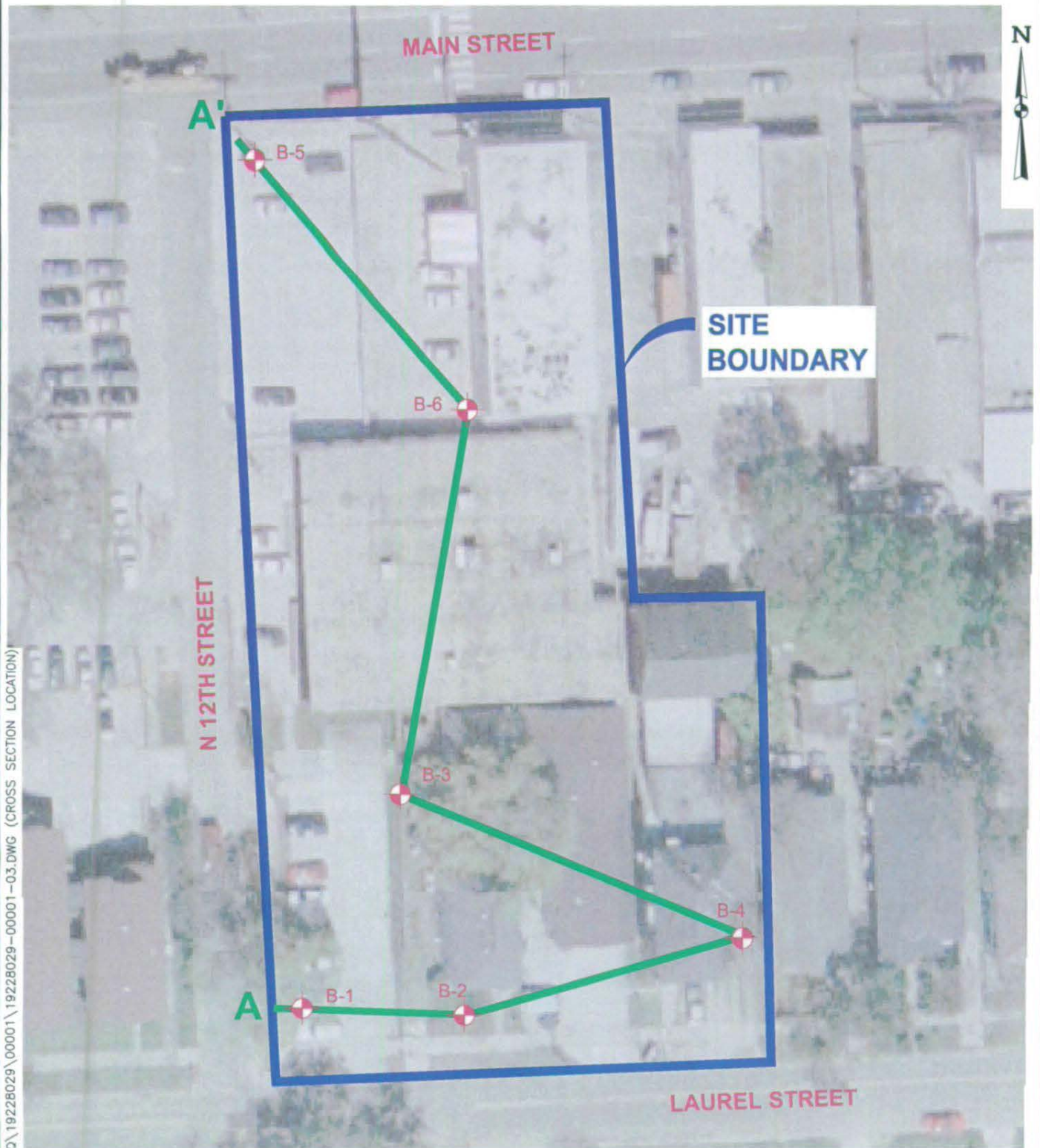
PROJ. NO.

19228029

FIG. NO.

2

I:\ONEAL CAD\DEO\19228029\00001\19228029-00001-03.DWG (CROSS SECTION LOCATION)



REFERENCE: INTERSEARCH, INGLEWOOD, COLORADO; 2002 IMAGERY.

LEGEND



SOIL BORING LOCATIONS



CROSS SECTION TRANSECT

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Baton Rouge, Louisiana 70806
225/922-5700

SCALE:

1" = 50'

DRAWN BY: GT

CHKD. BY: JA

DATE: 07/09/07

DATE: 07/09/07

O'BRIEN HOUSE
BATON ROUGE, LOUISIANA

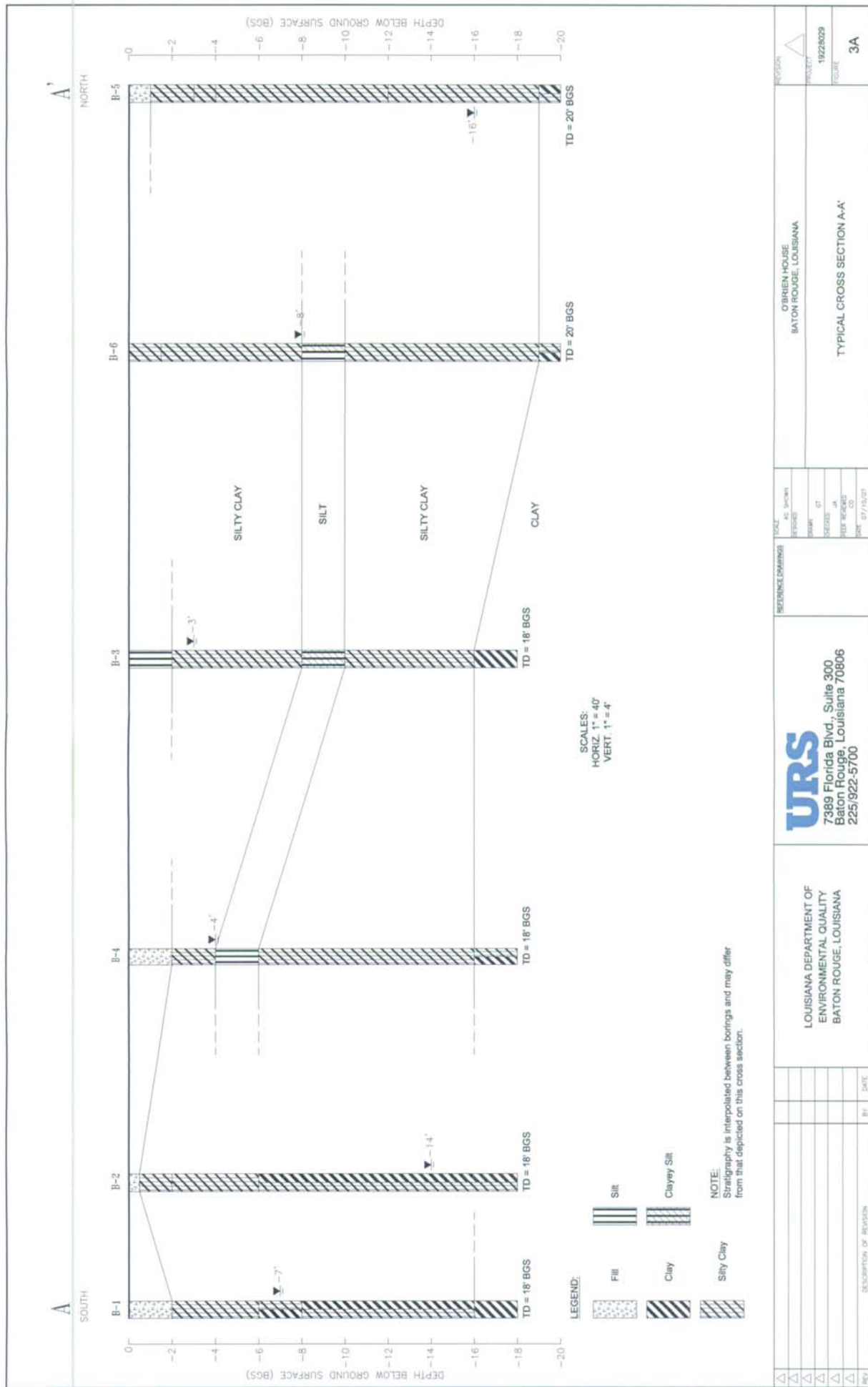
CROSS SECTION LOCATION
MAP

PROJ. NO.

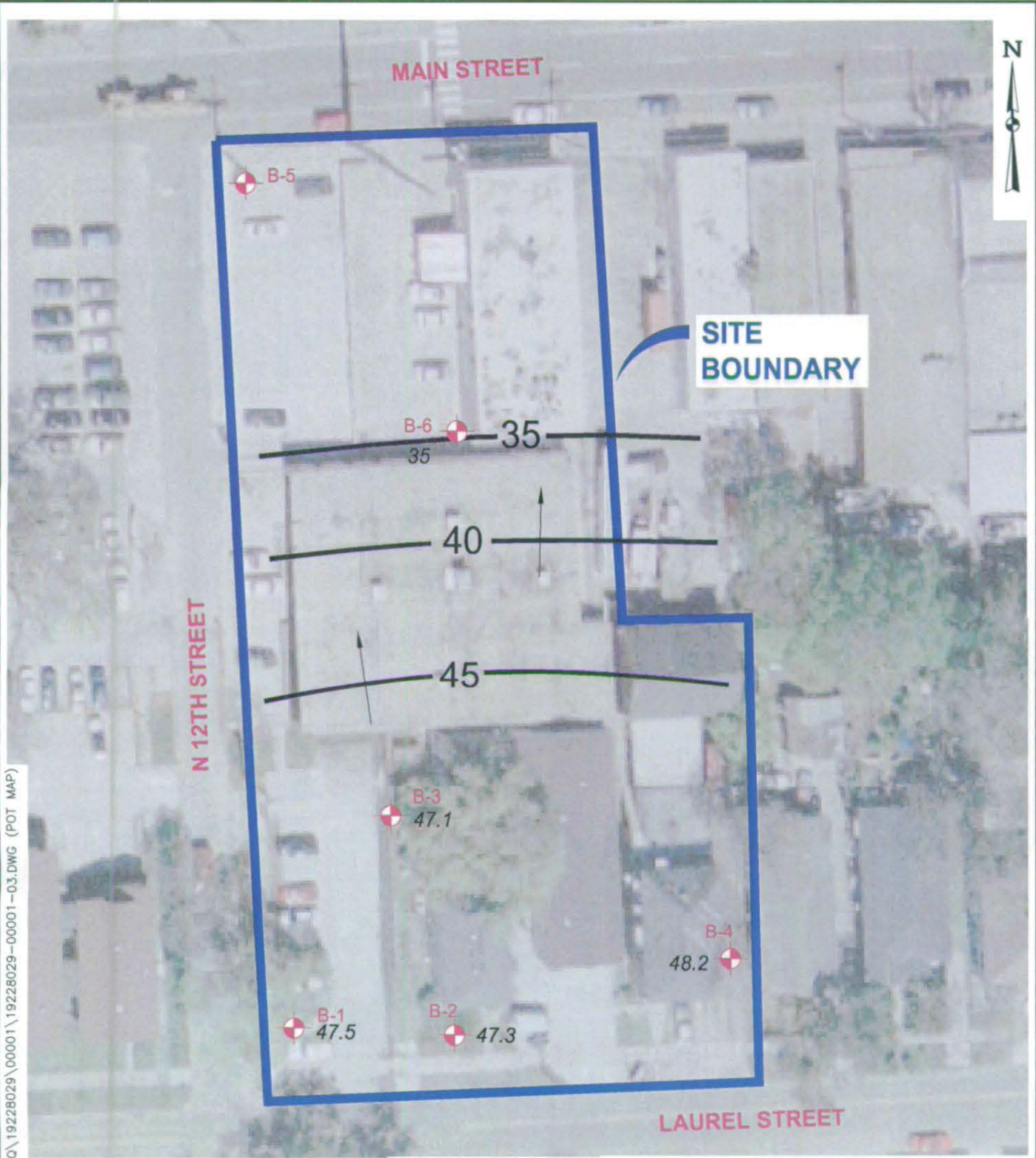
19228029

FIG. NO.

3



I:\ONEAL CAD\LDEQ\19228029\00001\19228029-00001-03.DWG (POT MAP)



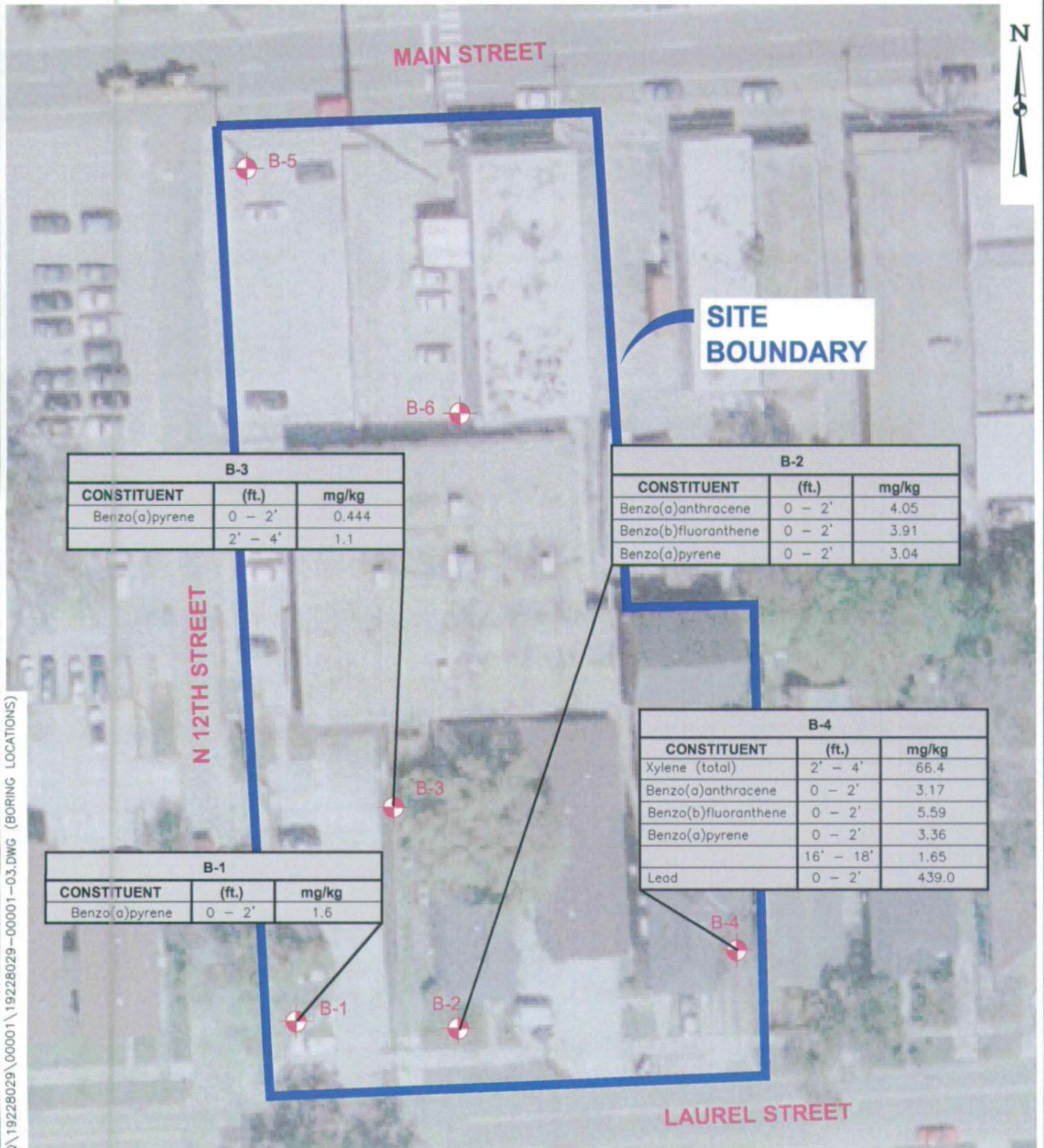
REFERENCE: INTERSEARCH, INGLEWOOD, COLORADO; 2002 IMAGERY.

LEGEND

- SOIL BORING LOCATIONS
- DIRECTION OF GROUNDWATER FLOW
- POTENTIOMETRIC CONTOUR LINE
- 47.3 GROUNDWATER ELEVATION (FT. MSL)

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY BATON ROUGE, LOUISIANA	URS 7389 Florida Blvd., Suite 300 Baton Rouge, Louisiana 70806 225/922-5700		O'BRIEN HOUSE BATON ROUGE, LOUISIANA	PROJ. NO. 19228029
			POTENTIOMETRIC MAP	FIG. NO. 4
	SCALE: 1" = 50'	DRAWN BY: GT CHKD. BY: JA	DATE: 07/09/07 DATE: 07/09/07	

I:\ONEAL CAD\DEQ\19228029\00001\19228029-00001-03.DWG (BORING LOCATIONS)



REFERENCE: INTERSEARCH, INGLEWOOD, COLORADO; 2002 IMAGERY.

LEGEND

 SOIL BORING LOCATIONS

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225/922-5700

SCALE: 1" = 50'
DRAWN BY: GT
CHKD. BY: JA
DATE: 07/09/07
DATE: 07/09/07

O'BRIEN HOUSE
BATON ROUGE, LOUISIANA

CONSTITUENTS IN
SOILS EXCEEDING RECAP
SCREENING STANDARDS

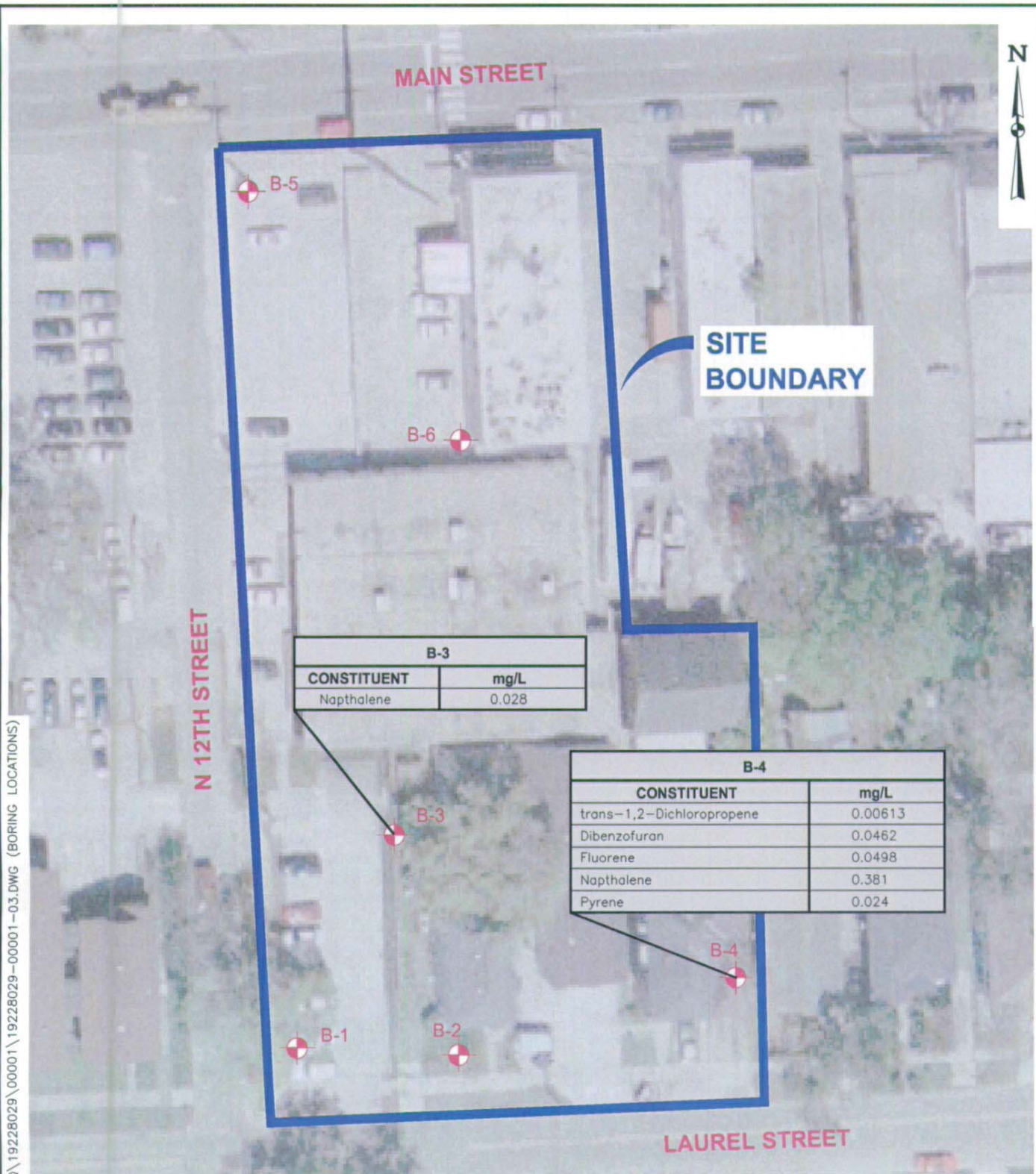
PROJ. NO.

19228029

FIG. NO.

5

I:\ONEAL CAD\DEO\19228029\00001\19228029-00001-03.DWG (BORING LOCATIONS)



REFERENCE: INTERSEARCH, INGLEWOOD, COLORADO; 2002 IMAGERY.

LEGEND

 SOIL BORING LOCATIONS

LOUISIANA DEPARTMENT OF
ENVIRONMENTAL QUALITY
BATON ROUGE, LOUISIANA

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225/922-5700

SCALE:
1" = 50'

DRAWN BY: GT
CHKD. BY: JA

DATE: 07/10/07
DATE: 07/10/07

O'BRIEN HOUSE
BATON ROUGE, LOUISIANA

CONSTITUENTS IN
GROUNDWATER EXCEEDING
RECAP SCREENING
STANDARDS

PROJ. NO.

19228029

FIG. NO.

6

APPENDIX A
BORING LOGS

LOG OF BORING B-1

Client LDEQ-O'Brien House Property Drill Contractor Walker-Hill Environmental, Inc. Ground Surface Elevation
 Project Name Phase II Site Investigation Drill Method Geoprobe Latitude 30°27'03" N
 Location Baton Rouge, LA Drilling Started 4/2/07 Ended 4/2/07 Longitude 91°10'39" W
 Project Number 19228029.00001 Logged By J. Pratt/S. Krul Depth To Water ▽ ATD 7 feet bgs

DEPTH FEET (bgs)	SAMPLE ID	TIME	OVM (ppm)	RECOVERY (inch)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET (bgs)
2	B-1 (0-2)	0915	0.0	24	FILL		Red and gray mottled Silty Clay - FILL with roots, moist	
4		0930	0.0	24	CL		Tan and brown Silty CLAY with some black cinder material, moist	2
6		0940	0.0	12			—with silt seams	4
8	B-1 (6-8)	0947	0.0	24	CH-CL		Light gray and tan CLAY to Silty CLAY	6
10		0950	0.0	24			—wet	▽
12		0955	0.0	8	CL-CH		Stiff, gray and tan Silty CLAY to CLAY with ferrous nodules and stains	8
14		1005	0.0	24				10
16		1008	0.0	24				12
18	B-1 (16-18)				CH		Stiff, brown CLAY	16
							Total depth of boring at 18' bgs. Set screen 7'-17' bgs.	18



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Remarks: Unified Soil Classification Based on Visual Observations.

ATD = Water depth at time of drilling.
 bgs = below ground surface.
 msl = mean sea level.
 OVM = organic vapor meter.

LOG OF BORING B-2

Client LDEQ-O'Brien House Property Drill Contractor Walker-Hill Environmental, Inc. Ground Surface Elevation
 Project Name Phase II Site Investigation Drill Method Geoprobe Latitude 30°27'03" N
 Location Baton Rouge, LA Drilling Started 4/2/07 Ended 4/2/07 Longitude 91°10'39" W
 Project Number 19228029.00001 Logged By J. Pratt/S. Krul Depth To Water ▽ ATD 14 feet bgs

DEPTH FEET (bgs)	SAMPLE ID	TIME	OVM (ppm)	RECOVERY (inch)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET (bgs)
					FILL		Dark brown Silt/Soil - FILL	
	B-2 (0-2)	1225	0.0	14	CL		Tan and brown Silty CLAY with ferrous nodules and cinders	
2								2
		1230	0.0	12			Stiff, tan and light gray Silty CLAY	
4					CL			4
		1235	0.0	12				
6							Very stiff Silty CLAY to CLAY	6
		1240	0.0	16				
8								8
		1250	0.0	24			—with light gray silt pockets	10
10								
		1255	0.0	24			—becoming more silty	12
12					CL-CH			12
		1227	0.0	24			—moist at 14' to 15'	14
14								14
	B-2 (14-16)	1300	0.0	24			—tan and light gray in color	16
16								16
	B-2 (16-18)	1305	0.0	24				18
18							Total depth of boring at 18' bgs. Set screen 8'-18' bgs.	18



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Remarks: Unified Soil Classification Based on Visual Observations.

ATD = Water depth at time of drilling.
 bgs = below ground surface.
 msl = mean sea level.
 OVM = organic vapor meter.

LOG OF BORING B-3

Client LDEQ-O'Brien House Property Drill Contractor Walker-Hill Environmental, Inc. Ground Surface Elevation
 Project Name Phase II Site Investigation Drill Method Geoprobe Latitude 30°27'04" N
 Location Baton Rouge, LA Drilling Started Ended Longitude 91°10'39" W
 Project Number 19228029.00001 Logged By J. Pratt/S. Krul Depth To Water ▽ ATD 3 feet bgs

DEPTH FEET (bgs)	SAMPLE ID	TIME	OVM (ppm)	RECOVERY (inch)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET (bgs)
							Brown SILT with roots	
2	B-3 (0-2)	1515	0.0	16	ML			
							Brown Silty CLAY, with black gravel and brick pieces	2
	B-3 (2-4)	1520	0.0	10			—wet	▽
4							—with gravel and brick material	4
		1525	0.0	8	CL		—light gray in color, slight odor	
6								6
		1530	0.0	10				
8							Gray and light gray Clayey SILT	8
		1545	0.0	18	MH			
10							Stiff, light gray and tan Silty CLAY with ferrous nodules	10
		1550	0.0	10				
12								12
		1553	0.0	8	CL			
14								14
		1605	0.0	6				
16							Stiff, brown CLAY	16
	B-3 (16-18)	1610	0.0	7	CH			
18							Total depth of boring at 18' bgs. Set screen 3'-18' bgs.	18



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Remarks: Unified Soil Classification Based on Visual Observations.

ATD = Water depth at time of drilling.
 bgs. = below ground surface.
 msl = mean sea level.
 OVM = organic vapor meter.

LOG OF BORING B-4

Client LDEQ-O'Brien House PropertyDrill Contractor Walker-Hill Environmental, Inc.Ground Surface Elevation 50 feet mslProject Name Phase II Site InvestigationDrill Method GeoprobeLatitude 30°27'03" NLocation Baton Rouge, LADrilling Started 4/3/07 Ended 4/3/07Longitude 91°10'37" WProject Number 19228029.00001Logged By J. Pratt/S. KrulDepth To Water ▽ ATD 4 feet bgs

DEPTH FEET (bgs)	SAMPLE ID	TIME	OVM (ppm)	RECOVERY (inch)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET (bgs)
	B-4 (0-2)	1310	0.0	24	FILL		Dark brown Silt with gravel - FILL ---with black ash-like material from 8"-10"	
2								2
	B-4 (2-4)	1317	31.3	16	CL		Dark gray Silty CLAY with ferrous stains	
4								4
			0.0	12	MH		Soft, gray SILT, moist	
6								6
		1320	0.0	15			Stiff, brown and tan Silty CLAY	
8							---very stiff	8
		1325	0.0	10				
10							---with calcareous nodules from 10'-12'	10
		1330	0.0	14	CL			
12								12
		1340	0.0	10				
14								14
		1345	0.0	12				
16								16
	B-4 (16-18)	1410	0.0	7	CH-CL		Stiff, brown CLAY to Silty CLAY	
18								18
							Total depth of boring at 18' bgs. Set screen 3'-18' bgs.	



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Remarks: Unified Soil Classification Based on Visual Observations.

ATD = Water depth at time of drilling.

bgs = below ground surface.

msl = mean sea level.

OVM = organic vapor meter.

LOG OF BORING B-5

Client LDEQ-O'Brien House Property Drill Contractor Walker-Hill Environmental, Inc. Ground Surface Elevation -
 Project Name Phase II Site Investigation Drill Method Geoprobe Latitude 30°27'06" N
 Location Baton Rouge, LA Drilling Started 4/3/07 Ended 4/3/07 Longitude 91°10'39" W
 Project Number 19228029.00001 Logged By J. Pratt/S. Krul Depth To Water ▽ ATD 16 feet bgs

DEPTH FEET (bgs)	SAMPLE ID	TIME	OVM (ppm)	RECOVERY (inch)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET (bgs)
					FILL	1505	Soft, brown Silty Clay - FILL	
2	B-5 (0-2)	1505	0.0	24	CL	1508	Medium to soft, brown and tan Silty CLAY	2
4		1508	0.0	15	CL	1515	Medium, light gray Silty CLAY	4
		1515	0.0	24		1519	Medium to stiff, light gray and tan Silty CLAY with ferrous stains and nodules	6
6		1519	0.0	24				8
8			0.0	24	CL			10
10			0.0	24				12
12		1522	0.0	24			Stiff, tan and light gray Silty CLAY with ferrous nodules	14
14		1525	0.0	24	CL			16
16							—moist	18
18	B-5 (16-18)	1635	0.0	24				20
20	B-5 (18-20)	1640	0.0	22	CL-CH		Very stiff, brown and light gray Silty CLAY to CLAY	
							Total depth of boring at 20' bgs. Set screen 10'-20' bgs.	



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Remarks: Unified Soil Classification Based on Visual Observations.

ATD = Water depth at time of drilling.
 bgs = below ground surface.
 msl = mean sea level.
 OVM = organic vapor meter.

LOG OF BORING B-6

Client LDEQ-O'Brien House Property

Drill Contractor Walker-Hill Environmental, Inc.

Ground Surface Elevation —

Project Name Phase II Site Investigation

Drill Method Geoprobe

Latitude 30°27'05" N

Location Baton Rouge, LA

Drilling Started _____ Ended _____

Longitude 91°10'38" W

Project Number 19228029.00001

Logged By J. Pratt/S. Krul

Depth To Water ATD 8 feet bgs

DEPTH FEET (bgs)	SAMPLE ID	TIME	OVM (ppm)	RECOVERY (inch)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET (bgs)
							Soft, brown Silty CLAY	
2	B-6 (0-2)	1220	0.0	24	CL			2
		1230	0.0	18			Tan and light gray Silty CLAY with ferrous nodules	
4								4
		1240	0.0	24	CL			
6								6
		1245	0.0	24			—stiff	
8								8
	B-6 (8-10)	1255	0.0	24	ML		Soft, light gray SILT to Clayey SILT, moist	
10								10
		1300	0.0	24			Stiff, tan and light gray Silty CLAY with ferrous nodules	
12								12
		1305	0.0	24				
14								14
		1310	0.0	24	CL			
16								16
	B-6 (16-18)	1315	0.0	24				
18								18
		1320	0.0	24				
20					CH-CL		Very stiff, brown and light gray CLAY to Clayey SILT	
							Total depth of boring at 20' bgs. Set screen 8'-18' bgs.	20

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Fax: 225 922-5701

Remarks: Unified Soil Classification Based on Visual Observations.

ATD = Water depth at time of drilling.

bgs = below ground surface.

msl = mean sea level.

OVM = organic vapor meter.

SHEET 1 OF 1

APPENDIX B

TEMPORARY WELL INSTALLATION REPORTS

MONITOR WELL INSTALLATION REPORT

PROJECT LDEQ-O'Brien House Property, Phase II Site Investigation

LOCATION Baton Rouge, Louisiana

PROJECT NO. 19228029.00001

Date Completed 4/2/2007 Original Depth 18.0'

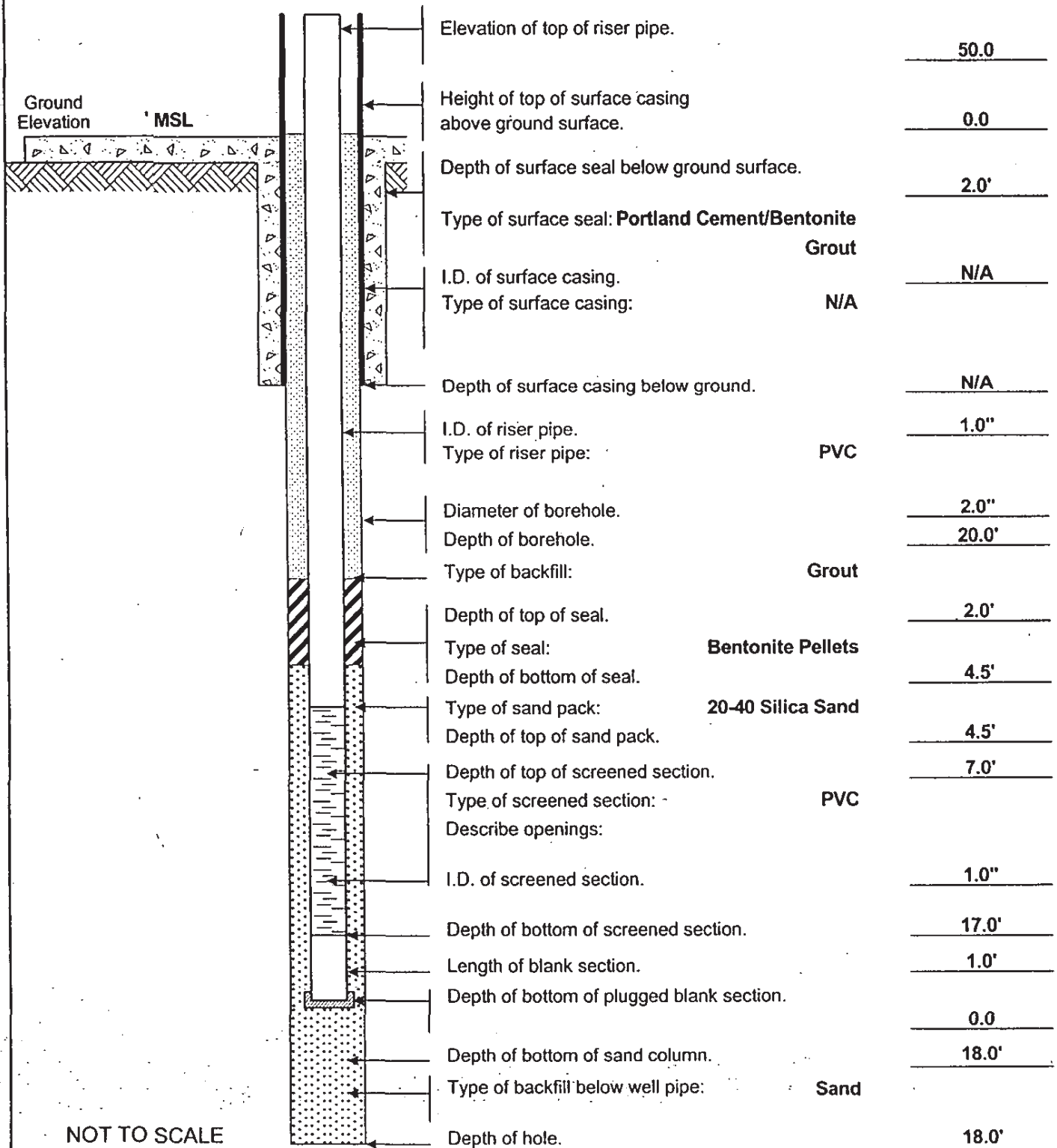
Inspected By S. Krul/J. Pratt Date 4/2/2007

Page 1 of 1

Well No. B-1W

Aquifer Shallow

Depth Interval



NOT TO SCALE

Jul 2, 07 WELL_M3 19228029_LDEQ_MW RPT.GPJ B-1W

MONITOR WELL INSTALLATION REPORT

PROJECT LDEQ-O'Brien House Property, Phase II Site Investigation

LOCATION Baton Rouge, Louisiana

PROJECT NO. 19228029.00001

Date Completed 4/2/2007

Inspected By S. Krul/J. Pratt

Original Depth 18.0'

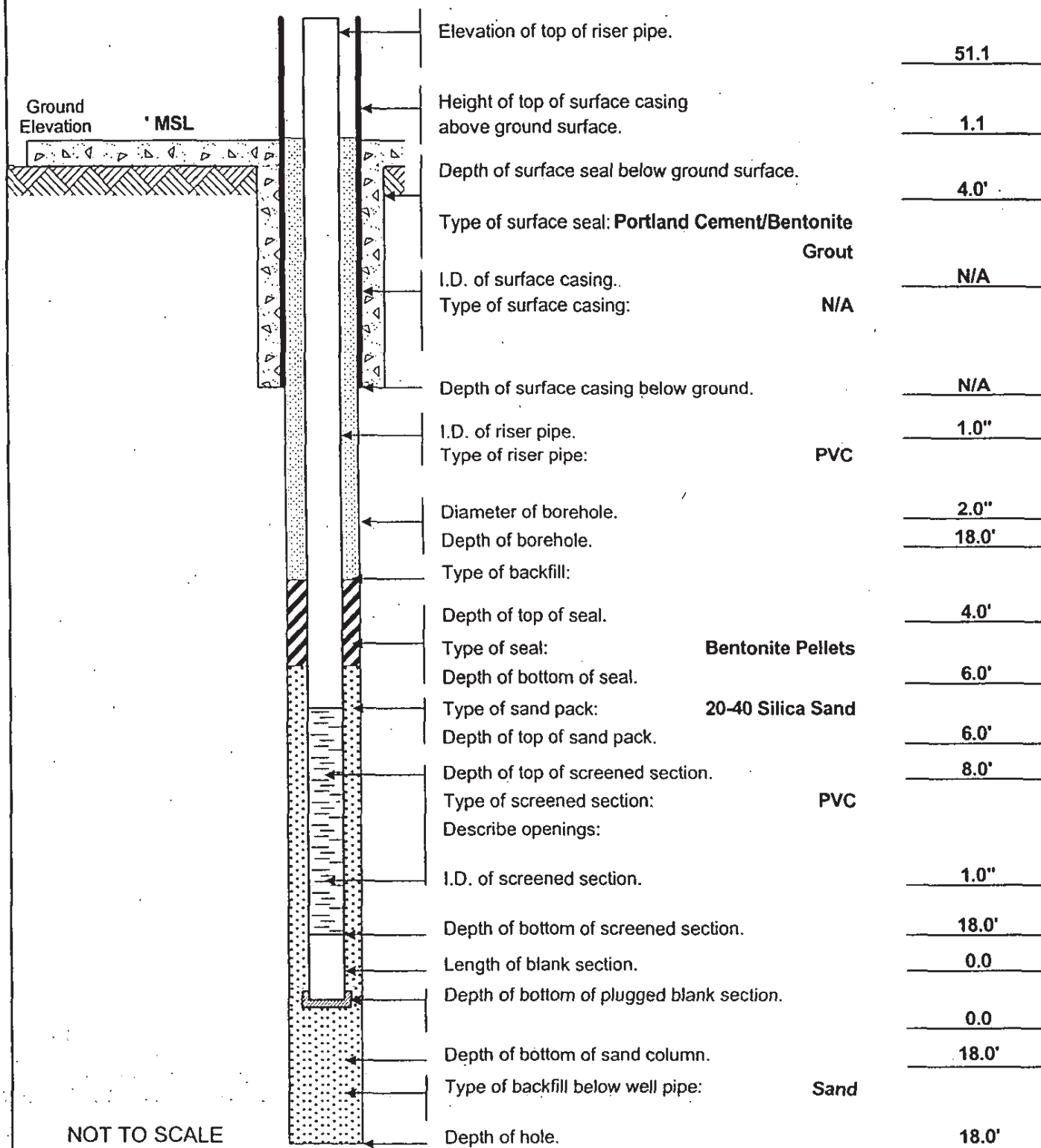
Date 4/2/2007

Page 1 of 1

Well No. B-2W

Aquifer Shallow

Depth Interval



NOT TO SCALE

Jul 2, 07 WELL_M3 19228029_LDEQ_MW RPT.GPJ B-2W

MONITOR WELL INSTALLATION REPORT

PROJECT LDEQ-O'Brien House Property, Phase II Site Investigation

LOCATION Baton Rouge, Louisiana

PROJECT NO. 19228029.00001

Date Completed 4/2/2007

Original Depth 18.0'

Inspected By S. Krul/J. Pratt

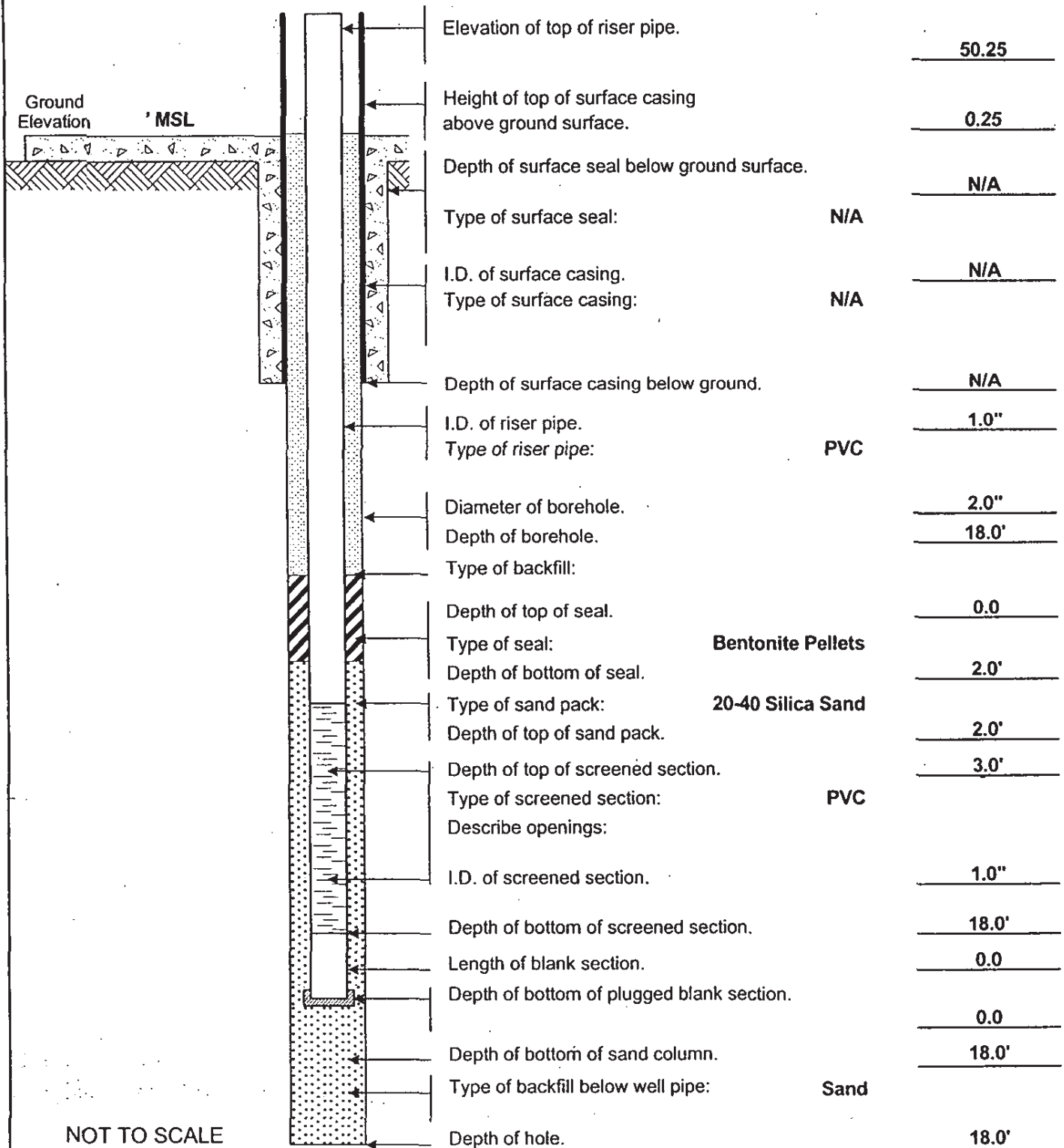
Date 4/2/2007

Page 1 of 1

Well No. B-3W

Aquifer Shallow

Depth Interval



NOT TO SCALE

Jul 2, 07 WELL_M3 19228029_LDEQ_MW RPT.GPJ B-3W

MONITOR WELL INSTALLATION REPORT

PROJECT **LDEQ-O'Brien House Property, Phase II Site Investigation**

LOCATION **Baton Rouge, Louisiana**

PROJECT NO. **19228029.00001**

Date Completed **4/3/2007**

Original Depth **18.0'**

Inspected By **S. Krul/J. Pratt**

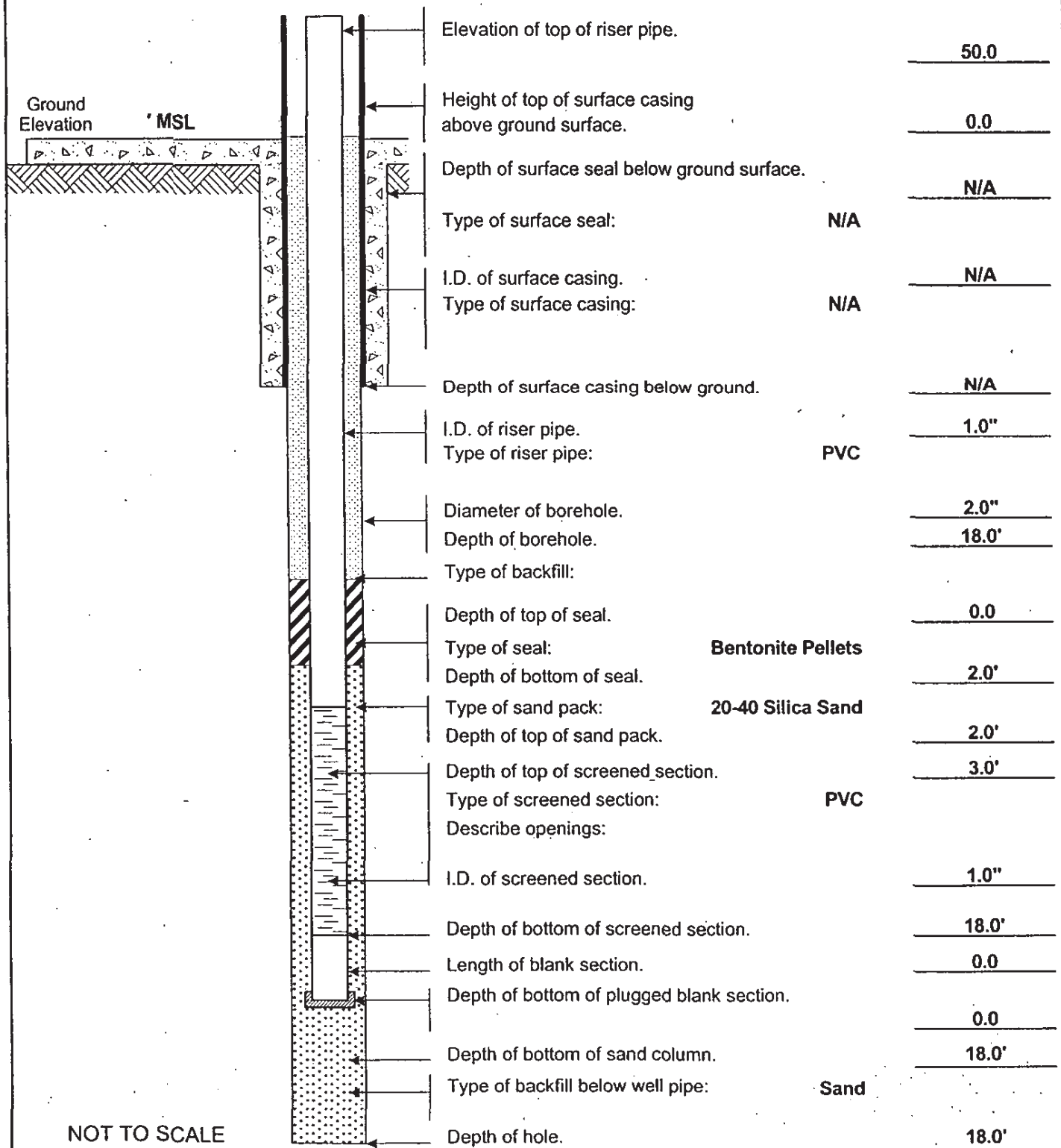
Date **4/3/2007**

Page **1** of **1**

Well No. **B-4W**

Aquifer **Shallow**

Depth Interval



MONITOR WELL INSTALLATION REPORT

PROJECT **LDEQ-O'Brien House Property, Phase II Site Investigation**

LOCATION **Baton Rouge, Louisiana**

PROJECT NO. **19228029.00001**

Date Completed **4/3/2007** Original Depth **20.0'**

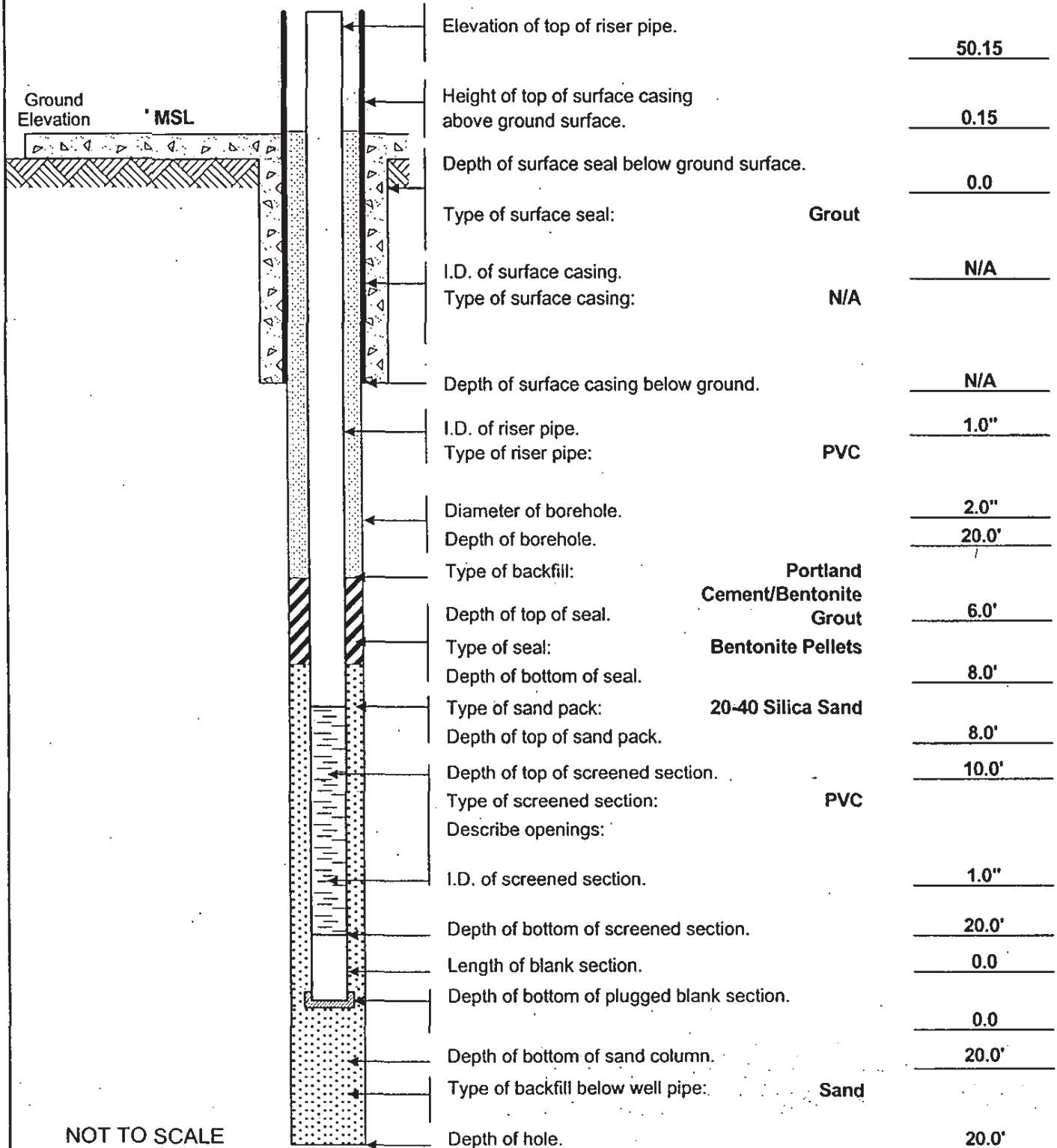
Inspected By **S. Krul/J. Pratt** Date **4/3/2007**

Page **1** of **1**

Well No. **B-5W**

Aquifer **Shallow**

Depth Interval **-**



NOT TO SCALE

Jul 2, 07 WELL_M3 19228029_LDEQ_MW RPT.GPJ B-5W

MONITOR WELL INSTALLATION REPORT

PROJECT **LDEQ-O'Brien House Property, Phase II Site Investigation**

LOCATION **Baton Rouge, Louisiana**

PROJECT NO. **19228029.00001**

Date Completed **4/3/2007**

Original Depth **20.0'**

Inspected By **S. Krul/J. Pratt**

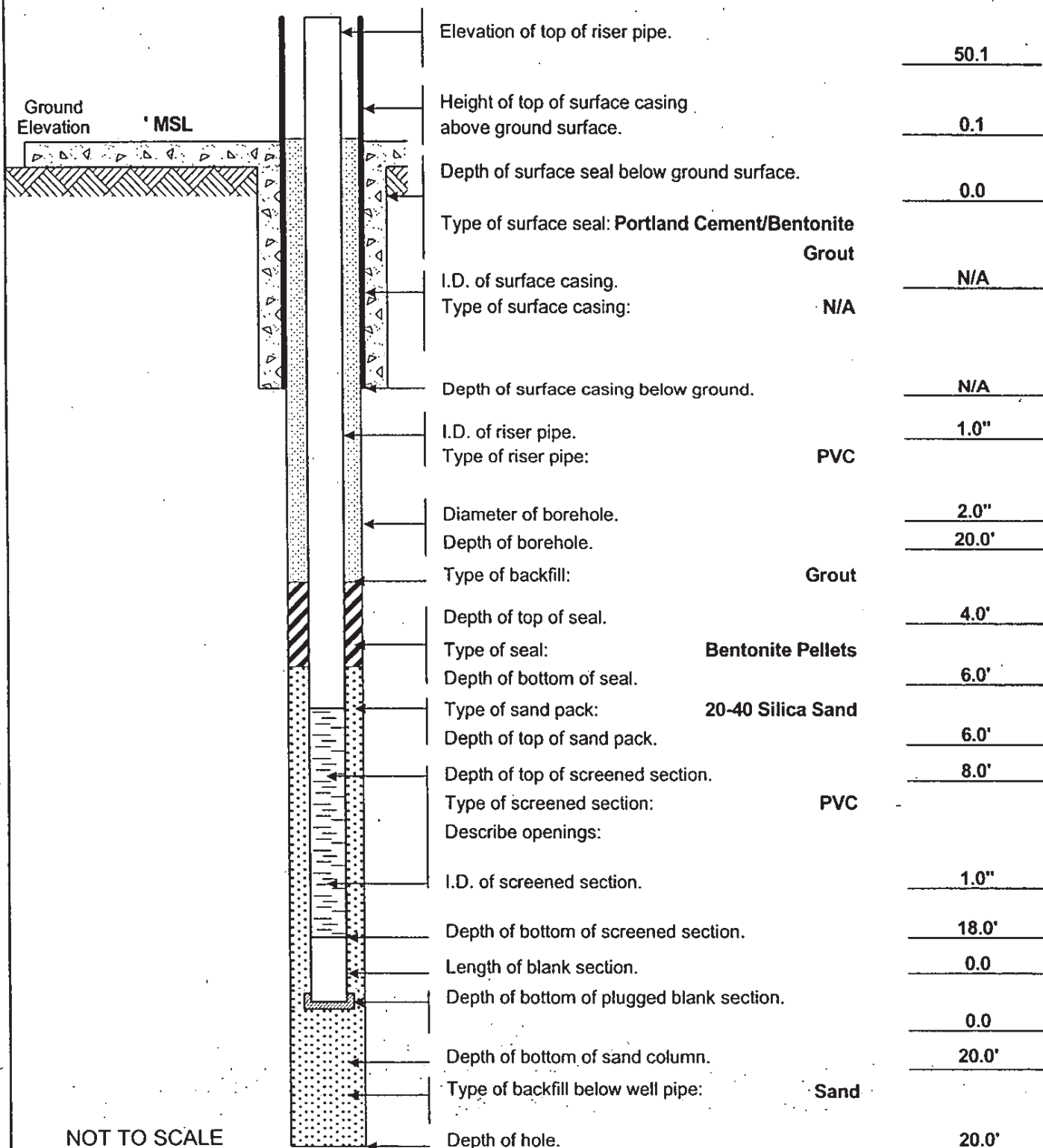
Date **4/3/2007**

Page **1** of **1**

Well No. **B-6W**

Aquifer **Shallow**

Depth Interval



NOT TO SCALE

Jul 2, 07 WELL_M3 19228029_LDEQ_MW RPT.GPJ B-6W

APPENDIX C
GROUNDWATER COLLECTION REPORTS



GROUNDWATER COLLECTION REPORT

PROJECT NUMBER AND NAME 19228029.00001, O'Brien House LOCATION Baton Rouge, LA
COLLECTOR/OPERATOR S. Kral / J. Pratt WELL NO. B-1W
TYPE OF SAMPLE Water ☒ GRAB ☐ COMPOSITE ☐ OTHER -
METHOD OF SAMPLING IF OTHER THAN MONITOR WELL - SHUTTLE NO. -

MONITOR WELL INFORMATION

EVACUATION: DATE/TIME 4/3/07 0930 METHOD OF EVACUATION Pump
INITIAL DEPTH TO WATER LEVEL 2.53 TOP OF CASING TO BOTTOM 18.0
GALLONS PER WELL VOLUME - TOTAL GALLONS EVACUATED 2.0
FINAL DEPTH TO WATER 15.91 ELEVATION TOP OF CASING 0.0

SAMPLING: DATE/TIME 4/3/07 1130 METHOD OF SAMPLING Pump
DEPTH TO WATER LEVEL 12.25

SAMPLE DATA

FIELD REPLICATE #1	TEMP.	<u>22.8°C</u>	pH	<u>5.99</u>	CONDUCTIVITY	<u>1197</u>
FIELD REPLICATE #2	TEMP.	<u>22.9°</u>	pH	<u>6.56</u>	CONDUCTIVITY	<u>1154</u>
FIELD REPLICATE #3	TEMP.	<u>23.0°</u>	pH	<u>6.67</u>	CONDUCTIVITY	<u>1075</u>
FIELD REPLICATE #4	TEMP.	<u>23.1°</u>	pH	<u>6.57</u>	CONDUCTIVITY	<u>1051</u>

GENERAL INFORMATION

WEATHER CONDITIONS AT TIME OF SAMPLING Partly cloudy + warm ~ 75°
SAMPLING CHARACTERISTICS Slightly cloudy water
CONTAINERS AND PRESERVATIVES 3 - VOC vials, 2 1-liter Amber for SVOC
1 1-liter Plastic for metals
RECOMMENDATION/OBSERVATIONS well went dry after 2.0 gallons
Filtered metals prior to sampling

SAMPLE ID NUMBERS B-1W and B-1W D (Duplicate)

SAMPLING PERSONNEL

TIME 0930 TO 1130

DATE 4/3/07

(SIGNED)

LOCK OR SEAL NUMBER

REPLACEMENT SEAL NUMBER



GROUNDWATER COLLECTION REPORT

PROJECT NUMBER AND NAME 19228029.00001, O'Brien House LOCATION Baton Rouge, LA
COLLECTOR/OPERATOR S. Krul / J. Pratt WELL NO. B-2W
TYPE OF SAMPLE () GRAB () COMPOSITE () OTHER
METHOD OF SAMPLING IF OTHER THAN MONITOR WELL SHUTTLE NO.

MONITOR WELL INFORMATION

EVACUATION: DATE/TIME 4/3/07 1000 METHOD OF EVACUATION Pump
INITIAL DEPTH TO WATER LEVEL 8.70 TOP OF CASING TO BOTTOM 18.02
GALLONS PER WELL VOLUME TOTAL GALLONS EVACUATED 1.5
FINAL DEPTH TO WATER 16.85 ELEVATION TOP OF CASING 81.1

SAMPLING: DATE/TIME 4/4/07 0855 METHOD OF SAMPLING Pump
DEPTH TO WATER LEVEL 9.31

SAMPLE DATA

FIELD REPLICATE #1	TEMP.	<u>22.5°C</u>	pH	<u>6.75</u>	CONDUCTIVITY	<u>1255</u>
FIELD REPLICATE #2	TEMP.	<u>22.9°</u>	pH	<u>6.81</u>	CONDUCTIVITY	<u>1270</u>
FIELD REPLICATE #3	TEMP.	<u>22.9°</u>	pH	<u>6.83</u>	CONDUCTIVITY	<u>1282</u>
FIELD REPLICATE #4	TEMP.	<u>—</u>	pH	<u>—</u>	CONDUCTIVITY	<u>—</u>

GENERAL INFORMATION

WEATHER CONDITIONS AT TIME OF SAMPLING Partly cloudy + warm ≈ 75°
SAMPLING CHARACTERISTICS Clear water
CONTAINERS AND PRESERVATIVES 3-VOC vials, 21-liter Amber for SVOC
1 1-liter Plastic for metals
RECOMMENDATION/OBSERVATIONS well went dry after 1.5 gallons
Filtered metals prior to sampling

SAMPLE ID NUMBERS B-2W

SAMPLING PERSONNEL TIME 1000 TO 0855

 DATE 4/4/07
(SIGNED)

LOCK OR SEAL NUMBER REPLACEMENT SEAL NUMBER

GROUNDWATER COLLECTION REPORT

PROJECT NUMBER AND NAME 19228029.00001, O'Brien House LOCATION Baton Rouge
 COLLECTOR/OPERATOR S. Koul / J. Pratt WELL NO. B-3W
 TYPE OF SAMPLE Water (X) GRAB () COMPOSITE () OTHER -
 METHOD OF SAMPLING IF OTHER THAN MONITOR WELL - SHUTTLE NO. -

MONITOR WELL INFORMATION

EVACUATION: DATE/TIME 4/3/07 1015 METHOD OF EVACUATION Pump
 INITIAL DEPTH TO WATER LEVEL 2.85 TOP OF CASING TO BOTTOM 18.30
 GALLONS PER WELL VOLUME - TOTAL GALLONS EVACUATED 3.5
 FINAL DEPTH TO WATER 7.17 ELEVATION TOP OF CASING 0.25

SAMPLING: DATE/TIME 4/3/07 1040 METHOD OF SAMPLING Pump
 DEPTH TO WATER LEVEL 6.76

SAMPLE DATA

FIELD REPLICATE #1	TEMP.	<u>23.3°C</u>	pH	<u>6.77</u>	CONDUCTIVITY	<u>988.8</u>
FIELD REPLICATE #2	TEMP.	<u>21.7°</u>	pH	<u>6.67</u>	CONDUCTIVITY	<u>942.6</u>
FIELD REPLICATE #3	TEMP.	<u>21.3°</u>	pH	<u>6.68</u>	CONDUCTIVITY	<u>922.7</u>
FIELD REPLICATE #4	TEMP.	<u>-</u>	pH	<u>-</u>	CONDUCTIVITY	<u>-</u>

GENERAL INFORMATION

WEATHER CONDITIONS AT TIME OF SAMPLING cloudy ~ 75°
 SAMPLING CHARACTERISTICS slightly cloudy water with a slight odor
 CONTAINERS AND PRESERVATIVES 3 VOC vials, 2 1-liter Amber for SVOCs
1 1-liter Plastic for metals

RECOMMENDATION/OBSERVATIONS Filtered metals prior to sampling
collected matrix spike and matrix spike duplicate samples
at this location.

SAMPLE ID NUMBERS B-3W, B-3W MS, B-3W MSD

SAMPLING PERSONNEL [Signature] TIME 1015 TO 1040
 DATE 4/3/07
 (SIGNED)

LOCK OR SEAL NUMBER - REPLACEMENT SEAL NUMBER -

GROUNDWATER COLLECTION REPORT

PROJECT NUMBER AND NAME 19228029.00001 O'Brien House LOCATION Baton Rouge, LA
 COLLECTOR/OPERATOR S. Krul / J. Pratt WELL NO. B-4W
 TYPE OF SAMPLE water ☒ GRAB ☐ COMPOSITE ☐ OTHER —
 METHOD OF SAMPLING IF OTHER THAN MONITOR WELL — SHUTTLE NO. —

MONITOR WELL INFORMATION

EVACUATION: DATE/TIME 4/4/07 0945 METHOD OF EVACUATION Pump
 INITIAL DEPTH TO WATER LEVEL 1.78 TOP OF CASING TO BOTTOM 18.03
 GALLONS PER WELL VOLUME — TOTAL GALLONS EVACUATED 3.0 gal
 FINAL DEPTH TO WATER 7.72 ELEVATION TOP OF CASING 0.0

SAMPLING: DATE/TIME 4/4/07 1015 METHOD OF SAMPLING Pump
 DEPTH TO WATER LEVEL 7.91

SAMPLE DATA

FIELD REPLICATE #1	TEMP. <u>19.4°C</u>	pH <u>6.45</u>	CONDUCTIVITY <u>592</u>
FIELD REPLICATE #2	TEMP. <u>19.2°</u>	pH <u>6.69</u>	CONDUCTIVITY <u>616</u>
FIELD REPLICATE #3	TEMP. <u>19.2°</u>	pH <u>6.79</u>	CONDUCTIVITY <u>816</u>
FIELD REPLICATE #4	TEMP. <u>19.2°</u>	pH <u>6.95</u>	CONDUCTIVITY <u>808</u>

GENERAL INFORMATION

WEATHER CONDITIONS AT TIME OF SAMPLING Cloudy + warm ~ 75°
 SAMPLING CHARACTERISTICS Slightly cloudy water
 CONTAINERS AND PRESERVATIVES 3-VOC vials, 2 1-liter Amber for SVOC
1 1-liter Plastic for Metals
 RECOMMENDATION/OBSERVATIONS Filtered metals prior to sampling

SAMPLE ID NUMBERS B-4W

SAMPLING PERSONNEL

TIME 0945 TO 1015

DATE 4/4/07

(SIGNED)

LOCK OR SEAL NUMBER

REPLACEMENT SEAL NUMBER

GROUNDWATER COLLECTION REPORT

PROJECT NUMBER AND NAME 19228029.00001 O'Brien House LOCATION Baton Rouge
 COLLECTOR/OPERATOR S. Krul / J. Pratt WELL NO. B-6W
 TYPE OF SAMPLE Water (x) GRAB () COMPOSITE () OTHER -
 METHOD OF SAMPLING IF OTHER THAN MONITOR WELL - SHUTTLE NO. -

MONITOR WELL INFORMATION

EVACUATION: DATE/TIME 4/4/07 1445 METHOD OF EVACUATION Pump
 INITIAL DEPTH TO WATER LEVEL 15.0 TOP OF CASING TO BOTTOM 18.05
 GALLONS PER WELL VOLUME - TOTAL GALLONS EVACUATED -
 FINAL DEPTH TO WATER 17.55 ELEVATION TOP OF CASING 0.1

SAMPLING: DATE/TIME 4/5/07 0915 METHOD OF SAMPLING Pump
 DEPTH TO WATER LEVEL -

SAMPLE DATA

FIELD REPLICATE #	TEMP.	pH	CONDUCTIVITY
FIELD REPLICATE #1	<u>22.4</u>	<u>6.76</u>	<u>190.4</u>
FIELD REPLICATE #2	<u>22.2</u>	<u>7.01</u>	<u>1339</u>
FIELD REPLICATE #3	<u>22.1</u>	<u>7.04</u>	<u>1296</u>
FIELD REPLICATE #4	<u>-</u>	<u>-</u>	<u>-</u>

GENERAL INFORMATION

WEATHER CONDITIONS AT TIME OF SAMPLING cloudy + cool $\approx 60^{\circ}$
 SAMPLING CHARACTERISTICS Slightly cloudy water
 CONTAINERS AND PRESERVATIVES 3 - VOC vials, 2 1-liter amber for SVOC, 1 1-liter plastic for metals.
 RECOMMENDATION/OBSERVATIONS well went dry after 0.75 gal. Filtered metals during sampling.

SAMPLE ID NUMBERS B-6W

SAMPLING PERSONNEL [Signature] TIME 1445 TO 0915
 DATE 4/5/07
 (SIGNED)

LOCK OR SEAL NUMBER - REPLACEMENT SEAL NUMBER -

APPENDIX D

ANALYTICAL DATA QUALITY ASSURANCE REVIEW

Quality Assurance Data Review for LDEQ Targeted Brownfields Assessments Program – 1200 Main Street, Baton Rouge, Louisiana: Analysis by Pace Analytical Laboratories, Inc. in Saint Rose, Louisiana, Project Nos. 2068139, 2068190, 2068250, and 2068300.

URS performed a quality assurance data review for the samples collected for the LDEQ Targeted Brownfields Assessment Program site investigation of 1200 Main Street, Baton Rouge, Louisiana. All laboratory analyses were performed by Pace Analytical Laboratories, Inc. (Pace) in Saint Rose, Louisiana. The laboratory job numbers assigned for soil boring and groundwater samples are shown below with the date of sample collection:

Date of Sample Collection	Lab Sample Group No.	Number of Soil Samples	Number of Groundwater Samples	Number of Field Quality Control Samples
04/02/07 to 04/05/07	2068	54	18	(Soil, Water) 1,1 DUP; 2,1 MS; 2,1 MSD; 0,4 TB; 0,1 FB; 0,1 RS

MS = Matrix Spike, MSD = Matrix Spike Duplicate, DUP = Duplicate, TB = Trip Blank, FB = Field Blank, RS = Equipment Rinsate

LABORATORY SAMPLE IDENTIFICATION & ANALYSES REQUEST

After sample collection, all samples were submitted to Pace in Saint Rose, Louisiana for analysis. The groundwater and soil samples analyzed for TCL VOA were done so by their respective Method 8260B (and 5035 for soil samples); TCL SVOA by Method 8270C; and TAL metals by Methods 6010C, 9012, and 7000 for soil and water matrices. The following tables summarize the soil, groundwater, and quality control analytical programs conducted for this site investigation.

Sample Analytical Program

SOILS		
Analysis	Samples Analyzed	Borings
VOA	18	1-6
SVOA	18	1-6
Metals	18	1-6
GROUNDWATER		
Analysis	Samples Analyzed	Borings
VOA	5	1,2,3,4,6
SVOA	5	1,2,3,4,6

Appendix D

Analytical Data Quality Assurance Review

SOILS		
Analysis	Samples Analyzed	Borings
VOA	18	1-6
SVOA	18	1-6
Metals	18	1-6
GROUNDWATER		
Analysis	Samples Analyzed	Borings
Metals	5	1,2,3,4,6

Quality Control Analytical Program

SOILS		
Analysis	Samples Analyzed	Q/C Samples
VOA	4	MS(2), MSD(2)
SVOA	4	MS(2), MSD(2)
Metal	4	MS(2), MSD(2)

GROUNDWATER		
Analysis	Samples Analyzed	Q/C Samples
VOA	8	MS(1), MSD(1), Trip Blank(4), Field Blank(1), Rinsate(1)
SVOA	3	MS(1), MSD(1), Rinsate(1)
Metals	3	MS(1), MSD(1), Rinsate(1)

Analytical Program Totals

SOILS		
VOA	SVOA	Metals
22	22	22

GROUNDWATER		
VOA	SVOA	Metals
13	8	8

HOLDING TIMES

All TCL VOA soil samples were collected in Encore™ samplers, were extracted within the specified holding time of 48 hours, and were analyzed within the holding time criterion of 14 days. TCL VOA groundwater samples were analyzed within the holding time criterion of 14 days from sample collection for water samples preserved with hydrochloric acid or 7 days if

unpreserved. All TCL SVOA were extracted within the specified holding time of 7 days from sample collection for water matrix or 14 days for soil matrix. SVOA extracts were analyzed within the specified holding time of 40 days from sample extraction. All Metals samples were analyzed within 28 days of sample collection. No data were qualified as estimated or rejected as unusable due to improper sample preservation or exceeded holding times. Complete reports of quality control by project are attached as Appendix F.

BLANKS

All laboratory method blanks and quality control trip blanks or field blanks associated with the sample analyses performed for all sample work orders were free of the target compounds. Complete reports of quality control by project are attached as Appendix F.

SURROGATE SPIKES

All surrogate percent recoveries (%Rs) were within the specified quality control limits for the VOA, SVOA, and TAL Metals analyses with the exception of the surrogate recovery for the soil sample B-4(2-4) which was outside control limits and was attributed to sample dilution, which is not considered an excursion. Complete reports of quality control by project are attached as Appendix F.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATES

The Matrix Spike (MS)/Matrix Spike Duplicates (MSD) %R and RPD values were all within specified quality control limits with the exception of those listed in Laboratory Project Reports for the following projects: 2068139, 2068190, 2068250, and 2068300. Complete reports of quality control by project are attached as Appendix F.

LABORATORY CONTROL SAMPLES

The results for the Laboratory Control Samples (LCSs) and Laboratory Control Sample Duplicates (LCSDs) were all within specified quality control limits. Complete reports of quality control by project are attached as Appendix F.

DUPLICATE SAMPLES

One field sample and field duplicate groundwater sample (Sample ID/Laboratory ID: B-1W/20511783 and B-1WD/20511784) were collected. There are no established precision criteria for field duplicate results. The sample and field duplicate results are in relative agreement when typically demonstrated by a low percent difference. No results were qualified or rejected based upon the field duplicate results. The results of detected concentrations reported in the water matrix sample and the associated field duplicate is attached in Appendix F, Laboratory Project Report 2068190.

OVERALL ASSESSMENT

Acceptable levels of analytical accuracy and precision were achieved except where noted in this report. The above qualifications are based on the detections of the above listed constituents in the analytical method and matrix-specific method blank.

APPENDIX E
GCAL ANALYTICAL LABORATORY DATA REPORTS
(SEE RED ROPES)

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES (Category I-B)

WASTE NUMBER	DISPOSED ON-SITE	DISPOSED OFF-SITE	REUSED RECYCLE	DISPOSER HANDLING CODE(S)
1002		X	N/A	T63

WASTE NUMBER	DISPOSED ON-SITE	DISPOSED OFF-SITE	REUSED RECYCLE	DISPOSER HANDLING CODE(S)

C. COMMERCIAL CHEMICAL PRODUCTS HAZARDOUS WASTES (Category I-C)

WASTE NUMBER	DISPOSED ON-SITE	DISPOSED OFF-SITE	REUSED RECYCLE	DISPOSER HANDLING CODE(S)

WASTE NUMBER	DISPOSED ON-SITE	DISPOSED OFF-SITE	REUSED RECYCLE	DISPOSER HANDLING CODE(S)

D. CHARACTERISTICS OF NON-LISTED HAZARDOUS WASTES (Category II)

1. Mark the boxes corresponding to characteristics of non-listed hazardous wastes your installation handles. Use criteria in Appendix A, Category II.
- ☐ Ignitable (D001)
 ☐ Corrosive (D002)
 ☐ Reactive (D003)
 ☐ Toxic (D000-EP Toxic)

2. List EP Toxic Waste numbers from codes at Category II-D, Appendix A and make other appropriate entries in the spaces provided.

WASTE NUMBER	DISPOSED ON-SITE	DISPOSED OFF-SITE	REUSED RECYCLE	DISPOSER HANDLING CODE(S)

WASTE NUMBER	DISPOSED ON-SITE	DISPOSED OFF-SITE	REUSED RECYCLE	DISPOSER HANDLING CODE(S)

10. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature [Signature] Name and Official Title President
 Company Orville Co. Inc. Martinsburg Date Signed 12/9/85



LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assistance Division, Compliance Assistance Section
P O Box 4313, Baton Rouge, LA 70821

602 North Fifth St, Baton Rouge, LA 70802 (Physical Address)

CERTIFICATION OF NO HAZARDOUS WASTE ACTIVITY

I certify, under penalty of law, that the facility named below does not presently generate, store, treat, transport, or dispose of hazardous wastes, as defined in the Louisiana Hazardous Waste Regulation. I certify that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

TYPE OF CHANGE RESULTING IN NO HAZARDOUS WASTE ACTIVITY:

(Check all that apply)

- ☐ Facility has no hazardous waste present at site.
- ☐ Facility is out of business. Date of Closure: _____
- ☒ Facility no longer offers services which generate, store, treat, transport, or dispose of hazardous waste. Date service discontinued: JAN 2009
- ☐ Facility has moved to a new location. Date of move: _____
 New Physical address: _____
- ☐ Temporary ID being deactivated. Date of last manifest: _____
- ☐ Other, please describe: _____

FOR THE FACILITY REQUESTING CERTIFICATION:

Facility Name: DRUSILLA CLEANERS

EPA ID Number: LAD981149776

Physical Address: 3406 DRUSILLA LN; BATON ROUGE, LA 70809

Signature & Date: *Darryl Zachary* 10/14/09

Print Name & Title: Darryl Zachary 10/14/09

FOR OFFICE USE ONLY	
DIST <u>CR</u> GEN <u>CEG</u>	TRANS _____ TSD _____ B/B _____ AI <u>5567</u>

Regs & Certs

Revised 08/2006

LM RCRA Info 10/29/9
TEMPO



March 15, 2013

Mr. Alex Knight
Brokerage/Development
Donnie Jarreau Real Estate, Inc.
10604 Coursey Boulevard
Baton Rouge, LA 70816

Re: Additional Phase II Environmental Site Assessment
Drusilla Shopping Center
Baton Rouge, East Baton Rouge Parish, Louisiana
Providence Project No. 884-001

Dear Mr. Knight:

On behalf of Donnie Jarreau Real Estate, Inc. (Donnie Jarreau), Providence completed a Phase I Environmental Site Assessment (ESA) of the Drusilla Shopping Center in February 2013. The Drusilla Shopping Center is located at 3458 Drusilla Lane in Baton Rouge, East Baton Parish, Louisiana. A site location map is included as **Figure 1**.

Based on the findings of Providence's Phase I ESA dated February 4, 2013, a Phase II ESA of the property was recommended. Providence's Phase II recommendations included the investigation of soil and groundwater at the property as well as an investigation of potential asbestos containing material (ACM) and lead-based paint, as the construction of on-site structures predated 1978.

Providence conducted the Phase II soil and groundwater sampling activities at the Drusilla Shopping Center from February 5 through February 7, 2013 to investigate the recognized environmental conditions and non-scope conclusions identified in the February 2013 Phase I ESA. Soil samples were collected from six locations, and groundwater samples were collected from four locations on the subject property. Boring locations B-1 through B-6 are shown on the attached **Figure 2**. Groundwater was attempted to be collected at all locations, but could not be collected at locations B-4 and B-5 due to lack of groundwater or insufficient groundwater yield.

Based on the historical use of the subject property and the historical uses of the adjoining properties, sample analyses included volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and eight Resource Conservation and Recovery Act (RCRA) metals.

In addition to soil and groundwater sampling and analysis activities at the Drusilla Shopping Center property, Providence also conducted surveys from February 6 through February 8, 2013 to determine whether or not the subject property contained ACM or lead-based paints. Lead-based paint readings were collected of all interior and exterior painted surfaces on the structures located at the site. ACM samples were also collected from various interior ceiling board, insulation, and flooring materials in structures located at the subject property. Lead and asbestos results were provided in the previous letter report dated

Mr. Alex Knight
March 15, 2013
Page 2 of 6

February 22, 2013.

The results of the Phase II ESA soil and groundwater sampling activities are summarized in **Tables 1** through **3** and were previously reported via letter dated February 22, 2013. The following conclusions were drawn based on the initial Phase II ESA activities:

- Detected concentrations of trichloroethene exceed the Louisiana Department of Environmental Quality's (LDEQ's) Risk Evaluation/Corrective Action Program (RECAP) Limiting Screening Standards based on industrial land use (LSS_i) in the soil located in the parking lot north of the former Kean's The Cleaner (boring B-2) and in the delivery road north of the former Drusilla Cleaners (boring B-4).
- Detected concentrations of 1,2-dichloroethene (total), cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride exceed the RECAP GW_{SS} in the groundwater located in the parking lot north of the former Kean's The Cleaner (boring B-2). Groundwater was not encountered in the temporary well installed in B-4, north of the former Drusilla Cleaners where soil impacts were identified.
- Detected concentrations of the dry cleaning solvent tetrachloroethene and its breakdown products indicate that impacts have occurred from the previous dry cleaning operations conducted at the site and/or at the adjoining Kean's The Cleaner site.
- Detected concentrations of arsenic, chromium, and lead exceed the RECAP LSS in the groundwater east of the former Drusilla Cleaners (boring B-3), and in the groundwater west of Building 2 (boring B-6).
- Because impacts to soil and groundwater have been identified above LDEQ's RECAP Screening Standards, the reporting requirements of the Louisiana Administrative Code (LAC) at LAC 33:1.3919 and LAC 33:1.3925 should be met. Furthermore, these impacts should be further evaluated and/or remediated, as necessary, under the LDEQ's RECAP or Voluntary Remediation Program (VRP).
- Lead paint was not detected at the subject property for the painted surfaces surveyed.
- ACM was detected in floor tiles and mastic collected from three different locations; therefore, as a best management practice, care should be taken to avoid the creation of potential asbestos fibers during demolition or remodeling activities involving these materials. Any demolition, removal, or remodeling of the identified building materials should be conducted by trained personnel and in accordance with all applicable regulations.

To determine the reasonable costs associated with further evaluation of the site under RECAP and possible corrective actions required, Providence recommended the following additional sampling:

- Installation of up to five delineation borings around boring B-4 for collection of soil and groundwater samples for VOC analysis
- Determine groundwater flow direction using temporary piezometers installed to collect groundwater samples
- Slug test one temporary piezometer to determine site-specific groundwater classification under RECAP

Mr. Alex Knight
March 15, 2013
Page 3 of 6

Additional Soil and Groundwater Sampling Activities

A contracted driller advanced four boreholes (B-7 through B-10) using a GeoProbe Macro-Core. The boring locations are indicated on **Figure 2**. Up to four samples were collected from each boring from the following intervals, as applicable:

- Surface soil [0-3 feet below ground surface (bgs)]
- Soil/water interface
- Bottom depth of the boring
- Highest Photoionization Detector (PID) screened interval

Each soil sample was visually classified in accordance with American Society for Testing and Materials (ASTM) Standard D2488 and documented on a field log by an experienced professional using the Unified Soil Classification System. Boring logs are provided in **Appendix A**.

Temporary piezometers with pre-packed well screens were installed in each borehole and allowed to develop overnight. The following day, Providence purged the piezometers and collected groundwater samples. Groundwater samples from the additional borings were analyzed for VOCs. The temporary piezometers and boreholes were properly plugged and abandoned at the completion of field activities.

The additional soil and groundwater analytical results are included in **Tables 1** through **3**. The analytical laboratory reports are included in **Appendix B**.

As shown in **Table 1**, detected concentrations in soils were compared to the LDEQ's RECAP Limiting Screening Standards based on industrial land use (LSS_i). The LSS_i applied were the lower of the Industrial Soil ($Soil_{ss_i}$) and the Soil Protective of Groundwater ($Soil_{ss_{GW}}$) Screening Standards provided in Table 1 of RECAP (LDEQ 2003), with the exception that the $Soil_{ss_{GW}}$ was eliminated from consideration for all volatile constituents of concern (COC) except 1,2-dibromo-3-chloropropane and tetrachloroethene based on Synthetic Precipitation Leaching Procedure (SPLP) analyses shown in **Table 2**. (Note: Previous SPLP results indicated tetrachloroethene concentrations in soils were protective of groundwater; however, additional SPLP analyses were required to be conducted based on the additional sampling as maximum detected concentrations are now observed at B-8, and tetrachloroethene concentrations are no longer protective of groundwater.) As shown in **Table 1**, detected concentrations of trichloroethene and tetrachloroethene exceed the LSS_i .

As shown in **Table 2**, detected concentrations of 1,2-dichloroethene (total), cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, vinyl chloride, arsenic, chromium, and lead exceed the RECAP Groundwater Screening Standards (GW_{ss}) provided in Table 1 of RECAP (LDEQ 2003) in at least one well sampled.

Based on additional site characterization data collected during the additional Phase II ESA activities, Management Option 1 (MO-1) Limiting RECAP Standards (LRS) were calculated for soil and groundwater as shown in **Tables 4** and **5**, respectively. Supporting documentation for standard calculations is included in **Appendix C**. Indoor and outdoor exposures were evaluated as part of the preliminary MO-1 evaluation, as soils and/or groundwater impacted with VOCs may be present beneath an enclosed structure. Vapor

Mr. Alex Knight
 March 15, 2013
 Page 4 of 6

emissions from soil and groundwater to indoor air cannot be evaluated under the RECAP Screening Option.

MO-1 LRS were calculated based on slug testing conducted on the temporary piezometer installed at B-10, and testing demonstrated that the uppermost water-bearing zone underlying the site is a Groundwater Classification 3 aquifer under RECAP. Slug testing and groundwater classification documentation is provided in **Appendix D**. The nearest downgradient surface water body [i.e. the point of exposure (POE)] was identified to further classify shallow groundwater underlying the site as either a Groundwater Classification 3 Drinking Water (GW_{3DW}) or Non-Drinking Water (GW_{3NDW}) aquifer in accordance with Appendix H of RECAP (LDEQ 2003). Based on the southerly groundwater flow direction depicted on **Figure 3**, the unnamed drainage canal along the southern property boundary was identified as the nearest downgradient surface water body, or the POE. The POE is located in Basin Segment/Subsegment 040201 (Bayou Manchac – From headwaters to Amite River). The Louisiana Surface Water Quality Standards at LAC 33:IX Chapter 11¹ have established the following designated uses for Basin Segment/Subsegment 040201: primary contact recreation, secondary contact recreation, and propagation of fish and wildlife. Basin segment 040201 is not classified as a drinking water supply per LAC 33:IX Chapter 11. Therefore, the groundwater is further classified as a GW_{3NDW} aquifer.

Preliminary MO-1 LRS for surface soils were calculated as the lowest of the following standards provided in Table 2 of RECAP (LDEQ 2003), as applicable, and as shown in **Table 4**:

- Industrial Soil (Soil_i), adjusted for additive effects (see **Appendix C**)
- Soil_{GW3NDW}, with adjustment for dilution and attenuation (*i.e.* DF3 applied)
- Soil saturation concentration (Soil_{sat}), and
- Industrial Vapor Emissions from Soil to Enclosed Structure (Soil_{esi}), adjusted for additive effects (see **Appendix C**)

Soil_{GW3NDW} MO-1 RS were multiplied by a DF3 (or DF2 for some COC as noted in Table 4), and identified as adjusted Soil_{GW3NDW} MO-1 RS in **Table 4**. The DF3/DF2 was 111 based on RECAP Appendix H, an average saturated thickness of less than or equal to five feet, and a distance from the point of compliance (POC) to the POE of 751 to 1,000 feet. B-8 was identified as the POC for soils.

Preliminary MO-1 LRS for site groundwater were calculated as the lowest of the following standards provided in Table 3 of RECAP (LDEQ 2003), as applicable, and as shown in **Table 5**:

- GW_{3NDW}, with adjustment for dilution and attenuation (*i.e.* DF3 applied)
- Industrial Vapor Emissions from Groundwater to Ambient Air (GW_{airi}), adjusted for additive effects, as applicable (see **Appendix C**)
- Industrial Vapor Emissions from Groundwater to Enclosed Structure (GW_{csi}), adjusted for additive effects, as applicable (see **Appendix C**), and
- Water Solubility (Water_{sol})

¹Louisiana Administrative Code, Title 33, Part IX, Section 1123, Table 3.

Mr. Alex Knight
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Page 5 of 6

GW_{3NDW} MO-1 RS were multiplied by a DF3, and identified as adjusted GW_{3DW} MO-1 RS in **Table 5**. The DF3 was 111 based on RECAP Appendix H, an average saturated thickness of less than or equal to feet, and a distance from the POC (B-8) to the POE of 751 to 1,000 feet.

As shown in **Table 1**, detected concentrations of 1,2-dichloroethene (total), cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride exceed the preliminary MO-1 LRS. Maximum detected concentrations of tetrachloroethene [410 milligrams per kilogram (mg/Kg)] and trichloroethene (9.3 mg/Kg) were observed at B-8, as deep as 14-16 feet bgs. Maximum detected concentrations of 1,2-dichloroethene (total), cis-1,2-dichloroethene, and vinyl chloride were observed at location B-4 (6-8), and exceed vapor emissions to indoor air standards. B-4 was installed within two feet of the shopping center building behind the former Drusilla Cleaners; therefore, COC in soils may be present beneath the building at concentrations exceeding the indoor vapor emissions standard. Furthermore, based on these results, further vertical delineation at B-8 is warranted to determine the depth of impact, as detected concentrations at the base of the borehole exceed the MO-1 LRS applied. Lateral delineation around B-4 and B-8 has been defined to the east, south, and west; however, further delineation to the north of B-8 (near the northern property boundary) is warranted. Impacts to soils at B-2 (14-16) may be a result of contamination from the off-site, former Kean's the Cleaner site located on the adjacent property. Dry cleaning solvents were not detected in soils collected from B-10 advanced in between the former Drusilla Cleaners site and B-2, which suggests the soil impacts at B-2 could potentially have originated from the former Kean's the Cleaner site. Further delineation in this area of the site may also be warranted; however, if impacts are confirmed to be from an off-site source, further delineation and/or evaluation of these impacts should be the responsibility of the adjacent property owner.

As shown in **Table 3**, concentrations in groundwater were less than the respective MO-1 LRS applied with the exception of tetrachloroethene, trichloroethene, and vinyl chloride. Maximum detected concentrations in groundwater were observed at B-8. Maximum detected concentrations of tetrachloroethene, trichloroethene, and vinyl chloride were 100, 15, and 1.2 milligrams per liter (mg/L), respectively. Tetrachloroethene and vinyl chloride concentrations at B-8 exceed industrial vapor emissions in indoor air from groundwater MO-1 RECAP Standards (36 and 0.49 mg/L, respectively). Boring B-8 was installed approximately 25 feet upgradient of the shopping center; therefore, based on the concentrations observed and a southerly groundwater flow direction, the potential exists that concentrations of tetrachloroethene and vinyl chloride in groundwater are present beneath the building at concentrations exceeding the indoor vapor emissions standards. Further delineation of groundwater north of B-8 (near the northern property boundary) is warranted based on these results; however, delineation of groundwater impacts to the south, east, and west is complete.

Conclusions

Based upon the results of the Phase II ESA activities conducted in February 2013, detected concentrations of 1,2-dichloroethene (total) and cis-1,2-dichloroethene in soils, and trichloroethene, tetrachloroethene, and vinyl chloride in both soils and groundwater exceed the preliminary MO-1 LRS calculated. Maximum detected concentrations of tetrachloroethene and trichloroethene were observed in B-8, which was advanced near the northern property boundary. Based on these results, further lateral delineation of COC in soils and groundwater is warranted to the north of B-8. Further vertical delineation of soils near B-8 is also warranted to determine depth of impact. Detected concentrations of the dry cleaning solvent tetrachloroethene and its breakdown products indicate that significant impacts have occurred from the

Mr. Alex Knight
March 15, 2013
Page 6 of 6

previous dry cleaning operations conducted at the site at the former Drusilla Cleaners site (now Emerald Cleaners). Soil impacts identified at boring location B-2 may be coming from the off-site, adjacent former Kean's The Cleaner site.

This Additional Phase II ESA report is not intended to meet all requirements of a RECAP MO-1 submittal; however, these calculated standards and a comparison to detected concentrations show that based on the intended future use, the available data, and the site-specific groundwater classification, concentrations in soil and groundwater at the site are not protective of human health and the environment for both indoor and outdoor use at some locations. Impacts to soil and groundwater above RECAP Standards may extend off site across the northern property boundary. Because impacts to soil and groundwater have been identified above LDEQ's RECAP Standards, the reporting requirements of LAC 33:1.3919 and LAC 33:1.3925 should be met. Furthermore, these impacts should be further evaluated and/or remediated, as necessary, under the LDEQ's RECAP or VRP, as site concentrations are not protective of human health and the environment. Based on the maximum detected concentrations observed in both soil and groundwater, the potential for off-site impacts above RECAP Standards, and potentially unsafe vapor emissions concerns, Providence does not feel that site concentrations can be "risked away" under typical RECAP Management Option 2 or 3 scenarios. Remedial action will need to be conducted before site concentrations can be reduced to levels protective of human health and environment. A partial remediation scenario for groundwater under the VRP for a non-responsible party is no longer considered a likely alternative for this site, unless vapor emissions concerns can be alleviated by further sampling (either indoor air sampling or collection of groundwater samples directly beneath the building).

Providence appreciates this opportunity to provide environmental services to Donnie Jarreau. Should you have any questions relative to this document, please contact me at (225) 766-7400.

Sincerely,



Melanie Hanks
Site Evaluation and Remediation Services Manager
Providence Engineering and Environmental Group LLC

Encl: As stated



LDEQ RECEIPT

2014 MAR 28 PM 1:23

March 27, 2014

Project No. 13109
Hand Delivered

Mr. Duane Wilson
Louisiana Department of Environmental Quality
P.O. Box 4314
Baton Rouge, LA 70821-4314

**RE: Submittal of Voluntary Remedial Investigation Application,
Partial Voluntary Remedial Action Supplemental Application and
Risk Assessment/Corrective Action Program (RECAP) Evaluation Report
Drusilla Shopping Center
3458 Drusilla Lane
Monroe, Louisiana
AI No. 5567**

Dear Mr. Wilson:

Submitted herewith please find one original and two copies of a completed Voluntary Remedial Investigation Application and an associated Partial Voluntary Remedial Action Supplemental Application for the captioned site. A check in the amount of \$500 for the required review fee has also been attached.

In addition to the above information, a copy of the RECAP Evaluation Report for the site has been attached for your review. The RECAP evaluation includes a summary of all assessment activities that have been performed at the site by our office and provides calculated site-specific remedial standards for the site. Also included is a survey map, a map showing boring locations, and a legal description describing the portion of property being entered into the Voluntary Remediation Program. Lastly, three electronic copies of a Phase I Environmental Assessment prepared for the site by a prior site consultant have been attached.

MAR 31 2014
FY2014-2572

Remediation Services Division	
Manager:	<i>[Signature]</i>
Team Leader:	<i>[Signature]</i>
AI #:	5567
TEMPO Task #:	<i>[Signature]</i>
<input type="checkbox"/> Desk Copy File Room:	<i>[Signature]</i>

Mr. Wilson

2

March 27, 2014

We appreciate your assistance in this matter and look forward to receiving your comments regarding the enclosed information. We are also currently preparing a Remedial Action Plan for the site and look forward to discussing details of the plan with you prior to its submittal. Should you have any questions or require additional information, do not hesitate to call.

Sincerely,

ENGINEERING ASSOCIATES, INC.

Shawn Funderburk
Project Manager



Stephen J. Burnham, P.E.
President

c w/encl

Mr. Donnie Jarreau, Donnie Jarreau Developments, L.L.C.

Mr. Alex Knight, Donnie Jarreau Developments, L.L.C.

Ms. Laura LeBeouf, Louisiana Department of Environmental Quality

**ENGINEERING****ASSOCIATES, INC.**

CONSULTING ENGINEERS

Voluntary Remediation Program
Louisiana Department of Environmental Quality
VOLUNTARY REMEDIAL INVESTIGATION APPLICATION

The remedial investigation work plan for this site and the application review fee must be included with this Voluntary Remedial Investigation Application form, as provided in LAC 33:VI.911.A, or this Voluntary Remedial Investigation Application will be considered incomplete and not be accepted for review.

I. Applicant Information
Section A: Applicant

Name/ Company Name: Donnie Jarreau Developments, L.L.C.

Mailing Address: 10604 Coursey Blvd

City: Baton Rouge State: LA Zip Code: 70816

Contact Person: Donnie Jarreau

Phone No: 225-753-3573 Fax No: 225-753-3572

Email Address: donnie@donniejarreau.com

Interest in Property: Prospective Buyer

Section B: Co-Applicant

Name/ Company Name: NA

Mailing Address:

City: State: Zip Code:

Contact Person:

Phone No: Fax No:

Email Address:

Interest in Property:

Section C: Co-Applicant

Name/ Company Name: NA

Mailing Address:

City: State: Zip Code:

Contact Person:

Phone No: Fax No:

Email Address:

Interest in Property:

Section D: Current Property Owner (if different from applicants)

Name/ Company Name: Garry Lewis Properties

Mailing Address: 3458 Drusilla Lane, Suite G

City: Baton Rouge State: LA Zip Code: 70809

Contact Person: Garry Lewis

Phone No: 225-930-9996 Fax No: NA

Email Address: NA

II. Site Information
Agency Interest Number (if exist):5567
Site Name:Drusilla Shopping Center
Parish:East Baton Rouge
Property Size (acres):+/- 2.3
Physical address or direction and distance from nearest intersection:3458 Drusilla Lane, Baton Rouge, LA 70809
Latitude: 30 ° 10 " 25 '
Longitude: 91 ° 22 " 05 '
Section/Township/Range (attach legal property description):Section 100, Township 7S, Range 1E
Adjacent Property Owners (persons listed as owners of the adjacent properties on the rolls of the parish tax assessor as of the date on which the voluntary remediation application is submitted):DiVincenti Plaza to North. Garry Lewis Properties to East, South, and West.
Current Property Use (Describe in detail. Use percentages if more than one use.):Light commercial businesses including the following: Family Dollar Store, Radio Shack, Chase Bank, Darensborough Shoe Repair, Movie Store, vacant tenant space, Drusilla Imports, parking lot and China Wok Restaurant. Light commercial businesses comprise approximately 40% of the property while a parking lot comprises the remaining 60%.
Past (historical) Property Use (Describe in detail):Light commercial tenants including a former dry cleaners
Future Property Use (Describe in detail. Use percentages if more than one use.):No changes to the current property use are anticipated with the exception of possible occupant changes in the tenant spaces.
Current Land Use Surrounding Property:Light commercial

Contaminant Type(s) and Affected Media: Trichloroethene and arsenic in soil and 1,1,1,2-Tetrachloroethane, Hexachloroethane, Tetrachloroethene and Trichloroethene in groundwater.

Applicant(s) must also attach to this form all available historical assessment and or investigation information available for the site, including Phase 1 and 2 Assessments, analytical data, etc.

III. Eligibility Information		
Permitted Hazardous Waste Unit(s) on site?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Site Proposed for Listing on the NPL?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Site Listed on the NPL?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Any Pending Federal Environmental Enforcement Actions Associated with the Site?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If yes, explain		
Any portion of the site UST Trust Fund Eligible?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If yes, explain		
IV. Type of Voluntary Remedial Action Proposed		
<input type="checkbox"/> Voluntary Remedial Action		
<input checked="" type="checkbox"/> Partial Voluntary Remedial Action (See note below)		

If Partial Voluntary Remedial Action is checked, the applicant and co-applicants must each complete and attach a Partial Remedial Action Supplemental Application Form.

V. Certification	
All applicants must certify the following with their signature below:	
I (we) certify that all of the information I (we) have provided in this Voluntary Remedial Investigation Application is true and correct to the best of my information, knowledge, and belief. I (we) understand and agree that I (we) am obligate to update and notify this application if I (we) learn that information that I (we) have provided is misleading or no longer correct. I (we) further certify that I (we) understand I (we) am responsible for and agree to reimburse the Louisiana Department of Environmental Quality for all actual direct costs associated with reasonable and appropriate oversight activities of the Department conducted pursuant to LAC 33:VI. Chapter 9, including, but not limited to, review, supervision, investigation, and monitoring activities.	
Primary Applicant Signature:	Date: 3-25/13
Co-Applicant Signature:	Date:
Co-Applicant Signature:	Date:

Voluntary Remediation Program
Louisiana Department of Environmental Quality
**PARTIAL VOLUNTARY REMEDIAL ACTION SUPPLEMENTAL
APPLICATION**

If a partial remediation is to be performed, one each of this form must be completed by the applicant and by each co-applicant and attached to the Application Form.

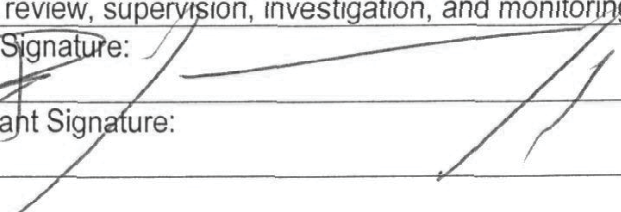
I. Applicant Information		
Check One: <input checked="" type="checkbox"/> Applicant <input type="checkbox"/> Co-Applicant		
Name/ Company Name: Donnie Jarreau Developments, L.L.C.		
Agency Interest Number (if one exists): 5567		
Site Name: Drusilla Shopping Center		
Interest in Property: Prospective Purchaser		
II. Answer the following questions by checking the appropriate answer		
Were you a generator who generated a hazardous substance that was disposed of or discharged at the site?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Were you a transporter who disposed of or discharged a hazardous substance or hazardous waste at the site?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Were you a disposer who disposed of or discharged a hazardous substance or hazardous waste at the site?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Did you contract with someone for transportation or disposal at the site?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
III. If you are or were an owner or operator of the site subsequent to the disposal of hazardous waste, answer the following questions by checking the appropriate answer		
Were you engaged in the business of generating, transporting, storing, treating, or disposing of a hazardous substance or hazardous waste on or in the site?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Did you knowingly permit any person to make regular use of the property for disposal of waste?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Did you knowingly permit any person to use the site for disposal of a hazardous substance?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Did you know or should you have reasonable known that a hazardous substance was located in or on the site at the time right, title, or interest in the site was first acquired by the person and engaged in conduct associating that person with the discharge or disposal?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Did you take action that significantly contributed to the discharge or disposal after that person knew or reasonable should have known that a hazardous substance was located in or on the site?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

NOTE: If "Yes" is answered to any question, applicant is not eligible for a partial remediation.

V. Certification

All applicants must certify the following with their signature below:

I (we) certify that all of the information I (we) have provided in this Partial Voluntary Remedial Action Supplemental Application is true and correct to the best of my information, knowledge, and belief. I (we) understand and agree that I (we) am obligate to update and notify this application if I (we) learn that information that I (we) have provided is misleading or no longer correct. I (we) further certify that I (we) understand I (we) am responsible for and agree to reimburse the Louisiana Department of Environmental Quality for all actual direct costs associated with reasonable and appropriate oversight activities of the Department conducted pursuant to LAC 33:VI. Chapter 9, including, but not limited to, review, supervision, investigation, and monitoring activities.

Applicant Signature: 

Date:

3/25/14

Co-Applicant Signature:

Date:

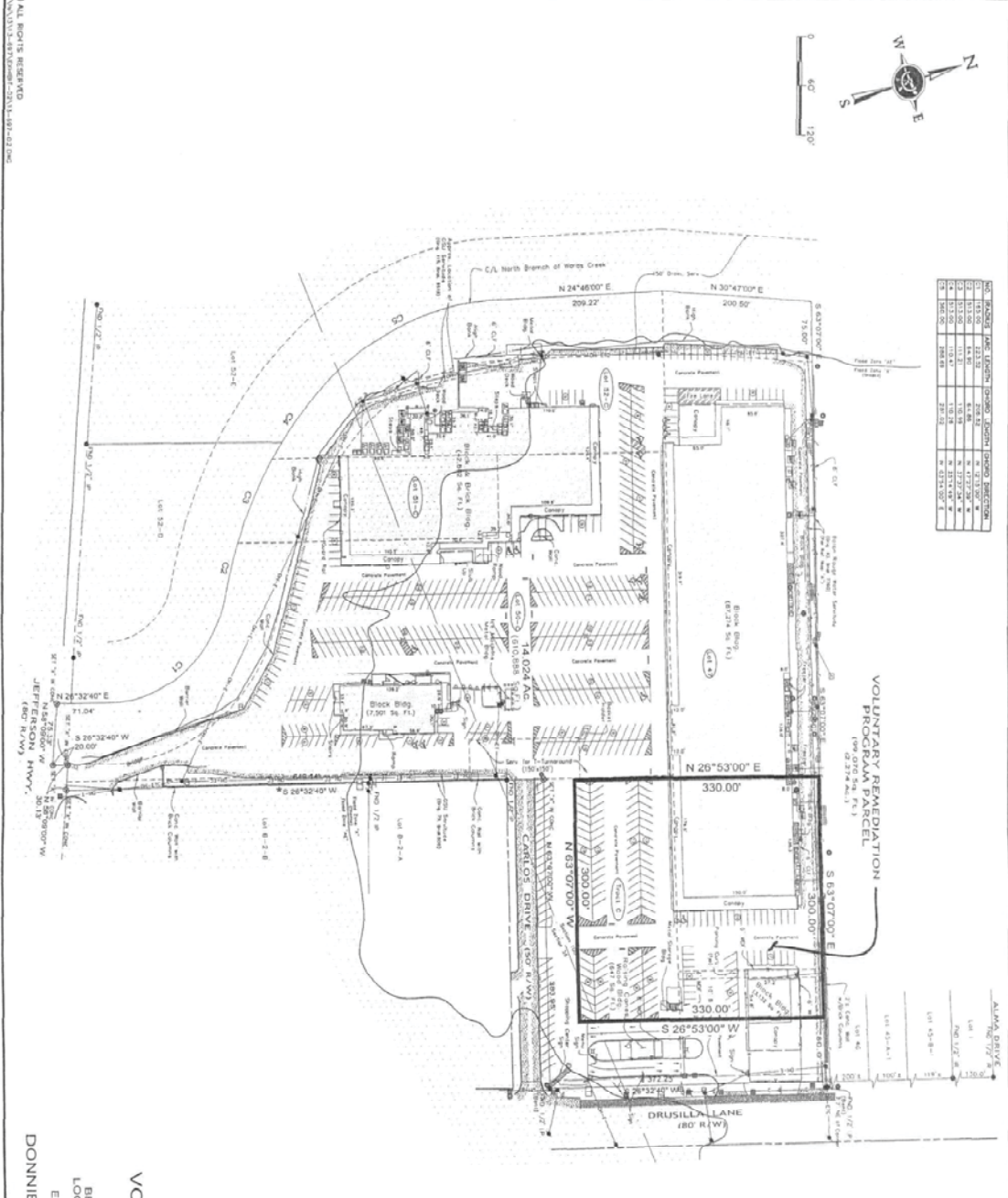
LEGAL DESCRIPTION:

A certain parcel of land, (99,070 Sq. Ft.) (2.274 Ac.), located in Section 100, Township 7 South, Range 1 East, Southeast Land District, East Baton Rouge Parish, Louisiana, said property being more particularly described as follows:

Commence at the intersection of the Westerly Right of Way of Drusilla Lane and the Northerly Right of Way of Carlos Drive; thence, along the Right of way of Drusilla Lane, N 26°32'40" E a distance of 372.25 feet to a point and corner; thence, departing said right-of-way, N 63°07'00" W a distance of 80.00 feet to the POINT OF BEGINNING;

Thence, S 26°53'00" W a distance of 330.00 to a point and turn; thence, N 63°07'00" W a distance of 300.00 feet to a point and turn; thence, N 26°53'00" E a distance of 330.00 feet to a point and turn; thence, S 63°07'00" E a distance of 300.00 feet to the POINT OF BEGINNING

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C:\Users\jchase\Documents\2014\14-01-02.DWG



SITE ANALYSIS DATA			
Area	100,000 Sq. Ft.	2.274 Ac.	
Perimeter	1,200.00' (approx.)		
Volume	1,200,000 Cu. Yd. (approx.)		
Weight	12,000,000 Lbs. (approx.)		
Mass	12,000,000 Lbs. (approx.)		
Force	12,000,000 Lbs. (approx.)		
Energy	12,000,000 Lbs. (approx.)		
Power	12,000,000 Lbs. (approx.)		
Heat	12,000,000 Lbs. (approx.)		
Light	12,000,000 Lbs. (approx.)		
Sound	12,000,000 Lbs. (approx.)		
Vibration	12,000,000 Lbs. (approx.)		
Shock	12,000,000 Lbs. (approx.)		
Impact	12,000,000 Lbs. (approx.)		
Damage	12,000,000 Lbs. (approx.)		
Loss	12,000,000 Lbs. (approx.)		
Cost	12,000,000 Lbs. (approx.)		
Value	12,000,000 Lbs. (approx.)		
Price	12,000,000 Lbs. (approx.)		
Rate	12,000,000 Lbs. (approx.)		
Time	12,000,000 Lbs. (approx.)		
Distance	12,000,000 Lbs. (approx.)		
Direction	12,000,000 Lbs. (approx.)		
Speed	12,000,000 Lbs. (approx.)		
Acceleration	12,000,000 Lbs. (approx.)		
Deceleration	12,000,000 Lbs. (approx.)		
Frequency	12,000,000 Lbs. (approx.)		
Wavelength	12,000,000 Lbs. (approx.)		
Amplitude	12,000,000 Lbs. (approx.)		
Phase	12,000,000 Lbs. (approx.)		
Polarization	12,000,000 Lbs. (approx.)		
Coherence	12,000,000 Lbs. (approx.)		
Monochromaticity	12,000,000 Lbs. (approx.)		
Spontaneous Emission	12,000,000 Lbs. (approx.)		
Stimulated Emission	12,000,000 Lbs. (approx.)		
Absorption	12,000,000 Lbs. (approx.)		
Scattering	12,000,000 Lbs. (approx.)		
Reflection	12,000,000 Lbs. (approx.)		
Refraction	12,000,000 Lbs. (approx.)		
Diffraction	12,000,000 Lbs. (approx.)		
Interference	12,000,000 Lbs. (approx.)		
Dispersion	12,000,000 Lbs. (approx.)		
Birefringence	12,000,000 Lbs. (approx.)		
Optical Activity	12,000,000 Lbs. (approx.)		
Scattering Coefficient	12,000,000 Lbs. (approx.)		
Absorption Coefficient	12,000,000 Lbs. (approx.)		
Emission Coefficient	12,000,000 Lbs. (approx.)		
Reflection Coefficient	12,000,000 Lbs. (approx.)		
Refraction Coefficient	12,000,000 Lbs. (approx.)		
Diffraction Coefficient	12,000,000 Lbs. (approx.)		
Interference Coefficient	12,000,000 Lbs. (approx.)		
Dispersion Coefficient	12,000,000 Lbs. (approx.)		
Birefringence Coefficient	12,000,000 Lbs. (approx.)		
Optical Activity Coefficient	12,000,000 Lbs. (approx.)		
Scattering Coefficient	12,000,000 Lbs. (approx.)		
Absorption Coefficient	12,000,000 Lbs. (approx.)		
Emission Coefficient	12,000,000 Lbs. (approx.)		
Reflection Coefficient	12,000,000 Lbs. (approx.)		
Refraction Coefficient	12,000,000 Lbs. (approx.)		
Diffraction Coefficient	12,000,000 Lbs. (approx.)		
Interference Coefficient	12,000,000 Lbs. (approx.)		
Dispersion Coefficient	12,000,000 Lbs. (approx.)		
Birefringence Coefficient	12,000,000 Lbs. (approx.)		
Optical Activity Coefficient	12,000,000 Lbs. (approx.)		

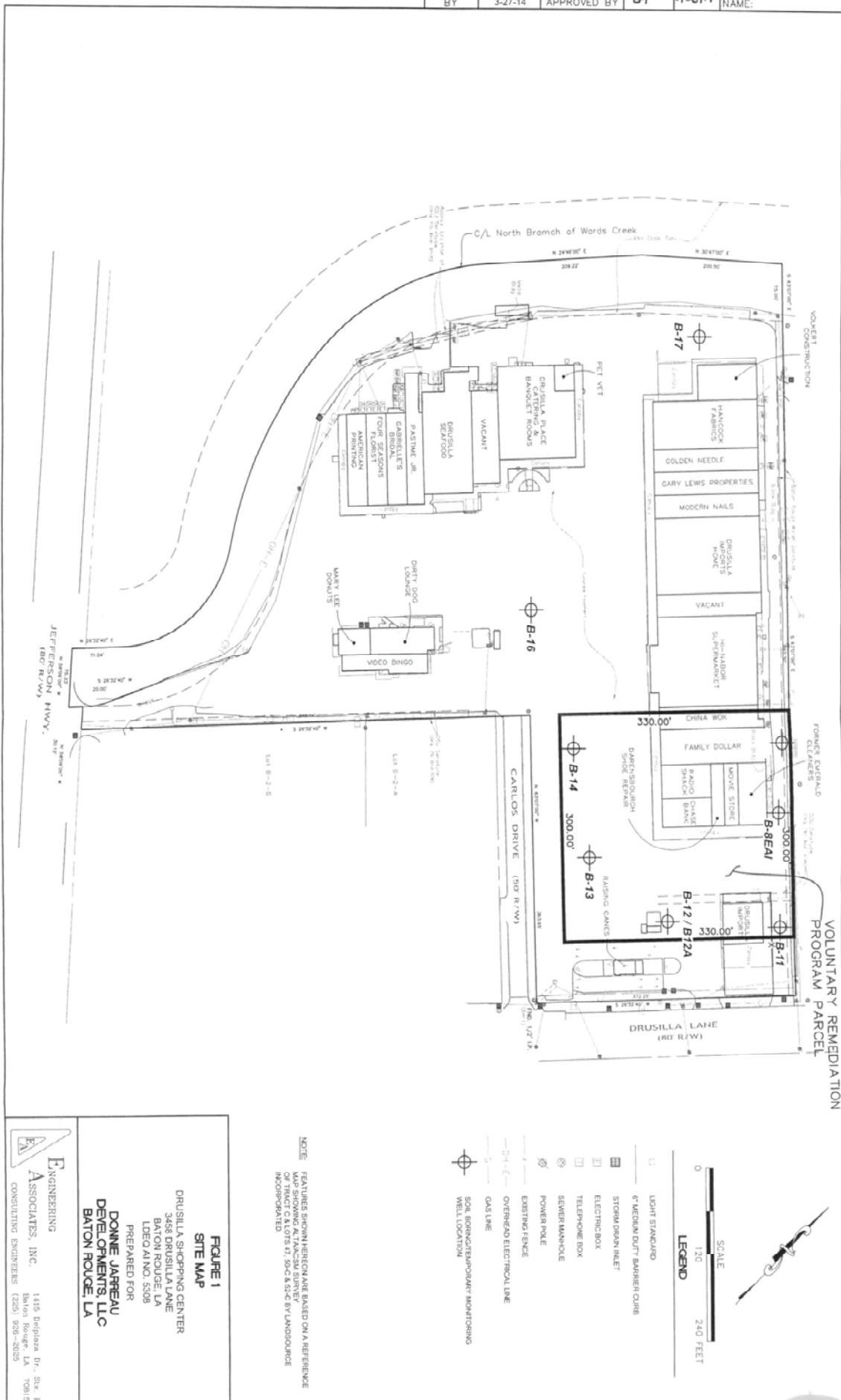
EXHIBIT MAP
VOLUNTARY REMEDIATION PROGRAM PARCEL
(DRUSILLA SHOPPING CENTER)
BEING A PORTION OF SINGULARITY PLACE
LOCATED IN SECTIONS 39 & 100, T-7-S, R-1-E,
GREENSBURG LAND DISTRICT,
EAST BATON ROUGE PARISH, LOUISIANA
DONNIE JARREAU DEVELOPMENTS, L.L.C.



GENERAL NOTES:
1. No attempt was made by Landsource, Inc. to verify the accuracy of the information shown on this map. The user assumes all responsibility for the use of the information shown on this map. The user assumes all responsibility for the use of the information shown on this map.

LEGAL DESCRIPTION:
A certain portion of land, (100,000 Sq. Ft.) (2.274 Ac.) located in Section 100, Township 7 South, Range 1 East, Southeast Land District, East Baton Rouge Parish, Louisiana and primary being more particularly described as follows:
Commence at the intersection of the Westerly Right of Way of Drusilla Lane and the Northerly Right of Way of Maple Creek; a distance of 177.25 feet to a point and corner, thence, bearing S 89°53'00" W, N 89°53'00" E a distance of 800.00 feet to the Point of Beginning.
Thence, S 89°53'00" W a distance of 330.00 feet to a point and corner, thence, N 89°53'00" E a distance of 330.00 feet to a point and corner, thence, N 26°53'00" E a distance of 330.00 feet to the Point of Beginning.

DRAWN BY	DRT	CHECKED BY	3/18/14	FILE NAME:
	3-27-14	APPROVED BY	ST	



NOTE: FEATURES SHOWN HEREIN ARE BASED ON A REFERENCE MAP DATED 1998, WHICH MAY BE DIFFERENT FROM THE ACTUAL SITUATION. THE USER OF THIS MAP ASSUMES ALL RESPONSIBILITY FOR ANY INACCURACIES OR OMISSIONS.

FIGURE 1
SITE MAP

DRUSILLA SHOPPING CENTER
3456 DRUSILLA LANE
BATON ROUGE, LA
LDCO #1 NO. 5508
PREPARED FOR
DONNE JARREAU
DEVELOPMENTS, LLC
BATON ROUGE, LA

ENGINEERING
ASSOCIATES, INC.
1415 Delphina Dr., Ste. B
Baton Rouge, LA 70815
CONSULTING ENGINEERS (225) 929-5050

RECEIPT OF CHECK

AI Number	5567
Company Name	Engineering Associates, Inc.
Site Name/	Drusilla Shopping Center
Phone	
Date Received	3/31/14
Date on Check	3/27/14
Check Number	20076
Amount Received	\$500.00

Check one Media:

- | | | |
|--|---|---|
| <input type="checkbox"/> Accident Prevention | <input type="checkbox"/> Ground Water | <input type="checkbox"/> Radiation |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Hazardous Waste | <input type="checkbox"/> Solid Waste |
| <input type="checkbox"/> Air Toxics | <input checked="" type="checkbox"/> Inactive and
Abandoned Sites | <input type="checkbox"/> Underground
Storage Tanks |
| <input type="checkbox"/> Asbestos and Lead | <input type="checkbox"/> Multi-Media | <input type="checkbox"/> Water Resources |

Comments:

VRP application fee

Initials:

vrt

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
FIELD INTERVIEW FORM**

AGENCY INTEREST#: 5547 INSPECTION DATE: 3/14/17 TIME OF ARRIVAL: 9:00 Am
 ALTERNATE ID#: _____ DEPARTURE DATE: 3/14/17 TIME OF DEPARTURE: 10:15 Am
 FACILITY NAME: (ID Type/Number) Drusilla Village, L.C.C. PH #: 225-753-3573
 LOCATION: 3458 Drusilla Lane Baton Rouge
 RECEIVING STREAM (BASIN/SUBSEGMENT): _____ PARISH NAME: EBR
 MAILING ADDRESS: 10604 Coursey Blvd. Baton Rouge LA 70816
 (Street/P.O. Box) (City) (State) (ZIP)
 FACILITY REPRESENTATIVE: Donnie Jarreau TITLE: _____
 FACILITY REPRESENTATIVE PHONE NUMBER: Same as above
 NAME, TITLE, ADDRESS and TELEPHONE of RESPONSIBLE OFFICIAL (if different from above): _____

INSPECTION TYPE: General Rem. PROGRAM INVOLVED: AIR WASTE WATER OTHER Remediation
 INSPECTOR'S OBSERVATIONS: (e.g. AREAS AND EQUIPMENT INSPECTED, PROBLEMS, DEFICIENCIES, REMARKS, VERBAL COMMITMENTS FROM FACILITY REPRESENTATIVES)

This site visit was to observe the remediation activities
(soil excavation) to address soil contamination (to 3 feet below
surface) in the boring B-SEAL area near the former dry
cleaner building. The excavated soil is being placed in
clump truck for disposal at Woodside Landfill. Confirmatory
soil samples will be collected and results received
before backfilling with clean material will occur. Confirm-
atory samples will be analyzed for VOCs.

AREAS OF CONCERN:

REGULATION	EXPLANATION	CORRECTED?
_____	_____	YES NO
_____	_____	YES NO

PHOTOS TAKEN: ☐ YES ☒ NO SAMPLES TAKEN: ☐ YES ☒ NO (Attach Chain-of-custody)

RECEIVED BY: SIGNATURE: SB

PRINT NAME: Steve Buensham

(NOTE: SIGNATURE DOES NOT NECESSARILY INDICATE AGREEMENT WITH INSPECTOR'S STATED OBSERVATIONS)

INSPECTOR(S): Celeste Bannear CROSS REFERENCE: _____

ATTACHMENTS: _____

REVIEWER: _____

NOTE: The Information contained on this form reflects only the preliminary observations of the inspector(s). It should not be interpreted as a final determination by the Department of Environmental Quality or any of its officers or personnel as to any matter, including, but not limited to, a determination of compliance or lack thereof by the facility operator with any requirements of statutes regulations or permits. Each day of non-compliance constitutes a separate violation of the regulations and/or the Louisiana Environmental Quality Act.



ENGINEERING ASSOCIATES, INC.

CONSULTING ENGINEERS

RECEIVED
DEQ-OEA

MAY 01 2017

Project No. 13109

April 25, 2017

Mr. Percy V. Harris, Administrator
Remediation Division
P.O. Box 4314
Baton Rouge, LA 70821-4314

Remediation Division

RE: Summary of Remediation Activities
Drusilla Shopping Center
3458 Drusilla Lane
Baton Rouge, LA (East Baton Rouge Parish)
AI No. 5567

Remediation Division	
Manager:	
Team Leader:	Bornmecke
AI #:	5567
Log#	4/2017-2253
TEMPO Task #:	
<input type="checkbox"/> Desk Copy File Room:	IAS

Dear Mr. Harris:

Submitted herewith please find three copies of a summary of remediation activities recently performed at the captioned site. This submittal is on behalf of our client, Drusilla Village, L.L.C.

A Voluntary Remedial Action Plan for the captioned site was prepared by our office in April, 2015, as revised in July, 2015. The Plan was approved for implementation through correspondence from the Louisiana Department of Environmental Quality (LDEQ) dated May 31, 2016. Proposed remediation activities included removal and disposal of a relatively small quantity of impacted soil from the site. Implementation of remediation activities was delayed for several months to accommodate several new tenants in Drusilla Shopping Center and in order to coordinate soil excavation activities with planned roadway replacement activities.

The scope of the remediation activities performed at the site, as approved in the July, 2015 Voluntary Remedial Action Plan, included excavation and disposal of soils from a 10' x 10' area to a depth of three feet. The area requiring excavation was located in the vicinity of previously installed boring B-8EAI. The boring and excavation area are shown on the attached Figure 4, as included in the Voluntary Remedial Action Plan. The constituent of concern within the impacted area was limited to trichloroethene.

CIVIL • ENVIRONMENTAL • LAND SURVEYING

Mr. Harris

2

April 25, 2017

Soil excavation and disposal activities were performed on March 14, 2017. The asphalt pavement over the proposed excavation area was removed from a 12' x 12' area centered over formerly installed boring B-8EAI. Excavated soils beneath the pavement were placed in a dump truck as they were excavated. The 12' x 12' area was excavated to a depth of approximately 3.5 feet. The area of excavation was enlarged slightly (relative to an approved area of 10' x 10') in an attempt to ensure that all impacted soils were removed during the excavation.

Upon completion of excavation activities, soil samples were collected from the bottom of the excavation and from all four sidewalls of the excavation. A photoionization detector (PID) was used to field screen the samples. PID readings ranged from 5.6 ppm in the "Confirmatory Bottom" sample to 38.9 ppm in the "Confirmatory West" sample.

Confirmatory soil samples collected for laboratory analysis included a sample from the bottom center of the excavation (Confirmatory Bottom) and samples from all four sidewalls of the excavation (Confirmatory North, East, South and West). All samples were collected and preserved in accordance with EPA Method 5035 and in accordance with the Sampling and Analysis Plan (SAP) and the Quality Assurance/Quality Control (QA/QC) plan prepared for the site. The health and safety procedures included in the Health and Safety Plan prepared for the site were also adhered to.

QA/QC samples were submitted to the laboratory in accordance with the QA/QC plan. The QA/QC samples included a duplicate sample (Confirmatory Dup Bottom), a trip blank, a field blank, and an MS/MSD sample. All samples were collected in laboratory supplied containers, placed on ice, and submitted to SGS Acutest Laboratories under chain-of-custody documentation. The samples were analyzed for Volatile Organic Compounds (VOCs) by EPA Method 8260 B.

Laboratory analysis results are provided on the attached laboratory analysis report (Attachment A) and are summarized on the attached Table 1. Only VOC constituents that exhibited constituent concentrations above laboratory detection limits are listed on Table 1.

As shown on Table 1, no constituents in the confirmatory soil samples exceeded Limiting Industrial Soil Remedial Standards (Soil RS) as previously established for the site. The RECAP Table 1 Soil Screening Standards (Soil SS) for tetrachloroethylene, trichloroethylene, and vinyl chloride were exceeded in several of the confirmatory soil samples. As such, filing of a Conveyance Notice documenting the exceedances will be required.



Mr. Harris

2

April 25, 2017

A total of 23.17 tons of soil were excavated from the site. The soil was transported to Waste Management's Woodside Landfill, Walker, Louisiana for disposal. The soils were transported by Kent Environmental, Port Allen, LA. A copy of the associated waste disposal manifest has been provided in Attachment B.

Upon receipt of acceptable laboratory analysis results, the excavation area was backfilled with clean, imported material. The area over the excavation was then paved with concrete. Adjacent areas unrelated to site remediation activities were also paved with concrete. Photographs of the excavation area taken during performance of excavation activities and following replacement of the pavement surface have been provided in Attachment C.

We appreciate your assistance in this matter. Should you have any questions or require additional information, do not hesitate to call.

Sincerely,

ENGINEERING ASSOCIATES, INC.



Stephen J. Burnham, P.E.
President

C w/encl Mr. Donnie Jarreau, Drusilla Village, L.L.C.
 Mr. Alex Knight, Drusilla Village, L.L.C.
 Ms. Celeste Bonneau, Louisiana Department of Environmental Quality



Gilmar Marine Services, Inc.
Preliminary Assessment Report
Baton Rouge, East Baton Rouge Parish, Louisiana

October 2007

Prepared for:
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202

USACE Contract: DACW56-02-G-1001
USACE Task Order No.: 0008
E & E Project No.: 001562.CU08.02.05

Prepared by:
Ecology & Environment, Inc.
Dallas, Texas

**GILMAR MARINE SERVICES, INC.
PRELIMINARY ASSESSMENT REPORT
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA**

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ACRONYM LIST

<u>Acronym</u>	<u>Definition</u>
AI	Agency Identification
BGS	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
ft³/sec	cubic feet per second
E & E	Ecology and Environment, Inc.
ECOS	Environmental Conservation Online System
EDMS	Electronic Document Management System
EPA	United States Environmental Protection Agency
GMS	Gilmar Marine Services, Inc.
LDEQ	Louisiana Department of Environmental Quality
LDNR	Louisiana Department of Natural Resources
LDOTD	Louisiana Department of Transportation and Development
LOSCO	Louisiana Oil Spill Coordinators Office
MRT	Mississippi River Trail
MSL	mean sea level
NRCS	National Resource Conservation Service
NWI	National Wetland Inventory
n.d.	no date
NPL	National Priorities List
NPDES	National Pollutant Discharge Elimination System
NWUDB	National Water Use Database
PA	Preliminary Assessment
ppm	parts per million
WCS	Water Control Section
WSS	Web Soil Survey
USACE	United States Army Corp of Engineers
USCB	United States Census Bureau
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

**GILMAR MARINE SERVICES, INC.
PRELIMINARY ASSESSMENT REPORT
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA**

1. INTRODUCTION

Ecology and Environment, Inc. (E & E) was tasked by the United States Army Corp of Engineers (USACE) Tulsa District to conduct a Preliminary Assessment (PA) of the former Gilmar Marine Services, Inc. (GMS), barge cleaning and servicing facility (Site), located in East Baton Rouge Parish, Louisiana for the U.S. Environmental Protection Agency (EPA) Region 6 under Contract No. DACW56-02-G-1001.

The specific goals for the GMS Site PA, identified by the EPA, are to:

- Determine the potential threat to public health or the environment posed by the site;
- Determine the potential for a release of hazardous constituents into the environment; and
- Determine the potential for placement of the site on the National Priorities List (NPL).

Completion of the PA included reviewing available site information; collecting information on potential receptors within the target distance limits; determining regional geology, groundwater, surface water, and population characteristics; and conducting a site drive by. This document includes a discussion of site background information (Section 2), a discussion of migration/exposure pathways and potential receptors for groundwater (Section 3), surface water (Section 4), soil and air (Section 5), Summary (Section 6), and a list of references (Section 7).

2. SITE BACKGROUND

2.1 SITE LOCATION

Site Name: Gilmar Marine Services (GMS)

Agency Interest (AI) Number(s): AI 8003

Additional Identification: National Pollution Discharge Elimination System (NPDES)
Permit No. LA0045705

Location: 1500 River Road,
Baton Rouge, Louisiana, 70802

Latitude: 30° 25' 59" North (N)

Longitude: 91° 11' 34" West (W)

Legal Description: Batture Lots T, D, C and R, subdivision of the A. Strenzke and E. Witting, subdivision Magnolia, Frontage 874.50 feet on the east side of the Mississippi River, North Line of 493.53 feet, South Line of 436.03 feet, located in Section 052, Township 07 South, Range 12 East, of East Baton Rouge Parish, Louisiana.

Site Owner: W. W. Minerals, Inc.

Site Contact: James Ervin, President
WW Minerals, Inc.
8126 One Calais Ave., Suite 1C
Baton Rouge, LA 70809

2.2 SITE DESCRIPTION/OWNERSHIP

The Site is located near downtown Baton Rouge, East Baton Rouge Parish, Louisiana (Appendix 1). The Site is situated in the batture (the elevated river bed between the Mississippi River Levee system and the river itself). The Site is bordered to the north and south by batture, to the west by the Mississippi River, and to the east by the Mississippi River Levee, River Road, followed by light industrial and commercial property and residential areas (Appendix 2). The Site operated from 1974 to the late-1980s by GMS. The property upon which the Site was located is currently owned and maintained by W. W. Minerals, Inc.

2.3 SITE OPERATIONS AND WASTE CHARACTERISTICS

A review of the documents for AI 8003 filed in the Louisiana Department of Environmental Quality (LDEQ) Electronic Document Management System (EDMS) indicated the GMS operated as a facility for the removal of remaining cargo, cleaning, repair, and/or certification of barges from 1975 to the late 1980's. A table of the documents available for AI 8003 is included in Appendix 7. According to the GMS NPDES permit application, barges were washed with water from the Mississippi River or from Baton Rouge Water Works for cleaning operations (Document 15855341, LDEQ EDMS, no date [n.d.]). Waste wash-fluids were removed from barges that contained residual petroleum products and were transferred to wash receiving tank(s). Fluids from the receiving tank were transferred to an oil-water separator. Separated oil was transferred to storage tank(s) for subsequent disposal. The remaining wash water was transferred to check tanks to ensure oil and grease concentrations were below the stated maximum of 15 parts per million (ppm) prior to discharge to the Mississippi River. The quality check consisted of a visual inspection for an oily sheen and testing the pH to ensure it was between 7.8 and 8.2. The pH was adjusted prior to discharge if necessary. Waste wash fluids from barges containing residual products other than petroleum products, specifically methanol, styrene, toluene, benzene, ethylene dichloride, and/or carbon tetrachloride, were supposedly stripped

directly to storage tanks for subsequent disposal (Document 21720825, LDEQ EDMS, n.d.). The number and size of tanks at the facility, as determined from GMS submitted permits, varied. In their January 1975 NPDES permit, GMS indicated there would be two 12,000 gallon vacuum tanks, one 24,000 gallon wash receiver tank, one 9,000 gallon oil/water separator and four 12,000 gallon storage tanks (Document 15855357, LDEQ EDMS, n.d.). In their Air Emissions permit, approved in February 1975, GMS identified ten storage tanks of unknown size in addition to the oil/water separator. The figures identified the ten tanks as: styrene; toluene/benzene; oils; gas; kerosene/jet fuel; coal tar solutions; ethylene dichloride; carbon tet (tetrachloride); methanol; and slop tank. The Figures or the permit indicated all fluids went through the separator, then through a manifold to the appropriate tank (Document 21720825, LDEQ EDMS, n.d.). Since the facility was located within in the batture, operations at the facility were suspended when/if the Mississippi River stage reached an elevation of 38.5 feet above mean sea level (MSL). The tanks and separation equipment were located in a 120-foot by 220-foot secondary containment area consisting of a 1-foot deep earthen depression. The grade surrounding the secondary containment was at 39 feet above MSL. Between 1997 and 2007, the Mississippi River has flooded the secondary containment and the surrounding area of the batture at least six times, usually 2 to 3 weeks per event (USACE WCS, n.d.).

2.4 PREVIOUS INVESTIGATIONS AND REGULATORY HISTORY

In August of 1975, the Louisiana Stream Control Commission granted a treated waste water discharge permit to GMS, provided these wastes were only associated with oil-barge cleaning operations. All other wastes streams were to be disposed of offsite. (Document 15855129, LDEQ EDMS, n.d.).

In December of 1980, the Louisiana Department of Natural Resources (LDNR) Office of Environmental Affairs issued a Notice of Violation and Compliance Order (Document 15855030, LDEQ EDMS, n.d.). The order stated that on December 18, 1980, subsequent to complaints of strong and objectionable odors in the area, LDNR personnel conducted an inspection of the GMS facility. During the inspection LDNR personnel observed:

- Oil and other chemicals discharging to a drain that flows directly to the Mississippi River;
- Oil and chemical wastes had overflowed directly onto the batture, which would drain into Mississippi River as an unpermitted discharge;
- Evidence on the barge decks indicated oil and chemical wastes had discharged directly into the Mississippi River;
- The holds of the work barge were used to store waste water when the USCG had previously, specifically designated that barge unsuitable for this purpose due to prior collisions;
- Evidence of transfer of ethyl acrylate to storage tanks when GMS facility was never granted a permit to store hazardous materials;
- The GMS waste water treatment system was contaminated by various organic compounds; and
- GMS had constructed and operated equipment, which included but was not limited to steam boilers, for which no air emission permit had been granted.

Subsequent to these findings, the GMS was ordered to:

- Immediately cease all discharge of contaminated wastewater, oil, and chemicals to surface drainage and the Mississippi River, specifically including the discharge location identified in the State Wastewater Discharge Authorization and NPDES Permit No. LA0045705 and all other areas where discharges may occur;
- Immediately initiate clean-up actions to remove and properly dispose of contaminated soils on the batture around the storage tanks and wastewater treatment facility by January 16, 1981 to prevent future contaminated runoff from occurring;
- Install blind flanges on all valves and hoses on the barges and catch basins or sumps on routine connect/disconnect points to contain leaks or spills;
- Repair/install combing and ensure drainage to a sump and collection system to contain all spills and leaks;

- The wastewater treatment system must be cleaned to remove all contaminating chemicals, chemical analysis must be performed to demonstrate removal, and system must be inspected by LDNR Division of Water Control personnel before authorization for future discharges will be granted or considered;
- The Air Quality Division granted a variance to allow GMS to continue operation upon the condition that clean-up procedures have first priority on the site, until January 22, 1981, at which time a revised air emission permit will be considered by the Environmental Control Commission.

On April 7, 1981, GMS submitted an air emissions permit that listed emissions from two boilers and carbon absorber outlet on barges, vent on oil/water separator, and tank vent through carbon filter drum (Document 21720703, LDEQ EDMS, n.d.).

On January 27, 1983, LDNR conducted an inspection to ensure the facility was not discharging per the requirements of their cease and desist order. Their inspection noted NPDES Permit No. LA0045705 was currently cancelled. The inspectors noted the facility was down but would resume operations next week. They also noted that waste water was routed to six tanks (Document 15855249, LDEQ EDMS, n.d.).

On January 4, 1984, LDNR conducted an inspection of the GMS the facility. They noted barges present, but there were no personnel or pumps on barge. Four tanks had contents. They noted the secondary containment seemed inadequate, but did not note any ground contamination (Document 15855248, LDEQ EDMS, n.d.).

In April of 1988, the Louisiana Department of Environmental Quality (LDEQ) Office of Water Resources received information from aerial surveillance that indicated potential leachate was entering the Mississippi River from its east bank, downstream of Interstate 10. A May 10, 1988, inspection located several leachate streams approximately 100 yards from the GMS tanks, but the LDEQ inspector noted these streams are normal as the Mississippi River recedes and ponded water drains through the subsoil. No sheen or volatile emissions were noted. LDEQ stated their intention

to collect samples for analysis of volatile organic compounds if the leachate stream continued, but no such sampling or analysis was noted. The LDEQ inspector noted two “XL” Railroad (RR) car tanks (one $\frac{3}{4}$ full, one $\frac{1}{3}$ full), four “med” RR-car tanks (one $\frac{3}{4}$ full and rest less full) and one smaller tank (contents not checked). The LDEQ inspector also noted there were no signs of leakage or residual contamination on the ground. Since the site appeared to be inactive, the LDEQ inspector recommended the site be turned over to the LDEQ Inactive and Abandoned Sites program (Document 15855037, LDEQ EDMS, n.d.).

In May of 1995, LDEQ conducted an inspection and noted the tanks and other facility components were not present. A worker at Home Oil (facility located across the street from GMS) stated the GMS facility has not operated for ten years. (Document 21721026, LDEQ EDMS, n.d.).

W. W. Minerals, Inc., purchased the property upon which the GMS facility was located in November of 1984 (Appendix 9). James O. Ervin, president of W. W. Minerals, Inc., stated they have never operated a facility on this property, but they allow a neighboring facility to anchor barges along the property. W. W. Minerals, Inc., hired an environmental contractor to dispose of the contents of the tanks and to scrap the tanks around 1990. Mr. Ervin did not observe and was not aware of any residual contamination stemming from GMS operations, but he has seen local dumping of old white goods and stumps on the property (Appendix 10).

3. GROUNDWATER MIGRATION PATHWAY

3.1 GEOLOGY AND HYDROGEOLOGY

The Site is located in a seasonally flooded palustrine wetland, as defined by the National Wetland Inventory (NWI), that is forested by broad leaf deciduous - woody angiosperms closer to the levee and grades to areas of scrub-shrub, dominated by woody vegetation less than 20 feet tall, and other persistent emergent (erect, rooted, herbaceous hydrophytes) vegetation until it reaches the lower perennial riverine system of the Mississippi River (USFWS NWI, n.d.).

The soils underlying the site consist of: the Convent series soils (35%), which are typified by a silty alluvium; and the Robinsonville series soils (55%), which are typified by a fine sandy, loamy alluvium. These soils were formed as natural levees of the Mississippi River and persist for more than 80 inches before more consolidated sediments are encountered. They form convex slopes and have a moderate to very high capacity to transmit water (0.6 to 6.0 inches per hour) and other surface fluids (USDA NRCS WSS, n.d.). The site is bounded to the east by the Mississippi River levee, which is reworked and contains manually deposited material. These soils are a worked mix of low-permeability, low-shear, compacted soils and additives. Underlying these soils are additional Holocene natural levee deposits characterized by gray and brown silt, silty clay, some very fine sand, and the Prairie Terrace -Loess Pleistocene deposits characterized by tan to reddish brown massive silt with some clay and minor amounts of very fine sand (USGS, 1998).

The Baton Rouge fault, a listric normal fault and part of a regional east-west trending fault zone, traverses east-west immediately south of the site. The Baton Rouge fault is recognized as a major barrier to groundwater flow. Freshwater deep aquifers, primarily the “1500-foot” and “1700-foot” sands of the Southern Hills aquifer system, north of the fault serve most of the area’s the municipal water supply and are in juxtaposition with the Mississippi River Alluvial aquifer system and localized shallow sand aquifers that are used south of the GMS site and the Baton Rouge Fault, (Tomaszewski, 1996).

The Southern Hills aquifer system is composed of Pleistocene aged alluvial and terrace deposits. The sedimentary sequences that make up the aquifer system are subdivided into several aquifer units separated by confining beds. Northward within southeast Louisiana, fewer units are recognized because some younger units pinch out and some clay layers present to the south disappear. Where clay layers are discontinuous or disappear, aquifer units coalesce. The aquifers are moderately well, to well sorted, and consist of fine sand near the top, grading to coarse sand and gravel in lower parts and are generally confined by silt and clay layers. The deposits that constitute the individual aquifers are not readily differentiated at the surface and act as one hydraulic system that can be subdivided into several hydrologic zones in the subsurface. The Mississippi River Valley is entrenched into the Pleistocene strata in the western part of the system, resulting in water movement between the river, the shallow sands, and the Pleistocene aquifers (Buono, 1983). Recharge occurs primarily by the direct infiltration of rainfall in interstream, upland outcrop areas, by the movement of water between aquifers, and between the aquifers and the Mississippi River. The hydraulic conductivity varies between 10-200 feet/day. The maximum depths of occurrence of freshwater in the Southern Hills range from 350 feet above sea level, to 1,100 feet below sea level. The range of thickness of the fresh water interval in the Southern Hills is 50 to 1,100 feet (Boniol, 1989).

The Mississippi River alluvium consists of fining upward sequences of gravel, sand, silt, and clay. The aquifer is poorly to moderately well sorted, with fine-grained to medium-grained sand near the top, grading to coarse sand and gravel in the lower portions. It is confined by layers of silt and clay of varying thicknesses and extent (Smoot, 1989). The Mississippi River Alluvial aquifer consists of two distinct components; valley trains and meander-belt deposits which are closely related hydrologically. The Mississippi River Alluvial aquifer is hydraulically connected with the Mississippi River and its major streams. Recharge is accomplished by direct infiltration of rainfall in the river valley, lateral and upward movement of water from adjacent and underlying aquifers, and overbank stream flooding. The amount of recharge from rainfall depends on the thickness and permeability of the silt and clay layers overlying it. Water levels fluctuate seasonally in response to precipitation trends and river stages. Water levels are generally within 30 to 40 feet of the land

surface and movement is downgradient and toward rivers and streams. Natural discharge occurs by seepage of water into the Mississippi River and its streams, but some water moves into the aquifer when stream stages are above aquifer water levels. The hydraulic conductivity varies between 10-530 feet per day. The maximum depths of occurrence of freshwater in the Mississippi River Alluvial range from 20 feet below sea level, to 500 feet below sea level. The range of thickness of the fresh water interval in the Mississippi River Alluvial is 50 to 500 feet (Boniol, 1989).

3.2 GROUNDWATER RECEPTORS

The Southern Hills aquifer system is the primary aquifer supplying public water for the Baton Rouge area. Most East Baton Rouge Parish and West Baton Rouge Parish withdrawals are from deep aquifers such as the “1500-foot” and “1700-foot” sands which are pumped for 20.97 million gallons per day for public supply. South of the GMS Site and the Baton Rouge Fault, the Mississippi River Alluvial aquifer system and localized shallow sand aquifers are used. Public wells supply 99.3% of the population in East Baton Rouge Parish and 97.8% of the population in West Baton Rouge Parish, with the remainder of water for public consumption coming from domestic water wells. Surface water is not used for public consumption in either parish (USGS NWUDB, n.d.).

Forty (40) public supply and 17 domestic drinking water wells have been identified within a 4-mile radius of the site. In addition to these wells, there are 33 industrial use wells, including two power generating and three rig supply wells, seven irrigation wells, two stock wells, and 46 recovery wells within a 4-mile radius of the site (Appendix 3). The nearest well, located 0.23 mile southeast of the site, is a domestic well that withdraws from the shallow sands of the Baton Rouge area at 280 foot below ground surface (BGS). It is not known if this well is still in use. The next closest wells are two public supply wells, located 1.1 miles to the north, which withdraw from the Southern Hills aquifer at a depth of over 2,200 feet BGS.

3.3 GROUND WATER SUMMARY

The permeable soils below the site would allow contaminants, if present, to flow to local ground water and the convex slopes tend to encourage leaching towards the Mississippi River. Between 1997 and 2007, the Mississippi River has flooded the secondary containment and the surrounding area of the batture at least six times, usually 2 to 3 weeks per event (USACE WCS, n.d.). This flooding would tend to saturate and then flush the soils below the site. Since the site is adjacent to the river and is bounded by the Mississippi River Levee to the east, near surface leachates flow into the Mississippi River. With the exception of the one domestic well 0.23 mile from the site, the potential of groundwater drinking source contamination is low, and based on public drinking water distribution, this well may no be longer used.

4. SURFACE WATER PATHWAY

4.1 HYDROLOGIC SETTING

Drainage from the facility flows west for 195 feet through a NWI defined wetland to the Mississippi River, though this distance varies with the stage of the river. In 2005, the flow rates of the Mississippi River varied between a maximum high of 1,170,000 cubic feet per second (ft³/sec) in February to a low of 166,000 ft³/sec in August (USACE WCS, n.d.).

4.2 SURFACE WATER RECEPTORS

Surface water supplies no water for public consumption in either East Baton Rouge Parish or West Baton Rouge Parish, but did account for 22.59% of industrial use, 7.14% of livestock consumption in East Baton Rouge Parish and for 100% of aquaculture use, 33.33% of livestock consumption in West Baton Rouge Parish (USGS NWUDB, n.d.). The nearest surface water intake, the Dow Chemical Surface Water Intake, Public Water Supply ID: 2047003, is located 19.3 miles downstream of the site (Louisiana Oil Spill Coordinators Office [LOSCO], 1999).

The Mississippi River is primarily used for transportation in the vicinity of the Site, though some recreational fishing may occur along its banks. The river currents are typically too swift for recreational watercraft. As previously stated, the site is located in a seasonally flooded palustrine wetland, as defined by the NWI, within the batture of the Mississippi River. There are 10,646 acres of NWI defined wetlands, including the permanently flooded riverine unconsolidated bottom of the Mississippi River, within 15 miles downstream of the site (USFWS NWI, n.d.). Threatened and endangered species potentially located within East Baton Rouge and West Baton Rouge Parishes include the: Bald Eagle (*Haliaeetus leucocephalus*); West Indian Manatee (*Trichechus manatus*); Inflated Heelsplitter Mussel (*Potamilus inflatus*); Gulf Sturgeon (*Acipenser oxyrinchus desotoi*); and Pallid sturgeon (*Scaphirhynchus albus*). There are no

identified critical species habitats located within a 20-mile radius of the site (USFWS Environmental Conservation Online System [ECOS], n.d.).

4.3 SURFACE WATER SUMMARY

The NWI wetlands in and around the site show no signs of stressed vegetation. A LDEQ investigation of several leachate streams approximately 100 yards from the GMS tanks in 1998 did not detect any volatile organic emissions or sheen in the streams and noted these streams are normal as the Mississippi River recedes and ponded water drains through the subsoil (Document 15855037, LDEQ EDMS, n.d.). There are no drinking water intakes within 15 miles downstream of the site. There are numerous wetlands along the Mississippi River, and five federally designated threatened and endangered species are found in East Baton Rouge Parish and West Baton Rouge Parish. Primary targets include the fishery in the Mississippi River, the wetlands associated with the Mississippi River, and the habitats of threatened and endangered species in East Baton Rouge Parish and West Baton Rouge Parish, which may also be associated with the Mississippi River.

5. SOIL EXPOSURE AND AIR PATHWAYS

5.1 PHYSICAL CONDITIONS

As previously noted, the documented air emission point sources at the GMS facility, specifically the two boilers and carbon absorber outlet on barges, the vents on the oil/water separator, vacuum tanks and storage tanks, do not appear to be present at the facility. Odor complaints were made during GMS facility operations between 1980 and 1983, but there have been no documented complaints or investigations involving the site since that time. The current property owner had the tanks and equipment, along with any residual contents, disposed of in 1990. Aerial photographs (Appendix 2) and photographs taken at the perimeter of the facility (Appendix 6) confirm that the tanks and larger components have been removed and the reported former location of the tanks and secondary containment was overgrown with woody vegetation. Sampling and analysis would be required to determine the presence of residual subsurface contamination, but there is no stressed vegetation, discoloration or sheen on site waters, or other environmental indicators that would indicate the presence of significant pollution point sources.

5.2 SOIL AND AIR RECEPTORS

The 2006 population estimate from the United States Census Bureau (USCB) is 411,417 for East Baton Rouge Parish and 22,463 for West Baton Rouge Parish. The population within a four-mile radius of the facility, as determined from the USCB 2000 (USCB, n.d.), is presented in Table 5-1.

Table 5-1

Population and Wetlands within the Four-Mile Radius of Facility		
Distance Ring (Miles)	Population¹	Wetlands Acreage²
On Site	0	7.1
0.00 – 0.25	0	80.2
0.25 - 0.50	777	198.6
0.50-1.0	5,565	451.7
1.0 - 2.0	23,268	1213.2
2.0 - 3.0	28,052	1,655.3
3.0 - 4.0	32,963	2,297.0
Total 0.0-4.0	90,625	5,963.1

1) USCB 2000 Census as determined via Landview 5

2) Includes riverine, permanently flooded wetlands

Source: Ecology & Environment, inc. 2007

The Mississippi River Trail (MRT) public bike path is present atop the levee along the east boundary of the property. There is no fence or other barriers to public access. Commercial properties, specifically Home Oil Company, the Baton Rouge Warehouse (owned by Garig Warehouse, Inc.), and a parking lot are located approximately 600 feet east of the site. An East Baton Rouge Parish Housing Authority Apartment complex is located approximately 1,400 feet northeast of the site. A hotel and shopping center are located approximately 1,100 feet east of the site. The nearest residences are located approximately 1,400 feet southeast of the site. The nearest school, the McKinley Middle Magnet School, is located 0.85 mile east of the site. The site has occasionally been used by locals for illegal dumping of non-hazardous solid waste and recreational fishing from the banks of the Mississippi River occurs in this area.

5.3 SOIL EXPOSURE AND AIR PATHWAY SUMMARY

With the exception of dirt and shell/limestone covered access roads, the site is heavily vegetated. The vegetated cover would limit the potential for release of particulate material to the air, but would not restrict the release of subsurface gasses, if present. During the perimeter survey, no odors were detected and there was no indication of blowing dust or soil.

6. CONCLUSIONS

The GMS site is situated in a light commercial/residential neighborhood in Baton Rouge, East Baton Rouge Parish, Louisiana. GMS operated a barge cleaning operation from 1974 to 1984. Waste wash-fluids were transferred to receiving tank(s). Oily fluids were transferred to an oil-water separator and water was discharged to the Mississippi River under NPDES Permit No. LA0045705. Oil and waste wash fluids containing methanol, styrene, toluene, benzene, ethylene dichloride, and/or carbon tetrachloride were supposedly transferred to storage tanks for subsequent disposal. In December of 1980, LDNR Office of Environmental Affairs issued a violation, citing GMS for contamination of the separator by non-oily wastes and releases of wastes to the batture and Mississippi River. NPDES Permit No. LA0045705 was cancelled and never reinstated. LDNR/LDEQ inspections conducted in 1983, 1984, and 1988 noted contents in the tanks with no leakage or ground contamination. The primary pollution point sources, the tanks and their contents, were removed 1990.

The presence of any residual subsurface contamination and the status of the drain used in conjunction with the NPDES permit are unknown. The lack of stressed vegetation on the site and the lack of sheen and/or discoloration of surface and subsurface (leachate) drainage from the site indicated significant secondary pollution point sources are not present, but soil and water sample analysis would be required to confirm the lack of contamination.

If significant pollution point sources consisting of oil and the volatile organic compounds handled by this facility are present, the surface water has the highest potential for contamination, via surface drainage through the NWI defined wetlands and subsurface drainage through the highly permeable soils. This would pose a threat to the environment and to human targets through food chain contamination. With the exception of the one domestic well 0.23 mile from the site, the potential of groundwater drinking source contamination is low, and based on the public drinking water distribution; this well is probably no longer used. No release to the air is suspected due to the heavily vegetated cover and the lack of any odors or blowing particulates during the site

reconnaissance. The likelihood of human exposure to contaminated soil is unknown, but since there are no restrictions to access to the site and recreational fishing from the banks of the Mississippi River occurs in this area, incidental exposure would be possible if secondary potential pollution point sources are present.

7. REFERENCES

7.1 PUBLISHED REFERENCES

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7.2 ONLINE REFERENCES

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APPENDIX 1

SITE LOCATION MAP



SOURCE: U.S.G.S 7.5 MINUTE TOPOGRAPHIC QUADRANGLE - BATON ROUGE WEST, LOUISIANA



SITE LOCATION MAP
GILMAR MARINE SERVICES, INC.
EAST BATON ROUGE PARISH, LOUISIANA

File Name: gilmar_ra.mxd

Date: 04/27/2007

APPENDIX 2

SITE AERIAL



Former GMS
Facility Location



SOURCE: 1998 DIGITALLY ORTHORECTIFIED PHOTOGRAPH OF SW QUARTER U.S.G.S 7.5 MINUTE QUADRANGLE - BATON ROUGE WEST, LOUISIANA



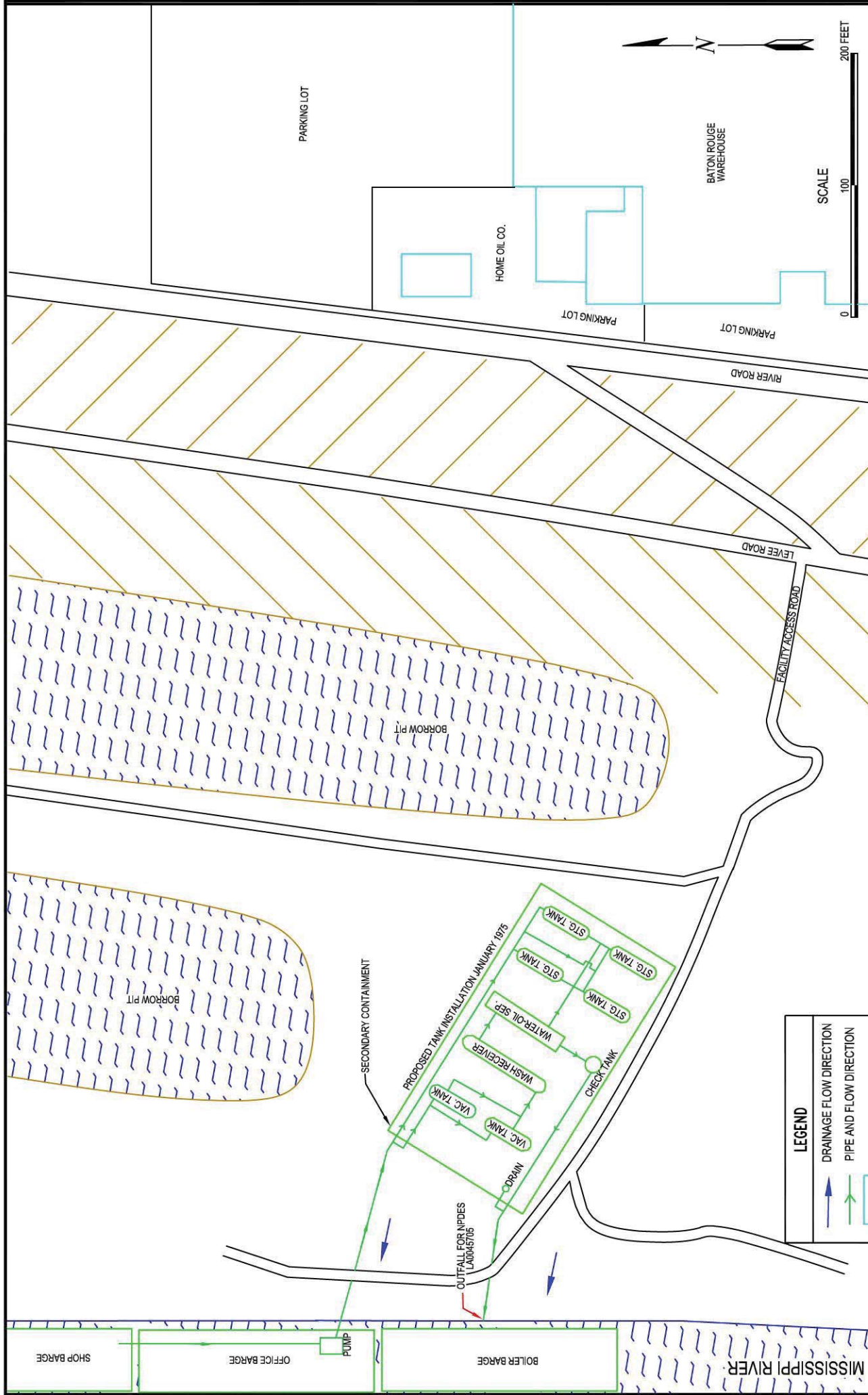
SITE LOCATION MAP
GILMAR MARINE SERVICES, INC.
EAST BATON ROUGE PARISH, LOUISIANA

File Name: gilmar_sa.mxd

Date: 04/27/2007

APPENDIX 3

SITE SKETCH



LEGEND	
	DRAINAGE FLOW DIRECTION
	PIPE AND FLOW DIRECTION
	BUILDINGS
	LEVEE
	WATER

ecology and environment, inc.
International Specialists in the Environment

FILE: GILMAR.dwg **DATE: 05/10/07**

SITE SKETCH
GILMAR MARINE SERVICES, INC.
EAST BATON ROUGE PARISH, LOUISIANA

APPENDIX 4

SITE DRAINAGE MAP



SOURCE: U.S.G.S 7.5 MINUTE TOPOGRAPHIC QUADRANGLES - BATON ROUGE WEST, LOUISIANA



SITE DRAINAGE MAP WITH DEFINED WETLANDS - 2-MILE RADIUS
GILMAR MARINE SERVICES, INC.
EAST BATON ROUGE PARISH, LOUISIANA

File Name: gilmar_wet.mxd

Date: 04/27/2007



SOURCE: U.S.G.S 7.5 MINUTE TOPOGRAPHIC QUADRANGLES - BATON ROUGE WEST, LOUISIANA



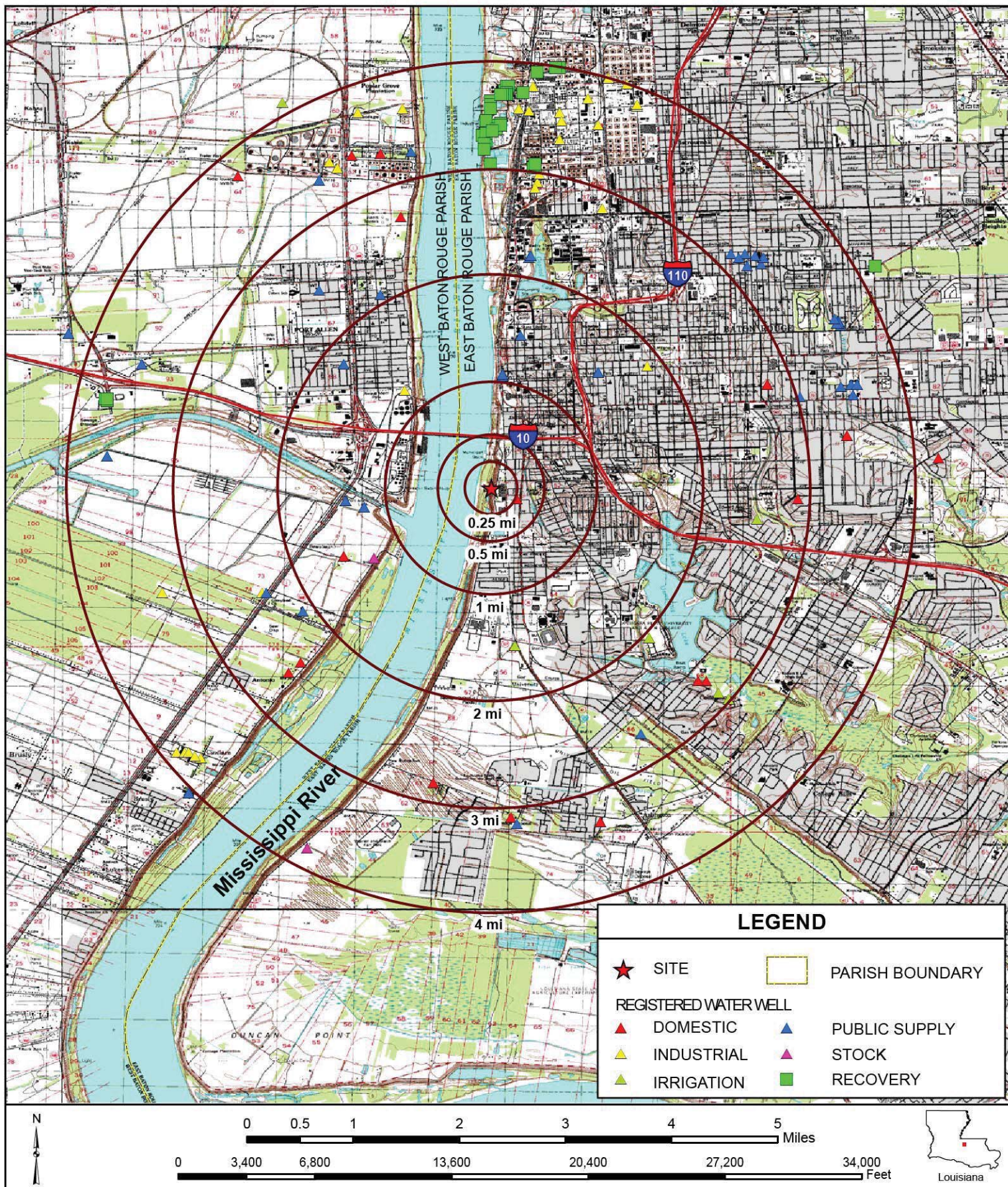
SITE DRAINAGE MAP WITH DEFINED WETLANDS - 4-MILE RADIUS
GILMAR MARINE SERVICES, INC.
EAST BATON ROUGE PARISH, LOUISIANA

File Name: gilmar_wet.mxd

Date: 04/27/2007

APPENDIX 5

GROUNDWATER WITHDRAWAL WELLS LOCATED WITHIN A 4-MILE RADIUS



SOURCE: U.S.G.S 7.5 MINUTE TOPOGRAPHIC QUADRANGLE - BATON ROUGE WEST, LOUISIANA



WATER WELLS LOCATED WITHIN A FOUR-MILE RADIUS
GILMAR MARINE SERVICES, INC.
EAST BATON ROUGE PARISH, LOUISIANA

File Name: gilmar_well.mxd

Date: 01/08/2007

Public Works & Water Resources Division

Water Resources Section

Wells located within 4 mile radius
of Latitude 30°25'59" and Longitude 91°11'34"

Parish	Owner Name	DOTD Well #	Owner Well #	Driller's Name	Well Depth (ft)	Well Use	Casing Size (in)	Drill Date	Water Level (ft)	W.L. Date Measured	Geologic Unit	Latitude	Longitude	Avail Info	Distance in Miles
East Baton Rouge	JARREAU	-536		GARLETE WELL	116	DOMESTIC	3	Apr-52	FLOWING	4/16/1952	112MRVA	302315	911120	Q W	3.08
East Baton Rouge	NEHER, C	-583		AIRHART	304	DOMESTIC	2.50X2	Apr-56	3.3	4/25/1956	112SLBR	302422	910944	D Q W	2.51
East Baton Rouge	PULLEN, F	-665		LAMBERT'S	116	DOMESTIC	4	1946	4	00/00/46	112SLBR	302647	910914	D Q W	2.45
East Baton Rouge	VARN, H	-731		GUI TREAU P	186	DOMESTIC	2	Apr-61	1.34	5/11/1961	112MRVA	302313	911036	Q W	3.24
East Baton Rouge	RAMSEY, J	-734		HERRINGTON	504	DOMESTIC	2	1960	69	00/00/60	11204BR	302551	910859	W	2.49
East Baton Rouge	ALBRITTO N, W	-735		HERRINGTON	481	DOMESTIC	2	Oct-61	70.42	10/23/1961	11204BR	302622	910835	ED Q W	2.93
East Baton Rouge	MELANCO N, C	-755		LAMBERT'S	325	DOMESTIC	3X2	Mar-63			112SLBR	302422	910948	E	2.46
East Baton Rouge	GLEASON, D	-768		GREEN TOM	280	DOMESTIC	2	Jun-64	12	6/4/1964	112SLBR	302551	911117	ED W	0.23
East Baton Rouge	OVERLING, J	-799		GREEN TOM	390	DOMESTIC	3X2	Aug-65	55	9/9/1965	11204BR	302611	910750	D W	3.64
East Baton Rouge	ROMBECH, JOHN	-8539Z		ECONOMY	180	DOMESTIC	4X2	Nov-99	12	11/9/1999	112MRVA	302332	911158	D W	2.79
West Baton Rouge	PHILLIPS BROS	-20		UNKNOWN	2080	DOMESTIC	4	Mar-44	46.2	3/1/1944	12115BR	302523	911242	D Q W	1.35
West Baton Rouge	DAMERON, G & C	-40		SUMMERS, D. K.	2191	DOMESTIC	3X2	Aug-56			12115BR	302431	911303	ED	2.24
West Baton Rouge	CHAUDOI R, E	-42		SUMMERS, D. K.	560	DOMESTIC	4X2	Sep-55	108	09/00/55	11206BR	302809	911214	Q W	2.65
West Baton Rouge	HALPHEN, F	-54		HEBERT A J	450	DOMESTIC	2	Sep-57			112SLBR	302426	911309	Q	2.37
West Baton Rouge	LEBLANC, L	-60		SUMMERS, D. K.	525	DOMESTIC	4X2.50	Jun-57	88.03	10/8/1958	11206BR	302840	911224	D Q W	3.26
West Baton Rouge	DENICOLA, J	-72		SUMMERS, D. K.	199	DOMESTIC	1.5	Sep-56	19	9/13/1956	112MRVA	302839	911238	D W	3.31
West Baton Rouge	WIBR RADIO	-124		CAPITAL	499	DOMESTIC	4X2	May-71	15.2	4/18/1973	11204BR	302829	911334	D Q W	3.57
East Baton Rouge	EXXON CO USA	-34	34	LAYNE (LA)	459	INDUSTRIAL	12X8	Apr-38	141	6/3/1938	11204BR	302907	911042	D Q W	3.74
East Baton Rouge	EXXON CO USA	-356	45	LAYNE (LA)	441	INDUSTRIAL	18X12	Sep-43	226	9/22/1943	11204BR	302913	911109	ED Q W	3.79
East Baton Rouge	EXXON CO USA	-398	48	EBERHART	1285	INDUSTRIAL	12X9X9X9	Jul-45			12111BR	302902	911116	EDMQ	3.57

Public Works & Water Resources Division

Water Resources Section

Wells located within 4 mile radius
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East Baton Rouge	ALLIED CHEM	-467	2	EBERHART	1021	INDUSTRIAL	12X9	Jan-48	101.98	3/2/1948	12110BR	302826	911107	EDMQ PW	2.89
East Baton Rouge	EXXON CO USA	-499	54	EBERHART	430	INDUSTRIAL	18X12	Nov-48			11204BR	302914	911023	E MQ	3.95
East Baton Rouge	EXXON MOBIL	-576	62	EBERHART	1270	INDUSTRIAL	18X12	Aug-54	73.75	10/25/1954	12112BR	302917	911032	ED Q PW	3.96
East Baton Rouge	EXXON CO USA	-580	63	LAYNE (LA)	1242	INDUSTRIAL	18X12X9	Dec-55	115	12/9/1955	12112BR	302903	911018	E Q W	3.77
East Baton Rouge	EXXON CO USA	-587	64	EBERHART	2110	INDUSTRIAL	18X12	Jun-56	121	9/17/1956	12220BR	302900	911056	E MQ W	3.56
East Baton Rouge	KEANS LAUNDRY	-674		EBERHART	2250	INDUSTRIAL	18	Dec-58			12220BR	302656	911013	EDMQ	1.71
East Baton Rouge	ALLIED CHEM	-784	4	EBERHART	1282	INDUSTRIAL	12X9X9	Nov-64			12112BR	302823	911108	ED Q	2.84
East Baton Rouge	EXXON CO USA	-810	69	LAYNE (LA)	2130	INDUSTRIAL	18X12X8	Sep-66	223.1	10/19/1966	12220BR	302854	911037	E Q W	3.52
East Baton Rouge	EXXON CO USA	-851	72	EBERHART	2119	INDUSTRIAL	18X12	Aug-68	267	9/23/1968	12220BR	302901	911111	E Q W	3.55
East Baton Rouge	EXXON CO USA	-855	74	LAYNE (LA)	2208	INDUSTRIAL	18X12X9	Apr-69	274	4/29/1969	12220BR	302847	911056	E Q W	3.32
East Baton Rouge	EXXON CO USA	-884	76	LAYNE (LA)	2120	INDUSTRIAL	18X12X9	Sep-69	299	4/22/1970	12220BR	302904	911018	E W	3.79
East Baton Rouge	CONCRET E	-1300		ECONOMY	585	INDUSTRIAL	6	Jul-00	85	7/6/2000	11206BR	302813	911035	D W	2.77
East Baton Rouge	HONEYWE LL	-1301		STAMM-SCHEELE	1260	INDUSTRIAL	16X10	Apr-00	135	4/27/2000	12112BR	302830	911106	EDMQ PW	2.97
East Baton Rouge	EXXON MOBIL	-1318	78	STAMM-SCHEELE	607	INDUSTRIAL	14	3-Oct	95	10/1/2003	0	302856	911055	EDMQ PW	3.49
West Baton Rouge	LAWS, H L & CO	-6	CINCLARE #1	EBERHART	2134	INDUSTRIAL	4X2.50	1916	71	00/00/16	12115BR	302347	911404	D W	3.54
West Baton Rouge	LAWS, H L & CO	-7	CINCLARE #4	UNKNOWN	200	INDUSTRIAL	8		20	3/2/1942	112MRVA	302347	911400	Q W	3.5
West Baton Rouge	EXXON CO USA	-38	ANCHORA GE4	EBERHART	1254	INDUSTRIAL	10X8X6	Dec-54	38.1	7/12/1955	12112BR	302836	911249	EDM W	3.33
West Baton Rouge	EXXON CO USA	-44	ANCHORA GE3	EBERHART	1247	INDUSTRIAL	8	Apr-50	16.1	4/7/1950	12112BR	302833	911245	D W	3.25
West Baton Rouge	CONCRET E	-63		HEBERT A J	230	INDUSTRIAL	6	1957			112MRVA	302505	911322		2.09
West Baton Rouge	MISSOURI PAC RR	-73		SOUTHERN CO	176	INDUSTRIAL	8	22-Dec			112MRVA	302900	911235	D	3.68

Public Works & Water Resources Division

Water Resources Section

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West Baton Rouge	EXXON CHEMICAL	-127	ANCHORA GE	STAMM-SCHEELE	220	INDUSTRIAL	18	Jul-72	17.5	7/27/1972	112MRVA	302902	911213	ED W	3.63
West Baton Rouge	GREAT BR PORT	-181	3	STAMM-SCHEELE	1900	INDUSTRIAL	14X10X10	Nov-86	105	11/10/1986	12117BR	302644	911212	EDMQ W	1.15
West Baton Rouge	LAWS, H L & CO	-192	CINCLARE #8	EBERHART	293	INDUSTRIAL	18X12	Sep-63			112MRVA	302344	911352	D	3.44
West Baton Rouge	LAWS, H L & CO	-193	CINCLARE #9	UNKNOWN	384	INDUSTRIAL	10X8	Mar-64			112MRVA	302347	911358	D	3.47
West Baton Rouge	TIGATOR INC	-5638Z		GURGANUS, J. R.	170	INDUSTRIAL	4	Mar-95	5	3/15/1995	112MRVA	302505	911411	D W	2.83
East Baton Rouge	BATES, C	-157		EBERHART	1552	IRRIGATION	6X4	Jun-42	23	8/1/1944	12115BR	302541	910919	D Q W	2.18
East Baton Rouge	BATON ROUGE	-1024	FOOTBALL	LAMBERT'S	315	IRRIGATION	8	May-80	16.3	10/16/1984	112MRVA	302439	911118	ED W	1.49
East Baton Rouge	BATON ROUGE	-1130	HORTICULT	EBERHART	361	IRRIGATION	8X6	Oct-83	25	10/4/1983	112SLBR	302443	911012	D W	1.9
East Baton Rouge	MORRIS, BUCK	-1239		ECONOMY	295	IRRIGATION	4X2	Aug-84	20	8/6/1984	112SLBR	302413	910933	D W	2.76
East Baton Rouge	BREC	-1351	WEBB PARK1	LAYNE	500	IRRIGATION	12X10	5-Jun	48	6/29/2005	0	302607	910805	ED W	3.39
East Baton Rouge	NEAAMS, KEYNON	-8536Z		BABIN, WHITNEY	265	IRRIGATION	4X2	1-Jun	3	6/4/2001	112SLBR	302416	910938	D W	2.66
West Baton Rouge	LEBLANC, LEO JR	-5627Z		GURGANUS, J. R.	150	IRRIGATION	2	Sep-93	5	9/25/1993	112MRVA	302905	911312	D W	3.99
East Baton Rouge	STATES UTL	-522	11	LAYNE (LA)	1190	POWER GEN.	18X8	Dec-48	20	12/22/1948	12112BR	302924	911121	ED Q W	3.98
East Baton Rouge	ENTERGY GULF	-1323	27-A	STAMM-SCHEELE	2158	POWER GEN.	16X12	3-Jul	282	5/15/2003	0	302921	911119	ED W	3.93
East Baton Rouge	ROUGE WW	-151	GOV'T ST 2	EBERHART	2658	PUBLIC SUPPLY	12X10X8	1944	5.6	8/29/1944	12223BR	302641	910858	D Q PW	2.65
East Baton Rouge	ROUGE WW	-413	GOV'T3	EBERHART	1745	PUBLIC SUPPLY	12X9X9X9	1946	55.43	9/4/1958	12115BR	302642	910832	EDMQ W	3.07
East Baton Rouge	ROUGE WW	-510	LULA17	EBERHART	1605	PUBLIC SUPPLY	12X9	Jan-51	77.65	9/4/1958	12115BR	302751	910925	MQ W	3.02
East Baton Rouge	DOWNING, B	-569		SUMMERS, D. K.	2170	PUBLIC SUPPLY	6X3	Dec-54	44.7	12/11/1954	12115BR	302312	911117	ED Q W	3.15
East Baton Rouge	ROUGE WW	-630	LAF 15	EBERHART	2253	PUBLIC SUPPLY	20X12X9	Aug-56	138.66	2/8/1961	12220BR	302651	911124	DMQ W	1.06
East Baton Rouge	ROUGE WW	-657	LULA18	EBERHART	1618	PUBLIC SUPPLY	22X18X12	Sep-55	72.02	9/4/1958	12115BR	302751	910932	D Q PW	2.94

Public Works & Water Resources Division Water Resources Section

Wells located within 4 mile radius
of Latitude 30°25'59" and Longitude 91°11'34"

Parish	Owner Name	DOTD Well #	Owner Well #	Driller's Name	Well Depth (ft)	Well Use	Casing Size (in)	Drill Date	Water Level (ft)	W.L. Date Measured	Geologic Unit	Latitude	Longitude	Avail Info	Distance in Miles
East Baton Rouge	ROUGE WW	-658	LULA19	EBERHART	1604	PUBLIC SUPPLY	18X12	Sep-56	75.39	9/4/1958	12115BR	302745	910924	D Q W	2.94
East Baton Rouge	ROUGE WW	-726	LULA20	EBERHART	1601	PUBLIC SUPPLY	18X12X9	Aug-60	89.4	10/10/1960	12115BR	302746	910917	D Q PW	3.04
East Baton Rouge	ROUGE WW	-733	GOV'T5	EBERHART	2637	PUBLIC SUPPLY	12X8X8	May-61	86.03	7/25/1961	12223BR	302647	910833	D Q W	3.08
East Baton Rouge	ROUGE WW	-751	45TH#1	EBERHART	2595	PUBLIC SUPPLY	18X9	1962	82	8/27/1962	12224BR	302716	910838	E Q W	3.22
East Baton Rouge	ROUGE WW	-771	GOV'T6	EBERHART	1739	PUBLIC SUPPLY	18X12X9	May-63	72	8/15/1963	12115BR	302646	910838	ED Q W	2.99
East Baton Rouge	ROUGE WW	-774	45TH#2	EBERHART	2143	PUBLIC SUPPLY	18X12X9	Jan-64	126	4/2/1964	12220BR	302718	910839	D Q W	3.23
East Baton Rouge	ROUGE WW	-813	LAKE#1	EBERHART	2536	PUBLIC SUPPLY	18X12X8	Apr-67	162	8/24/1967	12224BR	302749	911111	ED Q W	2.18
East Baton Rouge	ROUGE WW	-814	LULA21	EBERHART	2168	PUBLIC SUPPLY	18X12X8	Aug-66	180.6	11/14/1966	12220BR	302749	910916	D W	3.09
East Baton Rouge	ROUGE WW	-874	LAKE#2	EBERHART	2250	PUBLIC SUPPLY	18X12X8	Jul-70			12220BR	302750	911110	ED Q	2.21
East Baton Rouge	ROUGE WW	-927	45TH#3	EBERHART	1511	PUBLIC SUPPLY	18X12X12	Jun-73	135	2/19/1974	12115BR	302717	910839	D Q W	3.22
East Baton Rouge	ROUGE WW	-938	LULA22	EBERHART	1599	PUBLIC SUPPLY	18X12X12	Jun-72	151	2/1/1974	12115BR	302749	910928	D Q W	2.95
East Baton Rouge	ROUGE WW	-939	LULA23	EBERHART	1592	PUBLIC SUPPLY	18X12	Jul-74	165	2/23/1977	12115BR	302750	910920	ED Q W	3.06
East Baton Rouge	LA CIVIL DEFENS	-1007		MORRISON, J. L.	845	PUBLIC SUPPLY	10X8X6	Aug-78	94.09	8/3/1978	12108BR	302711	911115	EDMQ PW	1.46
East Baton Rouge	ROUGE WW	-1149	CONVENT N 1	EBERHART	2694	PUBLIC SUPPLY	18X12	Dec-86	147	5/13/1987	12224BR	302653	911037	ED W	1.4
East Baton Rouge	ROUGE WW	-1150	CONVENT N 2	EBERHART	2242	PUBLIC SUPPLY	18X12X12	Apr-87	207	4/21/1987	12220BR	302653	911037	ED W	1.4
East Baton Rouge	AUTOMOT IV	-1217		SUMMERS (DALE)	305	PUBLIC SUPPLY	2	Jan-90	15	1/9/1990	112MRVA	302356	911016	D W	2.6
East Baton Rouge	ROUGE WW	-1252	GOV'T7	LAYNE (BR)	2633	PUBLIC SUPPLY	18X12X9	May-93	153	5/6/1993	12224BR	302647	910830	EDM PW	3.13
East Baton Rouge	ROUGE WW	-1253	LAF 18	LAYNE (BR)	2687	PUBLIC SUPPLY	18X12X8	Aug-93	165	8/31/1993	12223BR	302652	911124	EDM PW	1.08
East Baton Rouge	ROUGE WW	-1276	N 45TH ST4	LAYNE (BR)	1075	PUBLIC SUPPLY	18	May-97	93	2/27/1997	12110BR	302717	910840	EDMQ PW	3.2
East Baton Rouge	ROUGE WW	-1308	N45TH #5	LAYNE (BR)	1070	PUBLIC SUPPLY	18	1-Sep	98	9/16/2001	12110BR	302719	910841	EDM PW	3.21

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Parish	Owner Name	DOTD Well #	Owner Well #	Driller's Name	Well Depth (ft)	Well Use	Casing Size (in)	Drill Date	Water Level (ft)	W.L. Date Measured	Geologic Unit	Latitude	Longitude	Avail Info	Distance in Miles
West Baton Rouge	SCHOOL BRD	-31	BRUSLY	MCDERMOTT F	416	PUBLIC SUPPLY	4	Dec-51	3	12/26/1951	112SLBR	302327	911358	D Q W	3.75
West Baton Rouge	PORT ALLEN, LA	-35	3	COASTAL WTR	1290	PUBLIC SUPPLY	10X6X6	Mar-55	25	3/1/1955	12112BR	302657	911242	DMQ W	1.67
West Baton Rouge	PORT ALLEN, LA	-110	12ST	HENRY, L. B.	1322	PUBLIC SUPPLY	10X8	Nov-66			12112BR	302733	911254	E Q	2.32
West Baton Rouge	PLAQUEMI NE, LA	-111	1	HENRY, L. B.	2650	PUBLIC SUPPLY	16X10X8	Jan-68	43.5	1/15/1970	12220BR	302550	911241	E MQ PW	1.18
West Baton Rouge	PLAQUEMI NE, LA	-112	2	HENRY, L. B.	2205	PUBLIC SUPPLY	16X10X8	Jan-68	23.85	1/15/1970	12115BR	302550	911241	MQ W	1.18
West Baton Rouge	PLAQUEMI NE, LA	-113	3	HENRY, L. B.	2242	PUBLIC SUPPLY	16X10X8	Jan-68	49.2	5/7/1974	12115BR	302547	911232	E MQ W	1.04
West Baton Rouge	WBR WTR DIST 2	-132	CONSOLID AT	EBERHART	2082	PUBLIC SUPPLY	12X8X6	Sep-76	30.65	2/10/1976	12115BR	302505	911320	EDMQ PW	2.06
West Baton Rouge	WBR WTR DIST 4	-136	HIGHWAY 76	EBERHART	1305	PUBLIC SUPPLY	10X8X8	Aug-72	66.59	2/10/1976	12112BR	302712	911457	E MQ W	3.71
West Baton Rouge	JACINTO PORT COR	-137	WEST	UNKNOWN	1330	PUBLIC SUPPLY	12X8	Nov-74	69.41	2/10/1976	12112BR	302657	911421	EDMQ W	3.05
West Baton Rouge	WBR GAS AND WTR	-150	SUNRISE 1	STAMM-SCHEELE	1034	PUBLIC SUPPLY	14X10X8	Jun-78	92	6/22/1978	12110BR	302827	911254	EDMQ W	3.2
West Baton Rouge	WBR WTR DIST 2	-173	3	EBERHART	2194	PUBLIC SUPPLY	12X8	Jun-85	60	4/8/1985	12115BR	302456	911302	D Q W	1.9
West Baton Rouge	PORT ALLEN, LA	-207	1-A-6TH ST	STAMM-SCHEELE	1332	PUBLIC SUPPLY	10X6	Dec-99	87	1/6/2000	12112BR	302731	911224	EDMQ PW	2.02
West Baton Rouge	WBR GAS AND WTR	-209	SUNRISE #4	LAYNE (BR)	1010	PUBLIC SUPPLY	24X16	May-00	109	4/4/2000	12110BR	302841	911209	EDMQBP W	3.22
West Baton Rouge	LA DOTD	-5630Z	LTRC	LAMBERT'S	180	PUBLIC SUPPLY	2	Mar-94	FLOWING	3/7/1994	112MRVA	302612	911438	D W	3.12
East Baton Rouge	EXXON CO USA	-5762Z	RW-1	BARRINGTON'S	20	RECOVERY	6	Jun-87	10.14	8/14/1987	112MRVA C	302906	911130	D W	3.64
East Baton Rouge	EXXON CO USA	-5763Z	RW-2	BARRINGTON'S	15	RECOVERY	6	Jun-87	3.28	8/14/1987	112MRVA C	302904	911130	D W	3.6
East Baton Rouge	EXXON CO USA	-5764Z	RW-3	BARRINGTON'S	15	RECOVERY	6	Jun-87	4.08	8/14/1987	112MRVA C	302902	911130	D W	3.56
East Baton Rouge	EXXON CO USA	-5766Z	RW-6	BARRINGTON'S	19	RECOVERY	6	Jun-87	8.76	8/14/1987	112MRVA C	302856	911132	D W	3.44
East Baton Rouge	EXXON CO USA	-5767Z	RW-7	BARRINGTON'S	24	RECOVERY	6	Jun-87	13.19	8/14/1987	112MRVA C	302854	911126	D W	3.41
East Baton Rouge	EXXON CO USA	-6238Z	RW-12	PSI/PTL	24	RECOVERY	6	Jul-89			112MRVA C	302846	911132	D	3.25

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Parish	Owner Name	DOTD Well #	Owner Well #	Driller's Name	Well Depth (ft)	Well Use	Casing Size (in)	Drill Date	Water Level (ft)	W.L. Date Measured	Geologic Unit	Latitude	Longitude	Avail Info	Distance in Miles
East Baton Rouge	EXXON CO USA	-6562Z	RW-404-2	WOODWARD-CLYDE	16	RECOVERY	6	Sep-90	4.1	9/28/1990	112MRVA C	302833	911108	D W	3.03
East Baton Rouge	EXXON CO USA	-6597Z	RW-148-1	WOODWARD-CLYDE	14	RECOVERY	8	Nov-90	4.5	11/27/1990	112MRVA C	302910	911114	D W	3.72
East Baton Rouge	EXXON CHEMICAL	-6842Z	RW-4	LAYNE (ENV)	16	RECOVERY	4	Dec-91	4	1/10/1992	112MRVA C	302911	911122	D W	3.73
East Baton Rouge	EXXON CHEMICAL	-6843Z	RW-5	LAYNE (ENV)	15	RECOVERY	4	Dec-91	4.2	1/10/1992	112MRVA C	302911	911123	D W	3.73
East Baton Rouge	EXXON CHEMICAL	-6844Z	RW-6	LAYNE (ENV)	14	RECOVERY	4	Dec-91	3.5	1/10/1992	112MRVA C	302913	911122	D W	3.77
East Baton Rouge	EXXON CHEMICAL	-6845Z	RW-7	LAYNE (ENV)	14	RECOVERY	4	Dec-91	3.2	1/10/1992	112MRVA C	302913	911121	D W	3.77
East Baton Rouge	EXXON CO USA	-6903Z	RW-5	WOODWARD-CLYDE	17	RECOVERY	6	Oct-92	4.52	11/3/1992	112MRVA C	302833	911109	D W	3.02
East Baton Rouge	EXXON CO USA	-6904Z	RW-6	WOODWARD-CLYDE	17	RECOVERY	6	Oct-92	4.54	11/3/1992	112MRVA C	302833	911109	D W	3.02
East Baton Rouge	EXXON CO USA	-6905Z	RW-7	WOODWARD-CLYDE	17	RECOVERY	6	Oct-92	4.05	11/3/1992	112MRVA C	302835	911108	D W	3.06
East Baton Rouge	EXXON CO USA	-6906Z	RW-8	WOODWARD-CLYDE	17	RECOVERY	6	Oct-92	5.36	11/3/1992	112MRVA C	302835	911108	D W	3.06
East Baton Rouge	EXXON CO USA	-7142Z	RW-5A	CCI	27	RECOVERY	6	Sep-90			112MRVA C	302856	911132	D	3.44
East Baton Rouge	EXXON CO USA	-7143Z	RW-19	CCI	27	RECOVERY	6	Sep-90			112MRVA C	302855	911125	D	3.43
East Baton Rouge	SOUTHLA ND CORP	-7466Z	RW-1	ALLIANCE	13	RECOVERY	6	Apr-94	11	4/13/1994	112SESC	302745	910821	D W	3.75
East Baton Rouge	EXXON CO USA	-7485Z	RW-7R	FUGRO (GS)	32	RECOVERY	6	Jul-94	17	7/14/1994	112SESC	302849	911134	D W	3.31
East Baton Rouge	EXXON CO USA	-7486Z	RW-8A	FUGRO (GS)	23	RECOVERY	6	Sep-94	5	9/26/1994	112SESC	302852	911127	D W	3.37
East Baton Rouge	EXXON CO USA	-7488Z	SF-2	FUGRO (GS)	25	RECOVERY	6	Nov-94	9	11/15/1994	112SESC	302850	911132	D W	3.33
East Baton Rouge	EXXON CO USA	-7489Z	SF-3	FUGRO (GS)	30	RECOVERY	6	Nov-94	22	11/15/1994	112SESC	302845	911133	D W	3.23
East Baton Rouge	EXXON CO USA	-7490Z	SF-4	FUGRO (GS)	30	RECOVERY	6	Nov-94	17	11/14/1994	112SESC	302842	911133	D W	3.18
East Baton Rouge	EXXON CO USA	-7726Z	W-42	FUGRO (GS)	35	RECOVERY	8X8	Mar-96	13.5	3/25/1996	112SESC	302922	911056	D W	3.98
East Baton Rouge	EXXON CO USA	-7727Z	W-43	FUGRO (GS)	35	RECOVERY	8X8	Mar-96	12.37	3/25/1996	112SESC	302922	911058	D W	3.98

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East Baton Rouge	EXXON CO USA	-7729Z	W-45	FUGRO (GS)	53	RECOVERY	6X6	Mar-96	16.98	3/25/1996	112SESC	302920	911107	D W	3.92
East Baton Rouge	EXXON CO USA	-7813Z	W-28	FUGRO (GS)	13	RECOVERY	4	Jul-95	4.68	8/9/1995	112MRVA C	302910	911122	D W	3.71
East Baton Rouge	EXXON CO USA	-7815Z	W-30	FUGRO (GS)	13	RECOVERY	4	Jul-95	2.84	8/9/1995	112MRVA C	302909	911122	D W	3.7
East Baton Rouge	EXXON CO USA	-7816Z	W-31	FUGRO (GS)	13	RECOVERY	4	Jul-95	5.16	8/9/1995	112MRVA C	302909	911122	D W	3.7
East Baton Rouge	EXXON CO USA	-7817Z	W-32	FUGRO (GS)	13	RECOVERY	4	Jul-95	2.63	8/9/1995	112MRVA C	302909	911122	D W	3.7
East Baton Rouge	EXXON CO USA	-7818Z	W-33	FUGRO (GS)	13	RECOVERY	4	Aug-95	2.17	8/9/1995	112MRVA C	302909	911122	D W	3.7
East Baton Rouge	EXXON CO USA	-7819Z	W-34	FUGRO (GS)	13	RECOVERY	4	Aug-95	2.35	8/9/1995	112MRVA C	302909	911123	D W	3.69
East Baton Rouge	EXXON CO USA	-7820Z	W-35	FUGRO (GS)	13	RECOVERY	4	Aug-95	1.93	8/9/1995	112MRVA C	302909	911124	D W	3.69
East Baton Rouge	EXXON CO USA	-7821Z	W-36	FUGRO (GS)	13	RECOVERY	4	Aug-95	1.75	8/9/1995	112MRVA C	302909	911124	D W	3.69
East Baton Rouge	EXXON CO USA	-7822Z	W-37	FUGRO (GS)	13	RECOVERY	4	Aug-95	1.92	8/9/1995	112MRVA C	302909	911125	D W	3.69
East Baton Rouge	EXXON CO USA	-7947Z	P-4B	FUGRO (GS)	26	RECOVERY	6	Jul-97	15.67	7/31/1997	112MRVA C	302854	911125	D W	3.41
East Baton Rouge	EXXON CO USA	-7948Z	SF-1B	FUGRO (GS)	27	RECOVERY	6	Jul-97	18.3	7/31/1997	112MRVA C	302851	911129	D W	3.35
East Baton Rouge	EXXON CO USA	-8250Z	RW-20	WALKER-HILL(CO)	30	RECOVERY	6	Jun-99	25	6/23/1999	112SESC	302835	911130	D W	3.04
West Baton Rouge	SEDCO	-5817Z	RW-1	G & E	15	RECOVERY	6	Jan-96	3	1/18/1996	112MRVA C	302639	911438	D W	3.21
West Baton Rouge	SEDCO	-5818Z	RW-3	G & E	14	RECOVERY	4	May-96	2.3	5/30/1996	112MRVA C	302639	911438	D W	3.21
West Baton Rouge	SEDCO	-5819Z	RW-4	G & E	14	RECOVERY	4	May-96	4	5/30/1996	112MRVA C	302640	911439	D W	3.23
West Baton Rouge	SEDCO	-5820Z	RW-5	G & E	14	RECOVERY	4	May-96	3.8	5/30/1996	112MRVA C	302640	911438	D W	3.21
West Baton Rouge	SEDCO	-5821Z	RW-6	G & E	14	RECOVERY	4	May-96	2.7	5/30/1996	112MRVA C	302640	911438	D W	3.21
West Baton Rouge	SEDCO	-5822Z	RW-7	G & E	14	RECOVERY	4	May-96	3.8	5/30/1996	112MRVA C	302640	911438	D W	3.21
West Baton Rouge	SEDCO	-5823Z	RW-8	G & E	14	RECOVERY	4	May-96	2.8	5/30/1996	112MRVA C	302640	911438	D W	3.21

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Wells located within 4 mile radius
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East Baton Rouge	OAK PROD	-5140Z	DUPLANT 1	GUICHARD	281	RIG SUPPLY	4	Dec-84			112MRVA	302346	910956	D	2.93
East Baton Rouge	DENOVO OIL-GAS	-6581Z	GIANELLO N4	RIG WATER	160	RIG SUPPLY	4	Nov-90	15	11/15/1990	112MRVA	302737	910802	D W	3.94
West Baton Rouge	HUFFCO PETRO	-5037Z	SUMRALL 1	RIG WATER	150	RIG SUPPLY	4	Sep-84			112MRVA	302523	911458	D	3.49
East Baton Rouge	DUPLANTI ER	-232		UNKNOWN	175	STOCK	2.5	.			112MRVA	302300	911300	Q	3.68
West Baton Rouge	PHILLIPS, R	-103		MCCLINTON D	2137	STOCK	4	May-66			12115BR	302522	911227	E	1.14

Available Information:

E - Geophysical Log
D - Driller's Log
M - Mechanical Analysis
Q - Quality of Water

Source:

Louisiana Department of Transportation and Development (LDOTD)
Public Works & Water Resources Division
Water Well Registration Data File
<http://www.dotd.state.la.us/intermodal/wells/>

P - Pumping Test
W - Water Level
B - Bacteriological Analysis