RECEIVED

UNDERGROUND STORAGE TANK NOTIFICATION FORM

OCT 0 2 1991

UNDERGROUND STORAGE TANK DIVISION

State Use Only

I.D. Number 17-004226

Date Received

Regional Office Lemin

Return to: State of Louisiana
Department of Environmental Quality
Office of Solid and Hazardous Waste
Underground Storage Tank Division
P.O. Box 44274 Baton Rouge, LA 70804-4274

INSTRUCTIONS

Please complete and return thirty (30) days prior to permanent tank(s) closure.

I. Ownership of Tank

Owner Name (Corporation, Individual, Public Agency, or other Entity): Exxon Co., USA

Street Address: 3301 Scenic Hwy.

Parish:

City: Baton Rouge State: La. Zip Code:

Area Code: (504) Phone Number: 359-4255

II. Location of Tank

Facility Name or Company Site Identifier: Stanford Exxon (Loc. No. 5-1052)

Street Address or State Road: 3191 South Acadian Thruway.

Parish:

City(Nearest): Baton Rouge State: La. Zip Code: 70808

Contact Person: Don Simpson Area Code: (504) Phone Number: 359-4255

ADDITIONAL INFORMATION

1. Type of closure: (check one) ✓ Removal _____ Close in Place

2. Number of tank(s) to be permanently closed: 4

3. If the tank(s) are to be closed in place, indicate cleaning method and type of fill material to be used:

Not applicable

4. Name and contractor number of contractor/individual performing tank closure and the scheduled date:

E.L. Hall & Assoc., Inc. Closure date scheduled: Oct. 28, 1991

5. Name of analytical laboratory to conduct sample analysis: E.T. Corporation (Contact person, Deborah Daigle

6. Soil and/or groundwater samples must be collected to determine if a release has occurred. Proper sampling protocol should be obtained from the laboratory prior to commencement of closure activities.
   a. Tank(s) closed by removal: Soil samples must be taken immediately after tank removal and placed on ice. Samples should be collected approximately two (2) feet beneath the tank pad fill material at both ends of each tank's elongated portion. If groundwater is encountered during removal, soil samples should be collected from the excavation side wall at the uppermost level of the encountered groundwater. Groundwater samples are also acceptable.
   b. In-Place Closure: Samples must be obtained as described above utilizing an auger or similar instrument.
   c. Below is a chart depicting analytical requirements. The type of analysis is dependent upon the product last stored in greatest quantity by volume.

PRODUCT STORED	SAMPLE MEDIA	ANALYSIS REQUIRED	ANALYTICAL PROCEDURE
Gasoline	Soil	BTEX*	Solid Waste 846-Method 8020
	Groundwater	BTEX* and Total Lead	
Diesel	Soil	TPH-Diesel**	Modified California Department of Health Services Method
	Groundwater	TPH-Diesel**	
Waste Oil	Soil	E.P. Toxicity Metals	Solid Waste 846-Method 1310
	Groundwater	Total Organic Halogens	ASTM Method D808
		Oil and Grease	503 E Standard Methods
		Volatile Organic Hydrocarbons	Solid Waste 846-Method 8240

*BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes
**TPH-Diesel = Total Petroleum Hydrocarbons for diesel

CERTIFICATION

I certify the above submitted information is correct and I agree to submit the analytical results within 60 days after tank(s) closure:

(1) Analytical Results.
(2) Site Diagram indicating location(s) where sample(s) were collected.
(3) Amended Registration Form.

Exxon Co., USA
Owner's Name

D. M. Simpson
Owner's Signature

6-20-91
Date Signed

INTERNATIONAL
TECHNOLOGY
CORPORATION

August 30, 1991

Project No. 435564

Mr. Glen Ewing
Exxon Company, USA
P.O. Box 4415
Houston, Texas 77210-4415

Site Remediation Work Plan
Exxon Station 5-1052
3191 South Acadian Thruway
Baton Rouge, Louisiana

Dear Mr. Ewing:

IT Corporation (IT) is pleased to submit the following work plan for performing site investigation and remediation activities at Exxon station 5-1052 in Baton Rouge, Louisiana. Information obtained from an initial report (by a previous consultant) indicates that a release was discovered at the dispenser during a routine inspection on December 24, 1990. The incident was properly reported to the Louisiana Department of Environmental Quality (LDEQ) following discovery and the defective value was subsequently replaced.

The preliminary study (C-K Associates, 1991) included four hand auger borings installed near the release and analysis of a composite soil sample. Results of the preliminary soil analysis indicates hydrocarbon constituents in the soil adjacent to the release.

This proposed scope of work is based on the above site specific information, and correspondence between Exxon and the LDEQ concerning further investigation and remediation of the site.

Scope of Work

In order to further investigate the site for subsurface hydrocarbons and prevent any further hydrocarbon migration, Exxon has elected to remove and replace all underground storage tanks and associated product lines from the site. This method is proposed instead of typical plume delineation by monitoring wells and subsequent remediation, which may take years to accomplish similar goals. During the excavation procedures, an IT geologist will be on site to screen soil samples for hydrocarbon vapors and to collect soil samples as required by the Louisiana UST regulations. Soil samples will also be screened near the area of the release and along all product line trenches.

1150 LeBlanc Road ▪ Port Allen, LA 70767 ▪ (504) 344-8530

Soil samples will be collected from approximately 24 inches beneath the tankhold fill material at both ends of each tank's elongated portion. Each sample will be placed in an airtight plastic container for headspace analysis with a portable photoionization detection (PID) meter. Samples will also be collected from the sidewalls of the excavation for field screening with a PID meter. Should elevated PID readings (> 150 ppm) be detected, further excavation of the tankhold will be performed, if feasible. Samples collected from the base of the tankhold will be submitted to the laboratory for BTEX and TPH-G analysis.

During excavation of the product lines, soil samples will be collected along the base of the trench at approximately 50 foot spacings and screened with a PID meter. This will include the immediate area of the release near the single dispenser island (Figure 1). Over excavation will be performed if necessary based on PID readings and observations by the on site geologist.

All soil removed during the excavation will be properly disposed at an industrial landfill, specifically Waste Management Inc.'s Woodside Landfill in Walker, Louisiana. The soil will be properly manifested by IT personnel on site. It is anticipated that a majority, possibly all soil disposal costs will be covered under the LDEQ underground storage tank trust fund, pending approval of this work plan by the LDEQ.

An Excavation Assessment report will be prepared summarizing the procedures utilized on site and the results of the investigation.

Project Schedule

The schedule provided (in working days) is conditional and is based on information gathered during similar investigations. Note that Day 1 of the proposed schedule coincides with approval of proposed work plan by LDEQ to proceed with the work, reimbursable under the terms of the Trust Fund, and receipt of an authorized work release form Exxon Company, USA.

Day 1 - 30	Exxon Company, USA, C & M Engineer to organize tank excavation procedures and notify LDEQ of start date.
Day 30 - 60	Tank removal, soil excavation, hauling and disposal activities in progress. New tanks and lines installed at site.
Day 60 - 90	Data reduction, Excavation Assessment Report preparation.
Day 90 - 95	Submittal of draft report for Exxon review.
Day 95 - 100	Submittal of final report to Exxon.

The excavation of the tankhold and line trenches is expected to remediate the site of any

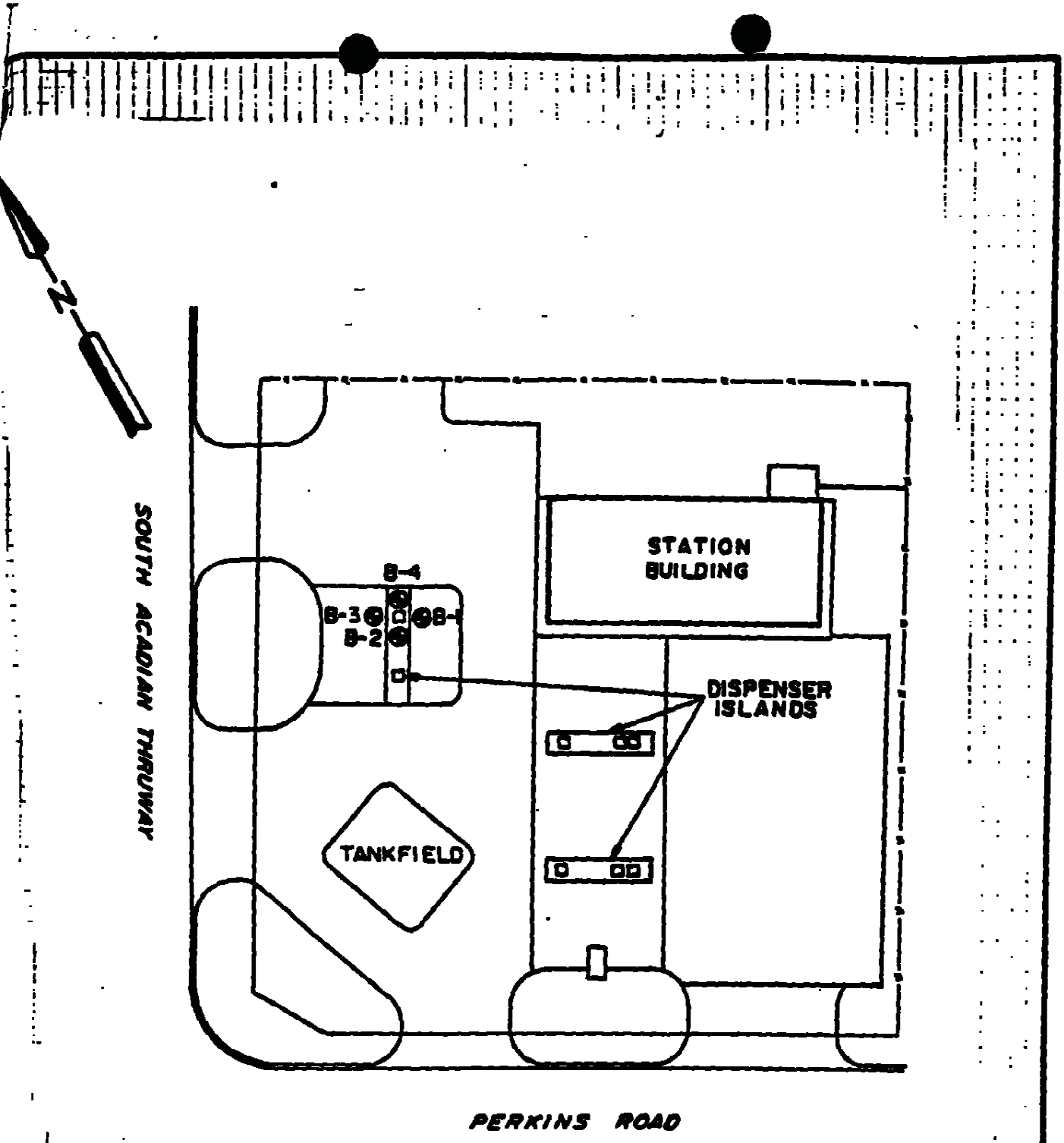
subsurface hydrocarbons released from the current UST system at Exxon Station 5-1052. Based on observations made during the excavation procedure and sample analysis data, recommendations for site closure or further investigation work will be proposed to Exxon by IT Corporation.

We trust that this information is sufficient for your needs. A cost estimate sheet for soil disposal is attached for your review. This work plan and cost estimate should be approved by the LDEQ in order to be eligible for reimbursement. Should you have any questions or desire additional information, please contact me at our Baton Rouge office at 504-291-0362. IT Corporation appreciates the opportunity to be of service to you on this project.

Sincerely,
IT CORPORATION

Deborah Daigle
Project Hydrogeologist

DD:jma



LEGEND

● Soil Boring (From Previous Investigation)

FIGURE 1

SITE PLAN

Exxon Station 5-1052
Baton Rouge, LA

PREPARED FOR

EXXON CO., USA
HOUSTON, TX

STATE OF LOUISIANA
REGISTRATION FOR UNDERGROUND STORAGE TANKS

RETURN COMPLETED FORM TO: DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF SOLID AND HAZARDOUS WASTE
UNDERGROUND STORAGE TANK DIVISION
P.O. BOX 44274
BATON ROUGE, LA. 70804-4274

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JAN 0 2 1991
UNDERGROUND STORAGE TANK DIVISION

AMENDED REGISTRATION **

Use this form ONLY when submitting corrections/changes to previous submitted registration. ONLY amended information needs to be included.

Check the ones that apply:

- [x] Changes are to Facility ID# 17-004226
- [x] Replacement Tank(s) Previous Tank #'s 1, 2, 3, 4
- [ ] Additional Tank(s)
- [ ] Changes to current tank(s) Tank #'s ____, ____, ____, ____
- [ ] Change in ownership
- [ ] Other changes ____

STATE USE ONLY
Date entered: 1-2-92
Data entry clerk: R

**Please submit a copy of original registration form when submitting any alterations to present registration.

- [ ] Closure
  Facility ID# ____

Owner response comments: ____

AMENDED
Replacement Tank

INSTRUCTIONS

Please type or print in ink all items except "signature" in Section V. This form must be completed for each location containing underground storage tanks. If more than 4 tanks are owned at this location, photocopy the reverse side, and staple continuation sheets to this form.
Indicate number of continuation sheets attached [ ]

I. OWNERSHIP OF TANK(S)

Exxon Co., U.S.A.
Owner Name: (Corporation, Individual, Public Agency, or Other Entity)
P.O. Box 4386
Mailing Address
Houston Texas. 77210-4386
City State Zip Code
Harris County
Parish
(713) 680-5122
Phone Number (include Area Code)

II. LOCATION OF TANKS

If same as Section 1, mark box here. [ ]
Stamford Exxon (Store No. 5-1052)
Facility Name or Company Site Identifier, as applicable
3191 S. Acadian Thruway
Street Address (P.O. Box not acceptable)
Baton Rouge, La. 70808
City State Zip Code
Parish

NOTICE: A current copy of the registration form must be kept on-site or at the nearest staffed facility.

Rev. 1/91

III. TYPE OF OWNER

- ☐ Federal Government
- ☒ Commercial
- ☐ State Government
- ☐ Private
- ☐ Local Government

IV. INDIAN LANDS

Tanks are located on land within an Indian Reservation or on other trust lands. ☐

Tanks are owned by native American nation, tribe, or individual. ☐

Tribe or Nation: _____

V. TYPE OF FACILITY

Select the Appropriate Facility Description

✓ Gas Station	Railroad	Trucking/Transport
Petroleum Distributor	Federal-No-Military	Utilities
Air Taxi(Airline)	Federal-Military	Residential
Aircraft Owner	Industrial	Farm
Auto Dealership	Contractor	Other(Explain)

VI. CONTACT PERSON IN CHARGE OF TANKS Exxon Co. USA

Name:	Job Title	Address
Donald W. Simpson	Constr. & Mzint. Engr.	3301 Scenic Hwy. Baton Rouge, La. 70805

Phone Number (Include Area Code)
(504) 359-4255

VII. FINANCIAL RESPONSIBILITY

I have met the financial responsibility requirements in accordance with 40 CFR Subpart H ✓

Check all that apply

- ☒ Self Insurance
- ☐ Commercial Insurance
- ☐ Risk Retention Group
- ☐ Guarantee
- ☐ Surety Bond
- ☐ Letter of Credit
- ☐ State Funds
- ☐ Trust Fund
- ☐ Other Method Allowed Specify _____

VIII. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiarwith 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.

Name and official title of owner or owner's authorized representative (Print)	Signature	Date Signed
B. C. TREVINO REGULATORY ANALYST	B C Trevino	12/23/91

IX. DESCRIPTION OF UNDERGROUND STORAGE TANKS (Complete for each tank at this location.)

Tank Identification Number	Tank No. 1	Tank No. 2	Tank No. 3	Tank No. 4
1. Status of Tank (mark only one)	39271	39272	39273	
Currently In Use	✓	✓	✓	
Temporarily Out of Use				
Permanently Out of Use				
Amendment of Information				
Is Tank or Piping leaking?	Yes ___ No ✓	Yes ___ No ✓	Yes ___ No ✓	Yes ___ No ___
2. Date of Installation (mo/year)	10/91	10/91	10/91	
3. Estimated Total Capacity (gallons)	12000	12000	12000	
4. Is there an Active or Abandoned Water Well within 50 ft.?	Yes ___ No ✓	Yes ___ No ✓	Yes ___ No ✓	Yes ___ No ___
If yes, specify # Active	-	-	-	
# Abandoned	-	-	-	
5. Material of Construction (Mark all that apply)				
Asphalt Coated or Bare Steel				
Cathodically Protected Steel				
Epoxy Coated Steel				
Composite (Steel with Fiberglass)				
Fiberglass Reinforced Plastic	✓	✓	✓	
Lined Interior				
Double Walled	✓	✓	✓	
Polyethylene Tank Jacket				
Concrete				
Excavation Liner				
Unknown				
Other, Please specify				
Has tank been repaired?				
6. Piping (Material) (Mark all that apply)				
Bare Steel				
Galvanized Steel				
Fiberglass Reinforced Plastic	✓	✓	✓	
Copper				
Cathodically Protected				
Double Walled	✓	✓	✓	
Secondary Containment	✓	✓	✓	
Unknown				
Other, Please specify				

IX. DESCRIPTION OF UNDERGROUND STORAGE TANKS(Complete for each tank at this location.)				
Tank Identification Number	**Tank No. 1**	**Tank No. 2**	**Tank No. 3**	**Tank No. ____**
7. Piping (Type) (Mark all that apply) — Suction: no valve at tank				
Suction: valve at tank				
Pressure	✓	✓	✓	
Gravity Feed				
Has piping been repaired?	No	No	No	
8. Substance Currently or Last Stored in Greatest Quantity by Volume — Gasoline	✓	✓	✓	
Diesel				
Gasohol				
Kerosene				
Heating Oil				
Used Oil				
Other, Please specify				
Hazardous Substance				
CERCLA name and/or,				
CAS number				
Mixture of Substances				
Please specify				

X. TANKS OUT OF USE, OR CHANGE IN SERVICE				
1. Closing of Tank — A. Estimated date last used (mo/day/year)	10/27/91	10/27/91	10/27/91	10/27/91
B. Estimate date tank closed (mo/day/year)	10/28/91	10/28/91	10/28/91	10/28/91
C. Tank was removed from ground	yes	yes	yes	yes
D. Tank was closed in ground				
E. Tank filled with inert material				
Describe				
F. Change in service				
2. Site Assessment Complete	No	No	No	No

Tank Identification Number	Tank No.	Tank No.	Tank No.	Tank No.
Evidence of a leak detected	1	2	3	5,3

XI. CERTIFICATION OF COMPLIANCE (Complete for all new and upgraded tanks at this location.)

1. Installation (Effective January 20, 1992, only those persons certified by the Louisiana Department of Environmental Quality may install USTs) (Mark all that apply)				
A. Installer certified by the LDEQ	yes	yes	yes	—
B. Installer certified by tank and piping manufacturers	yes	yes	yes	—
C. Installation inspected by a registered engineer.	yes	yes	yes	—
D. Manufacturer's installation checklists have been completed				

2. Release Detection (Mark all that apply)	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping
A. Manual tank gauging	X		X		X			
B. Tank tightness testing	X		X		X			
C. Inventory controls								
D. Automatic tank gauging								
E. Vapor monitoring								
F. Groundwater monitoring								
G. Interstitial monitoring doubled walled tank/piping	X		X		X			
H. Interstitial monitoring/secondary containment	X	X	X	X	X	X		
I. Automatic line leak detectors	[illegible]	X		X		X		
J. Line tightness testing		X		X		X		
K. Other method allowed by implementing agency. Please specify.								

3. Spill and Overfill Protection				
A. Overfill device installed	yes	yes	yes	
B. Spill device installed	yes	yes	yes	

Oath: I certify the information concerning installation that is provided in section XI is true to the best of my belief and knowledge.

Installer: R.L. Hall & Assoc. (Name) — R.L. Hall (Signature) — 11-20-91 (Date)

(Certificate Number (Issued by the LDEQ))

R.L. Hall & Assoc. (Company)

REGISTRATION FOR UNDERGROUND STORAGE TANKS

GENERAL INFORMATION

Registration is required by State law for all underground tanks that have been used to store regulated substances, unless, the underground storage tanks have been filled with a solid inert material.

WHO MUST REGISTER? The Louisiana Environmental Quality Act, L.R.S. 30:2194 et seq, as amended, requires that, unless exempted, owners of underground tanks that store regulated substances must notify the Louisiana Department of Environmental Quality of the existence of their tanks.

Owner means-

a) the current owner of the land under which the tank is buried;
b) any legal owner of the tank;
c) any known operator of the tank;
d) any lessee;
e) any lessor.

If one person defined as an owner complies it shall be deemed compliance by all persons defined as owners.

WHAT TANKS ARE INCLUDED? Underground storage tank is defined as any one or combination of tanks that (1) is used to contain an accumulation of "regulated substances," and (2) whose volume (including connected underground piping) is 10% or more beneath the ground. Some examples are underground tanks storing:

1. Gasoline, used oil, or diesel fuel, and 2. Industrial solvents, pesticides, herbicides or fumigants.

WHAT TANKS ARE EXCLUDED? Tanks removed from the ground are not subject to registration. Other tanks excluded from registration are:

1. farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;
2. tanks used for storing heating oil for consumptive use on the premises where stored;
3. septic tanks;
4. pipeline facilities (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968, or Hazardous Liquid Pipeline Safety Act of 1979, or which is an intrastate pipeline facility regulated under State laws:
5. surface impoundments, pits, ponds, or lagoons;
6. storm water or waste water collection systems;
7. flow-through process tanks;
8. liquid traps or associated gathering lines directly

STATE OF LOUISIANA
UNDERGROUND STORAGE TANK CLOSURE/ASSESSMENT FORM – PLEASE TYPE

Please complete and return withing sixty (60) days after UST system closure or change-in-service. AI-20629

Return to: LDEQ - UST DIVISION Questions: (504) 765-0243
P. O. Box 82178
Baton Rouge, LA 70884-2178

DEQ Facility Number 17-004226
DEQ Owner ID Number 0109200

I. OWNERSHIP OF TANKS

IF OWNER'S ADDRESS CHANGED, PLEASE CHECK ☐

Exxon Mobil Corporation
OWNER NAME (CORPORATION/INDIVIDUAL, ETC.)

601 Jefferson Street
MAILING ADDRESS

Houston TX 77002
CITY STATE ZIP

Harris
PARISH/COUNTY

(713) 656-9216
TELEPHONE (INCLUDE AREA CODE)

Roxana Brom
NAME OF CONTACT PERSON

II. LOCATION OF TANKS

IF SAME AS SECTION I, PLEASE CHECK ☐

Former Exxon Retail Store No. 5-1052
FACILITY NAME OR COMPANY SITE IDENTIFIER

3191 South Acadian Thruway
STREET ADDRESS (P. O. BOX NOT ACCEPTABLE)

Baton Rouge LA 70808
CITY STATE ZIP

East Baton Rouge
PARISH

( ) N/A
TELEPHONE (INCLUDE AREA CODE)

CONTACT PERSON AT THIS LOCATION

III. TANK INFORMATION (Attach Continuation Sheets If Necessary)

DEQ ASSIGNED TANK NUMBERS	SIZE OF TANKS (GALLONS)	PRODUCT LAST STORED IN TANK	CHOOSE ONE PER TANK 1 = Removed 2 = Closed-in-Place 3 = Change-in-Service[1] 4 = Removed & Replaced[2]	TANK PROPERLY LABELED? CIRCLE		HIGHEST LEL OR OXYGEN READING[3] LEL[4]	Oxygen	DATE OF CLOSURE OR CHANGE-IN-SERVICE
39271	12,000	Gasoline	1	(Y)	N		4%	03 / 15 / 01
39272	12,000	Gasoline	1	(Y)	N		3%	03 / 15 / 01
39273	12,000	Gasoline	1	(Y)	N		4%	03 / 15 / 01
				Y	N			/ /
				Y	N			/ /

1 - Indicate the non-regulated substance to be stored in the tank.
2 - A registration form addressing the replacement tank must be completed.
3 - Highest reading recorded just before tank removed from excavation.
4 - Lower Explosive Limit

IV. TANK	V. TANK SLUDGES	VI. TANK WATERS/WASHWATERS
A. Date cleaned 03 / 15 / 01	A. Date disposed/recycled N/A /	A. Date disposed/recycled 03 / 15 /01
B. Date disposed/recycled 03/27/01	B. Volume removed None cu/yds	B. Volume removed 5,300 gals
C. Name of disposal site/recycling site Jefferson Parish Landfill	C. Name of disposal site N/A	C. Name of disposal/recycling site U.S.Filter Recovery Services

VII. CONTAMINATED SOIL		VIII. CONTAMINATED GROUNDWATER	
A. Date removed N/A /	D. Date disposed N/A /	A. Date removed 03 / 14 /01	D. Date disposed 03 / 14 / 01
B. Volume of soil removed None cu/yds		B. Volume of groundwater removed 12,863 gals	
C. Name of disposal site N/A		C. Name of disposal site/recycler U.S. Filter Recovery Services	

IX. 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.

Roxanna Brom — PRINT OR TYPE OWNER'S NAME
OWNER'S SIGNATURE
5/11/01 — DATE

Cliff D. Corder — PRINT OR TYPE NAME OF CERTIFIED WORKER
SIGNATURE OF CERTIFIED UST WORKER
C-0676 — CERTIFICATE NO.
05/10/01 — DATE

FORMS THAT DO NOT INCLUDE THE OWNER'S AND UST WORKER'S SIGNATURES WILL BE REJECTED.

LDEQ RESPONSE - DO NOT WRITE BELOW THIS LINE

☐ UST system removed from database; no further action required.
☑ UST system removed from database; additional information required Contamination is present in soil and groundwater. Refer to Remediation Services Division.

Reviewer's Signature Charles J. McClain Telephone No. (225) 765-2682 Date 7/2/01

Signature of LDEQ Representative Bobby Mayweather Date 7/02/01 Supervisor's Initials

UST-ENF-02 **** INCOMPLETE FORMS MAY BE REJECTED ***** Revised 12/94

UST DIV. MAIN OFFICE FILE

UNDERGROUND STORAGE TANK CLOSURE/ASSESSMENT FORM

INSTRUCTIONS

Within **SIXTY DAYS** after completing a UST closure or change-in-service, this form along with **two copies** of the following must be provided to the Underground Storage Tank Division:

1. site drawing;
2. analytical results with chain-of-custody documents; and
3. copies of all manifests, bills of lading or receipts for the disposition of tank(s), tank contents, soil and waters.

All applicable information required on the form must be addressed. Forms that are incomplete may be rejected.

Please **PRINT** clearly (press hard, as you are making six copies). After completion, the owner is to retain the bottom (canary) copy and forward all remaining copies of the form to:

UNDERGROUND STORAGE TANK DIVISION
P. O. BOX 82178
BATON ROUGE, LA 70884-2178.

The UST Division will distribute the remaining copies of the form as follows:

1. Original (White) - UST Main Office File
2. Pink - UST Regional Office File
3. Goldenrod - Registration Files
4. Blue - UST Owner (After DEQ Processing)
5. White - UST Closure Reading File
6. Green - UST Main Office File (Before DEQ Processing)

PROCEDURES TO BE FOLLOWED

The procedures which must be followed when performing a UST closure or change-in-service are provided in the "Underground Storage Tank Closure/Change-in-Service Assessment Guidelines." To obtain a copy of this document call the UST Division at (504) 765-0243 or write to the address noted above.

NOTICE

Chapter 13 of the UST Regulations requires that owners of USTs ensure that the contractor chosen to perform the UST closure/change-in-service employs an individual who holds a current Louisiana DEQ certificate for closure. The certified person must be present at the site and exercising responsible supervisory control during the closure/change-in-service process. A list of contractors who employ DEQ certified workers can be obtained from the UST Division at (504) 765-0243.

CONESTOGA-ROVERS
& ASSOCIATES

4915 S. Sherwood Forest Blvd., Baton Rouge, LA 70816
Telephone: 225.292.9007 Facsimile: 225.292.3614
www.CRAworld.com

September 26, 2001

Reference No. 26809-00

acl

Remediation Services Division
Manager: Bradford
Team Leader: Pegan
AI #: 20629
TEMPO Task #:
Desk Copy File Room: UST

Mr. Keith L. Casanova, Administrator
Louisiana Department of Environmental Quality
Remediation Services Division
P.O. Box 82178
Baton Rouge, LA 70884-2178

Re: Work Plan and Cost Estimate for Additional Site Investigation
Former Exxon Retail Store No. 5-1052
3191 South Acadian Thruway
Baton Rouge, Louisiana
Facility UST I.D. No.: 17-004226
Agency Interest No.: ~~20629~~ 22413

RECEIVED
SEP 2 8 2001
LA. DEPT. OF ENV. QUALITY
REMEDIATION SERVICES DIVISION
LOG # FY 2002 - 1634

Dear Mr. Casanova:

As requested in Louisiana Department of Environmental Quality (LDEQ) correspondence dated August 29, 2001, Conestoga-Rovers & Associates (CRA), on behalf of Exxon Mobil Corporation (ExxonMobil), herein submits a work plan and cost estimate to perform an investigation (exclusive of RECAP evaluation costs) at the above-referenced facility in accordance with the LDEQ's Risk Evaluation/Corrective Action Program (RECAP), Appendix B, as revised on June 20, 2000. Within ninety days following receipt of written LDEQ approval of this investigation plan, a site investigation report detailing the extent of subsurface hydrocarbon impact will be submitted that will include a RECAP evaluation of the analytical laboratory results of the investigation. Prior to completing this RECAP evaluation, a RECAP proposal detailing the management option, input parameters, and estimated cost to complete the evaluation will be submitted for LDEQ Remediation Services Division (RSD) approval. A site plan depicting the former underground storage tanks (USTs), dispenser island locations, former used oil tank, and other pertinent features of the property are presented as Figure 1.

CRA proposes to utilize existing soil and groundwater analytical data obtained during Initial Subsurface Investigation (ISI) activities conducted in May 2001. CRA has determined, however, that some additional data is needed. Soil and groundwater data should be collected from the five proposed boring locations, presented in Figure 1. The soil and groundwater samples should be analyzed for the appropriate parameters designated for gasoline in Table D-1 of the LDEQ RECAP document. In addition, fractional organic carbon (foc), total dissolved solids (TDS), and geotechnical information will be collected to comply with RECAP. Also, all existing monitoring wells will be resampled and analyzed for the appropriate parameters designated in Table D-1. One of the existing monitoring wells will be resampled for Chromium VI as previous laboratory analysis of combined Chromium indicated levels above RECAP screening standards (SS). In addition, CRA will collect a non-impacted soil sample to confirm the suspected background

source of elevated concentrations of arsenic. The appropriate QA/QC samples will be collected. This data, as well as all recent data collected from the site by CRA, will be incorporated into the RECAP evaluation.

SCOPE OF WORK

CRA proposes the following scope of work to be conducted in accordance with the LDEQ's Risk Evaluation/Corrective Action Program (RECAP), Appendix B:

- Install five soil exploration borings to approximately 18 feet below ground surface (bgs), or at least 10 feet below the water table, using a small diameter, hydraulically advanced direct push drilling method. Borehole depth may vary depending on soil/groundwater interface.
- Collect representative soil samples continuously (two-foot centers) from the borings.
- Inspect and classify soil samples in the field, and conduct headspace screening of the soil samples for petroleum hydrocarbon vapors using a portable photoionization detector (PID).
- Collect groundwater samples from existing monitoring wells (MW-1 through MW-5).
- Submit one soil sample from each distinct change in lithology for geotechnical characterization. In addition, one soil sample submitted for geotechnical testing will also be analyzed for foc by ASTM D2974.
- Submit a minimum of three soil samples from each of the borings and groundwater samples from the existing monitoring wells (MW-1 through MW-5) to ExxonMobil's contract, LDEQ approved, laboratory, Test America, Inc. (TAI) of Nashville, Tennessee. Soil and groundwater samples will be analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by U.S. Environmental Protection Agency (EPA) Method 8021B, total petroleum hydrocarbon-gasoline (TPH-G) by EPA Method 8015B and total lead by Method 6010B. Submit one soil sample for arsenic analysis by EPA Method 6010B. A groundwater sample, from one well, will also be analyzed for total dissolved solids (TDS) by EPA Method 160.1. Additionally, the groundwater sample collected from monitoring well MW-5 will be analyzed for Chromium VI (total and dissolved) by EPA Method 7196. The soil samples to be submitted will be determined by the following criteria: highest PID reading; first-encountered groundwater; and the total depth of the borehole; and at all significant lithology changes. In addition, QA/QC samples will be collected. Submit one soil sample for arsenic analysis by EPA Method 6010B.

CONESTOGA-ROVERS & ASSOCIATES

- Grout the boreholes to the surface with a cement-bentonite mixture following sample collection and repair the concrete parking lot area where necessary.
- Conduct rising head slug test in order to define groundwater yield if the TDS concentration is determined to be < 10,000 milligrams per liter.
- Conduct a sensitive receptor and water well survey for a one-mile radius surrounding the site.
- Prepare a RECAP proposal detailing the management option, input parameters, and estimated cost to complete the evaluation

CRA will conduct the recommended evaluation in accordance with applicable LDEQ/RECAP requirements. Laboratory analyses will be performed utilizing EPA and LDEQ approved analytical methods. Soil cuttings generated from the borings will be minimal due to the small diameter of the sampling equipment and will be spread on-site.

CRA's cost estimate for this plan proposal is $ 7,298. If during the course of the project, CRA determines that additional tasks are advisable or additional data collection will be required beyond the scope of work defined herein, approval will be obtained prior to proceeding and incurring additional costs.

If you have any questions or comments concerning this submittal, please call CRA, or Roxanna Brom, ExxonMobil Territory Manager, at 713/656-9216.

Sincerely,
CONESTOGA-ROVERS & ASSOCIATES

Troy S. Bernal
Project Coordinator

Thomas B. Powers, PG
Project Manager

TSB:pla

Attachments: Figure 1 - Site Plan and Proposed Boring Locations
Exhibit 1 - Estimated Budget

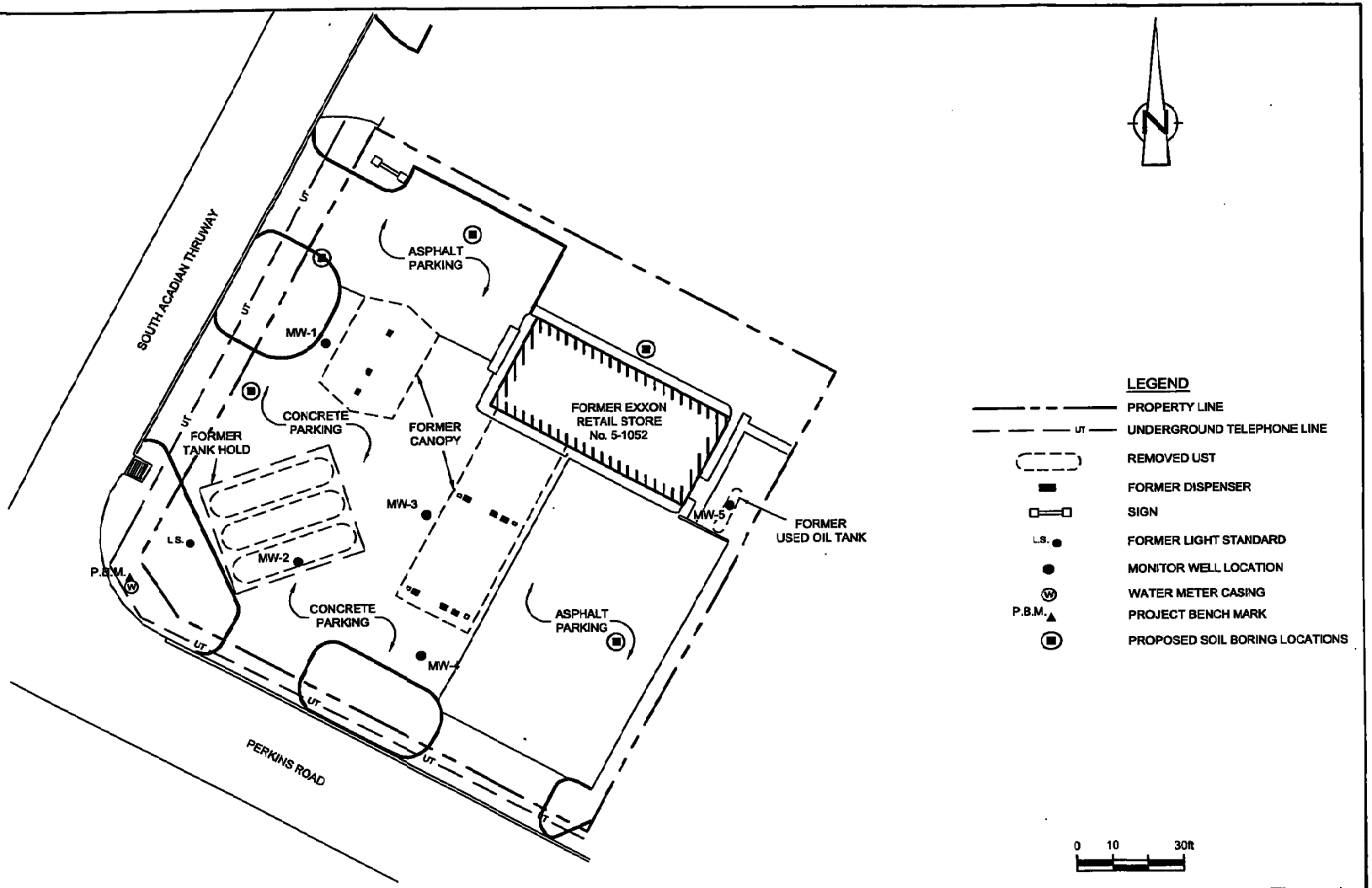

Figure 1

SITE PLAN
FORMER EXXON RETAIL STORE NO. 5-1052
3191 SOUTH ACADIAN THRUWAY, BATON ROUGE, LOUISIANA
EXXON MOBIL CORPORATION, HOUSTON, TEXAS

26809-00(002)GN-BR006 SEP 26/2001

RECAP FORM 1
RECAP SUBMITTAL SUMMARY

A completed RECAP Submittal Summary form shall be included as the first page of the RECAP Submittal.

Facility Owner Name:	ExxonMobil Corporation
Facility Owner Mailing Address:	Roxanna Brom Exxon Mobil Corporation 601 Jefferson Street, Room 1268 Houston, Texas 77002
Facility Physical Address:	3191 South Acadian Thruway Baton Rouge, Louisiana
Parish:	East Baton Rouge
Latitude/Longitude of Primary Facility Entrance:	Latitude 30:25:16 Longitude 91:09:09
Latitude/Longitude Method:	Derived from USGS topographic map
Facility Contact Person:	Roxanna Brom
Facility Contact Person's Phone Number:	713-656-9216
Facility Contact Person's Mailing Address:	ExxonMobil Corporation 601 Jefferson Street, Room 1268 Houston, Texas 77002
Facility LDEQ Identification Numbers:	AI: 22413 UST ID No.: 17-004226
Area of Investigation Name:	SOIL AOI
Area of Investigation Location:	Northern end of former UST, both dispenser islands
Area of Investigation Size:	90 feet by 105 feet
Indicate How Release Occurred (if known):	Unknown leak from UST and/or piping.
List Constituents Released (if known):	Benzene, toluene, ethylbenzene, xylene, TPH-GRO, and lead
RECAP Submittal Date:	04/02/03
RECAP Submittal Prepared by:	David Dickey
RECAP Submittal Preparer's Employer:	Conestoga-Rovers & Associates

Site Ranking: [ ] Class 1 [ ] Class 2 [ ] Class 3 [X] Class 4

Media Impacted:

[X] Surface Soil	[ ] Groundwater 1A	[ ] Surface water
[X] Potential Surface Soil	[ ] Groundwater 1B	[ ] Sediment
[ ] Subsurface Soil	[ ] Groundwater 2A	[ ] Biota
	[ ] Groundwater 2B	
	[ ] Groundwater 2C	
	[X] Groundwater 3A	
	[ ] Groundwater 3B	
	[ ] Groundwater Classification Unknown	

Aquifer: N/A

Depth Groundwater First Encountered: 5-9 feet bgs

Fractional Organic Carbon Content: 0.020 g/g

Distance from POC to POE: 1950 feet
Dilution Factor Applied: 310

Is NAPL Present? [ ] Yes [X] No

Current Land Use: [ ] Non-Industrial [X] Industrial NAICS: 44711

Potential Future Land Use: [ ] Non-Industrial [X] Industrial

Is There Offsite Contamination? [ ] Yes [X] No
If Yes, Land Use Offsite: [ ] Non-Industrial [ ] Industrial NAICS:

Management Option(s) Used:

[X]SO: Are the maximum detected concentrations for all COC in all impacted media less than or equal to the limiting SS? [ ] Yes [X] No

[ ] MO-1: Are the exposure concentrations for all COC in all impacted media less than or equal to the limiting MO-1 RS? [ ] Yes [ ] No

[X] MO-2: Are the exposure concentrations for all COC in all impacted media less than or equal to the limiting MO-2 RS? [X] Yes [ ] No

[X] Appendix K: Are the exposure concentrations for all COC in all impacted media less than or equal to the limiting Appendix K MO-2 RS? [X] Yes [ ] No

[ ] MO-3A Is the cumulative cancer risk less than or equal to 1E-06? [ ] Yes [ ] No

Is the total hazard index less than or equal to 1.0? [ ] Yes [ ] No

[ ] MO-3B: Are the exposure concentrations for all COC in all impacted media less than or equal to the limiting MO-1 RS? [ ] Yes [ ] No

Is Corrective Action Proposed? [ ] Yes [X] No

Are Institutional Controls Proposed? [X] Yes [ ] No

Have Interim Corrective Actions Been Performed? [X] Yes [ ] No

If yes, explain. USTs and piping removed.

Is There a Current or Potential Ecological Impact? [ ] Yes [X] No

What is the Action Being Requested for Management of this AOI?

[X] NFA-ATT [ ] CAP Approval [ ] Closure Plan Approval

RECAP Standards Applied at the AOI:

Constituents of Concern	Soil RECAP Standards (mg/kg)	Groundwater RECAP Standards (mg/L)
Benzene	12.0	4.03
Toluene	1600	530
Ethylbenzene	720	170
Xylene	440	10
TPH-GRO (C6-C12)	5667	9610
Lead	100	15.5
Arsenic	9.82 (background)	0.05

EXECUTIVE SUMMARY

This site investigation was conducted by Conestoga-Rovers & Associates (CRA) in accordance with the Louisiana Department of Environmental Quality (LDEQ) Risk Evaluation/Corrective Action Program (RECAP) dated June 20, 2000, in order to assess the lateral and vertical limits of petroleum hydrocarbon constituents in the subsurface soils and groundwater. Soil and groundwater samples were collected during the time period March 2001 to December 2002 for analysis of parameters specified in RECAP. A summary of CRA's work and findings follows:

Area of Investigation (AOI) History

Reason for Investigation - The investigation was conducted to evaluate the site in accordance with the LDEQ's RECAP as requested by the LDEQ/Remediation Services Division following UST tank closure confirmatory sampling and a Divestment Initial Subsurface Investigation (DISI) conducted by CRA on behalf of ExxonMobil Corporation which determined the presence of petroleum hydrocarbon constituents in the subsurface.

Site Characteristics – The site, located on the northeast corner of the intersection of South Acadian Thruway and Perkins Road, is paved with concrete. The underground storage tank (UST) system has been removed and the building demolished.

Site Status – The site is currently vacant. Site closure is sought under RECAP in accordance with LDEQ UST regulations.

Release Source - The source of the release was not clearly identified, but apparently resulted from a leak from the former UST system and/or the dispenser lines. Based on analytical concentrations, the release is believed to be from a former fuel dispenser.

Soil Type - The soils encountered at the site are described as silty clays.

Analytical results obtained during the site investigation were compared with LDEQ RECAP-derived Screening Option Screening Standards (SO SS). Based on the findings from the work, one Area of Investigation (AOI) has been identified as an area that exhibits constituent concentrations above SO SS.

The AOI represents an area encompassing soil borings/monitor wells S-1 through S-4, SB-3 through SB-7, and MW-1 and MW-3 in the area of the former UST hold and the former fuel dispenser islands (see Figure 5).

Highest Concentrations in all Impacted Media - Six constituents had soil concentrations that exceeded the limiting SO SS. They are arsenic (8.96 milligrams per kilogram (mg/kg), benzene (8.81 mg/kg), toluene (158 mg/kg), ethylbenzene (56.5 mg/kg), xylene (215 mg/kg), and TPH-Gasoline Range Organics: C-6 to C12 (2940 mg/kg).

Also for the AOI, there were five constituents with groundwater concentrations that exceeded the limiting SO SS including benzene (2.638 milligrams per liter (mg/L)), toluene (13.28 mg/L), ethylbenzene (1.974 mg/L), TPH-GRO (60.7 mg/L), and lead (0.036 mg/L).

The groundwater and soil concentrations of the constituents that were above the SO SS were then evaluated under RECAP Appendix K and Management Option 2. A comparison of the Limiting RECAP Standard (RS) concentrations with the exposure/source concentrations for the soil and compliance concentrations for groundwater (See Tables 11 and 12) demonstrates that none of the reported concentrations in soil and groundwater are above their respective Limiting RS.

Free Product Conditions – Phase-separated hydrocarbon (PSH) was not encountered in any of the soil borings or monitor wells.

Potential and/or Affected Receptors – On-site workers are the potential receptors for soil and ambient air. Dawson Creek, located approximately 1,950 feet downgradient of the site is the potential point of exposure for groundwater.

Problem Evaluation – Based on the findings of the site investigations and RECAP evaluation, CRA recommends that a "no further action-at this time" be granted for this site.

State of Louisiana

Department of Environmental Quality

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

SEP 2 7 2005

CERTIFIED – RETURN RECEIPT REQUESTED (7003 2260 0001 2752 4823)

Mr. Dale L. Gomm
ExxonMobil Territory Manager
16825 Northchase Dr.
Room 928 C
Houston, TX 77060

RE: No Further Action Notification
Former Exxon Service Station #5-1052; **AI Number 22413**
FID # 17-004226; UST ID # UE-91-02-0181
3191 South Acadian Thruway, Baton Rouge, East Baton Rouge Parish

Dear Mr. Gomm:

The Louisiana Department of Environmental Quality – Environmental Technology Division (LDEQ-ETD) has completed its review of your RECAP Evaluation dated April 2, 2003, for the above-referenced area of investigation located at 3191 South Acadian Thruway 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.

No soils may be removed from this site without prior approval from LDEQ unless they are removed and disposed at a permitted disposal facility. Prior to the construction of enclosed structures over any portion of the impacted area, further evaluation and approval from LDEQ is warranted.

If you have any questions or need further information, please call Melissa Boles Ashour at (225) 219-3409.

Thank you for your cooperation in addressing this area.

Sincerely,

Keith L. Casanova

Keith L. Casanova, Administrator
Remediation Services Division

mba
Attachment

c: Imaging Operations – UST
Claire Greer, Motor Fuels Trust Fund
Terri Gibson, RSD
Seth Domangue, CRA
4915 S. Sherwood Forest Blvd.
Baton Rouge, LA 70816
Larry Brooks
P.O. Box 64862
Baton Rouge, LA 70896

BASIS OF DECISION FOR NO FURTHER ACTION

Former Exxon Retail Store # 5-1052
AI # 22413

The Louisiana Department of Environmental Quality – Environmental Technology Division (LDEQ-ETD) has determined that the Former Exxon Retail Store # 5-1052 requires No Further Action At This Time.

The property has historically been operated as an Exxon gasoline service station. The site is currently inactive. The building has been demolished and underground storage tanks have been removed. Future land use is projected to remain commercial/industrial. In March 2001, the underground storage tank system, including dispenser islands, product piping, and three 12,000-gallon fiberglass gasoline USTs were removed from the site. Five soil borings/monitor wells were installed during the Divestment Initial Subsurface Investigation (May 2001) to determine conditions of soils and groundwater. In April and December 2002, nine additional soil borings were installed to completely assess the horizontal and vertical extent of impacted soil and groundwater.

Remedial standards were developed for this property using the 2000 LDEQ's RECAP Appendix K Standards. The standards that were applied to this site are listed in the table that appears at the end of this BOD. The initial depth to groundwater measured in the soil borings at the site ranged from 5 to 9 feet bgs. The direction of groundwater flow is approximately due east toward Dawson Creek which is approximately 1,950 feet downgradient from the site. Groundwater at this site is designated as classification 3A.

Soil and groundwater sampling has confirmed that constituents of concern concentrations do not exceed the established site-specific remediation standards, so no remedial action was required. No Further Action At This Time is granted when contamination is confirmed to exist at concentrations that do not exceed the established standards.

In accordance with LAC 33:I. Chapter 13, if land use is going to be changed from industrial to non-industrial, the responsible party shall notify the LDEQ within thirty (30) days and the Exxon Service Station #5-1052 shall be reevaluated to determine if conditions are appropriate for the proposed land use. Future use may dictate additional remedial activities. A conveyance notice has been filed with the East Baton Rouge Parish Clerk of Court noting that the Exxon Service Station #5-1052 was closed under industrial standards.

The last inspection of the site was preformed on June 7, 2005, confirming that no investigation derived waste remains on site. No contaminated soils may be moved from this location without written authorization from the LDEQ unless they are removed and disposed at a permitted disposal facility.

All monitoring wells onsite were properly plugged and abandoned on December 12, 2003.

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

Medium	Constituent of Concern	Maximum Remaining Concentration	Limiting RECAP Standard
Soil	Benzene	8.81 mg/kg	12 mg/kg
Soil	Toluene	158 mg/kg	1600 mg/kg
Soil	Ethylbenzene	56.5 mg/kg	720 mg/kg
Soil	Xylene	215 mg/kg	440 mg/kg
Soil	TPH-GRO (C6-C12)	2940 mg/kg	5667 mg/kg
Soil	Lead	24.2 mg/kg	100 mg/kg
Soil	Arsenic	8.96 mg/kg	9.82 mg/kg (background)
Groundwater	Benzene	2.638 mg/L	4.03 mg/L
Groundwater	Toluene	13.28 mg/L	530 mg/L
Groundwater	Ethylbenzene	1.974 mg/L	170 mg/L
Groundwater	Xylene	6.144 mg/L	10 mg/L
Groundwater	TPH-GRO (C6-C12)	60.7 mg/L	9610 mg/L
Groundwater	Lead	0.036 mg/L	15.5 mg/L

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.

Vicki "Riedel" Thibodeaux

From: SPOC <spoc.otrs@la.gov>
Sent: Friday, March 28, 2014 3:46 PM
To: Vicki "Riedel" Thibodeaux
Cc: Alan Karr
Subject: [Incident#1440614] CRO s14-40614 T 154846 UST 8401UnitedPlaza-BR diesel-missing
Attachments: CRO s14-40614 T 154846 UST 8401UnitedPlaza-BR diesel-missing.txt

Remediation Services Division
Manager: Blanchard
Team Leader:
AI #: 79956
TEMPO Task #:
Desk Copy File Room:

Alan Karr copied (called SPOC asking about this 3/26/14)
SPOC
Cindy LaFosse

--
Louisiana Department of Environmental Quality
Single Point Of Contact
Phone: (225) 219-3640
Fax: (225) 219-4044
--
---- Forwarded message from <Elizabeth.Ecker@dps.la.gov> ---

From: <Elizabeth.Ecker@dps.la.gov>
To: <singlepointof.contact@la.gov>, <HSEESStaff@la.gov>, <oil.spill@la.gov>, <seddy@stmartinsheriff.org>, <GOHSEP-HazMatAlerts@LA.GOV>, <lafusion.center@dps.la.gov>, <abmcconnell@nola.gov>, <dnrincidents@la.gov>, <hazmat@nola.gov>, <Lcarver@wlf.la.gov>, <John.Nicholas@dps.la.gov>, <R6_SpillReports@epamail.epa.gov>, <Spiers.Brett@epa.gov>
Subject: LSP Hazardous Material Incident Incident # 14-01345
Date: 2014-03-25 15:26:03

THIS INFORMATION IS FOR EMERGENCY RESPONSE PURPOSES
AND NOT FOR PUBLIC DISTRIBUTION WITHOUT PRIOR STATE POLICE APPROVAL

RECEIVED
APR 24 2014
LA DEPT OF ENV QUALITY
REMEDIATION SERVICES
E-2014-2860

INCIDENT # 14-01345 SOURCE: STATE POLICE HAZMAT HOTLINE
877-925-6595 / 225-925-6595

** (INITIAL REPORT) DATE AND TIME **
HOTLINE NOTIFIED: 03/25/14 15:17
INCIDENT DISCOVERED: 03/25/14 09:30

** (INITIAL REPORT) INCIDENT LOCATION ***
PARISH: East Baton Rouge
ADDRESS: 8401 United Plaza Blvd
CITY: Baton Rouge

** (INITIAL REPORT) CALLER INFORMATION **
CALLER'S NAME: Layne Roberts
CALLER'S ADDRESS OR EMPLOYER: Beau Box Property Management
CALLER'S PHONE NUMBER: 225-330-9806

** (INITIAL REPORT) RESPONSIBLE PARTY ***
NAME: Beau Box Property Management
MAILING ADDRESS: 8710 Jefferson Hwy
CITY,STATE,ZIP: Baton Rouge, LA 70809

** (INITIAL REPORT) DETAILS ***
There is an underground storage tank that operates the generator for their facility... It was discovered this morning that 1,700 to 1,800 gallons of diesel was missing... There are no signs of a leak anywhere

near the tank or surrounding areas... They brought in a company (Southern Tank Testers) to perform a test to see if there was a possible leak, and the company determined that the tank would not hold a vacuum- that he could not seal the tank all the way to pressurize... It is possible that the diesel was stolen... No release is suspected since the plant life is still alive and well, knowing that if diesel had affected the area that plant life would be dead...

** (INITIAL REPORT) CHEMICAL INFORMATION **********
CHEMICAL 1: Diesel
QTY: 1,700-1,80gal
RELEASED STATE: Liquid CLASS: Combustible Liqui ID: 1993 EHS: No

** (INITIAL REPORT) RELEASE INFORMATION **********
INCIDENT CLASSIFICATION: Unusual Event
POTENTIAL TO ESCAPE FACILITY? No
DID MATERIAL GO OFFSITE? No
RELEASED TO: No release
ANY OFF-SITE PROTECTIVE ACTION?
No
RELEASE EFFECTS:
FIRE: No
INJURIES: No :
FATALITIES: No :

** (INITIAL REPORT) FIXED SITE **********
Storage Unit

---- End forwarded message ---

TANK EXCAVATION ASSESSMENT REPORT

BEAU BOX PROPERTY MANAGEMENT
THE RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA
EAST BATON ROUGE PARISH

INCIDENT ID NO. 154846
FACILITY UST ID NO. 17-017472
LDEQ AGENCY INTEREST NO. 79956

PPM PROJECT NO. 503124

NOVEMBER 2014

Environmental Science and Engineering

PPM CONSULTANTS

STATE OF LOUISIANA
UNDERGROUND STORAGE TANK CLOSURE/ASSESSMENT FORM – PLEASE TYPE

Please complete and return within sixty (60) days after UST system closure or change-in-service

Return to:
LDEQ - UNDERGROUND STORAGE TANK & REMEDIATION DIVISION
Appropriate Regional Office *See attached mailing list or USTRD Submittal information at www.deq.louisiana.gov*
Questions: (225) 219-3181

DEQ Agency Interest Number: 79956
DEQ Facility ID Number: 17-017472

I. OWNERSHIP OF TANKS

IF OWNER'S ADDRESS CHANGED, PLEASE CHECK ☐
LA. RETIRMENT SYSTEMS BLDG. PART.
OWNER NAME (CORPORATION/INDIVIDUAL, ETC.)
8401 UNITED PLAZA BLVD.
MAILING ADDRESS
BATON ROUGE LA 70809
CITY STATE ZIP
EAST BATON ROUGE PARISH
PARISH/COUNTY
(225) 330-9806
TELEPHONE (INCLUDE AREA CODE)
LAYNE ROBERTS
NAME OF CONTACT PERSON

II. LOCATION OF TANKS

IF SAME AS SECTION I, PLEASE CHECK ☒
FACILITY NAME OR COMPANY SITE IDENTIFIER
STREET ADDRESS (P. O. BOX NOT ACCEPTABLE)
CITY STATE ZIP
PARISH
( ) TELEPHONE (INCLUDE AREA CODE)
CONTACT PERSON AT THIS LOCATION

LA Dept. of Environmental Quality UST
FEB 4 2014
RECEIVED

III. TANK INFORMATION (Attach Continuation Sheets If Necessary)

DEQ ASSIGNED TANK NUMBERS	SIZE OF TANKS (GALLONS)	PRODUCT LAST STORED IN TANK	CHOOSE ONE PER TANK 1 = Removed 2 = Closed-in-Place 3 = Change-In-Service 1 4 = Removed & Replaced 2	TANK PROPERLY LABELED? Yes	No	HIGHEST LEL OR OXYGEN READING 3 LEL 4	Oxygen	DATE OF CLOSURE OR CHANGE-IN-SERVICE
53049	2,000	DIESEL	1	☐	☐	0%	18%	4/23/14
				☐	☐			
				☐	☐			
				☐	☐			
				☐	☐			

1 - Indicate the non-regulated substance to be stored in the tank.
2 - A registration form addressing the replacement tank must be completed.
3 - Highest reading recorded just before tank removed from excavation.
4 - Lower Explosive Limit

IV. TANK	V. TANK SLUDGES	VI. TANK WATERS/WASHWATERS
A. Date cleaned: 4/23/14	A. Date disposed/recycled:	A. Date disposed/recycled: 4/23/2014
B. Date disposed/recycled: 4/23/2014	B. Volume removed (cu/yds):	B. Volume removed (gals): 1,000
C. Name of disposal site/recycling site: Clean Fuels Facility	C. Name of disposal site: None Generated	C. Name of disposal/recycling site: Clean Fuels Facility

VII. CONTAMINATED SOIL		VIII. CONTAMINATED GROUNDWATER	
A. Date removed: 4/28/2014	D. Date disposed: 4/28/2014	A. Date removed:	D. Date disposed:
B. Volume of soil removed (cu/yds): 48.06 Tons		B. Volume of groundwater removed (gals):	
C. Name of disposal site: Woodside Land Fill		C. Name of disposal site/recycler: None Generated	

IX. 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.

Layne Roberts — PRINT OR TYPE OWNER'S NAME
[signature] — OWNER'S SIGNATURE
8-25-14 — DATE

Jacob Poirier — PRINT OR TYPE NAME OF CERTIFIED WORKER
[signature] — SIGNATURE OF CERTIFIED UST WORKER
0774 — CERTIFICATE NO.
4-23-14 — DATE

FORMS THAT DO NOT INCLUDE THE OWNER'S AND UST WORKER'S SIGNATURES WILL BE REJECTED.

LDEQ RESPONSE - DO NOT WRITE BELOW THIS LINE

☐ UST system removed from database; no further action required at this time.
☑ Referred for remediation review.
☑ UST system removed from database; additional information required. DIESEL SPLP & FRACTION ANALYSIS ABOVE RECAP SS. SITE IN REMEDIATION/INVESTIGATION. ASSIGNED INCIDENT # 154846

Signature of LDEQ Representative [signature] Telephone No. 225 219-3440 Date 12/1/14 Supervisor's Initials KSB

PPM CONSULTANTS
Environmental Science and Engineering
7936 Office Park Boulevard • Baton Rouge, LA 70809 • tel 225.293.7270 • fax 225.293.7271 • www.ppmco.com

November 18, 2014

RECEIVED
NOV 24 2014
LA DEPT. OF ENV. QUALITY
REMEDIATION SERVICES DIVISION
LOG # 2015-1342

Remediation Services Division
Manager: Blanchard
Team Leader: Messina
AI #: 79956
TEMPO Task #:
Desk Copy File Room: UST

Mr. Gary Fulton, Administrator
Louisiana Department of Environmental Quality
Office of Environmental Compliance
Remediation and Underground Storage Tank Division
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312

Re: Tank Excavation Assessment Report
Beau Box Property Management
The Retirement Systems Building Partnership
8401 United Plaza Boulevard
Baton Rouge, Louisiana
East Baton Rouge Parish
Incident ID No. 154846
Facility UST ID No. 17-017472
LDEQ Agency Interest No. 79956
PPM Project No. 503124

TRANSMITTAL LETTER

Dear Mr. Fulton:

Enclosed please find three copies of the Tank Excavation Assessment Report prepared by PPM Consultants, Inc. for the above-referenced site.

If you have any questions or need any additional information, please do not hesitate to contact me at (225) 293-7270.

Sincerely,

Peter T. Smith, PG, CHMM
Senior Project Director

Enclosures

cc: Mr. Layne Roberts, Beau Box Property Management

TANK EXCAVATION ASSESSMENT REPORT

BEAU BOX PROPERTY MANAGEMENT
THE RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA
EAST BATON ROUGE PARISH

INCIDENT ID NO. 154846
FACILITY UST ID NO. 17-017472
LDEQ AGENCY INTEREST NO. 79956

PPM PROJECT NO. 503124

NOVEMBER 2014

TANK EXCAVATION ASSESSMENT REPORT

AT

THE RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA
EAST BATON ROUGE PARISH

INCIDENT ID NO. 154846
FACILITY UST ID NO. 17-017472
LDEQ AGENCY INTEREST NO. 79956

PREPARED FOR:

BEAU BOX PROPERTY MANAGEMENT
POST OFFICE BOX 66865
BATON ROUGE, LOUISIANA 70896
MR. LAYNE ROBERTS
(225) 237-3343

PPM PROJECT NO. 503124

NOVEMBER 2014

PREPARED BY:

JASON BEAUVAIS
ENVIRONMENTAL SPECIALIST IV

REVIEWED BY:

PETER T. SMITH, PG, CHMM
SENIOR PROJECT DIRECTOR

PPM CONSULTANTS, INC.
7936 OFFICE PARK BOULEVARD, SUITE A
BATON ROUGE, LOUISIANA 70809
(225) 293-7270

TABLE OF CONTENTS

1.0 INTRODUCTION

PPM Consultants, Inc. (PPM) herein submits this report documenting the removal of one underground storage tank (UST) at The Retirement Systems Building Partnership facility located at 8401 United Plaza Boulevard in Baton Rouge, East Baton Rouge Parish, Louisiana. The location of the former UST, soil samples, and other pertinent site features are presented on **Figure 1, Site Map with Soil Boring Well Locations**, in **Appendix A, Figure**.

Southern Tank Testers, Inc. (STT) of Breaux Bridge, Louisiana removed one 2,000-gallon diesel UST from the site on April 23, 2014. Oversight and documentation of the removal activities were provided by STT (Jacob Poirier) and PPM (Adrian Bain). Compliance sampling was provided by STT (Certification No. 0774). A State of Louisiana Notification of Intent to Perform a Closure or Change-In-Service to an Underground Storage Tank System form was submitted by Layne Roberts to the Louisiana Department of Environmental Quality (LDEQ) on April 17, 2014, and is provided in **Appendix B, State of Louisiana, Notification of Intent to Perform a Closure or Change-In-Service to an Underground Storage Tank System Form**.

2.0 UST EXCAVATION PROCESS

STT utilized an excavator to remove soil backfill from the ground surface to the top of the UST (approximately two feet below grade) and along the sides of the UST on April 23, 2014. Excavated soil was temporarily stockpiled adjacent to the tank hold for possible re-use as backfill. Prior to exposing the tank, the fill ports were opened, and the tank was purged of residual fluids. The tank was then cleaned and degassed utilizing a vacuum truck operated by Clean Fuels. Dry ice was added to the tank for the purpose of reducing the oxygen levels. An oxygen reading of zero percent (0%) was measured in the tank. A chain was then attached to the UST which the excavator used to lift the tank from the tank hold.

3.0 UST FLUIDS REMOVAL AND DISPOSAL

Approximately 1,000 gallons of residual fluids and wash water were removed from the UST by Clean Fuels and transported off-site to their facility in Belle Chase, Louisiana. A copy of Clean Fuel's service order for the waste fluids removed from the UST at the site is presented in **Appendix C, Waste Fluids Transportation and Disposal Manifest**.

4.0 UST CONDITION AND DISPOSAL

Following removal of the UST, the tank was visually inspected and found to be in poor condition. Following inspection, the tank was crushed and placed in a roll-off container, pending proper disposal. The UST was then transported off-site by Gator Environmental to the Woodside Landfill located at 29340 Woodside Drive in Walker, Louisiana, for disposal/recycling. Copies of the Non-Hazardous Waste Manifests are presented in **Appendix D, Non-Hazardous Wastes Manifests**. The UST closure / assessment form is provided in **Appendix E, State of Louisiana, Underground Storage Tank Closure / Assessment Form**.

5.0 SOIL SAMPLE COLLECTION AND ANALYSES

Following removal of the UST system, soil samples were collected from the tank hold and backfill, and analyzed in accordance with the UST closure guidelines specified in the LDEQ UST Closure / Change-In-Service Guidance Document, October 20, 2003.

Soil samples BF-1 and BF-2 were collected beneath each end of the UST at a depth of approximately 10 feet below ground surface (BGS) and soil samples T-1 and T-2 were collected beneath each end of the UST in native soil at approximately 12 feet BGS on April 23, 2014.

Soil samples BF-1 and T-1 were placed in laboratory-supplied containers, stored on ice, and transported to Accutest Laboratories (Accutest) of Scott, Louisiana for analysis for Total Petroleum Hydrocarbons - Diesel (TPH-D) and Polycyclic Aromatic Hydrocarbons (PAHs). The soil sample analytical laboratory results are depicted on **Figure 1, Site Map with Soil Boring Well Locations**, in **Appendix A**, and presented in **Table 1, Soil Analytical Laboratory Summary,** in **Appendix F, Table**. The analytical laboratory report and chain-of-custody document are included in **Appendix G, Soil Sample Analytical Laboratory Reports and Chain-of-Custody Documents**.

6.0 SOIL EXCAVATION

Approximately 70 tons of soil backfill were excavated from the UST hold, placed in lined roll-off boxes, and transported off-site by Gator Environmental to the Woodside Landfill in Walker, Louisiana, for disposal. Copies of the Non-Hazardous Waste Manifests are presented in **Appendix D, Non-Hazardous Wastes Manifests**.

7.0 FINDINGS AND CONCLUSIONS

One (1) 2,000-gallon diesel UST was removed from 8401 United Plaza Boulevard in Baton Rouge, East Baton Rouge Parish, Louisiana on April 23, 2014.

Soil samples BF-1 and BF-2 were collected beneath each end of the UST at a depth of approximately 10 feet BGS and soil samples T-1 and T-2 were collected beneath each end of the UST in native soil at approximately 12 feet BGS on April 23, 2014. Soil samples BF-1 and T-1 were submitted to Accutest and analyzed for TPH-D by Environmental Protection Agency (EPA) Method 8015B and PAHs by EPA Method 8270B.

The soil sample analytical laboratory data indicated TPH-D and 2-methylnaphthalene in soil samples BF-1 and T-1 exceeded their respective UST Screening Standards (SS) and naphthalene in soil sample BF-1 exceeded its UST SS. Soil sample BF-1 was further analyzed for 2-methylnaphthalene and naphthalene using the Synthetic Precipitation Leaching Procedure (SPLP) and aliphatics / aromatics in the appropriate carbon ranges by the Massachusetts Department of Environmental Protection (MADEP) Extractable Petroleum Hydrocarbons (EPH) Method. The analytical laboratory results indicated that SPLP 2-methylnaphthalene, aliphatics $>C_{12}$-C_{16}, aromatics $>C_{12}$-C_{16}, aromatics $>C_{16}$-C_{21} were above their respective SS.

Approximately 70 tons of soil backfill was excavated from the UST hold, placed in lined roll-off boxes, and transported off-site by Gator Environmental to the Woodside Landfill in Walker, Louisiana, for disposal.

APPENDICES

APPENDIX A – FIGURE

BF-1	04/23/14
TPH-D (ppm)	12,000
ALIPHATICS >C10-C12 (ppm)	30
ALIPHATICS >C12-C16 (ppm)	1,100
ALIPHATICS >C16-C35 (ppm)	1,500
AROMATICS >C10-C12 (ppm)	6.8
AROMATICS >C12-C16 (ppm)	270
AROMATICS >C16-C21 (ppm)	550
AROMATICS >C21-C35 (ppm)	91
ACENAPHTHENE (ppm)	<0.033
ACENAPHTHYLENE (ppm)	<0.033
ANTHRACENE (ppm)	<0.033
BENZO(A)ANTHRACENE (ppm)	<0.033
BENZO(A)PYRENE (ppm)	<0.033
BENZO(B)FLUORANTHENE (ppm)	<0.033
BENZO(K)FLUORANTHENE (ppm)	<0.033
CHRYSENE (ppm)	<0.033
DIBENZ(A,H)ANTHRACENE (ppm)	<0.033
FLUORANTHENE (ppm)	<0.033
FLUORENE (ppm)	3.7
INDENO(1,2,3-CD)PYRENE (ppm)	<0.033
2-METHYLNAPHTHALENE (ppm)	37
SPLP 2-METHYLNAPHTHALENE (ppm)	0.26
NAPHTHALENE (ppm)	6.7
SPLP NAPHTHALENE (ppm)	<0.025
PHENANTHRENE (ppm)	9.8
PYRENE (ppm)	1.8

T-1	04/23/14
TPH-D (ppm)	440
ACENAPHTHENE (ppm)	<0.033
ACENAPHTHYLENE (ppm)	<0.033
ANTHRACENE (ppm)	<0.033
BENZO(A)ANTHRACENE (ppm)	<0.033
BENZO(A)PYRENE (ppm)	<0.033
BENZO(B)FLUORANTHENE (ppm)	<0.033
BENZO(K)FLUORANTHENE (ppm)	<0.033
CHRYSENE (ppm)	<0.033
DIBENZ(A,H)ANTHRACENE (ppm)	<0.033
FLUORANTHENE (ppm)	0.07
FLUORENE (ppm)	0.42
INDENO(1,2,3-CD)PYRENE (ppm)	<0.033
2-METHYLNAPHTHALENE (ppm)	3.9
NAPHTHALENE (ppm)	0.5
PHENANTHRENE (ppm)	1.2
PYRENE (ppm)	0.22

LEGEND:

- SAMPLE LOCATION
- SOIL BORING LOCATION
- 3.9 RED TEXT INDICATES CONCENTRATION EXCEEDS THE RECAP SCREENING STANDARD

PPM CONSULTANTS, INC.
www.ppmco.com

DRAWN BY:	DRAWN DATE:
JCP	08/20/14
PROJECT NUMBER:	BILLING GROUP:
503124	USTCL

BEAU BOX INVESTMENTS, LLC
THE RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

SITE MAP WITH SOIL BORING WELL LOCATIONS

FIGURE NUMBER
1

Z:\Beau Box Investments, LLC\503124 - La Retirement Systems Building Partnership\ustcl\503124-USTCL.dwg, 1 Site Map, 8/21/2014 8:21:05 AM, jay prickett

APPENDIX B – STATE OF LOUISIANA, NOTIFICATION OF INTENT TO PERFORM A CLOSURE OR CHANGE-IN-SERVICE TO AN UNDERGROUND STORAGE TANK SYSTEM FORM

STATE OF LOUISIANA

NOTIFICATION OF INTENT TO PERFORM A CLOSURE OR CHANGE-IN-SERVICE TO AN UNDERGROUND STORAGE TANK SYSTEM

Please complete and return thirty (30) days prior to permanent UST system closure or change-in-service.

Return: LDEQ- UNDERGROUND STORAGE TANK & REMEDIATION DIVISION
Appropriate Regional Office
See attached mailing list or USTRD
Submittal info @ www.deq.louisiana.gov Questions: (225) 219-3181

DEQ Facility Number 17-017472

DEQ AI Number 79956 79956

I. OWNERSHIP OF TANKS

IF OWNER'S ADDRESS CHANGED, PLEASE CHECK ☐

LA RETIREMENT SYSTEMS BLDG PARTNERSHIP
OWNER NAME (CORPORATION/INDIVIDUAL, ETC.)

8401 UNITED PLAZA BLVD.
MAILING ADDRESS

BATON ROUGE LA 70809
CITY STATE ZIP

EAST BATON ROUGE
PARISH/COUNTY

(225) 925-1825
TELEPHONE (INCLUDE AREA CODE)

LANE ROBERTS
NAME OF CONTACT

II. LOCATION OF TANKS

IF SAME AS SECTION I. PLEASE CHECK ☒

FACILITY NAME OR COMPANY SITE IDENTIFIER

STREET ADDRESS (P. O. BOX NOT ACCEPTABLE)

CITY STATE ZIP

PARISH

( )
TELEPHONE (INCLUDE AREA CODE)

CONTACT PERSON AT THIS LOCATION

RECEIVED
APR 17 2014
LA Dept. of Environmental Quality
UST

III. TANK INFORMATION

DATE SCHEDULED FOR CLOSURE/REMOVAL OR CHANGE-IN-SERVICE 4/23/2014

DEQ ASSIGNED TANK NUMBERS	SIZE OF TANK (GALLONS)	PRODUCT LAST STORED IN TANK	DEQ ASSIGNED TANK NUMBERS	SIZE OF TANK (GALLONS)	PRODUCT LAST STORED IN TANK
53045 53049	2,000	DIESEL			

ATTACH CONTINUATION SHEETS IF NECESSARY

IV. TANK CLOSURE INFORMATION

A. If the tank(s) are to be closed in place, indicate cleaning method and the type of fill material to be used:

B. Name of UST Certified Worker JACOB POIRIER Certificate No. IRC #0774

C. Name of Contracting Company STT SERVICES, LLC

D. Name of laboratory to conduct sample analysis ESC

FORMS THAT INCLUDE "TO BE DETERMINED" OR "UNKNOWN" AS A RESPONSE WILL BE REJECTED

V. CERTIFICATION

I certify that the above information is correct to the best of my knowledge and that the appropriate UST Regional Office will be contacted seven days prior to performing the UST system closure or change-in-service. I agree if closure or change-in-service of the UST system does not begin within 90 days after DEQ's approval, that this form becomes invalid. I also agree to submit the following information within 60 days after closure/change-in-service of the UST system:

(1) the 'UST Closure/Assessment Form' (UST-SURV-02);
(2) two copies of a site drawing to include the information required by the "Underground Storage Tank Closure/Change-in-Service Assessment Guidelines";
(3) two copies of analytical results with chain-of-custody documents; and
(4) two copies of all manifests, bills of lading or receipts for the disposition of tank(s), tank contents, soil and waters.

LANE ROBERTS
PRINT OR TYPE OWNER'S NAME

OWNER'S SIGNATURE

4-17-14
DATE

FORMS THAT DO NOT INCLUDE THE OWNER'S SIGNATURE WILL BE REJECTED

LDEQ RESPONSE - DO NOT WRITE BELOW THIS LINE

☑ DEQ AI No. 79956
☑ Approved for the indicated activity
☐ Rejected for the following reason.
- ☐ DEQ records indicate that the contractor you have selected is not a UST worker certified by DEQ for closure. You must select, from the enclosed list, a contractor that is a certified UST worker.
- ☐ DEQ records indicate that the UST system has not been registered. You must complete the attached registration form and return it to this office IMMEDIATELY
- ☐ _____

☐ The noted highlighted section(s) of this form must be completed in order for LDEQ to process
☐ This form has not been signed by the owner. Please resubmit with the required signature.

Signature of LDEQ Representative _____ Telephone No. (225) 219-3440 Date 4/17/14

UST-SURV-01

**** INCOMPLETE FORMS MAY BE REJECTED ****

Revised 12/10

APPENDIX C – WASTE FLUIDS TRANSPORTATION AND DISPOSAL MANIFEST

FIELD OPERATING REPORT AND MANIFEST

EPA# LAR000072280

Clean Fuels

Emergency Contact: Lee Parrish 504-912-8602 – 800-453-8265
Emergency Response Team: Oil Mop, LLC 800-645-6671

Operator: Paul M. Hebert III Job# or PO#: _____ Date: 4-23-14 Assistant: Dwayne Johnson

Product on truck from job site:

NA 1993 Diesel Fuel, 3, III	_____(gal)
UN 1203 Gasoline, 3, II	_____(gal)
Contaminated Water	400+ 600 (gal)
Lube Oil	_____(gal)
Solid Waste/Sludge	_____(gal)
Other: _____	_____(gal)

Truck# 16 Mileage start 32,377
Trailer#_____ Mileage end 32,464

Customer: Southern Tank Testers
[ ] Commercial [ ] Residential [ ] Marine
Contact: _____
Phone: _____
Site Name: United Plaza
Address: 8401 United Plaza Blvd. Westminister, LA 70809
Billing: _____

Arrival Time: 12:00 Departure Time: 2:15

Tank #	Size/ Contents		Fuel Depth	Gallons	Water Depth	Gallons	Sludge Depth	Gallons	After Sample	Biocide/ Stabilizer Gal Treated	Filter Flush/ Pump off/ or Transfer
1		Before									
		After									
2		Before									
		After									
3		Before									
		After									
4		Before									
		After									

*If your equipment or station pumps are operating during our service, you will need to check your own records to verify fuel quantities.
Clean Fuels is not responsible for fuel level discrepancies when customer equipment is being operated during filtration.

Operator Comments: Impingment cleaning of 2K tank.

Quoted Price: $_____ (Customer initials):_____

I am the owner or an authorized representative responsible for the tanks listed above. I have inspected the tanks and I am satisfied with the work that has been completed. I further acknowledge that the fuel levels and amounts listed are correct. I understand the 30 day guarantee and will call Clean Fuels if I experience any problems in that time. I certify that, to my knowledge, the material removed is not hazardous waste, does not contain PCB's and has not be mixed with any listed hazardous waste.

Signature: _____ Print: Jacob Poirier Title: _____ Date: 4-23-14

Off-Load Information:
Released/Transferred to: _____ (COMPANY NAME) Address of transfer: _____
Company Representative: _____
Contact # (_____)_____-_____ EPA ID# (as needed): _____

I certify that this material is not a hazardous waste. I further certify that the material does not contain PCBs, has not been mixed with any listed hazardous waste, is not ignitable and does not contain more than 1,000 parts per million halogens. I understand my business will be responsible for any and all costs of proper disposal, testing and transportation if this material contains PCBs or is determined to be a hazardous waste. I further Certify that the material in this shipment is exempt from 49 CFR 279 IAW part (g)6.

Carrier Driver: _____ Print: _____

I am the owner or authorized representative of the transfer site named above. I have received the contaminated materials listed. I certify that the person(s) responsible for this site is/are authorized under, or exempt from, Title 40 CFR to transfer, store or properly dispose of the hazardous material I have received.

Signature _____ Title _____ Print: _____ Date _____

APPENDIX D – NON-HAZARDOUS WASTE MANIFESTS

BEST COPY

NEXT 3 PAGES

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No. Manifest Doc No.	2. Page 1 of	
3. Generator's Mailing Address:	Generator's Site Address (if different than mailing):	A. Manifest Number	WMNA 00409993
4. Generator's Phone		B. State Generator's ID	
5. Transporter 1 Company Name	6. US EPA ID Number LNR000068940	C. State Transporter's ID	
		D. Transporter's Phone	
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID	
		F. Transporter's Phone	
9. Designated Facility Name and Site Address	10. US EPA ID Number	G. State Facility ID	
		H. State Facility Phone	

GENERATOR

11. Description of Waste Materials	12. Containers No	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. WM Profile #					
b. WM Profile #					
c. WM Profile #					
d. WM Profile #					

J. Additional Descriptions for Materials Listed Above	K. Disposal Location			
	Cell		Level	
	Grid			

15. Special Handling Instructions and Additional Information

Purchase Order # EMERGENCY CONTACT / PHONE NO.:

16. GENERATOR'S CERTIFICATE:

I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name	Signature "On behalf of"	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year

FACILITY

19. Certificate of Final Treatment/Disposal

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed Name	Signature	Month	Day	Year

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of	

3. Generator's Mailing Address:	Generator's Site Address (if different than mailing):	A. Manifest Number	
		WMNA	00409998
		B. State Generator's ID	
4. Generator's Phone			

5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID
		D. Transporter's Phone
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID
		F. Transporter's Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	G. State Facility ID
		H. State Facility Phone

GENERATOR

11. Description of Waste Materials	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. WM Profile #					
b. WM Profile #					
c. WM Profile #					
d. WM Profile #					

J. Additional Descriptions for Materials Listed Above	K. Disposal Location			
	Cell		Level	
	Grid			

15. Special Handling Instructions and Additional Information

Purchase Order # EMERGENCY CONTACT / PHONE NO.:

16. GENERATOR'S CERTIFICATE:

I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name	Signature "On behalf of"	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year
Joseph Calentine	Joseph Calentine	4	30	14

FACILITY

19. Certificate of Final Treatment/Disposal

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed Name	Signature	Month	Day	Year

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No. / Manifest Doc No.	2. Page 1 of	

GENERATOR

3. Generator's Mailing Address:	Generator's Site Address (if different than mailing):	A. Manifest Number: WMNA 00410044
4. Generator's Phone		B. State Generator's ID
5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID / D. Transporter's Phone
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID / F. Transporter's Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	G. State Facility ID / H. State Facility Phone

11. Description of Waste Materials	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. WM Profile #					
b. WM Profile #					
c. WM Profile #					
d. WM Profile #					

J. Additional Descriptions for Materials Listed Above

K. Disposal Location: Cell / Level / Grid

15. Special Handling Instructions and Additional Information

Purchase Order # EMERGENCY CONTACT / PHONE NO.:

16. GENERATOR'S CERTIFICATE:

I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name	Signature "On behalf of"	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year
Byron Boylston	Byron Boylston	4	30	14

FACILITY

19. Certificate of Final Treatment/Disposal

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed Name	Signature	Month	Day	Year

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY

Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY

APPENDIX E – STATE OF LOUISIANA, UNDERGROUND STORAGE TANK CLOSURE / ASSESSMENT FORM

APPENDIX F – TABLE

TABLE 1

SOIL ANALYTICAL LABORATORY SUMMARY
THE RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

Boring ID	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	TPH-D	Code	Aliphatics >C10-C12	Code	Aliphatics >C12-C16	Code	Aliphatics >C16-C35	Code	Aromatics >C10-C12	Code	Aromatics >C12-C16	Code	Aromatics >C16-C21
T-1	NA	NA	04/23/14		440		NA		NA		NA		NA		NA		NA
BF-1	NA	NA	04/23/14		12,000		30		1,100		1,500		6.8		270		550
Minimum Concentration					440		30		1,100		1,500		6.8		270		550
Maximum Concentration					12,000		30		1,100		1,500		6.8		270		550
Screening Standards					65		230		370		7,100		100		180		150

Boring ID	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Aromatics >C21-C35	Code	Acenaphthene	Code	Acenaphthylene	Code	Anthracene	Code	Benzo(a)anthracene	Code	Benzo(a)pyrene	Code	Benzo(b)fluoranthene
T-1	NA	NA	04/23/14		NA	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
BF-1	NA	NA	04/23/14		91	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
Minimum Concentration					91	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
Maximum Concentration					91	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
Screening Standards					180		220		88		120		0.62		0.33		0.62

Boring ID	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Benzo(k)fluoranthene	Code	Chrysene	Code	Dibenz(a,h)anthracene	Code	Fluoranthene	Code	Fluorene	Code	Indeno(1,2,3-cd)pyrene	Code	Methylnaphthalene,2-
T-1	NA	NA	04/23/14	<	0.033	<	0.033	<	0.033		0.07		0.42	<	0.033		3.9
BF-1	NA	NA	04/23/14	<	0.033	<	0.033	<	0.033	<	0.033		3.7	<	0.033		37
Minimum Concentration				<	0.033	<	0.033	<	0.033	<	0.033		0.42	<	0.033		3.9
Maximum Concentration				<	0.033	<	0.033	<	0.033		0.07		3.7	<	0.033		37
Screening Standards					6.2		62		0.33		220		230		0.62		1.7

Boring ID	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	SPLP Methylnaphthalene,2-	Code	Naphthalene	Code	SPLP Naphthalene	Code	Phenanthrene	Code	Pyrene
T-1	NA	NA	04/23/14		NA		0.5		NA		1.2		0.22
BF-1	NA	NA	04/23/14		0.26		6.7	<	0.025		9.8		1.8
Minimum Concentration					0.26		0.5	<	0.025		1.2		0.22
Maximum Concentration					0.26		6.7	<	0.025		9.8		1.8
Screening Standards					0.12		1.5		0.2		660		230

Notes:

Bold RED type indicates concentration exceeds the RECAP Screening Standard.
Bold BLUE type indicates highest concentration for each COC.

ND - Not Detected
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

J - Indicates data are estimated by laboratory
U - Indicates that the data are considered to be undetected at the elevated detection limit due to blank contamination; data are usable as undetected values
B - Indicates blank contamination exceeding MDL

APPENDIX G – SOIL SAMPLE ANALYTICAL LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTS

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Case Narrative for:

PPM CONSULTANTS, INC.

Certificate of Analysis Number:

L0042235

Report To:		Project Name:	503124-USTCL
PPM CONSULTANTS, INC.		Site:	LA RETIREMENT SYSTEMS
JASON BEAUVAIS		Site Address:	
7936 OFFICE PARK BLVD STE. A			
BATON ROUGE		PO Number:	
LA		State:	Louisiana
70809-		State Cert. No.:	02048
ph: (225) 293-7270	fax: (225) 293-7271	Date Reported:	5/12/2014

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data for those samples spiked by the laboratory and may be applicable to other samples of similar matrix from the site. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group.

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process. If insufficient sample is supplied for MS/MSD, a Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) are reported with the analytical batch and serve as the batch quality control (QC).

Results are reported on a Wet Weight Basis unless otherwise noted in the sample unit field as -dry.

This report may contain data results from tests performed in the field by non-laboratory personnel. Such data will be indicated within the report using the method code, FIELD, and analyst initials of FT indicating results obtained by a field technician.

The collection of samples using encores, terracores or other field collection devices may result in inconsistent initial sample weights for the parent sample and MS/MSD samples.

The MS/MSD recovery and precision data are calculated based on detected spike concentrations that are adjusted for initial sample weights. As a result of the variability between initial sample weights, the calculated RPD may have increased bias.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

Accutest Gulf Coast is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs. Prep Comments for PR3510_SPLP_8270, Sample L0042235-02A: The preparation hold time was exceeded by 8 days for preparation code PR3510_SPLP_8270. Prep Comments for PR3510_SPLP_8270, Sample L0042235-02A: The preparation hold time was exceeded by 8 days for preparation code PR3510_SPLP_8270. Prep Comments for PR3510_SPLP_8270, Sample L0042235-02A: The preparation hold time was exceeded by 8 days for preparation code PR3510_SPLP_8270.

Rebecca Hebert — 5/12/2014

Rebecca Hebert
Project Manager

Date

Test results meet all requirements of NELAC, unless specified in the narrative.

Version 2.1 - Modified February 11, 2011

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

PPM CONSULTANTS, INC.

Certificate of Analysis Number:

L0042235

Report To: PPM CONSULTANTS, INC.
JASON BEAUVAIS
7936 OFFICE PARK BLVD STE. A

BATON ROUGE
LA
70809-
ph: (225) 293-7270 fax: (225) 293-7271

Fax To:

Project Name: 503124-USTCL
Site: LA RETIREMENT SYSTEMS
Site Address:

PO Number:
State: Louisiana
State Cert. No.: 02048
Date Reported: 5/12/2014

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
-1	L0042235-01	Soil	04/23/2014 16:15	4/24/2014 3:30:00 PM		☐
DF-1	L0042235-02	Soil	04/23/2014 16:10	4/24/2014 3:30:00 PM		☐
COMP	L0042235-03	Soil	04/24/2014 9:30	4/24/2014 3:30:00 PM		☐

Rebecca Hebert
Project Manager

5/12/2014
Date

Ron Benjamin
Laboratory Director

Karen Rodrigue-Varnado
Quality Assurance Officer

Date: Monday, May 12, 2014

*****CHRONOLOGY REPORT*****

Workorder	Sample_ID	Matrix	Collected	Received	Analyzed	Test Name	Method
L0042235	L0042235-01A	Soil	4/23/2014 4:10:00 PM	4/24/2014 3:30:00 PM			
					4/25/2014 8:24:00 PM	RECAP PAH by EPA 8270D	SW8270D
					4/25/2014 8:50:00 PM	RECAP PAH by EPA 8270D	SW8270D
					4/25/2014 9:16:00 PM	RECAP PAH by EPA 8270D	SW8270D
					4/26/2014 12:27:00 AM	RECAP Diesel Range Organics by Method 8015C	SW8015C
					4/26/2014 12:46:00 AM	RECAP Diesel Range Organics by Method 8015C	SW8015C
					4/26/2014 1:22:00 AM	RECAP Diesel Range Organics by Method 8015C	SW8015C
					4/26/2014 10:43:00 AM	RECAP PAH by EPA 8270D	SW8270D
					5/5/2014 7:45:30 PM	Extractable Petroleum Hydrocarbons- RECAP	MA_VPH_EPH
					5/8/2014 6:55:00 PM	SPLP Semivolatile Organics by EPA 8270D	SW8270D

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Date: Monday, May 12, 2014

*****SUMMARY REPORT*****

Company: PPM CONSULTANTS, INC. **Project:** 503124-USTCL

Site: LA RETIREMENT SYSTEMS

Workorder	Matrix	Client ID	Collected	Compound	Result	Det Limit	Method
L0042235-01A	Soil	T-1	4/23/2014 4:15:00 PM	Diesel Range Organics (C10-C28)	440	5 mg/Kg	SW8015C
				2-Methylnaphthalene	3.9	0.033 mg/Kg	SW8270D
				Acenaphthene	ND	0.033 mg/Kg	SW8270D
				Acenaphthylene	ND	0.033 mg/Kg	SW8270D
				Anthracene	ND	0.033 mg/Kg	SW8270D
				Benz(a)anthracene	ND	0.033 mg/Kg	SW8270D
				Benzo(a)pyrene	ND	0.033 mg/Kg	SW8270D
				Benzo(b)fluoranthene	ND	0.033 mg/Kg	SW8270D
				Benzo(k)fluoranthene	ND	0.033 mg/Kg	SW8270D
				Chrysene	ND	0.033 mg/Kg	SW8270D
				Dibenz(a,h)anthracene	ND	0.033 mg/Kg	SW8270D
				Fluoranthene	0.07	0.033 mg/Kg	SW8270D
				Fluorene	0.42	0.033 mg/Kg	SW8270D
				Indeno(1,2,3-cd)pyrene	ND	0.033 mg/Kg	SW8270D
				Naphthalene	0.5	0.033 mg/Kg	SW8270D
				Phenanthrene	1.2	0.033 mg/Kg	SW8270D
				Pyrene	0.22	0.033 mg/Kg	SW8270D

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

ACCUTEST LABORATORIES

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Date: Monday, May 12, 2014

*****SUMMARY REPORT*****

Company: PPM CONSULTANTS, INC. **Project:** 503124-USTCL

Site: LA RETIREMENT SYSTEMS

Workorder	Matrix	Client ID	Collected	Compound	Result	Det Limit	Method
L0042235-02A	Soil	BF-1	4/23/2014 4:10:00 PM	C10-C12 Aliphatics	30	1.7 mg/Kg	MA_VPH_EPH
				C10-C12 Aromatics	6.8	1.7 mg/Kg	MA_VPH_EPH
				C12-C16 Aliphatics	1100	3.3 mg/Kg	MA_VPH_EPH
				C12-C16 Aromatics	270	5 mg/Kg	MA_VPH_EPH
				C16-C21 Aromatics	550	8.3 mg/Kg	MA_VPH_EPH
				C16-C35 Aliphatics	1500	10 mg/Kg	MA_VPH_EPH
				C21-C35 Aromatics	91	10 mg/Kg	MA_VPH_EPH
				Diesel Range Organics (C10-C28)	12000	100 mg/Kg	SW8015C
				2-Methylnaphthalene	0.26	0.025 mg/L	SW8270D
				2-Methylnaphthalene	37	0.65 mg/Kg	SW8270D
				Acenaphthene	ND	0.033 mg/Kg	SW8270D
				Acenaphthylene	ND	0.033 mg/Kg	SW8270D
				Anthracene	ND	0.033 mg/Kg	SW8270D
				Benz(a)anthracene	ND	0.033 mg/Kg	SW8270D
				Benzo(a)pyrene	ND	0.033 mg/Kg	SW8270D
				Benzo(b)fluoranthene	ND	0.033 mg/Kg	SW8270D
				Benzo(k)fluoranthene	ND	0.033 mg/Kg	SW8270D
				Chrysene	ND	0.033 mg/Kg	SW8270D
				Dibenz(a,h)anthracene	ND	0.033 mg/Kg	SW8270D
				Fluoranthene	ND	0.033 mg/Kg	SW8270D
				Fluorene	3.7	0.033 mg/Kg	SW8270D
				Indeno(1,2,3-cd)pyrene	ND	0.033 mg/Kg	SW8270D
				Naphthalene	6.7	0.65 mg/Kg	SW8270D
				Naphthalene	ND	0.025 mg/L	SW8270D
				Phenanthrene	9.8	0.65 mg/Kg	SW8270D
				Pyrene	1.8	0.033 mg/Kg	SW8270D

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

ACCUTEST LABORATORIES

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Date: Monday, May 12, 2014

*******SUMMARY REPORT*******

Company: PPM CONSULTANTS, INC. **Project:** 503124-USTCL
Site: LA RETIREMENT SYSTEMS

Workorder	Matrix	Client ID	Collected	Compound	Result	Det Limit	Method
L0042235-03A	Soil	COMP	4/24/2014 9:30:00 AM	Diesel Range Organics (C10-C28)	33	5 mg/Kg	SW8015C
				2-Methylnaphthalene	0.065	0.033 mg/Kg	SW8270D
				Acenaphthene	ND	0.033 mg/Kg	SW8270D
				Acenaphthylene	ND	0.033 mg/Kg	SW8270D
				Anthracene	ND	0.033 mg/Kg	SW8270D
				Benz(a)anthracene	ND	0.033 mg/Kg	SW8270D
				Benzo(a)pyrene	ND	0.033 mg/Kg	SW8270D
				Benzo(b)fluoranthene	ND	0.033 mg/Kg	SW8270D
				Benzo(k)fluoranthene	ND	0.033 mg/Kg	SW8270D
				Chrysene	ND	0.033 mg/Kg	SW8270D
				Dibenz(a,h)anthracene	ND	0.033 mg/Kg	SW8270D
				Fluoranthene	ND	0.033 mg/Kg	SW8270D
				Fluorene	ND	0.033 mg/Kg	SW8270D
				Indeno(1,2,3-cd)pyrene	ND	0.033 mg/Kg	SW8270D
				Naphthalene	ND	0.033 mg/Kg	SW8270D
				Phenanthrene	0.041	0.033 mg/Kg	SW8270D
				Pyrene	ND	0.033 mg/Kg	SW8270D

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

ACCUTEST LABORATORIES

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Client Sample ID: T-1 **Collected:** 04/23/2014 16:15 **Lab Sample ID:** L0042235-01

Site: LA RETIREMENT SYSTEMS

Analyses/Method	Result	QUAL	Rep.Limit		Dil. Factor	Date Analyzed	Analyst	Seq. #
RECAP DIESEL RANGE ORGANICS BY METHOD 8015C				**MCL**	**SW8015C**	**Units: mg/Kg**		
Diesel Range Organics (C10-C28)	**440**	**>MCL**	**5**	**65**	**1**	**04/26/14 0:27**	**DF**	**5511540**
Surr: o-Terphenyl	86.3		% 38-135		1	04/26/14 0:27	DF	5511540

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3546	04/25/2014 14:37	CT	1.00

RECAP PAH BY EPA 8270D				MCL	SW8270D	Units: mg/Kg		
2-Methylnaphthalene	**3.9**	**>MCL**	**0.033**	**1.7**	**1**	**04/25/14 20:24**	**IHK**	**5511072**
Acenaphthene	ND		0.033	220	1	04/25/14 20:24	IHK	5511072
Acenaphthylene	ND		0.033	88	1	04/25/14 20:24	IHK	5511072
Anthracene	ND		0.033	120	1	04/25/14 20:24	IHK	5511072
Benz(a)anthracene	ND		0.033	0.62	1	04/25/14 20:24	IHK	5511072
Benzo(a)pyrene	ND		0.033	0.33	1	04/25/14 20:24	IHK	5511072
Benzo(b)fluoranthene	ND		0.033	0.62	1	04/25/14 20:24	IHK	5511072
Benzo(k)fluoranthene	ND		0.033	6.2	1	04/25/14 20:24	IHK	5511072
Chrysene	ND		0.033	62	1	04/25/14 20:24	IHK	5511072
Dibenz(a,h)anthracene	ND		0.033	0.33	1	04/25/14 20:24	IHK	5511072
Fluoranthene	0.07		0.033	220	1	04/25/14 20:24	IHK	5511072
Fluorene	0.42		0.033	230	1	04/25/14 20:24	IHK	5511072
Indeno(1,2,3-cd)pyrene	ND		0.033	0.62	1	04/25/14 20:24	IHK	5511072
Naphthalene	0.5		0.033	1.5	1	04/25/14 20:24	IHK	5511072
Phenanthrene	1.2		0.033	660	1	04/25/14 20:24	IHK	5511072
Pyrene	0.22		0.033	230	1	04/25/14 20:24	IHK	5511072
Surr: 2-Fluorobiphenyl	67.0		% 43-128		1	04/25/14 20:24	IHK	5511072
Surr: 4-Terphenyl-d14	81.1		% 51-136		1	04/25/14 20:24	IHK	5511072
Surr: Nitrobenzene-d5	70.2		% 47-134		1	04/25/14 20:24	IHK	5511072

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3546	04/25/2014 17:08	CT	0.98

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

5/12/2014 8:02:45 AM

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Client Sample ID: BF-1 **Collected:** 04/23/2014 16:10 **Lab Sample ID:** L0042235-02

Site: LA RETIREMENT SYSTEMS

Analyses/Method	Result	QUAL	Rep.Limit		Dil. Factor	Date Analyzed	Analyst	Seq. #
EXTRACTABLE PETROLEUM HYDROCARBONS- RECAP				**MCL**	**MA_VPH_EPH**	**Units: mg/Kg**		
C10-C12 Aliphatics	30		1.7	230	1	05/05/14 19:45	E_G	5528069
C10-C12 Aromatics	6.8		1.7	100	1	05/05/14 19:45	E_G	5527987
C12-C16 Aliphatics	**1100**	**>MCL**	**3.3**	**370**	**1**	**05/05/14 19:45**	**E_G**	**5528069**
C12-C16 Aromatics	**270**	**>MCL**	**5**	**180**	**1**	**05/05/14 19:45**	**E_G**	**5527987**
C16-C21 Aromatics	**550**	**>MCL**	**8.3**	**180**	**1**	**05/05/14 19:45**	**E_G**	**5527987**
C16-C35 Aliphatics	1500		10	7100	1	05/05/14 19:45	E_G	5528069
C21-C35 Aromatics	91		10	180	1	05/05/14 19:45	E_G	5527987
Surr: 2-Fluorobiphenyl	107		% 40-140		1	05/05/14 19:45	E_G	5527987
Surr: Chloro-octadecane	52.0		% 40-140		1	05/05/14 19:45	E_G	5528069
Surr: o-Terphenyl	97.3		% 40-140		1	05/05/14 19:45	E_G	5527987

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3546	05/04/2014 13:00	TJH	1.00

RECAP DIESEL RANGE ORGANICS BY METHOD 8015C				**MCL**	**SW8015C**	**Units: mg/Kg**		
Diesel Range Organics (C10-C28)	**12000**	**>MCL**	**100**	**65**	**20**	**04/26/14 1:22**	**DF**	**5511542**
Surr: o-Terphenyl	D	*	% 38-135		20	04/26/14 1:22	DF	5511542

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3546	04/25/2014 14:37	CT	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

5/12/2014 8:02:47 AM

ACCUTEST LABORATORIES

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Client Sample ID: BF-1 **Collected:** 04/23/2014 16:10 **Lab Sample ID:** L0042235-02

Site: LA RETIREMENT SYSTEMS

Analyses/Method	Result	QUAL	Rep.Limit	MCL	Dil. Factor	Date Analyzed	Analyst	Seq. #
RECAP PAH BY EPA 8270D				**MCL**	**SW8270D**	**Units: mg/Kg**		
2-Methylnaphthalene	**37**	**>MCL**	**0.65**	**1.7**	**20**	**04/26/14 10:43**	**IHK**	**5511260**
Acenaphthene	ND		0.033	220	1	04/25/14 20:50	IHK	5511073
Acenaphthylene	ND		0.033	88	1	04/25/14 20:50	IHK	5511073
Anthracene	ND		0.033	120	1	04/25/14 20:50	IHK	5511073
Benz(a)anthracene	ND		0.033	0.62	1	04/25/14 20:50	IHK	5511073
Benzo(a)pyrene	ND		0.033	0.33	1	04/25/14 20:50	IHK	5511073
Benzo(b)fluoranthene	ND		0.033	0.62	1	04/25/14 20:50	IHK	5511073
Benzo(k)fluoranthene	ND		0.033	6.2	1	04/25/14 20:50	IHK	5511073
Chrysene	ND		0.033	62	1	04/25/14 20:50	IHK	5511073
Dibenz(a,h)anthracene	ND		0.033	0.33	1	04/25/14 20:50	IHK	5511073
Fluoranthene	ND		0.033	220	1	04/25/14 20:50	IHK	5511073
Fluorene	3.7		0.033	230	1	04/25/14 20:50	IHK	5511073
Indeno(1,2,3-cd)pyrene	ND		0.033	0.62	1	04/25/14 20:50	IHK	5511073
Naphthalene	**6.7**	**>MCL**	**0.65**	**1.5**	**20**	**04/26/14 10:43**	**IHK**	**5511260**
Phenanthrene	9.8		0.65	660	20	04/26/14 10:43	IHK	5511260
Pyrene	1.8		0.033	230	1	04/25/14 20:50	IHK	5511073
Surr: 2-Fluorobiphenyl	80.3		% 43-128		1	04/25/14 20:50	IHK	5511073
Surr: 2-Fluorobiphenyl	79.9		% 43-128		20	04/26/14 10:43	IHK	5511260
Surr: 4-Terphenyl-d14	99.8		% 51-136		1	04/25/14 20:50	IHK	5511073
Surr: 4-Terphenyl-d14	116		% 51-136		20	04/26/14 10:43	IHK	5511260
Surr: Nitrobenzene-d5	62.5		% 47-134		20	04/26/14 10:43	IHK	5511260
Surr: Nitrobenzene-d5	81.2		% 47-134		1	04/25/14 20:50	IHK	5511073

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3546	04/25/2014 17:08	CT	0.98

SPLP SEMIVOLATILE ORGANICS BY EPA 8270D				MCL	SW8270D	Units: mg/L		
2-Methylnaphthalene	0.26		0.025		5	05/08/14 18:55	IHK	5534680
Naphthalene	ND		0.025		5	05/08/14 18:55	IHK	5534680
Surr: 2-Fluorobiphenyl	71.2		% 50-124		5	05/08/14 18:55	IHK	5534680
Surr: 4-Terphenyl-d14	85.2		% 57-133		5	05/08/14 18:55	IHK	5534680
Surr: Nitrobenzene-d5	100		% 51-138		5	05/08/14 18:55	IHK	5534680

Prep Method	Prep Date	Prep Initials	Prep Factor	Leach Method	Leachate Date	Leach Initials
SW3510B	05/08/2014 9:30	KRJ	1.00	SW1312	05/04/2014	JBW

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

5/12/2014 8:02:49 AM

ACCUTEST LABORATORIES

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Client Sample ID: COMP **Collected:** 04/24/2014 9:30 **Lab Sample ID:** L0042235-03

Site: LA RETIREMENT SYSTEMS

Analyses/Method	Result	QUAL	Rep.Limit		Dil. Factor	Date Analyzed	Analyst	Seq. #
RECAP DIESEL RANGE ORGANICS BY METHOD 8015C				**MCL**	**SW8015C**	**Units: mg/Kg**		
Diesel Range Organics (C10-C28)	33		5	65	1	04/26/14 0:46	DF	5511541
Surr: o-Terphenyl	61.8		% 38-135		1	04/26/14 0:46	DF	5511541

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3546	04/25/2014 14:37	CT	1.00

RECAP PAH BY EPA 8270D				**MCL**	**SW8270D**	**Units: mg/Kg**		
2-Methylnaphthalene	0.065		0.033	1.7	1	04/25/14 21:16	IHK	5511074
Acenaphthene	ND		0.033	220	1	04/25/14 21:16	IHK	5511074
Acenaphthylene	ND		0.033	88	1	04/25/14 21:16	IHK	5511074
Anthracene	ND		0.033	120	1	04/25/14 21:16	IHK	5511074
Benz(a)anthracene	ND		0.033	0.62	1	04/25/14 21:16	IHK	5511074
Benzo(a)pyrene	ND		0.033	0.33	1	04/25/14 21:16	IHK	5511074
Benzo(b)fluoranthene	ND		0.033	0.62	1	04/25/14 21:16	IHK	5511074
Benzo(k)fluoranthene	ND		0.033	6.2	1	04/25/14 21:16	IHK	5511074
Chrysene	ND		0.033	62	1	04/25/14 21:16	IHK	5511074
Dibenz(a,h)anthracene	ND		0.033	0.33	1	04/25/14 21:16	IHK	5511074
Fluoranthene	ND		0.033	220	1	04/25/14 21:16	IHK	5511074
Fluorene	ND		0.033	230	1	04/25/14 21:16	IHK	5511074
Indeno(1,2,3-cd)pyrene	ND		0.033	0.62	1	04/25/14 21:16	IHK	5511074
Naphthalene	ND		0.033	1.5	1	04/25/14 21:16	IHK	5511074
Phenanthrene	0.041		0.033	660	1	04/25/14 21:16	IHK	5511074
Pyrene	ND		0.033	230	1	04/25/14 21:16	IHK	5511074
Surr: 2-Fluorobiphenyl	80.9		% 43-128		1	04/25/14 21:16	IHK	5511074
Surr: 4-Terphenyl-d14	90.8		% 51-136		1	04/25/14 21:16	IHK	5511074
Surr: Nitrobenzene-d5	71.8		% 47-134		1	04/25/14 21:16	IHK	5511074

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3546	04/25/2014 17:08	CT	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

5/12/2014 8:02:51 AM

Quality Control Documentation

ACCUTEST LABORATORIES

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Quality Control Report

PPM CONSULTANTS, INC.

503124-USTCL

nalysis: RECAP Diesel Range Organics by Method 8015C — **WorkOrder:** L0042235
ethod: SW8015C — **Lab Batch ID:** 130991

Method Blank

unID: TPHB_140425E-5511533 Units: mg/Kg
nalysis Date: 04/25/2014 20:32 Analyst: DF
Preparation Date: 04/25/2014 14:37 Prep By: CT Method: SW3546

Analyte	Result	Rep Limit
Diesel Range Organics (C10-C28)	ND	5.0
Surr: o-Terphenyl	71.7	38-135

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
L0042235-01A	T-1
L0042235-02A	BF-1
L0042235-03A	COMP

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: TPHB_140425E-5511534 Units: mg/Kg
Analysis Date: 04/25/2014 20:50 Analyst: DF
Preparation Date: 04/25/2014 14:37 Prep By: CT Method: SW3546

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
iesel Range Organics (C10-C28)	150	116	77.1	150	112	74.5	3.4	20	45	102
Surr: o-Terphenyl	2.50	2.00	80.0	2.50	1.95	78.2	2.3	30	38	135

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: L0042178-02
RunID: TPHB_140425E-5511547 Units: mg/Kg
Analysis Date: 04/26/2014 2:53 Analyst: DF
Preparation Date: 04/25/2014 14:37 Prep By: CT Method: SW3546

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Diesel Range Organics (C10-C28)	ND	147	121	79.0	150	119	76.1	1.67	20	45	102
Surr: o-Terphenyl	ND	2.45	1.97	80.3	2.5	2.01	80.2	1.86	30	38	135

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
J - Estimated Value Between MDL And PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/12/2014 8:02:52 AM

Version 2.1 - Modified February 11, 2011

ACCUTEST LABORATORIES

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Quality Control Report

PPM CONSULTANTS, INC.

503124-USTCL

nalysis: Extractable Petroleum Hydrocarbons- RECAP
ethod: MA_VPH_EPH

WorkOrder: L0042235
Lab Batch ID: 131339

Method Blank

unID: TPHA_140505B-5528053 Units: mg/Kg
nalysis Date: 05/05/2014 16:19 Analyst: E_G
Preparation Date: 05/04/2014 13:00 Prep By: TJH Method: SW3546

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
L0042235-02A	BF-1

Analyte	Result	Rep Limit
C10-C12 Aliphatics	ND	1.7
C12-C16 Aliphatics	ND	3.3
C16-C35 Aliphatics	ND	10
Surr: Chloro-octadecane	43.7	40-140

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: TPHA_140505B-5528054 Units: mg/Kg
Analysis Date: 05/05/2014 16:49 Analyst: E_G
Preparation Date: 05/04/2014 13:00 Prep By: TJH Method: SW3546

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
C10-C12 Aliphatics	5.00	3.38	67.7	5.00	3.02	60.3	11.5	25	40	140
12-C16 Aliphatics	10.0	6.38	63.8	10.0	5.85	58.5	8.7	25	40	140
16-C35 Aliphatics	45.0	25.5	56.7	45.0	23.9	53.2	6.4	25	40	140
Surr: Chloro-octadecane	5.00	2.43	48.7	5.00	2.37	47.4	2.7	30	40	140

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: L0042219-01
RunID: TPHA_140505B-5528063 Units: mg/Kg
Analysis Date: 05/05/2014 18:18 Analyst: E_G
Preparation Date: 05/04/2014 13:00 Prep By: TJH Method: SW3546

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
C10-C12 Aliphatics	ND	5	2.36	45.8	5	2.67	52.1	12.5	50	40	140

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
J - Estimated Value Between MDL And PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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Version 2.1 - Modified February 11, 2011

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Quality Control Report

PPM CONSULTANTS, INC.

503124-USTCL

Analysis: Extractable Petroleum Hydrocarbons- RECAP **WorkOrder:** L0042235
Method: MA_VPH_EPH **Lab Batch ID:** 131339

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: L0042219-01
RunID: TPHA_140505B-5528063 Units: mg/Kg
Analysis Date: 05/05/2014 18:18 Analyst: E_G
Preparation Date: 05/04/2014 13:00 Prep By: TJH Method: SW3546

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
C12-C16 Aliphatics	ND	10	4.89	26.1 *	10	5.37	30.9 *	9.35	50	40	140
16-C35 Aliphatics	9.45	45	27.6	40.3	45	26.6	38.1 *	3.68	50	40	140
Surr: Chloro-octadecane	ND	5	2.91	58.2	5	2.86	57.1	1.82	30	40	140

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
J - Estimated Value Between MDL And PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Quality Control Report

PPM CONSULTANTS, INC.

503124-USTCL

nalysis: Extractable Petroleum Hydrocarbons- RECAP **WorkOrder:** L0042235
lethod: MA_VPH_EPH **Lab Batch ID:** 131339

Method Blank

:unID: TPHA_140505A-5527980 Units: mg/Kg
.nalysis Date: 05/05/2014 16:19 Analyst: E_G
Preparation Date: 05/04/2014 13:00 Prep By: TJH Method: SW3546

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
L0042235-02A	BF-1

Analyte	Result	Rep Limit
C10-C12 Aromatics	ND	1.7
C12-C16 Aromatics	ND	5.0
C16-C21 Aromatics	ND	8.3
C21-C35 Aromatics	ND	10
Surr: 2-Fluorobiphenyl	61.4	40-140
Surr: o-Terphenyl	57.2	40-140

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: TPHA_140505A-5527981 Units: mg/Kg
Analysis Date: 05/05/2014 16:49 Analyst: E_G
Preparation Date: 05/04/2014 13:00 Prep By: TJH Method: SW3546

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
10-C12 Aromatics	5.00	2.65	53.0	5.00	2.79	55.9	5.3	25	40	140
C12-C16 Aromatics	15.0	8.86	59.1	15.0	9.06	60.4	2.2	25	40	140
C16-C21 Aromatics	25.0	15.3	61.0	25.0	15.2	60.7	0.6	25	40	140
21-C35 Aromatics	40.0	25.5	63.7	40.0	24.6	61.5	3.6	25	40	140
Surr: 2-Fluorobiphenyl	12.5	9.16	73.2	12.5	9.31	74.5	1.7	30	40	140
Surr: o-Terphenyl	5.00	2.93	58.7	5.00	3.15	62.9	7.0	30	40	140

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: L0042219-01
RunID: TPHA_140505A-5527984 Units: mg/Kg
Analysis Date: 05/05/2014 18:18 Analyst: E_G
Preparation Date: 05/04/2014 13:00 Prep By: TJH Method: SW3546

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
J - Estimated Value Between MDL And PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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Version 2.1 - Modified February 11, 2011

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Quality Control Report

PPM CONSULTANTS, INC.

503124-USTCL

nalysis: **Extractable Petroleum Hydrocarbons- RECAP** **WorkOrder:** **L0042235**
ethod: **MA_VPH_EPH** **Lab Batch ID:** **131339**

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
C10-C12 Aromatics	ND	5	3.02	60.4	5	2.35	47.0	25.1	50	40	140
C12-C16 Aromatics	ND	15	9.99	62.4	15	8.08	49.7	21.1	50	40	140
16-C21 Aromatics	ND	25	16.9	60.8	25	13.6	47.9	21.2	50	40	140
C21-C35 Aromatics	ND	40	27.2	62.6	40	23.2	52.8	15.6	50	40	140
Surr: 2-Fluorobiphenyl	ND	12.5	9.77	78.1	12.5	9.65	77.2	1.17	30	40	140
Surr: o-Terphenyl	ND	5	3.53	70.6	5	3.04	60.7	15.1	30	40	140

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
J - Estimated Value Between MDL And PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
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500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Quality Control Report

PPM CONSULTANTS, INC.

503124-USTCL

Analysis: RECAP PAH by EPA 8270D
Method: SW8270D
WorkOrder: L0042235
Lab Batch ID: 131001

Method Blank

RunID: A_140425A-5511069 Units: mg/Kg
Analysis Date: 04/25/2014 19:06 Analyst: IHK
Preparation Date: 04/25/2014 17:08 Prep By: CT Method: SW3546

Analyte	Result	Rep Limit
2-Methylnaphthalene	ND	0.033
Acenaphthene	ND	0.033
Acenaphthylene	ND	0.033
Anthracene	ND	0.033
Benz(a)anthracene	ND	0.033
Benzo(a)pyrene	ND	0.033
Benzo(b)fluoranthene	ND	0.033
Benzo(k)fluoranthene	ND	0.033
Chrysene	ND	0.033
Dibenz(a,h)anthracene	ND	0.033
Fluoranthene	ND	0.033
Fluorene	ND	0.033
Indeno(1,2,3-cd)pyrene	ND	0.033
Naphthalene	ND	0.033
Phenanthrene	ND	0.033
Pyrene	ND	0.033
Surr: 2-Fluorobiphenyl	88.2	43-128
Surr: 4-Terphenyl-d14	97.6	51-136
Surr: Nitrobenzene-d5	80.5	47-134

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
L0042235-01A	T-1
L0042235-02A	BF-1
L0042235-03A	COMP

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: A_140425A-5511070 Units: mg/Kg
Analysis Date: 04/25/2014 19:32 Analyst: IHK
Preparation Date: 04/25/2014 17:08 Prep By: CT Method: SW3546

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
-Methylnaphthalene	2.50	2.14	85.6	2.50	2.37	94.9	10.3	26	57	112
cenaphthene	2.50	2.19	87.5	2.50	2.46	98.6	11.9	26	56	115
Acenaphthylene	2.50	2.28	91.4	2.50	2.57	103	11.9	27	55	120
nthracene	2.50	2.30	92.1	2.50	2.56	102	10.6	27	55	115
enz(a)anthracene	2.50	2.28	91.1	2.50	2.52	101	10.1	22	60	109
Benzo(a)pyrene	2.50	2.42	97.0	2.50	2.73	109	11.8	27	59	115

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
J - Estimated Value Between MDL And PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Quality Control Report

PPM CONSULTANTS, INC.

503124-USTCL

nalysis: RECAP PAH by EPA 8270D **WorkOrder:** L0042235
lethod: SW8270D **Lab Batch ID:** 131001

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: A_140425A-5511070 Units: mg/Kg
Analysis Date: 04/25/2014 19:32 Analyst: IHK
Preparation Date: 04/25/2014 17:08 Prep By: CT Method: SW3546

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
enzo(b)fluoranthene	2.50	2.29	91.6	2.50	2.59	104	12.3	28	56	115
enzo(k)fluoranthene	2.50	2.65	106	2.50	2.89	116	8.8	35	46	131
hrysene	2.50	2.29	91.4	2.50	2.55	102	10.9	24	54	116
ibenz(a,h)anthracene	2.50	2.43	97.1	2.50	2.71	108	10.8	20	56	121
luoranthene	2.50	2.25	90.0	2.50	2.58	103	13.8	28	55	118
Fluorene	2.50	2.18	87.1	2.50	2.48	99.4	13.2	27	51	123
deno(1,2,3-cd)pyrene	2.50	2.35	94.0	2.50	2.64	106	11.8	29	50	125
aphthalene	2.50	2.14	85.4	2.50	2.40	96.1	11.7	27	51	118
Phenanthrene	2.50	2.46	98.2	2.50	2.71	109	10.0	27	55	118
yrene	2.50	2.33	93.2	2.50	2.50	99.9	6.9	27	57	115
Surr: 2-Fluorobiphenyl	2500	2100	84.2	2500	2340	93.6	10.6	30	43	128
Surr: 4-Terphenyl-d14	2500	2410	96.4	2500	2540	101	5.1	30	51	136
Surr: Nitrobenzene-d5	2500	2040	81.7	2500	2240	89.6	9.2	30	47	134

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: L0042260-05
RunID: A_140426B-5512519 Units: mg/Kg
Analysis Date: 04/27/2014 13:33 Analyst: IHK
Preparation Date: 04/25/2014 17:08 Prep By: CT Method: SW3546

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
2-Methylnaphthalene	ND	2.46	2.25	91.2	2.5	2.23	89.3	0.560	26	57	112
cenaphthene	ND	2.46	2.32	94.1	2.5	2.25	90.1	2.84	26	56	115
cenaphthylene	ND	2.46	2.40	97.5	2.5	2.36	94.3	1.86	27	55	120
Anthracene	ND	2.46	2.44	99.0	2.5	2.35	93.8	3.89	27	55	115

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
J - Estimated Value Between MDL And PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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ACCUTEST LABORATORIES

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Quality Control Report

PPM CONSULTANTS, INC.

503124-USTCL

nalysis: **RECAP PAH by EPA 8270D** **WorkOrder:** **L0042235**
lethod: **SW8270D** **Lab Batch ID:** **131001**

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: L0042260-05
RunID: A_140426B-5512519 Units: mg/Kg
Analysis Date: 04/27/2014 13:33 Analyst: IHK
Preparation Date: 04/25/2014 17:08 Prep By: CT Method: SW3546

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benz(a)anthracene	ND	2.46	2.40	97.6	2.5	2.34	93.6	2.71	22	60	109
enzo(a)pyrene	ND	2.46	2.64	107	2.5	2.52	101	4.42	27	59	115
enzo(b)fluoranthene	ND	2.46	2.52	102	2.5	2.54	101	0.700	28	56	115
Benzo(k)fluoranthene	ND	2.46	2.92	118	2.5	2.69	108	7.97	35	46	131
hrysene	ND	2.46	2.43	98.6	2.5	2.33	93.1	4.27	24	54	116
ibenz(a,h)anthracene	ND	2.46	2.46	100	2.5	2.38	95.2	3.54	20	56	121
luoranthene	ND	2.46	2.36	96.0	2.5	2.32	92.9	1.81	28	55	118
Fluorene	ND	2.46	2.24	90.8	2.5	2.18	87.1	2.66	27	51	123
ideno(1,2,3-cd)pyrene	ND	2.46	2.37	96.1	2.5	2.33	93.3	1.51	29	50	125
aphthalene	ND	2.46	2.26	92.0	2.5	2.23	89.2	1.53	27	51	118
Phenanthrene	ND	2.46	2.60	106	2.5	2.50	100	3.97	27	55	118
yrene	ND	2.46	2.59	105	2.5	2.46	98.3	5.11	27	57	115
Surr: 2-Fluorobiphenyl	ND	2460	2260	91.9	2500	2200	88.1	2.67	30	43	128
Surr: 4-Terphenyl-d14	ND	2460	2660	108	2500	2560	102	3.95	30	51	136
Surr: Nitrobenzene-d5	ND	2460	2210	89.5	2500	2200	87.9	0.368	30	47	134

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
J - Estimated Value Between MDL And PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
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(337) 237-4775

Quality Control Report

PPM CONSULTANTS, INC.

503124-USTCL

nalysis: SPLP Semivolatile Organics by EPA 8270D **WorkOrder:** L0042235
lethod: SW8270D **Lab Batch ID:** 131507

Method Blank

:unID: F_140508B-5534326 Units: mg/L
.nalysis Date: 05/08/2014 16:24 Analyst: IHK
Preparation Date: 05/08/2014 9:30 Prep By: KRJ Method: SW3510B

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
L0042235-02A	BF-1

Analyte	Result	Rep Limit
2-Methylnaphthalene	ND	0.0050
Naphthalene	ND	0.0050
Surr: 2-Fluorobiphenyl	100.3	50-124
Surr: 4-Terphenyl-d14	94.7	57-133
Surr: Nitrobenzene-d5	95.7	51-138

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: F_140508B-5534327 Units: mg/L
Analysis Date: 05/08/2014 16:46 Analyst: IHK
Preparation Date: 05/08/2014 9:30 Prep By: KRJ Method: SW3510B

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
-Methylnaphthalene	0.0500	0.0468	93.5	0.0500	0.0482	96.5	3.1	18	53	118
laphthalene	0.0500	0.0476	95.1	0.0500	0.0501	100	5.2	40	45	125
Surr: 2-Fluorobiphenyl	50.0	48.9	97.8	50.0	50.4	101	3.1	30	50	124
Surr: 4-Terphenyl-d14	50.0	46.9	93.7	50.0	50.3	101	7.1	30	57	133
Surr: Nitrobenzene-d5	50.0	49.9	99.7	50.0	50.2	100	0.6	30	51	138

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte Detected In The Associated Method Blank
J - Estimated Value Between MDL And PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/12/2014 8:02:52 AM

Version 2.1 - Modified February 11, 2011

Sample Receipt Checklist

And

Chain of Custody

ACCUTEST GULF COAST
500 AMBASSADOR CAFFERY PARKWAY
SCOTT, LA 70583
(337) 237-4775

Sample Receipt Checklist

Workorder:	**L0042235**	Received By:	**MAR**
Date and Time Received:	**4/24/2014 3:30:00 PM**	Carrier name:	**Accutest-Delivery**
Temperature:	**4.7°C**	Chilled by:	**Water Ice**

1.	**Shipping container/cooler in good condition?**	Yes	☑	No	☐	Not Present ☐
2.	**Custody seals intact on shippping container/cooler?**	Yes	☐	No	☐	Not Present ☑
3.	**Custody seals intact on sample bottles?**	Yes	☐	No	☐	Not Present ☑
4.	**Chain of custody present?**	Yes	☑	No	☐	
5.	**Chain of custody signed when relinquished and received?**	Yes	☑	No	☐	
6.	**Chain of custody agrees with sample labels?**	Yes	☑	No	☐	
7.	**Samples in proper container/bottle?**	Yes	☑	No	☐	
8.	**Sample containers intact?**	Yes	☑	No	☐	
9.	**Sufficient sample volume for indicated test?**	Yes	☑	No	☐	
10.	**All samples received within holding time?**	Yes	☑	No	☐	
11.	**Container/Temp Blank temperature in compliance?**	Yes	☑	No	☐	
12.	**Water - VOA vials have zero headspace?**	Yes	☐	No	☐	VOA Vials Not Present ☑
13.	**Water - Preservation checked upon receipt (except VOA*)?**	Yes	☐	No	☐	Not Applicable ☑

***VOA Preservation Checked After Sample Analysis**

Accutest Representative: _____ **Contact Date & Time:** _____

Client Name Contacted: _____

Non Conformance Issues: _____

Client Instructions: _____

CHAIN OF CUSTODY

ACCUTEST LABORATORIES

Accutest Gulf Coast/SPL Environmental
500 Ambassador Caffery Pkwy Scott, LA 70583
TEL.337-237-4775 FAX: 337-237-7837
www.accutest.com/www.spl-inc.com

PAGE 1 OF 1

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: L00 42285

Client / Reporting Information

Company Name: PM Consultants, Inc
Street Address: 936 Office Park Blvd, Suite A
City: Baton Rouge State: LA Zip: 70809
Project Contact: JASON BEAUVAIS E-mail:
Phone #: 225-293-7270 Fax #:
Sampler(s) Name(s): Adrian Bain Phone #: 225-293-7270

Project Information

Project Name: LA RETIREMENT SYSTEMS
Street: 8401 UNITED PLAZA BLVD
City: BATON ROUGE State: LA
Project #: 503124-USTCL
Client Purchase Order #:
Project Manager: PETER SMITH

Billing Information (If different from Report to)

Company Name:
Street Address:
City State Zip:
Attention:

Requested Analyses

RUSH

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled By	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	ZA/NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	TSP	NaHSO4	ENCORE	OTHER	DRO	PAH	EPH (ON HOLD)	SPLP (ON HOLD)						LAB USE ONLY
	T-1	4-23-14	1615	AB	SO	3						3							✓	✓	✓	✓						3
	BF-1	4-23-14	1610	AB	SO	3						3							✓	✓	✓	✓						3
	COMP	4/24/14	930	AB	SO	1						1							✓	✓	✓	✓						1

Turnaround Time (Business days)

- [X] Standard PTS 04/24/14
- [ ] 5 Day *RUSH*
- [ ] 4 Day *RUSH*
- [ ] 3 Day *RUSH*
- [ ] 2 Day *RUSH*
- [X] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [X] Commercial "B" (Level 2)
- [ ] FULT1 (Level 3+4)
- [ ] REDT1 (Level 3+4)
- [ ] Commercial "C"
- [ ] TRRP
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC & Surrogate Summary

Comments / Special Instructions

Standard PPM Rates will apply
WS5-12 (12)
RMC-7

Page 23 of 23

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		4/24/14 1023	Renee Sam...	Renee Sam	4/24/14 1530	Mark Red
2						
3						
4						
5						

Custody Seal # Intact Preserved where applicable On Ice Cooler Temp. 4.7 (4.6)

CORRECTIVE ACTION PLAN

BEAU BOX PROPERTY MANAGEMENT
LOUISIANA RETIREMENT SYSTEMS
BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA
EAST BATON ROUGE PARISH

INCIDENT ID NO. 154846
FACILITY UST ID NO. 17-017472
LDEQ AGENCY INTEREST NO. 79956

PPM PROJECT NO. 503124

MAY 2015

Environmental Science
and Engineering

PPM
CONSULTANTS

PPM CONSULTANTS

Environmental Science and Engineering

7936 Office Park Boulevard • Baton Rouge, LA 70809 • tel 225 293 7270 • fax 225 293 7271 • www.ppmco.com

May 26, 2015

Mr. Gary A. Fulton, Administrator
Louisiana Department of Environmental Quality
Office of Environmental Compliance
Remediation and Underground Storage Tank Division
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312

Re: Corrective Action Plan
Beau Box Property Management
Louisiana Retirement Systems Building Partnership
8401 United Plaza Boulevard
Baton Rouge, Louisiana
East Baton Rouge Parish
Incident ID No. 154846
Facility UST ID No. 17-017472
LDEQ Agency Interest No. 79956
PPM Project No. 503124

TRANSMITTAL LETTER

Dear Mr. Fulton:

Enclosed please find three copies of the Corrective Action Plan prepared by PPM Consultants, Inc. for the above-referenced site.

If you have any questions or need any additional information, please do not hesitate to contact me at (225) 293-7270.

Sincerely,
PPM Consultants, Inc.

Michael D. Luckett, P.E.
Senior Engineer

Enclosures

cc: Mr. Layne Roberts, Beau Box Property Management

CORRECTIVE ACTION PLAN

BEAU BOX PROPERTY MANAGEMENT
LOUISIANA RETIREMENT SYSTEMS
BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA
EAST BATON ROUGE PARISH

INCIDENT ID NO. 154846
FACILITY UST ID NO. 17-017472
LDEQ AGENCY INTEREST NO. 79956

PPM PROJECT NO. 503124

MAY 2015

CORRECTIVE ACTION PLAN

AT

LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA
EAST BATON ROUGE PARISH

INCIDENT ID NO. 154846
FACILITY UST ID NO. 17-017472
LDEQ AGENCY INTEREST NO. 79956

PREPARED FOR:

BEAU BOX PROPERTY MANAGEMENT
POST OFFICE BOX 66865
BATON ROUGE, LOUISIANA 70896
MR. LAYNE ROBERTS
(225) 237-3343

PPM PROJECT NO. 503124

MAY 2015

PREPARED BY:

PHAEDRA E. CANRIGHT
PROJECT ENGINEER

REVIEWED BY:

MICHAEL D. LUCKETT, P.E.
SENIOR ENGINEER

PPM CONSULTANTS, INC.
7936 OFFICE PARK BOULEVARD, SUITE A
BATON ROUGE, LOUISIANA 70809
(225) 293-7270

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 GENERAL

PPM Consultants, Inc. (PPM) prepared this Corrective Action Plan (CAP) for Beau Box Property Management (Beau Box) for the Louisiana Retirement Systems Building Partnership property located at 8401 United Plaza Boulevard in Baton Rouge, East Baton Rouge Parish, Louisiana. The location of the site is included on **Figure 1, Site Location Map**, in **Appendix A, Figures**.

2.0 SITE CONDITIONS

One 2,000-gallon diesel underground storage tank (UST) was installed at the site on March 10, 1985, to fuel the building's emergency generator. Beau Box reported a release at the site to the Louisiana Department of Environmental Quality (LDEQ) on March 25, 2014, upon discovering that the diesel UST on the site was empty. On March 31, 2014, PPM submitted a Workplan for Limited Site Investigation to the LDEQ. Five soil borings (SB-1 through SB-5) were installed on April 3, 2014, to assess the subsurface environment in the vicinity of the UST system at the site. Additionally, two soil borings (SB-6 and SB-7) were installed at the site on April 9, 2014. Following soil sampling, soil borings SB-1 through SB-7 were converted into 0.75-inch diameter temporary monitor wells SB-1/TW-1 through SB-7/TW-7 for collection of groundwater samples. On April 9, 2014, soil boring/temporary monitor well SB-1/TW-1 was converted into 4-inch diameter monitor well MW-1.

Southern Tank Testers, Inc. (STT) of Breaux Bridge, Louisiana, removed the 2,000-gallon diesel UST from the site on April 23, 2014. Approximately 70 tons of soil backfill were excavated from the UST hold.

Free product was encountered in two of the site monitor wells. Several mobile dual-phase vacuum extraction (MDPVE) events and hand-bailing events were conducted to recover free product from the wells.

2.1 SITE GEOLOGY CHARACTERISTICS

Subsurface conditions and lithology at the site were identified from visual inspection of the soil samples collected from soil borings SB-1 through SB-7. In general, site soils consisted of predominantly gray-brown to light brown Silty Clay.

2.2 GROUNDWATER CLASSIFICATION

PPM researched LDEQ's Electronic Document Management System (EDMS) online database to determine the groundwater classification of facilities in the site area. The groundwater classification for the site is considered to be Groundwater-3 Non-Drinking water based on information from Former Shell Retail Store No. 101249 (LDEQ Agency Interest No. 70008), which is located approximately 3,200 feet northeast of the site and is considered to be representative of conditions at the site. The groundwater yield for Former Shell Retail Store No. 101249 was less than 800 gallons per day. Therefore, a classification of Groundwater-3 was used. The nearest downgradient water body is the North Branch of Ward Creek, which is not listed as a drinking water body in LAC 33:IX; therefore, it is classified as Groundwater-3 Non-Drinking Water.

2.2.1 Water Well Survey

On February 20, 2015, PPM obtained a water well survey from the Louisiana Department of Natural Resources (LDNR) in order to identify current water wells within a 1-mile radius of the source area. There were sixteen registered wells identified within the search area (1-mile radius). Four of the wells were identified as monitoring wells. In addition, one water well was identified as public supply and three as irrigation wells within the 1-mile radius. The public supply well was installed to 1,487 feet into the 1,200 foot Sand of the Baton Rouge Area Aquifer. The irrigation wells were installed to depths of 170 and 1,405 feet in the 400 and 1,200 foot Sand of the Baton Rouge Area Aquifers. Due to the affected aquifer being different from the drinking water aquifers, there is no possibility of impact to the public supply or irrigation wells as shown in **Table B-1, LDNR Water Well Survey**, in **Appendix B, Tables**.

2.3 POINT OF EXPOSURE

For the aquifer at the subject site, a Groundwater-3 aquifer, the point of exposure (POE) is identified as the nearest downgradient water body, which is located approximately 1,300 feet east of the site. Based on the Classification-3, and the referenced water body, the

MO1 Dilution Attenuation Factor (DAF) is 248 and the MO2 DAF is 1902 (refer to Appendix H, 2003 RECAP Document).

2.4 ENVIRONMENTAL HISTORY

One 2,000-gallon diesel UST was installed at the site on March 10, 1985, to fuel the building's emergency generator.

Beau Box reported a release at the site to the LDEQ on March 25, 2014, upon discovering that the diesel UST on the site was empty. On March 31, 2014, PPM submitted a Workplan for Limited Site Investigation to the LDEQ. Five soil borings (SB-1 through SB-5) were installed on April 3, 2014, to assess the subsurface environment in the vicinity of the UST system at the site. Additionally, two soil borings (SB-6 and SB-7) were installed at the site on April 9, 2014. Following soil sampling, soil borings SB-1 through SB-7 were converted into 0.75-inch diameter temporary monitor wells SB-1/TW-1 through SB-7/TW-7 for collection of groundwater samples. On April 9, 2014, soil boring/temporary monitor well SB-1/TW-1 was converted into 4-inch diameter monitor well MW-1.

Free product was encountered in two of the site monitor wells. Several MDPVE events and hand-bailing events were conducted to recover free product from the wells. A total of approximately 156 gallons of free product were recovered during the hand-bailing and MDPVE events. The 2,000-gallon diesel UST was removed from the site on April 23, 2014. Approximately 70 tons of impacted soil backfill were excavated from the UST hold.

The soil and groundwater samples were analyzed for total petroleum hydrocarbons – diesel (TPH-D) by Environmental Protection Agency (EPA) Method 8015B, polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270C, aliphatics/aromatics in the appropriate carbon ranges by the Massachusetts Department of Environmental Protection Extractable Petroleum Hydrocarbons Method.

The analytical laboratory results indicated TPH-D, 2-methylnaphthalene, aliphatics $>C_{10}$-C_{12}, aliphatics $>C_{12}$-C_{16}, aromatics $>C_{12}$-C_{16}, aromatics $>C_{16}$-C_{21}, aliphatics $>C_{12}$-C_{16}, and aromatics $>C_{16}$-C_{21} in one or more soil samples were above their proposed respective LDEQ Risk Evaluation/Corrective Action Program (RECAP) Screening Standard (SO SS).

The analytical laboratory results indicated TPH-D, 2-methylnaphthalene, naphthalene, fluorine, phenanthrene, pyrene, aliphatics $>C_{10}$-C_{12}, aliphatics $>C_{12}$-C_{16}, aromatics $>C_{12}$-

C_{16}, aromatics >C_{16}-C_{21}, aromatics >C_{21}-C_{35}, aliphatics >C_{16}-C_{-35}, and aromatics >C_{10}-C_{12} in one or more groundwater samples were above their respective proposed LDEQ RECAP SS.

Additionally, several PAH constituents were not detected in groundwater samples from SB-7/TW-7 and MW-1; however, the laboratory detection limit for these constituents was greater than the LDEQ RECAP SS.

2.5 CONSTITUENTS OF CONCERN IN SOIL AND GROUNDWATER

Historical soil and groundwater sampling data are shown in **Table B-2, Soil Analytical Laboratory Summary**, and **Table B-3, Groundwater Analytical Laboratory Summary**, in **Appendix B**.

2.6 PRELIMINARY RECAP EVALUATION

A RECAP assessment was conducted to determine which constituents present at the subject site would be considered a constituent of concern (COC). A COC is a constituent in which the concentration exceeds screening standards established in the RECAP, as revised by the LDEQ on October 20, 2003.

Laboratory analytical results for soil revealed that aromatics >C_{10}-C_{12} and aromatics >C_{12}-C_{16} exceeded their applicable soil RECAP SS. Free product was present in monitor well MW-1 and temporary monitor well TW-7; therefore, all constituents were considered COCs for groundwater. Therefore, these constituents for soil and groundwater were further evaluated under Management Option 1 (MO1) and Management Option 2 (MO2).

The soil and groundwater concentrations, along with applicable MO1 and MO2 RECAP Standards for COCs at the site, are shown below in **Table 2-1, Soil MO1 Standards, AOI No. 1 – Industrial Soil 0-15 Feet BGS**, **Table 2-2, Soil MO1 Standards, AOI No. 2 – Industrial Soil >15 Feet BGS**, and **Table 2-3, Groundwater MO2 Standards**.

TABLE 2-1
SOIL MO1 STANDARDS
AOI NO. 1 – INDUSTRIAL SOIL 0-15 FEET BGS

Constituents of Concern	Soil MO1 Standards (mg/kg)	Area of Investigation Soil Concentrations (mg/kg)	Points of Highest Concentration
Aromatics >C10-C12	5,000[1]	1,300[2]	SB-7
Aromatics >C12-C16	5,000[1]	1,300[2]	SB-7
2-Methylnaphthalene	826[1]	7.3	SB-7

[1] *RECAP standards based on Industrial Soil*
[2] *Concentration based on highest TPH-D concentration*

TABLE 2-2
SOIL MO1 STANDARDS
AOI NO. 2 – INDUSTRIAL SOIL >15 FEET BGS

Constituents of Concern	Soil MO1 Standards (mg/kg)	Area of Investigation Soil Concentrations (mg/kg)	Points of Highest Concentration
Aromatics >C12-C16	10,000[1]	240	SB-1

[1] *Total Petroleum Hydrocarbons shall not exceed 10,000 ppm based on aesthetics.*

TABLE 2-3
GROUNDWATER MO2 STANDARDS

Constituents of Concern	Groundwater MO2 Standards (mg/L)	Area of Investigation Groundwater Concentrations (mg/L)	Points of Highest Concentration
Aliphatics >C10-C12	349[1]	FP	MW-1
Aliphatics >C12-C16	82[1]	FP	MW-1
Aliphatics >C16-C35	1,171[2]	FP	MW-1
Aromatics >C10-C12	2,698[1]	FP	MW-1
Aromatics >C12-C16	1,171[2]	FP	MW-1
Aromatics >C16-C21	1,171[2]	FP	MW-1
Aromatics >C21-C35	1,171[2]	FP	MW-1
Acenaphthene	4[3]	FP	MW-1
Acenaphthylene	16[3]	FP	MW-1
Anthracene	0.043[3]	FP	MW-1

Constituents of Concern	Groundwater MO2 Standards (mg/L)	Area of Investigation Groundwater Concentrations (mg/L)	Points of Highest Concentration
Benz(a)anthracene	0.0078[4]	FP	MW-1
Benzo(a)pyrene	0.0016[3]	FP	MW-1
Benzo(b)fluoranthene	0.0048[4]	FP	MW-1
Benzo(k)fluoranthene	0.0025[4]	FP	MW-1
Chrysene	0.0016[3]	FP	MW-1
Dibenz(a,h)anthracene	0.0025[4]	FP	MW-1
Fluoranthene	0.21[3]	FP	MW-1
Fluorene	2[3]	FP	MW-1
Indeno(1,2,3-cd)pyrene	0.0037[4]	FP	MW-1
2-Methylnaphthalene	25[3]	FP	MW-1
Naphthalene	31[3]	FP	MW-1
Phenanthrene	1.2[3]	FP	MW-1
Pyrene	0.14[3]	FP	MW-1

[1] *RECAP standards based on Groundwater to Ambient Air*
[2] *Total Petroleum Hydrocarbons shall not exceed 10,000 ppm based on aesthetics*
[3] *RECAP standards based on Water Solubility*
[4] *RECAP standards based on Quantitation Limits*

As shown in **Table 2-1** and **Table 2-2** above, all constituent concentrations in soil are below their applicable MO1 RECAP Standards for the site. As shown in **Table 2-3** above, all constituent concentrations in groundwater exceed their proposed MO2 RECAP Standards for the site due to the presence of free product in monitor well MW-1.

3.0 TECHNOLOGY RECOMMENDATION

A Product Removal System appears to be the most efficient and cost effective technology for remediating the site. The following sections describe the technology and how it would be implemented.

3.1 SCOPE OF WORK

PPM inspected the site to determine the optimum location for installation of the Product Removal System. Factors considered in placement of the unit included subsurface

conditions, location of utilities, security, noise, and pedestrian and vehicular traffic. The proposed location of the unit is shown in **Figure 3, System Layout**, in **Appendix A**.

Installation dates will be based on receipt of the required permits, approval dates of this CAP from the LDEQ, equipment availability, and subcontractor scheduling. Corrective action activities using Product Removal System will consist of the following:

I. Product Removal System Installation:

- Obtaining necessary permits.
- Initiating the construction (e.g. marking lines, contractor meeting, mobilization, etc.).
- Developing a site-specific Health and Safety Plan (HASP) for the corrective action activities at the site. The HASP will be specifically designed to address installation, operation, and monitoring activities at the site. The site-specific HASP will be kept onsite throughout the duration of the project.
- Installing subsurface extraction lines minimum of 30 inches below ground surface (BGS) by trenching.
- Installing one well vault and modification of wellhead at monitor well MW-1.
  - Reduction of the top of the casing from surface level to approximately 1 foot BGS and removal of the existing manhole to allow for subsurface pipe connections.
  - Installation of a 24-inch by 24-inch by 12-inch vault at monitor well MW-1 to allow access to the well and piping.
- Installing remediation unit.
- Connecting subsurface extraction lines.
- Installing phase separated hydrocarbons (PSH) tank.
- Installing air supply and PSH return tubing to vault near the PSH tank.
- Installing required electrical power supply equipment and lines.
- Testing and startup of the system.
- Preparing a construction and operation report.

II. System Operation:

- Conducting operation and maintenance visits bi-weekly (26 events) for 12 months to maintain and monitor system components.

III. Groundwater Monitoring:

- Gauging of liquid levels inside all monitoring wells.
- Collecting groundwater samples (if free product is not present) from all monitor wells.
- Analyzing samples for all extractable petroleum hydrocarbons (EPH) and PAH.
- Preparing a report which will include chronology of events conducted at the site, recommendations for future actions, figures (consisting of a site map, a potentiometric surface map, and an isopleth map for dissolved constituents), and a summary of findings in tabular format.
- Analyzing field blank, duplicate sample, decon rinse, and trip blank for the purpose of maintaining proper Quality Assurance/Quality Control Plan (QA/QC) practices.
- Preparing semiannual groundwater reports.

IV. Post Remediation:

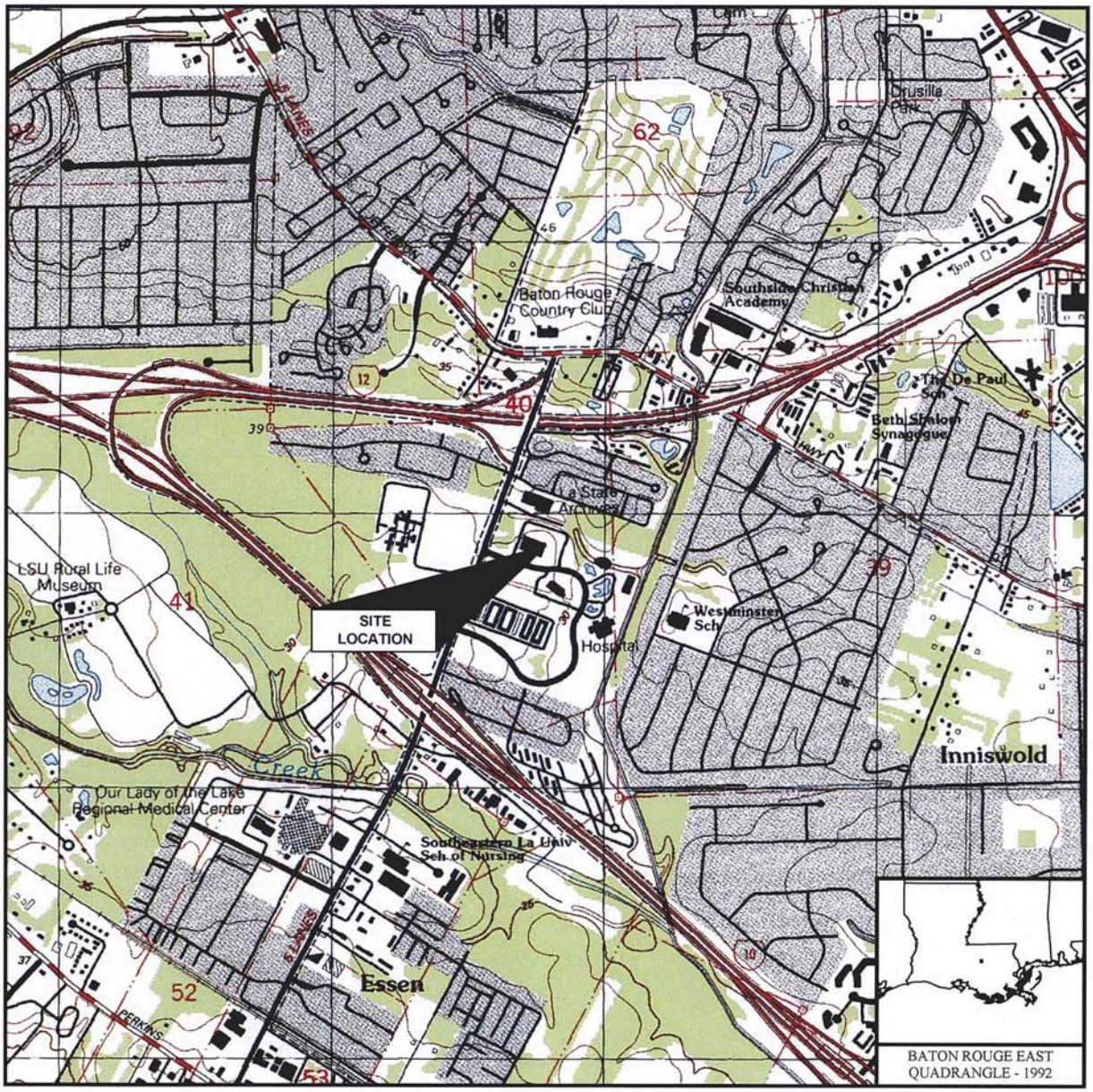
- Removing 30 feet of 4-inch well casing and screen by pulling (if possible). If the well casing cannot be pulled from the boring, the well will be grouted in-place.
- Plugging the boring by pumping a cement-bentonite slurry, consisting of not more than seven percent bentonite by dry weight of cement and a maximum of 10 gallons of water per sack (94 pounds) of cement, from the bottom of the boring to the ground surface via tremie pipe.
- Disposing well materials.
- Demobilizing system.
- Restoring site to original conditions.
- Preparing and filing a conveyance notice at the East Baton Rouge Parish courthouse in accordance with LDEQ guidelines.

4.0 SCHEDULE

PPM is prepared to implement the CAP upon LDEQ approval. Installation activities are expected to take approximately three days after receipt of equipment.

APPENDICES

APPENDIX A – FIGURES



SCALE: 1 : 24,000

1 .5 0 1
MILES

1000 0 1000 5000 10,000
FEET

1 0 1 2
KILOMETER

1000 0 1000 2000
METER

N

PPM CONSULTANTS, INC. www.ppmco.com		BEAU BOX PROPERTY MANAGEMENT **LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP** 8401 UNITED PLAZA BOULEVARD BATON ROUGE, LOUISIANA	SITE LOCATION MAP	FIGURE NUMBER 1
DRAWN BY: JCP	DRAWN DATE: 04/15/15			
PROJECT NUMBER: 503124	BILLING GROUP: CAP			

Z:\Beau Box Property Management\503124\Cap\503124-CAP dwg, 1 Site Location Map, 4/22/2015 8:50:21 AM, jay prickett

PPM CONSULTANTS, INC.
www.ppmco.com

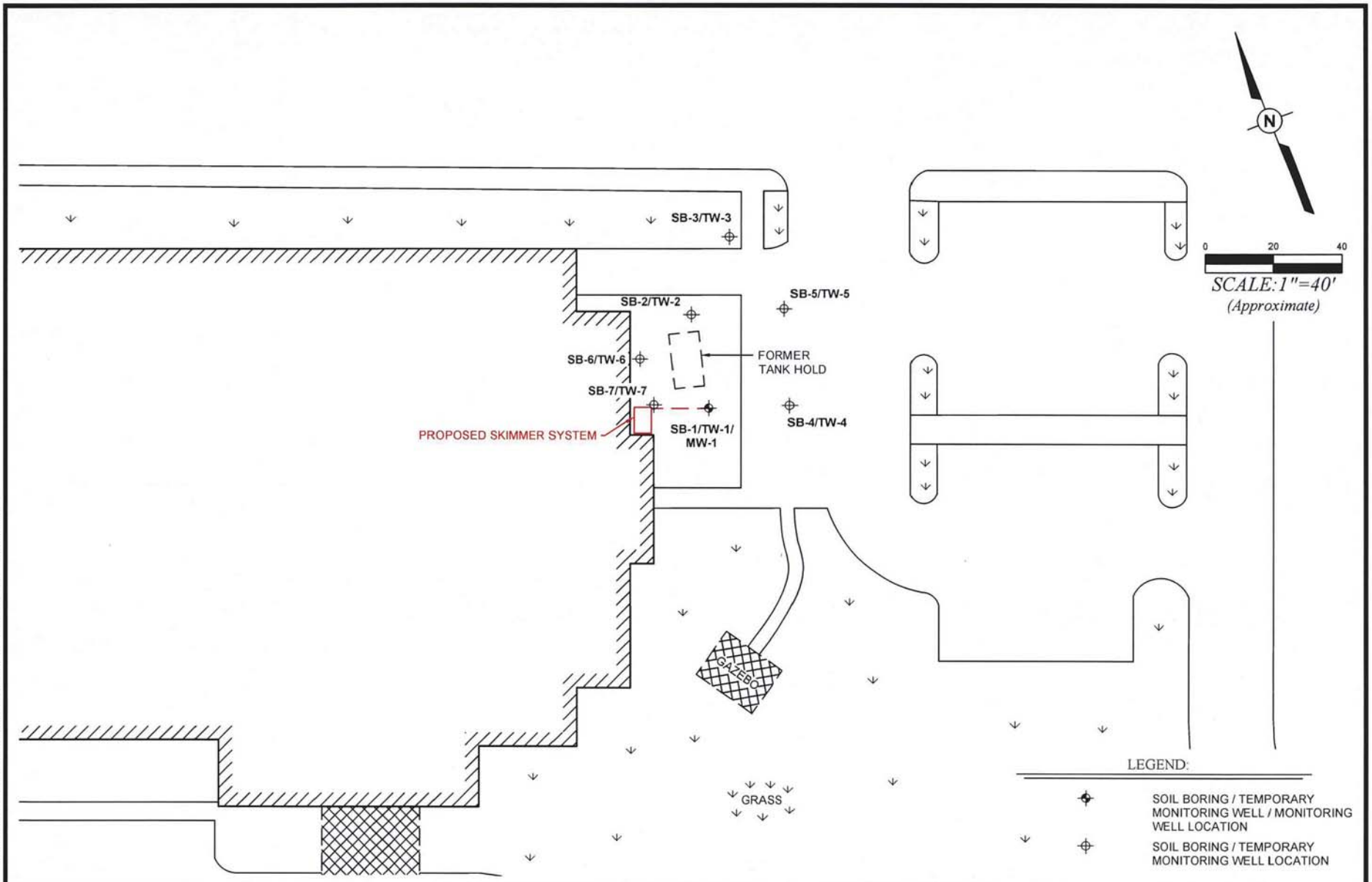
DRAWN BY:	DRAWN DATE:
JCP	04/15/15
PROJECT NUMBER:	BILLING GROUP:
503124	CAP

BEAU BOX PROPERTY MANAGEMENT
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

SITE MAP

FIGURE NUMBER
2

Z:\Beau Box Property Management\503124\Cap\503124-CAP.dwg, 2 Site Map, 4/22/2015 8:50:26 AM, jay prickett



Z:\Beau Box Property Management\503124\Cap\503124-CAP.dwg, 3, 4/22/2015 8:50:27 AM, jay prickett

PPM CONSULTANTS, INC.
www.ppmco.com

DRAWN BY:	DRAWN DATE:
JCP	04/15/15
PROJECT NUMBER:	BILLING GROUP:
503124	CAP

BEAU BOX PROPERTY MANAGEMENT

LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP

8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

SYSTEM LAYOUT

FIGURE NUMBER

3

APPENDIX B – TABLES

Water Wells By LATITUDE / LONGITUDE Report

Latitude	Longitude	Radius Ft	MSG
30.412777778	-91.096944444	5280	Found 58 records

Well Distance Ft	SECTION	TOWNSHIP	RANGE	PARISH_NAME	PARISH_NUM	LOCAL_WELL_NUM	WELL_USE	DESCRIPTION	WELL_STATUS	OWNERS_NUM	OWNERS_NAME	DRILLERS_NAME	WELL_DEPTH	CASING_DIAMETER	DATE_COMPLETED	WATER_LEVEL	DATE_MEASURED	GEOLOGIC_UNIT	LATITUDE	LONGITUDE
0	040	07S	01E	EAST BATON ROUGE	033	9891Z	W	Piezometer	Active	TW-6	BEAU BOX PROPERTY MANAGEMENT, LLC	QUATERNARY RESOURCE INVESTIGATIONS, LLC	29	1	5/12/14	25		112SESC	302446	910549
0	040	07S	01E	EAST BATON ROUGE	033	9893Z	M	Monitor	Active	MW-1	BEAU BOX PROPERTY MANAGEMENT, LLC	QUATERNARY RESOURCE INVESTIGATIONS, LLC	24	4	5/12/14	11.5	5-12-14	112MRVA	302446	910549
0	040	07S	01E	EAST BATON ROUGE	033	9892Z	W	Piezometer	Active	TW-7	BEAU BOX PROPERTY MANAGEMENT, LLC	QUATERNARY RESOURCE INVESTIGATIONS, LLC	29	1	5/12/14	14	5-12-14	112SESC	302446	910549
1229.3	040	07S	01E	EAST BATON ROUGE	033	144	H	Domestic	Destroyed		WILLIAMS, L R	SUMMERS, D. K.	620	2	09/36	29.25	09/11/36	112048R	302435	910555
2427.04	040	07S	01E	EAST BATON ROUGE	033	226	H	Domestic	Destroyed		LEONARD, H	EBERHART	1275	4X2.50	01/27	41.00	00/00/27	121128R	302509	910557
2520.5	039	07S	01E	EAST BATON ROUGE	033	1278	O	Observation	Active		CAPITAL AREA GW	LAMBERT'S	550	2	06/97	37.00	06/11/97	112048R	302501	910526
2533.24	039	07S	01E	EAST BATON ROUGE	033	621	P	Public Supply	Active	WESTMR	BATON ROUGE WW	EBERHART	1487	12X8	12/56	10.42	01/04/57	121128R	302500	910525
2541.46	039	07S	01E	EAST BATON ROUGE	033	5349Z	L	Heat Pump	Active		MCELVEEN, JOY	ROUYEA'S	300		11/85	0.00		1120ONWM	302445	910520
2598.46	039	07S	01E	EAST BATON ROUGE	033	6041Z	M	Monitor	Active	MW-2	SOUTHLAND CORP	IT CORPORATION	12	4	08/88	2.00	09/28/88	112SESC	302505	910529
2598.46	039	07S	01E	EAST BATON ROUGE	033	6040Z	M	Monitor	Active	MW-1	SOUTHLAND CORP	IT CORPORATION	10	4	08/88	3.00	09/28/88	112SESC	302505	910529
2598.51	041	07S	01E	EAST BATON ROUGE	033	5728Z	M	Monitor	Plugged and Abandoned		KELLER OIL	SUBSURFACE	11	4	07/88	0.00		112SESC	302427	910609
2696.26	041	07S	01E	EAST BATON ROUGE	033	5727Z	M	Monitor	Plugged and Abandoned		KELLER OIL	SUBSURFACE	26	4	07/88	21.00	07/07/88	112SESC	302425	910608
2704.59	024	07S	01E	EAST BATON ROUGE	033	8751Z	M	Monitor	Active	PH1-22	BATON ROUGE, LA	PROFESSIONAL	85	2	09/03	9.50	09/12/03	112PLSC	302459	910616
2740.49	040	07S	01E	EAST BATON ROUGE	033	265	P	Public Supply	Destroyed	1	BR COUNTRY CLUB	EBERHART	1191	4	04/16	47.00	04/22/16	121128R	302513	910552
2740.49	040	07S	01E	EAST BATON ROUGE	033	445	I	Irrigation	Plugged and Abandoned	2	BR COUNTRY CLUB	CLEMARD	518	8X6X6	01/47	12.11	01/17/47	112048R	302513	910552
2845.3	041	07S	01E	EAST BATON ROUGE	033	224	H	Domestic	Destroyed		MURPHY, A	SUMMERS, D. K.	638	2X1.50	1936	26.70	08/01/40	112048R	302422	910606
2862.59	100	07S	01E	EAST BATON ROUGE	033	1136	I	Irrigation	Active	4	BR COUNTRY CLUB	EBERHART	1405	8X6	09/54	101.00	05/25/77	121128R	302514	910554
2931.25	040	07S	01E	EAST BATON ROUGE	033	227	H	Domestic	Destroyed		KEAN, J	EBERHART	1300	4	1917	0.00		121128R	302515	910550
2940.72	041	07S	01E	EAST BATON ROUGE	033	8931Z	M	Monitor	Plugged and Abandoned	MW-3	EXXON MOBIL	CRA, INC.	12	2	03/05	2.80	04/04/05	112SESC	302422	910608
2940.72	041	07S	01E	EAST BATON ROUGE	033	8929Z	M	Monitor	Plugged and Abandoned	MW-1	EXXON MOBIL	CRA, INC.	19	2	03/05	0.92	04/04/05	112SESC	302422	910608
2940.72	041	07S	01E	EAST BATON ROUGE	033	8930Z	M	Monitor	Plugged and Abandoned	MW-2	EXXON MOBIL	CRA, INC.	12	2	03/05	0.83	04/04/05	112SESC	302422	910608
2979.22	041	07S	01E	EAST BATON ROUGE	033	8984Z	I	Irrigation	Active		LSU BURDEN CENT	GILL (JACK)	170	2	06/06	35.00	06/20/06	00000000	302426	910614
3094.65	039	07S	01E	EAST BATON ROUGE	033	5919Z	M	Monitor	Plugged and Abandoned	MW-5	EXXON CO USA	ATEC	30	4	01/92	13.80	01/26/92	112SESC	302459	910517
3094.65	039	07S	01E	EAST BATON ROUGE	033	5917Z	M	Monitor	Plugged and Abandoned	MW-3	EXXON CO USA	ATEC	20	4	01/92	7.40	01/26/92	112SESC	302459	910517
3094.65	039	07S	01E	EAST BATON ROUGE	033	5916Z	M	Monitor	Plugged and Abandoned	MW-2	EXXON CO USA	ATEC	30	4	01/92	11.50	01/26/92	112SESC	302459	910517
3094.65	039	07S	01E	EAST BATON ROUGE	033	5918Z	M	Monitor	Plugged and Abandoned	MW-4	EXXON CO USA	ATEC	30	4	01/92	11.70	01/26/92	112SESC	302459	910517
3094.65	039	07S	01E	EAST BATON ROUGE	033	5915Z	M	Monitor	Plugged and Abandoned	MW-1	EXXON CO USA	ATEC	30	4	01/92	11.80	01/26/92	112SESC	302459	910517
3096.87	039	07S	01E	EAST BATON ROUGE	033	145	H	Domestic	Plugged and Abandoned		WEBB, FLETCHER	SUMMERS, D. K.	1210	2X1.50	02/34	25.00	02/01/34	121128R	302510	910527

TABLE B-1
LDNR WATER WELL SURVEY

3143	040	07S	01E	EAST BATON ROUGE	033	8003Z	B	Borehole/Pilot Hole	Plugged and Abandoned	TEST HOLE	BR COUNTRY CLUB	LAYNE (BR)	210		02/98	0.00		11200NWM	302517	910552
3655.98	052	07S	01E	EAST BATON ROUGE	033	815	O	Observation	Active		LSU BATON ROUGE	SUMMERS BROS	645	8	05/67	13.30	05/11/67	11204BR	302425	910623
3774.94	055	07S	01E	EAST BATON ROUGE	033	8917Z	W	Piezometer	Active	T04-25P	URS CORPORATION	CAPOZZOLI	30	2	02/05	16.00	02/21/05	112SESC	302409	910555
3920.61	100	07S	01E	EAST BATON ROUGE	033	267	H	Domestic	Destroyed		DUCOTE, E	UNKNOWN	490	2.50		0.00		11204BR	302514	910518
4524.08	039	07S	01E	EAST BATON ROUGE	033	271	H	Domestic	Active		BOND, C W	SINGLETARY	650	2.50	1919	0.00		11206BR	302508	910504
4797.17	059	07S	01E	EAST BATON ROUGE	033	272	H	Domestic	Destroyed		FONTENOT ETAL	UNKNOWN	530	2.50	1940	0.00		11204BR	302454	910455
4862.19	062	07S	01E	EAST BATON ROUGE	033	1259	I	Irrigation	Active	5	BR COUNTRY CLUB	LAYNE (BR)	515	16X10	03/94	41.00	03/31/94	11204BR	302534	910545
4862.19	062	07S	01E	EAST BATON ROUGE	033	816	I	Irrigation	Plugged and Abandoned	3	BR COUNTRY CLUB	EBERHART	520	12X9X9	10/63	41.68	02/08/67	11204BR	302534	910545
4952.63	053	07S	01E	EAST BATON ROUGE	033	7471Z	M	Monitor	Plugged and Abandoned	MW-2	CHEVRON	UNKNOWN	13	4	03/90	8.85	11/02/94	112SESC	302405	910620
4952.63	053	07S	01E	EAST BATON ROUGE	033	7470Z	M	Monitor	Plugged and Abandoned	MW-1	CHEVRON	UNKNOWN	12	4	03/90	9.15	11/02/94	112SESC	302405	910620
4952.63	053	07S	01E	EAST BATON ROUGE	033	7473Z	M	Monitor	Plugged and Abandoned	MW-4	CHEVRON	UNKNOWN	13	4	03/90	3.51	11/02/94	112SESC	302405	910620
4952.63	053	07S	01E	EAST BATON ROUGE	033	7472Z	M	Monitor	Plugged and Abandoned	MW-3	CHEVRON	UNKNOWN	13	4	03/90	7.00	11/02/94	112SESC	302405	910620
5016.81	085	01S	06W	EAST BATON ROUGE	033	9354Z	H	Domestic	Plugged and Abandoned		WASHANER, WOLFE		50	2		0.00		00000000	302451	910452
5163.53	083	07S	01E	EAST BATON ROUGE	033	8054Z	W	Piezometer	Plugged and Abandoned	PZ-15	WHITNEY BANK	CRA, INC.	102	4	06/98	13.23	07/17/98	112SESC	302530	910619
5163.53	083	07S	01E	EAST BATON ROUGE	033	7977Z	W	Piezometer	Plugged and Abandoned	PZ-2	WHITNEY BANK	G & E	36	2	12/97	7.79	02/07/98	112SESC	302530	910619
5163.53	083	07S	01E	EAST BATON ROUGE	033	7978Z	W	Piezometer	Plugged and Abandoned	PZ-3	WHITNEY BANK	G & E	31	2	12/97	7.23	02/07/98	112SESC	302530	910619
5163.53	083	07S	01E	EAST BATON ROUGE	033	8052Z	W	Piezometer	Plugged and Abandoned	PZ-13	WHITNEY BANK	CRA, INC.	56	2	06/98	9.59	07/17/98	112SESC	302530	910619
5163.53	083	07S	01E	EAST BATON ROUGE	033	8055Z	W	Piezometer	Plugged and Abandoned	PZ-16	WHITNEY BANK	CRA, INC.	162	2	07/98	13.76	07/17/98	112SESC	302530	910619
5163.53	083	07S	01E	EAST BATON ROUGE	033	8053Z	W	Piezometer	Plugged and Abandoned	PZ-14	WHITNEY BANK	CRA, INC.	75	4	06/98	11.96	07/17/98	112SESC	302530	910619
5178.3	055	07S	01E	EAST BATON ROUGE	033	8916Z	W	Piezometer	Active	T04-24P	URS CORPORATION	CAPOZZOLI	41	2	02/05	4.00	02/24/05	112PLSC	302356	910602
5208.62	083	07S	01E	EAST BATON ROUGE	033	8046Z	W	Piezometer	Plugged and Abandoned	PZ-7	WHITNEY BANK	CRA, INC.	36	2	06/98	10.58	07/17/98	112SESC	302530	910620
5208.62	083	07S	01E	EAST BATON ROUGE	033	8048Z	W	Piezometer	Plugged and Abandoned	PZ-9	WHITNEY BANK	CRA, INC.	36	2	06/98	10.36	07/17/98	112SESC	302530	910620
5208.62	083	07S	01E	EAST BATON ROUGE	033	8050Z	W	Piezometer	Plugged and Abandoned	PZ-11	WHITNEY BANK	CRA, INC.	56	2	06/98	9.87	07/17/98	112SESC	302530	910620
5208.62	083	07S	01E	EAST BATON ROUGE	033	8051Z	W	Piezometer	Destroyed	PZ-12	WHITNEY BANK	CRA, INC.	55	2	06/98	10.19	07/17/98	112SESC	302530	910620
5208.62	083	07S	01E	EAST BATON ROUGE	033	8044Z	W	Piezometer	Destroyed	PZ-5	WHITNEY BANK	CRA, INC.	38	2	06/98	10.68	07/17/98	112SESC	302530	910620
5208.62	083	07S	01E	EAST BATON ROUGE	033	8047Z	W	Piezometer	Plugged and Abandoned	PZ-8	WHITNEY BANK	CRA, INC.	36	2	06/98	9.96	07/17/98	112SESC	302530	910620
5208.62	083	07S	01E	EAST BATON ROUGE	033	8049Z	W	Piezometer	Plugged and Abandoned	PZ-10	WHITNEY BANK	CRA, INC.	36	2	06/98	10.36	07/17/98	112SESC	302530	910620
5208.62	083	07S	01E	EAST BATON ROUGE	033	8045Z	W	Piezometer	Plugged and Abandoned	PZ-6	WHITNEY BANK	CRA, INC.	36	2	06/98	10.13	07/17/98	112SESC	302530	910620
5208.62	083	07S	01E	EAST BATON ROUGE	033	7976Z	W	Piezometer	Plugged and Abandoned	PZ-1	WHITNEY BANK	G & E	34	2	12/97	6.84	02/07/98	112SESC	302530	910620
5254.79	083	07S	01E	EAST BATON ROUGE	033	8043Z	W	Piezometer	Destroyed	PZ-4	WHITNEY BANK	CRA, INC.	35	2	06/98	10.78	07/17/98	112SESC	302530	910621

TABLE B-2A
SOIL ANALYTICAL LABORATORY SUMMARY (0 to 15 FEET BGS)
AOI 1 - SOIL
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	TPH-D	Code	Aliphatics >C10-C12	Code	Aliphatics >C12-C16	Code	Aliphatics >C16-C35
SB-3	SB-3 (13-15)	1	13	15	04/03/2014		66		6.7		35		39
SB-5	SB-5 (11-13)	1	11	13	04/03/2014	<	5		NA		NA		NA
SB-6	SB-6 (11-13)	1	11	13	04/09/2014		710		NA		NA		NA
SB-7	SB-7 (11-13)	1	11	13	04/09/2014		1,300		NA		NA		NA
					Minimum Concentration	**<**	**5**		**6.7**		**35**		**39**
					Maximum Concentration		**1,300**		**6.7**		**35**		**39**
					MO1 or Screening Standards		**5,000**		**2,000**		**3,800**		**10,000**

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Aromatics >C10-C12	Code	Aromatics >C12-C16	Code	Aromatics >C16-C21	Code	Aromatics >C21-C35
SB-3	SB-3 (13-15)	1	13	15	04/03/2014	<	1.7		7.7		14	<	10
SB-5	SB-5 (11-13)	1	11	13	04/03/2014		NA		NA		NA		NA
SB-6	SB-6 (11-13)	1	11	13	04/09/2014		NA		NA		NA		NA
SB-7	SB-7 (11-13)	1	11	13	04/09/2014		NA		NA		NA		NA
					Minimum Concentration	**<**	**1.7**		**7.7**		**14**	**<**	**10**
					Maximum Concentration	**<**	**1.7**		**7.7**		**14**	**<**	**10**
					MO1 or Screening Standards		**5,000**		**5,000**		**1,700**		**2,500**

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Acenaphthene	Code	Acenaphthylene	Code	Anthracene	Code	Benz(a)-anthracene
SB-3	SB-3 (13-15)	1	13	15	04/03/2014		NA		NA		NA		NA
SB-5	SB-5 (11-13)	1	11	13	04/03/2014		NA		NA		NA		NA
SB-6	SB-6 (11-13)	1	11	13	04/09/2014	<	0.033	<	0.033	<	0.033	<	0.033
SB-7	SB-7 (11-13)	1	11	13	04/09/2014	<	0.033	<	0.033	<	0.033	<	0.033
					Minimum Concentration	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**
					Maximum Concentration	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**
					MO1 or Screening Standards		**220**		**88**		**120**		**2.9**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-2A
SOIL ANALYTICAL LABORATORY SUMMARY (0 to 15 FEET BGS)
AOI 1 - SOIL
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Benzo(a)-pyrene	Code	Benzo(b)-fluoranthene	Code	Benzo(k)-fluoranthene	Code	Chrysene
SB-3	SB-3 (13-15)	1	13	15	04/03/2014		NA		NA		NA		NA
SB-5	SB-5 (11-13)	1	11	13	04/03/2014		NA		NA		NA		NA
SB-6	SB-6 (11-13)	1	11	13	04/09/2014	<	0.033	<	0.033	<	0.033		0.037
SB-7	SB-7 (11-13)	1	11	13	04/09/2014	<	0.033	<	0.033	<	0.033	<	0.033
					Minimum Concentration	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**
					Maximum Concentration	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**		**0.037**
					MO1 or Screening Standards		**0.33**		**2.9**		**29**		**76**

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Dibenz(a,h)-anthracene	Code	Fluoranthene	Code	Fluorene	Code	Indeno(1,2,3-cd)-pyrene
SB-3	SB-3 (13-15)	1	13	15	04/03/2014		NA		NA		NA		NA
SB-5	SB-5 (11-13)	1	11	13	04/03/2014		NA		NA		NA		NA
SB-6	SB-6 (11-13)	1	11	13	04/09/2014	<	0.033	<	0.033		0.69	<	0.033
SB-7	SB-7 (11-13)	1	11	13	04/09/2014	<	0.033		0.11		0.88	<	0.033
					Minimum Concentration	**<**	**0.033**	**<**	**0.033**		**0.69**	**<**	**0.033**
					Maximum Concentration	**<**	**0.033**		**0.11**		**0.88**	**<**	**0.033**
					MO1 or Screening Standards		**0.33**		**1,200**		**230**		**2.9**

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Methylnaphthalene,2-	Code	Naphthalene	Code	Phenanthrene	Code	Pyrene
SB-3	SB-3 (13-15)	1	13	15	04/03/2014		NA		NA		NA		NA
SB-5	SB-5 (11-13)	1	11	13	04/03/2014		NA		NA		NA		NA
SB-6	SB-6 (11-13)	1	11	13	04/09/2014		6		1.2		1.9		0.32
SB-7	SB-7 (11-13)	1	11	13	04/09/2014		7.3		1.4		2.5		0.44
					Minimum Concentration		**6**		**1.2**		**1.9**		**0.32**
					Maximum Concentration		**7.3**		**1.4**		**2.5**		**0.44**
					MO1 or Screening Standards		**826**		**1.5**		**660**		**1,100**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-2B
SOIL ANALYTICAL LABORATORY SUMMARY (0 to 15 FEET BGS)
AOI 2 - SOIL
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

Boring ID	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	TPH-D	Code	Aliphatics >C10-C12	Code	Aliphatics >C12-C16	Code	Aliphatics >C16-C35	Code	Aromatics >C10-C12	Code	Aromatics >C12-C16	Code	Aromatics >C16-C21
SB-1	17	19	04/03/2014		5,200		380		1,300		1,300		7.8		240		460
SB-1	21	24	04/03/2014		1,800		NA		NA		NA		NA		NA		NA
SB-2	17	19	04/03/2014		500		NA		NA		NA		NA		NA		NA
SB-2	21	24	04/03/2014		70		NA		NA		NA		NA		NA		NA
SB-3	13	15	04/03/2014		66		6.7		35		39	<	1.7		7.7		14
SB-3	21	24	04/03/2014	<	5		NA		NA		NA		NA		NA		NA
SB-4	17	19	04/03/2014		14		NA		NA		NA		NA		NA		NA
SB-4	26	29	04/03/2014	<	5		NA		NA		NA		NA		NA		NA
SB-5	11	13	04/03/2014	<	5		NA		NA		NA		NA		NA		NA
SB-5	17	20	04/03/2014		62		NA		NA		NA		NA		NA		NA
SB-6	11	13	04/09/2014		710		NA		NA		NA		NA		NA		NA
SB-6	27	30	04/09/2014		5		NA		NA		NA		NA		NA		NA
SB-7	11	13	04/09/2014		1,300		110		870		870	<	1.7		45		280
SB-7	27	30	04/09/2014		5		NA		NA		NA		NA		NA		NA
			Minimum Concentration	<	5		6.7		35		39	<	1.7		7.7		14
			Maximum Concentration		5,200		380		1,300		1,300		7.8		240		460
			MO1 or Screening Standards		65		1,955		3,772		10,000		102		10,000		1,746

Boring ID	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Aromatics >C21-C35	Code	Acenaphthene	Code	Acenaphthylene	Code	Anthracene	Code	Benzo(a)anthracene	Code	Benzo(a)pyrene	Code	Benzo(b)fluoranthene
SB-1	17	19	04/03/2014		80		NA		NA		NA		NA		NA		NA
SB-1	21	24	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-2	17	19	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-2	21	24	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-3	13	15	04/03/2014	<	10		NA		NA		NA		NA		NA		NA
SB-3	21	24	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-4	17	19	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-4	26	29	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-5	11	13	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-5	17	20	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-6	11	13	04/09/2014		NA	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
SB-6	27	30	04/09/2014		NA	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
SB-7	11	13	04/09/2014		53	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
SB-7	27	30	04/09/2014		NA	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
			Minimum Concentration	<	10	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
			Maximum Concentration		80	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
			MO1 or Screening Standards		2,518		215		88		121		2.9		0.33		2.9

Notes:
Bold RED type indicates concentration exceeds the RECAP Screening Standard.
Bold BLUE type indicates highest concentration for each COC.

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NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)
* - Indicates data from the April 23, 2014, UST closure sampling

J - Indicates data are estimated by laboratory
U - Indicates that the data are considered to be undetected at the elevated detection limit due to blank contamination; data are usable as undetected values
B - Indicates blank contamination exceeding MDL

TABLE B-2B
SOIL ANALYTICAL LABORATORY SUMMARY (0 to 15 FEET BGS)
AOI 2 - SOIL
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

Boring ID	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Benzo(k)fluoranthene	Code	Chrysene	Code	Dibenz(a,h)anthracene	Code	Fluoranthene	Code	Fluorene	Code	Indeno(1,2,3-cd)pyrene	Code	Methylnaphthalene,2-
SB-1	17	19	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-1	21	24	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-2	17	19	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-2	21	24	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-3	13	15	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-3	21	24	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-4	17	19	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-4	26	29	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-5	11	13	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-5	17	20	04/03/2014		NA		NA		NA		NA		NA		NA		NA
SB-6	11	13	04/09/2014	<	0.033		0.037	<	0.033	<	0.033		0.69	<	0.033		6
SB-6	27	30	04/09/2014	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
SB-7	11	13	04/09/2014	<	0.033	<	0.033	<	0.033		0.11		0.88	<	0.033		7
SB-7	27	30	04/09/2014	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
			Minimum Concentration	<	**0.033**	<	**0.033**	<	**0.033**	<	**0.033**	<	**0.033**	<	**0.033**	<	**0.033**
			Maximum Concentration	<	**0.033**		**0.037**	<	**0.033**		**0.11**		**0.88**	<	**0.033**		**7**
			MO1 or Screening Standards		**29**		**76**		**0.33**		**1,213**		**266**		**2.9**		**1.7**

Boring ID	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	SPLP Methylnaphthalene,2-	Code	Naphthalene	Code	SPLP Naphthalene	Code	Phenanthrene	Code	Pyrene
SB-1	17	19	04/03/2014		NA		NA		NA		NA		NA
SB-1	21	24	04/03/2014		NA		NA		NA		NA		NA
SB-2	17	19	04/03/2014		NA		NA		NA		NA		NA
SB-2	21	24	04/03/2014		NA		NA		NA		NA		NA
SB-3	13	15	04/03/2014		NA		NA		NA		NA		NA
SB-3	21	24	04/03/2014		NA		NA		NA		NA		NA
SB-4	17	19	04/03/2014		NA		NA		NA		NA		NA
SB-4	26	29	04/03/2014		NA		NA		NA		NA		NA
SB-5	11	13	04/03/2014		NA		NA		NA		NA		NA
SB-5	17	20	04/03/2014		NA		NA		NA		NA		NA
SB-6	11	13	04/09/2014		NA		1.2		NA		1.9		0.32
SB-6	27	30	04/09/2014		NA	<	0.033		NA	<	0.033	<	0.033
SB-7	11	13	04/09/2014		0.016		1.4		NA		2.5		0.44
SB-7	27	30	04/09/2014		NA	<	0.033		NA	<	0.033	<	0.033
			Minimum Concentration		**0.016**	<	**0.033**		**NA**	<	**0.033**	<	**0.033**
			Maximum Concentration		**0.016**		**1.4**		**NA**		**2.5**		**0.44**
			MO1 or Screening Standards		**0.12**		**1.5**		**0.2**		**660**		**230**

Notes:
Bold RED type indicates concentration exceeds the RECAP Screening Standard.
Bold BLUE type indicates highest concentration for each COC.

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NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)
* - Indicates data from the April 23, 2014, UST closure sampling

J - Indicates data are estimated by laboratory
U - Indicates that the data are considered to be undetected at the elevated detection limit due to blank contamination; data are usable as undetected values
B - Indicates blank contamination exceeding MDL

TABLE B-3
GROUNDWATER ANALYTICAL LABORATORY SUMMARY
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

Sample ID	Sample Date	Code	TPH-D	Code	Aliphatics >C10-C12	Code	Aliphatics >C12-C16	Code	Aliphatics >C16-C35	Code	Aromatics >C10-C12	Code	Aromatics >C12-C16
SB-2/TW-2	04/04/2014		4.2		NA		NA		NA		NA		NA
SB-3/TW-3	04/04/2014		0.51		NA		NA		NA		NA		NA
SB-4/TW-4	04/04/2014		8.4		0.19		0.24		0.35	<	0.1		0.29
SB-5/TW-5	04/04/2014	<	0.15		NA		NA		NA		NA		NA
SB-6/TW-6	04/10/2014	<	0.15		NA		NA		NA		NA		NA
SB-7/TW-7	04/10/2014		16		0.14		0.1	<	0.1	<	0.1	<	0.1
MW-1	06/27/2014		430		21		70		69		0.46		15
MW-1	04/21/2015		NT		5.81		19.8		17.4		0.169		2.94
Minimum Concentrations		**<**	**0.15**		**0.14**		**0.1**	**<**	**0.1**	**<**	**0.1**	**<**	**0.1**
Maximum Concentrations			**430**		**21**		**70**		**69**		**0.46**		**15**
MO2 Standards			**--**		**349**		**82**		**1,171**		**2,698**		**1,171**

Sample ID	Sample Date	Code	Aromatics >C16-21	Code	Aromatics >C21-C35	Code	Acenaphthene	Code	Acenaphthylene	Code	Anthracene	Code	Benzo(a)anthracene
SB-2/TW-2	04/04/2014		NA		NA		NA		NA		NA		NA
SB-3/TW-3	04/04/2014		NA		NA		NA		NA		NA		NA
SB-4/TW-4	04/04/2014		0.18		0.26		NA		NA		NA		NA
SB-5/TW-5	04/04/2014		NA		NA		NA		NA		NA		NA
SB-6/TW-6	04/10/2014		NA		NA		0.00051	<	0.00018	<	0.00018	<	0.00018
SB-7/TW-7	04/10/2014	<	0.1	<	0.1	<	0.0091	<	0.0091	<	0.0091	<	**0.0091**
MW-1	06/27/2014		23		3.5	<	0.018	<	0.018	<	0.018	<	**0.018**
MW-1	04/21/2015		7.51		1.26		0.268	<	0.019	<	0.019	<	0.019
Minimum Concentrations		**<**	**0.1**	**<**	**0.1**		**0.00051**	**<**	**0.00018**	**<**	**0.00018**	**<**	**0.00018**
Maximum Concentrations			**23**		**3.5**		**0.268**	**<**	**0.019**	**<**	**0.019**	**<**	**0.019**
MO2 Standards			**1,171**		**1,171**		**4**		**16**		**0.043**		**0.0078**

Notes:
Bold RED type indicates concentration exceeds the RECAP Screening Standard.
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NA - Not Analyzed for Parameter
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J - Indicates data are estimated by laboratory
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TABLE B-3
GROUNDWATER ANALYTICAL LABORATORY SUMMARY
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

Sample ID	Sample Date	Code	Benzo(a)pyrene	Code	Benzo(b)fluoranthene	Code	Benzo(k)fluoranthene	Code	Chrysene	Code	Dibenz(a,h)anthracene	Code	Fluoranthene
SB-2/TW-2	04/04/2014		NA		NA		NA		NA		NA		NA
SB-3/TW-3	04/04/2014		NA		NA		NA		NA		NA		NA
SB-4/TW-4	04/04/2014		NA		NA		NA		NA		NA		NA
SB-5/TW-5	04/04/2014		NA		NA		NA		NA		NA		NA
SB-6/TW-6	04/10/2014	<	0.00018	<	0.00018	<	0.00018	<	0.00018	<	0.00018	<	0.00018
SB-7/TW-7	04/10/2014	<	**0.0091**	<	**0.0091**	<	0.0091	<	**0.0091**	<	**0.0091**	<	0.0091
MW-1	06/27/2014	<	**0.018**	<	**0.018**	<	0.018	<	**0.018**	<	**0.018**	<	0.018
MW-1	04/21/2015	<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**
Minimum Concentrations		<	**0.00018**	<	**0.00018**	<	**0.00018**	<	**0.00018**	<	**0.00018**	<	**0.00018**
Maximum Concentrations		<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**
MO2 Standards			**0.0016**		**0.0048**		**25**		**0.0016**		**0.0025**		**0.21**

Sample ID	Sample Date	Code	Fluorene	Code	Indeno(1,2,3-cd)pyrene	Code	Methylnaphthalene,2-	Code	Naphthalene	Code	Phenanthrene	Code	Pyrene
SB-2/TW-2	04/04/2014		NA		NA		NA		NA		NA		NA
SB-3/TW-3	04/04/2014		NA		NA		NA		NA		NA		NA
SB-4/TW-4	04/04/2014		NA		NA		NA		NA		NA		NA
SB-5/TW-5	04/04/2014		NA		NA		NA		NA		NA		NA
SB-6/TW-6	04/10/2014		0.00062	<	0.00018		0.0072		0.0045		0.00069	<	0.00018
SB-7/TW-7	04/10/2014		0.021	<	**0.0091**		0.25		0.05		0.044		0.011
MW-1	06/27/2014		0.23	<	**0.018**		1.7		0.33		0.4		**0.073**
MW-1	04/21/2015		**0.449**	<	**0.019**		**2.34**		**0.645**		**0.724**	<	**0.019**
Minimum Concentrations			**0.00062**	<	**0.00018**		**0.0072**		**0.0045**		**0.00069**	<	**0.00018**
Maximum Concentrations			**0.449**	<	**0.019**		**2.34**		**0.645**		**0.724**	<	**0.073**
MO2 Standards			**2**		**0.0037**		**25**		**31**		**1.2**		**0.14**

Notes:
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RISK EVALUATION/ CORRECTIVE ACTION PROGRAM REPORT

BEAU BOX PROPERTY MANAGEMENT
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA
EAST BATON ROUGE PARISH

LDEQ AGENCY INTEREST NO. 79956
FACILITY ID NO. 17-017472
INCIDENT NO. 154846

PPM PROJECT NO. 503124

JUNE 2015

Environmental Science and Engineering

PPM CONSULTANTS

PPM CONSULTANTS

Environmental Science and Engineering

7935 Office Park Boulevard • Baton Rouge, LA 70809 • Tel 225 293-7270 • www.ppmcp.com

June 29, 2015

Mr. Gary A. Fulton, Administrator
Louisiana Department of Environmental Quality
Office of Environmental Compliance
Remediation and Underground Storage Tank Division
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312

Re: Risk Evaluation/Corrective Action Program Report
Beau Box Property Management
Louisiana Retirement Systems Building Partnership
8401 United Plaza Boulevard
Baton Rouge, Louisiana
East Baton Rouge Parish
Incident No. 154846
Facility ID No. 17-017472
LDEQ Agency Interest No. 79956
PPM Project No. 503124

TRANSMITTAL LETTER

Dear Mr. Fulton:

Enclosed please find three copies of the Risk Evaluation/Corrective Action Program Report prepared by PPM Consultants, Inc. for the above-referenced site.

If you have any questions or need any additional information, please do not hesitate to contact me at (225) 293-7270.

Sincerely,
PPM Consultants, Inc.

Michael D. Luckett, P.E.
Senior Engineer

Enclosures

cc: Mr. Layne Roberts, Beau Box Property Management

RISK EVALUATION/ CORRECTIVE ACTION PROGRAM REPORT

BEAU BOX PROPERTY MANAGEMENT
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA
EAST BATON ROUGE PARISH

LDEQ AGENCY INTEREST NO. 79956
FACILITY ID NO. 17-017472
INCIDENT NO. 154846

PPM PROJECT NO. 503124

JUNE 2015

RISK EVALUATION/CORRECTIVE ACTION PROGRAM REPORT

AT

LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA
EAST BATON ROUGE PARISH

LDEQ AGENCY INTEREST NO. 79956
FACILITY ID NO. 17-017472
INCIDENT NO. 154846

PREPARED FOR:

BEAU BOX PROPERTY MANAGEMENT
MR. LAYNE ROBERTS
POST OFFICE BOX 66865
BATON ROUGE, LOUISIANA 70896
(225) 237-3343

PPM PROJECT NO. 503124

JUNE 2015

PREPARED BY:

CHASITY H. REED
SENIOR TOXICOLOGIST

REVIEWED BY:

SHAWN P. IVEY, P.G.
PRINCIPAL

PPM CONSULTANTS, INC.
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BATON ROUGE, LOUISIANA 70809
(225) 293-7270

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APPENDICES

1.0 BACKGROUND

PPM Consultants, Inc. (PPM) has prepared this Risk Evaluation/Corrective Action Program (RECAP) submittal for Beau Box Property Management, to address petroleum hydrocarbon (diesel) impact to site soil and groundwater at Louisiana Retirement Systems Building Partnership located at 8401 United Plaza Boulevard in Baton Rouge, East Baton Rouge Parish, Louisiana. The RECAP Standards are utilized by the Louisiana Department of Environmental Quality (LDEQ) to address risk to human health and the environment posed by the release of chemical constituents to the environment. PPM evaluated the site utilizing the guidelines established in the RECAP guidance document (October 20, 2003).

1.1 SITE DESCRIPTION

Geographically, the site is located in Section 40, Township 7 South, Range 1 East of the Baton Rouge East Quadrangle at the approximate Longitude 91° 05' 49.3" and Latitude 30° 24' 46.5". The site location is shown in **Figure 1, Site Location Map**, in **Appendix A, Figures**.

The topography of the site is generally flat. The only structure present at the site is the professional office building. The surface area is covered mostly by concrete, with areas of grass along the south and east sides of the building.

There was one underground storage tank (UST) located in a single tank pit located on the east side of the building. The UST pit contained one 2,000-gallon capacity diesel UST. Site features are shown in **Figure 2, Site Map**, in **Appendix A**.

1.2 LAND USE AND ZONING

Currently, the subject site is a professional office building and is to be maintained as such in the future. Thus, the property is utilized as a commercial property. There are no known changes in business or structure intended for the subject site.

1.3 ADJACENT PROPERTIES

Adjacent properties include professional office buildings and their associated parking lots to the north, east, southeast, and southwest. Adjacent properties are shown in **Figure 3, Regional Site Map**, in **Appendix A**.

1.4 ENVIRONMENTAL HISTORY

One 2,000-gallon diesel UST was installed at the site on March 10, 1985, to fuel the building's emergency generator.

Beau Box reported a release at the site to the LDEQ on March 25, 2014, upon discovering that the diesel UST on the site was empty. On March 31, 2014, PPM submitted a Workplan for Limited Site Investigation to the LDEQ.

PPM began site assessment activities at the site on April 3, 2014. On April 23, 2014, Southern Tank Testers, Inc., with oversight by PPM, removed the 2,000-gallon diesel UST and approximately 70 tons of soil backfill from the site. The tank was visually inspected and found to be in poor condition. Soil samples collected during the UST removal indicated that Total Petroleum Hydrocarbons – Diesel (TPH-D), naphthalene, 2-methylnaphthalene, SPLP 2-methylnaphthalene, aliphatics $>C_{12}$-C_{16}, aromatics $>C_{12}$-C_{16}, and aromatics $>C_{16}$-C_{21} exceeded their respective UST RECAP Screening Standards (SS). The Tank Excavation Assessment Report was submitted to the LDEQ on November 24, 2014.

PPM and Gator Environmental visited the site on April 10, 2014, May 29, 2014, June 2, 2014, June 24, 2014, and February 5, 2015, to conduct Mobile Dual-Phase Vacuum Extraction (MDPVE) events on monitor well MW-1. Additionally, PPM hand-bailed free product from monitor well MW-1 and temporary monitor well TW-7 several times during the course of this investigation and a skimmer was installed in monitor well MW-1 on August 21, 2014, to recover free product. A total of approximately 156 gallons of free product were recovered during the hand-bailing and MDPVE events. Free product was not observed in temporary monitor wells TW-4, TW-5, or TW-6 during the course of this investigation. Temporary monitor wells TW-2 and TW-3 were destroyed during removal of the UST on April 23, 2014.

On May 18, 2015, PPM submitted a RECAP Input Parameter (RIP) form to the LDEQ and client.

2.0 CONDITIONS

Methods to delineate the Area of Investigation (AOI) were conducted in accordance with PPM's internal *Technical Sampling and Analysis* (TS&A) *Plan, Quality Assurance/Quality Control* (QA/QC) *Plan*, and *Health and Safety Plan* (HASP).

PPM mobilized to the site on April 3, 2014, to conduct site investigation field activities. Seven soil borings (SB-1/TW-1 through SB-7/TW-7) were installed to approximate depths ranging from 20 to 30 feet below ground surface (BGS) during the investigation to determine the distribution of petroleum hydrocarbons in soil and groundwater. On June 27, 2014, groundwater monitoring well MW-1 was installed in soil boring SB-1/TW-1 to an approximate depth of 24 feet BGS.

2.1 SITE GEOLOGY

Seven soil borings were advanced at the site during the assessment. Subsurface conditions and lithology at the site were identified from visual inspection of samples obtained from the soil borings. Site lithology included alluvial sediments consisting of Silty Clay. The default fractional organic carbon (foc) value of 0.006 was utilized at the site.

2.2 SITE HYDROGEOLOGY

2.2.1 Groundwater Characteristics

One permanent 4-inch groundwater monitoring well and seven temporary probe wells were installed during the investigation to characterize groundwater conditions at the site. Saturated soils were encountered approximately 12 to 19 feet BGS in each soil boring. Static groundwater levels were recorded at depths between 8.25 and 11.69 feet BGS subsequent to well installation. The aquifer thickness was determined to be approximately 16 feet thick, based on geological borings logs, which are presented in **Appendix C, Boring Logs**.

No groundwater monitoring event has occurred at the site; therefore, groundwater flow direction was determined by selecting the nearest surface water body, as shown on **Figure 1, Appendix A**.

2.2.2 Groundwater Classification

The classification of the groundwater at the site was based on criteria found in *Section 2.10, Groundwater/Aquifer Use*, of the RECAP guidance document. The criteria for classification of the groundwater include the current use of the groundwater within the vicinity of the release, the maximum yield of the aquifer, and the total dissolved solids (TDS) concentration in the groundwater. Based on the following sections, the groundwater classification for the site is considered to be Groundwater-3 Non-Drinking water.

The groundwater classification for the site is considered to be Groundwater-3 Non-Drinking water based on information from Former Shell Retail Store No. 101249 (LDEQ Agency Interest No. 70008), which is located approximately 3,200 feet northeast of the site and is considered to be representative of conditions at the site. The groundwater yield for Former Shell Retail Store No. 101249 was less than 800 gallons per day. Therefore, a classification of Groundwater-3 was used. The nearest downgradient water body is the North Branch of Ward Creek, which is no listed as a drinking water body in LAC 33:IX; therefore, it is classified as Groundwater-3 Non-Drinking Water.

2.2.2.1 Water Well Survey

On February 20, 2015, PPM obtained a water well survey from the Department of Natural Resources (DNR) in order to identify current water wells within a 1-mile radius of the source area, and is included in **Appendix D, DNR Water Well Survey**. There were 58 registered wells identified within the search area (1-mile radius). Twenty of the wells were identified as piezometers, eighteen as monitoring, two as observation, one as a heat pump, and one as a borehole/pilot hole within the area. In addition, nine water wells were identified as domestic, two as public supply, and five as irrigation within the 1-mile radius. The domestic wells are installed to depths ranging from 50 to 1,300 feet in the 400-Foot, 600-Foot, and 1,200-Foot Sands of Baton Rouge Area. One domestic well (DNR No. 271) is identified as active. The remaining domestic wells are identified as destroyed or plugged and abandoned. The public supply wells are installed to depths ranging from 1,197 to 1,487 into the 1,200-Foot Sands of Baton Rouge Area. One public supply well (DNR No. 621) is identified as active, while the remaining well is identified as destroyed. The irrigation wells are installed to depths ranging from 170 to 1,405 feet into the 400-Foot and 1,200-Foot Sands of Baton Rouge Area. The aquifer at the site is the Southeast Louisiana Aquifer System Surficial Confining Unit. Due to the aquifer at the site being different from the drinking water aquifers, there is no possibility of impact to the domestic, public supply, and irrigation wells, as shown in **Table B-1, DNR Water Well Survey**, in

Appendix B, Tables. Domestic, public supply, and irrigation water wells are shown in **Figure 4, Water Well Survey Map**, in **Appendix A**.

2.3 CONSTITUENTS OF CONCERN DISTRIBUTION

As defined in the RECAP guidelines, constituents of concern (COC) are the constituents that are site-related and the focus of the risk investigation process. Initially, all constituents detected in at least one sample were identified as a COC. Sample collection and screening of each COC were conducted in accordance with *Section 3.2, Sample Collection and Screening Rational*. All laboratory analyses were conducted by a laboratory approved by the LDEQ in accordance with methods approved by the Environmental Protection Agency (EPA).

The data were determined to be Analyte specific and the identity and concentrations were confirmed in accordance with *Section 2.5, Data Evaluation and Data Usability*, of the 2003 RECAP guidelines, and summarized below:

- Analytical method used to analyze each COC are approved methods;
- Sample quantitation limits for at least 90 to 95 percent of the samples collected were at or below the limiting screening standards or RECAP standards;
- Blank sample results were below the detection limit; and
- Identification of tentatively identified compounds is not required at sites impacted with petroleum hydrocarbons.

QA/QC requirements as stated in *Section 2.4* of the 2003 RECAP guidance were met for this site. Laboratory Data and QA/QC Documentation are presented in **Appendix E, Laboratory Analytical Reports and Chain-Of-Custody**. An evaluation of the analytical data is provided on **RECAP Form 3, Analytical Data Evaluation**, in **Appendix F, RECAP Forms**.

2.3.1 Constituents of Concern in Soil

A total of seven soil borings have been advanced during the assessment activities at the site. All analytical results collected from these borings are included in the RECAP evaluation. Constituent concentrations ranges are as follows:

- Aliphatics C10-C12 concentrations from 6.7 to 380 ppm;
- Aliphatics C12-C16 concentrations from 35 to 1,300 ppm;
- Aliphatics C16-C35 concentrations from 39 to 1,300 ppm;
- Aromatics C10-C12 concentrations from <1.7 to 7.8 ppm;
- Aromatics C12-C16 concentrations from 7.7 to 240 ppm;
- Aromatics C16-C21 concentrations from 14 to 460 ppm;
- Aromatics C21-C35 concentrations from <10 to 80 ppm;
- Acenaphthene concentrations were <0.033 ppm;
- Acenaphthylene concentrations were <0.033 ppm;
- Anthracene concentrations were <0.033 ppm;
- Benz(a)anthracene concentrations were <0.033 ppm;
- Benzo(a)pyrene concentrations were <0.033 ppm;
- Benzo(b)fluoranthene concentrations were <0.033 ppm;
- Benzo(k)fluoranthene concentrations were <0.033 ppm;
- Chrysene concentrations from <0.033 to 0.037 ppm;
- Dibenz(a,h)anthracene concentration were <0.033 ppm;
- Fluoranthene concentrations from <0.033 to 0.11 ppm;
- Fluorene concentrations from <0.033 to 0.88 ppm;
- Indeno(1,2,3-cd)pyrene concentrations were <0.033 ppm;
- 2-Methylnaphthalene concentrations from <0.033 to 7.3 ppm;
- Naphthalene concentrations from <0.033 to 1.4 ppm;
- Phenanthrene concentrations from <0.033 to 2.5 ppm; and
- Pyrene concentrations from <0.033 to 0.44 ppm.

The highest constituent concentrations in soil from the soil sampling events are summarized in **Table B-2, Soil Analytical Summary**, in **Appendix B**. COCs in soil that exhibited concentrations above the screening standards are shown graphically in the **Figure 5, COC Concentrations in Soil**, in **Appendix A**.

2.3.2 Constituents of Concern in Groundwater

Dissolved constituent concentrations in groundwater have ranged as follows:

- Aliphatics C10-C12 concentrations from 0.14 to 21 ppm;
- Aliphatics C12-C16 concentrations from 0.1 to 70 ppm;
- Aliphatics C16-C35 concentrations from 0.35 to 69 ppm;
- Aromatics C10-C12 concentrations from <0.1 to 0.46 ppm;
- Aromatics C12-C16 concentrations from 0.29 to 15 ppm;
- Aromatics C16-C21 concentrations from 0.18 to 23 ppm;
- Aromatics C21-C35 concentrations from 0.26 to 3.5 ppm;
- Acenaphthene concentrations from 0.00051 to <0.018 ppm;
- Acenaphthylene concentrations from <0.00018 to <0.018 ppm;
- Anthracene concentrations from <0.00018 to <0.018 ppm;
- Benz(a)anthracene concentrations from <0.00018 to <0.018 ppm;
- Benzo(a)pyrene concentrations from <0.00018 to <0.018 ppm;
- Benzo(b)fluoranthene concentrations from <0.00018 to <0.018 ppm;
- Benzo(k)fluoranthene concentrations from <0.00018 to <0.018 ppm;
- Chrysene concentrations from <0.00018 to <0.018 ppm;
- Dibenz(a,h)anthracene concentration from <0.00018 to <0.018 ppm;
- Fluoranthene concentrations from <0.00018 to <0.018 ppm;
- Fluorene concentrations from 0.00062 to 0.23 ppm;
- Indeno(1,2,3-cd)pyrene concentrations from <0.00018 to <0.018 ppm;
- 2-Methylnaphthalene concentrations from 0.0072 to 1.7 ppm;
- Naphthalene concentrations from 0.0045 to 0.33 ppm;
- Phenanthrene concentrations from 0.00069 to 0.4 ppm; and
- Pyrene concentrations from <0.00018 to 0.73 ppm.

The highest dissolved constituent concentrations in groundwater from the groundwater sampling events are summarized in **Table B-3, Groundwater Analytical Summary**, in **Appendix B**. COCs in groundwater that exhibited concentrations above the screening standards are shown graphically in the **Figure 6, Dissolved COC Concentrations in Groundwater**, in **Appendix A**.

2.3.3 Free Product Distribution

Free product (diesel) was present in site monitoring wells TW-7 and MW-1 during site assessment activities. The most recent gauging event conducted on February 5, 2015, revealed product thicknesses of 0.03 feet and 0.16 feet, respectively.

2.4 OFF-SITE CONDITIONS

2.4.1 Off-Site Impact

No offsite impact of petroleum hydrocarbons was apparent at the site.

2.4.2 Off-Site Sources

No offsite sources of petroleum hydrocarbons were apparent at the site.

3.0 MIGRATION PATHWAYS AND SENSITIVE RECEPTORS

A sensitive receptor survey was conducted within the site vicinity to identify receptors potentially sensitive to released petroleum hydrocarbons. Receptors considered being potentially sensitive included: migration pathways, biological receptors, natural receptors, and underground man-made receptors.

Several potential migration pathways were identified at the site such as underground utilities. Underground utilities located at the site did not appear to be impacted.

Biological receptors such as plants and animals do not appear to have been impacted from the subsurface release at the site. Human health does not appear to have been impacted at the site.

No lakes, streams, or surface bodies of water appear to have been impacted by the release.

PPM obtained a water well plot from the DNR in order to identify water wells within a 1-mile radius of the site. As shown in **Appendix D**, nine water wells were identified as domestic, two as public supply, and five as irrigation within the 1-mile radius. The domestic wells are installed to depths ranging from 50 to 1,300 feet in the 400-Foot, 600-Foot, and 1,200-Foot Sands of Baton Rouge Area. One domestic well (DNR No. 271) is identified as active. The remaining domestic wells are identified as destroyed or plugged and abandoned. The public supply wells are installed to depths ranging from 1,197 to 1,487 into the 1,200-Foot Sands of Baton Rouge Area. One public supply well (DNR No. 621) is identified as active, while the remaining well is identified as destroyed. The irrigation wells are installed to depths ranging from 170 to 1,405 feet into the 400-Foot and 1,200-Foot Sands of Baton Rouge Area. The aquifer at the site is the Southeast Louisiana Aquifer System Surficial Confining Unit. Due to the aquifer at the site being different from the drinking water aquifers, there is no possibility of impact to the domestic, public supply, and irrigation wells.

4.0 RISK EVALUATION/CORRECTIVE ACTION PROGRAM EVALUATION RESULTS

4.1 SITE RANKING AND JUSTIFICATION FOR THE RANKING

The RECAP guidelines require that each site be categorized according to the ranking system set forth in the RECAP Guidelines. The purpose of the ranking system is to allow the LDEQ to determine the urgency of remedial actions that may be necessary for a site.

The impacted soils are not in significant quantities. Potential for human contact with the surface soil is minimal. The impacted aquifer does not appear to be hydraulically connected to utilized supply wells. Based on a review of the site data, the site best fits into the criterion of posing a low likelihood of threat to human health and the environment. Therefore, the site has a Site Ranking of 4. A Class 4 ranking demonstrates a no long-term (>2 years) threat to human health, safety or environmental receptors.

4.2 ECOLOGICAL CHECKLIST

The ecological conditions of the subject site and surrounding area were evaluated based on a walking survey of the area and through literature review. The area of impacted soil was determined to be less than one acre in size, and there were no releases or potential for release of COCs from the area of investigation to a surface water body. There were no recreational, commercial, threatened, or endangered species, and their habitats were not impacted or expected to be impacted in the future by constituents of concern from the subject site. Following a thorough investigation, no obvious impacts to ecological receptors or their habitats were observed and no future impacts were expected. Therefore, based on the results of the ecological evaluation, no further ecological assessment was deemed necessary for the subject site. A complete ecological checklist is presented on **RECAP Form 18, Ecological Checklist**, in **Appendix F**.

4.3 CONSTITUENTS OF CONCERN

Constituents detected at the subject site in groundwater and soil included TPH-D fractions and poly-nuclear aromatic hydrocarbons (PAHs). The soil and groundwater samples collected from soil and probe borings and monitoring wells were analyzed in accordance with the LDEQ RECAP Guidance Document.

Chemical properties for the COCs at the subject site were taken from *Table H-2, Chemical and Physical Parameters*, in *Appendix H* of the RECAP guidance document and are included in **Table B-4, Chemical/Physical Properties**, in **Appendix B**, of this report. Based on the oral and inhalation slope factor, COCs can be classified as carcinogens or non-carcinogens. In addition, COCs are also classified as volatile or non-volatile as indicated in *Table H-1, Cancer Slope Factors* and *Reference Doses*, in *Appendix H* of the RECAP guidance document, as shown in **Table B-5, Chemical RECAP Properties**, in **Appendix B**.

4.4 AREA OF INVESTIGATION AND CONCERN

The Area of Concern (AOC) is defined as "an area where constituents have been released to the environment or a waste management unit." The size is determined by all sampling points that exhibited detectable COC concentrations above the RECAP standards. The AOI is defined in the RECAP Guidance Document as "a zone contiguous to and including impacted media defined vertically and horizontally by the presence of one or more constituents in concentrations exceeding the appropriate screening standards."

Five AOIs were identified at the site, based on land use and distribution of COCs with concentrations above the screening standards. AOI No. 1 was identified as industrial soil from 0 to 15 feet BGS. AOI No. 2 was identified as industrial soil greater than 15 feet BGS. AOI No. 3 was identified as groundwater. AOI No. 4 was identified as industrial soil beneath an enclosed structure (BES). AOI No. 5 was identified as groundwater BES. The size is determined by all sampling points that exhibited detectable COC concentrations. The AOIs are shown in **Figure 2, Appendix A**.

The source area is defined as the length (L) and the width (S_w) of soil that is serving or may serve as a source for the transfer of constituents to groundwater. For this site, the source length and width is summarized in **Table 4-1, AOI Source Length and Width**, and illustrated in **Figure 2, Appendix A**.

TABLE 4-1
AOI SOURCE LENGTH AND WIDTH

Area of Investigation	Source Length (ft)	Source Width (ft)	Source Area (sq ft)
AOI No. 1	30	30	900
AOI No. 2	30	30	900
AOI No. 3	30	30	900
AOI No. 4	30	30	900
AOI No. 5	30	30	900

4.5 POINT OF COMPLIANCE

The point of compliance (POC) identified for a site is based on the point at which cleanup standards are enforced. The point at which cleanup standards are enforced is also the point nearest to the source of release and generally where the highest dissolved and adsorbed concentrations are determined. In evaluating exposure/source and historical concentrations for soil and groundwater, the POC was determined for all AOIs. This determination was based on soil boring/monitoring wells exhibiting the highest COC concentration and is shown in **Table 4-2, AOI Point of Compliance**.

TABLE 4-2
AOI POINT OF COMPLIANCE

Area of Investigation	Point of Compliance
AOI No. 1	SB-3
AOI No. 2	SB-1
AOI No. 3	TW-4
AOI No. 4	SB-7
AOI No. 5	MW-1

4.6 POINT OF EXPOSURE

For the aquifer at the subject site, Groundwater-3 aquifer, North Branch Ward Creek was determined as the point of exposure (POE) and is located east of the site.

TABLE 4-3
AOI POINT OF EXPOSURE DISTANCES

Area of Investigation	Point of Compliance	Distance to POE (ft)
AOI No. 1	SB-3	1,300
AOI No. 2	SB-1	1,300
AOI No. 3	TW-4	1,300
AOI No. 4	SB-7	1,300
AOI No. 5	MW-1	1,300

4.7 DILUTION FACTORS

Where applicable, the groundwater and soil RECAP standards for each COC were adjusted by applying a dilution factor for Groundwater-3 and Soil Protective of Groundwater-3 (DF3), Groundwater-2 and Soil Protective of Groundwater-2 (DF2) to account for the natural dilution of constituent concentrations from the POC to the POE. The dilution factors were determined using the Domenico Model. Distances from the POC to the POE as well as dilution factors are shown in **Table 4-4, Dilution Factors**.

TABLE 4-4
DILUTION FACTORS

Area of Investigation	Distance from POC to Nearest Downgradient Surface Water Body (ft)	DF3	Management Option
AOI No. 1	1,300	--	Screening
AOI No. 2	1,300	248	MO1
AOI No. 3	1,300	248	MO1
AOI No. 4	1,300	1,902	MO2
AOI No. 5	1,300	1,902	MO2

4.8 CONCEPTUAL SITE MODEL

Exposure pathways for the subject site are outlined in **Figure 7, Conceptual Site Model**, in **Appendix A.**

4.8.1 Sources

The source of the release occurred in the UST pit area, which is identified as the primary source for this conceptual site model. The secondary sources consist of soil and groundwater. Air exists as a tertiary source at the site.

4.8.2 Migration Pathways

Migration pathways for the COCs consisted of volatilization of the volatile organic compounds (VOCs) into the ambient air, infiltration of rainwater through the soil, infiltration of groundwater through the saturated region, and direct contact with soil and groundwater.

4.8.3 Source Media

For this site, the source media consisted of soil and groundwater. There exists no potential for impact to sediment.

4.8.4 Exposure Media

For this site, air, soil, and groundwater were considered exposure media. Because groundwater does not appear to be impacting surface water, then surface water sediment and biota were not considered an exposure media. Because of the depth of impacted soil (> 2 ft), there exists no possibility of impact to the environment or a potential receptor via fugitive dust.

4.8.5 Exposure Points

For this site the exposure points were determined to be ambient air and direct contact. Since area surface water bodies do not appear to have potential to be impacted by the source, then surface water and biota uptake was not considered in this RECAP evaluation.

4.8.6 Exposure Pathways

Impacted soil at the subject site is between 11 and 24 feet BGS. RECAP guidelines take into consideration that soil could be excavated up to 15 feet BGS. Therefore, inhalation of volatile emissions, ingestion, and dermal contact are considered potential exposure pathways for impacted soil.

Groundwater is also impacted at the subject site. Due to the depth of the impacted groundwater (12 feet BGS) and the use of the aquifer, dermal contact and ingestion is considered a potential exposure pathway. In addition, inhalation of volatile emissions via groundwater must be considered in this evaluation because groundwater is less than 15.0 feet BGS. Therefore, inhalation of volatile emissions from groundwater to ambient air is also considered a potential exposure pathway for impacted groundwater.

Because enclosed structures exists at the site, and are located down gradient of the POC, inhalation of volatile emissions via impacted soil and groundwater is considered a potential exposure pathway at the subject site.

4.8.7 Receptors

Potential human receptors considered for this evaluation were on-site workers, adults, and children. It is estimated that an on-site worker would have the highest estimated risk from exposure to emissions from the subject site. A customer or trespasser could be considered as potential receptors; however, the duration of the exposure for these receptors would be minimal. Therefore, for the subject site, on-site workers are the only human receptors considered.

4.9 SCREENING OF CONSTITUENTS

RECAP allows the screening of COCs for each AOI utilizing Screening Standards and Management Option 1 (MO1) standards if the criteria for each management option are met. Therefore, PPM conducted a screening of COCs in accordance with the October 20, 2003, RECAP Guidance Document.

4.9.1 AOI No. 1 – Industrial Soil 0-15 Feet BGS

4.9.1.1 Screening Option

A screening assessment was conducted for AOI No. 1 to determine which constituents present at the AOI would be considered COCs. The highest concentration for each constituent was compared to soil screening standards for each constituent. The highest soil concentrations for all constituents were below the Soil Screening Standard, as shown in **Table 4-5, Soil Screening Standards for AOI No. 1**. Screening standards for soil are also presented on **RECAP Form 10A, Screening Option Submittal for Soil**, in **Appendix F**.

TABLE 4-5
SOIL SCREENING STANDARDS FOR AOI NO. 1

Constituents of Concern	Soil Screening Standard (mg/kg)	Area of Investigation Soil Concentration (mg/kg)	Point of Highest Concentration
Aliphatics C10-C12	1,955[1]	6.7	SB-3
Aliphatics C12-C16	3,772[1]	35	SB-3
Aliphatics C16-C35	10,000[1]	39	SB-3
Aromatics C10-C12	102[2]	<1.7	SB-3
Aromatics C12-C16	203[2]	7.7	SB-3
Aromatics C16-C21	1,746[1]	14	SB-3
Aromatics C21-C35	2,518[1]	<10	SB-3

[1] *RECAP standards based on Industrial Soil*
[2] *RECAP standards based on Soil Protective of Groundwater*

4.9.2 AOI No. 2 – Industrial Soil >15 Feet BGS

4.9.2.1 Screening Option

A screening assessment was conducted for AOI No. 2 to determine which constituents present at the AOI would be considered COCs. The highest concentration for each constituent was compared to soil screening standards for each constituent. The highest soil concentration for aromatics C12-C16 was above the Soil Screening Standard. Therefore, aromatics C12-C16 is the only COC for soil. COC concentrations that exceeded the screening standards are highlighted and presented in **Table 4-6, Soil Screening Standards for AOI No. 2**. Screening standards for soil are also presented on **RECAP Form 10B, Screening Option Submittal for Soil**, in **Appendix F**.

TABLE 4-6
SOIL SCREENING STANDARDS FOR AOI NO. 2

Constituents of Concern	Soil Screening Standard (mg/kg)	Area of Investigation Soil Concentration (mg/kg)	Point of Highest Concentration
Aliphatics >C10-C12	1,955[1]	380	SB-1
Aliphatics >C12-C16	3,772[1]	1,300	SB-1
Aliphatics >C16-C35	10,000[1]	1,300	SB-1
Aromatics >C10-C12	102[2]	7.8	SB-1
Aromatics >C12-C16	203[2]	240	SB-1
Aromatics >C16-C21	1,746[1]	460	SB-1
Aromatics >C21-C35	2,518[1]	80	SB-1
Acenaphthene	215[2]	<0.033	SB-6 and SB-7
Acenaphthylene	88[2]	<0.033	SB-6 and SB-7
Anthracene	121[2]	<0.033	SB-6 and SB-7
Benz(a)anthracene	2.9[1]	<0.033	SB-6 and SB-7
Benzo(a)pyrene	0.33[1]	<0.033	SB-6 and SB-7
Benzo(b)fluoranthene	2.9[1]	<0.033	SB-6 and SB-7
Benzo(k)fluoranthene	29[1]	<0.033	SB-6 and SB-7
Chrysene	76[2]	<0.033	SB-6 and SB-7
Dibenz(a,h)anthracene	0.33[1]	<0.033	SB-6 and SB-7
Fluoranthene	1,213[2]	<0.033	SB-6 and SB-7
Fluorene	226[2]	<0.033	SB-6 and SB-7
Indeno(1,2,3-cd)pyrene	2.9[1]	<0.033	SB-6 and SB-7
Methylnaphthalene,2-	1.7[2]	<0.033	SB-6 and SB-7
Naphthalene	1.5[2]	<0.033	SB-6 and SB-7
Phenanthrene	665[2]	<0.033	SB-6 and SB-7
Pyrene	1,101[2]	<0.033	SB-6 and SB-7

[1] *RECAP standards based on Industrial Soil*
[2] *RECAP standards based on Soil Protective of Groundwater*

4.9.2.2 Management Option No. 1

The highest concentration for each constituent was compared to the MO1 RECAP standards developed for soil, as shown in **Table 4-7, Soil MO1 Standards for AOI No. 2**. All of the highest soil concentrations were below Soil Standards, as shown in **Table 4-7**. MO1 standards for soil are also presented on **RECAP Form 12, Management Option 1 Submittal for Soil**, in **Appendix F**.

TABLE 4-7
SOIL MO1 STANDARDS FOR AOI NO. 2

Constituents of Concern	Soil MO1 Standard (mg/kg)	Area of Investigation Soil Concentration (mg/kg)	Point of Highest Concentration
Aromatics C12-C16	10,000[1]	240	SB-1

[1] *Total Petroleum Hydrocarbons shall not exceed 10,000 ppm based on aesthetics.*

4.9.3 AOI No. 3 – Groundwater

4.9.3.1 Screening Option

A screening assessment was conducted for AOI No. 3 to determine which constituents present at the AOI would be considered COCs. The highest concentration for each constituent was compared to groundwater screening standards for each constituent. The highest groundwater concentrations for aliphatics C10-C12, aliphatics C12-C16, aromatics C12-C16, aromatics C16-C21, and aromatics C21-C35 were above its Groundwater Screening Standard. Therefore, these constituents are considered COCs for groundwater. COC concentrations that exceeded the screening standards are highlighted and presented in **Table 4-8, Groundwater Screening Standards for AOI No. 3**. Screening standards for groundwater are also presented on **RECAP Form 15, Screening Option Submittal for Groundwater**, in **Appendix F**.

TABLE 4-8
GROUNDWATER SCREENING STANDARDS FOR AOI NO. 3

Constituents of Concern	Groundwater Screening Standard (mg/L)	Area of Investigation Groundwater Concentration (mg/L)	Point of Highest Concentration
Aliphatics C10-C12	0.15[1]	0.19	TW-4
Aliphatics C12-C16	0.15[1]	0.24	TW-4
Aliphatics C16-C35	7.3[1]	0.35	TW-4
Aromatics C10-C12	0.15[1]	<0.1	TW-4
Aromatics C12-C16	0.15[1]	0.29	TW-4
Aromatics C16-C21	0.15[1]	0.18	TW-4
Aromatics C21-C35	0.15[1]	0.26	TW-4

[1] *RECAP standards based on Groundwater Screening Standards.*

4.9.3.2 Management Option No. 1

The highest concentration for each constituent was compared to the MO1 RECAP standards developed for groundwater, as shown in **Table 4-9, Groundwater MO1 Standards for AOI No. 3**. The highest groundwater concentrations for all constituents were below the Groundwater Standard, as shown in **Table 4-9**. MO1 standards for groundwater are also presented on **RECAP Form 16, Management Option 1 Submittal for Groundwater**, in **Appendix F**.

TABLE 4-9
GROUNDWATER MO1 STANDARDS FOR AOI NO. 3

Constituents of Concern	Groundwater MO1 Standard (mg/L)	Area of Investigation Groundwater Concentration (mg/L)	Point of Highest Concentration
Aliphatics C10-C12	698[1]	0.19	TW-4
Aliphatics C12-C16	165[1]	0.24	TW-4
Aromatics C12-C16	3,045[2]	0.29	TW-4
Aromatics C16-C21	3,045[2]	0.18	TW-4
Aromatics C21-C35	3,045[2]	0.26	TW-4

[1] *RECAP standards based on Groundwater to Ambient Air.*
[2] *Total Petroleum Hydrocarbons shall not exceed 10,000 ppm based on aesthetics.*

4.9.4 AOI No. 4 – Industrial Soil BES

4.9.4.1 Screening Option

A screening assessment was not conducted for AOI No. 4 due to the presence of soil beneath an enclosed structure. Therefore, all constituents are considered COCs for soil in AOI No. 4.

4.9.4.2 Management Option No. 1

The highest concentration for each constituent was compared to the MO1 RECAP standards developed for soil, as shown in **Table 4-10, Soil MO1 Standards for AOI No. 4**. All of the highest soil concentrations were below the Soil Standards, as shown below in **Table 4-10**. MO1 standards for soil are also presented on **RECAP Form 11, Management Option 1 Submittal for Soil**, in **Appendix F**.

TABLE 4-10
SOIL MO1 STANDARDS FOR AOI NO. 4

Constituents of Concern	Soil MO1 Standard (mg/kg)	Area of Investigation Soil Concentration (mg/kg)	Point of Highest Concentration
Aliphatics >C10-C12	1,428[1]	1,300[5]	SB-7
Aliphatics >C12-C16	1,428[1]	1,300[5]	SB-7
Aliphatics >C16-C35	1,428[1]	1,300[5]	SB-7
Aromatics >C10-C12	1,428[1]	1,300[5]	SB-7
Aromatics >C12-C16	1,428[1]	1,300[5]	SB-7
Aromatics >C16-C21	1,428[1]	1,300[5]	SB-7
Aromatics >C21-C35	1,428[1]	1,300[5]	SB-7
Acenaphthene	15,311[2]	<0.033	SB-6 and SB-7
Acenaphthylene	46,135[3]	<0.033	SB-6 and SB-7
Anthracene	30,068[3]	<0.033	SB-6 and SB-7
Benz(a)anthracene	2.9[2]	<0.033	SB-6 and SB-7
Benzo(a)pyrene	0.33[2]	<0.033	SB-6 and SB-7
Benzo(b)fluoranthene	2.9[2]	<0.033	SB-6 and SB-7
Benzo(k)fluoranthene	29[2]	<0.033	SB-6 and SB-7
Chrysene	286[2]	0.037	SB-6
Dibenz(a,h)anthracene	0.33[2]	<0.033	SB-6 and SB-7
Fluoranthene	7,213[2]	0.11	SB-7
Fluorene	17,832[3]	0.88	SB-7
Indeno(1,2,3-cd)pyrene	2.9[2]	<0.033	SB-6 and SB-7
Methylnaphthalene,2-	551[2]	7.3	SB-7
Naphthalene	54[4]	1.4	SB-7
Phenanthrene	29,480[3]	2.5	SB-7
Pyrene	18,689[2]	0.44	SB-7

[1] *Total Petroleum Hydrocarbons shall not exceed 10,000 ppm based on aesthetics*
[2] *RECAP standards based on Industrial Soil*
[3] *RECAP standards based on Soil Protective of Groundwater-3 Non-Drinking Water*
[4] *RECAP standards based on Industrial Soil Beneath an Enclosed Structure*
[5] *Concentration based on highest TPH-D concentration*

4.9.5 AOI No. 5 – Groundwater BES

4.9.5.1 Screening Option

A screening assessment was not conducted for AOI No. 3 due to the presence of free product in monitoring wells TW-7 and MW-1. Therefore, all constituents are considered COCs for groundwater in AOI No. 5.

4.9.5.2 Management Option No. 1

A screening assessment was not conducted for AOI No. 3 due to the presence of free product in monitoring wells TW-7 and MW-1. Therefore, all constituents are considered COCs for groundwater in AOI No. 5.

4.10 SELECTED MANAGEMENT OPTION

Parameters used to evaluate the site and calculations of the RECAP standards are provided in **Appendix G, RECAP Calculations.**

4.10.1 Groundwater RECAP Standards

Subsequent to the screening of COCs as discussed in **Section 4.9**, COCs for groundwater in AOI No. 5 consist of aliphatics C10-C12, aliphatics C12-C16, aliphatics C16-C35, aromatics C10-C12, aromatics C12-C16, aromatics C16-C21, aromatics C21-C35, acenaphthene, acenaphthylene, anthracene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, 2-methylnaphthalene, naphthalene, phenanthrene, and pyrene. The highest groundwater concentrations for all constituents in AOI No. 3 were below their respective Groundwater Screening and/or MO1 Standard.

4.10.1.1 Groundwater Standards

The groundwater RECAP standards were developed utilizing calculations found in *Appendix I* under MO2 of the RECAP guidance document. Acceptable exposure concentrations were based on the groundwater classification of the aquifer impacted. The groundwater RECAP Standards developed utilizing *Appendix I* of the RECAP guidance document take into account exposure to COCs via ingestion of groundwater, dermal contact with groundwater, and inhalation of volatile emissions from groundwater during household use.

The RECAP standards identified for Groundwater-3 Non-Drinking Water were compared to their respective RECAP standards identified for Groundwater-2. If Groundwater-3 RECAP standards are calculated to be more conservative than Groundwater-2 RECAP standards, the Groundwater-2 RECAP standards may be used. The Groundwater-2 RECAP standards were adjusted by applying a dilution factor for Groundwater-2 (DF2) based on the nearest downgradient property boundary from the POC. If the

Groundwater-2 RECAP standards are calculated to be more conservative than Groundwater-1 RECAP standards, the Groundwater-1 RECAP standards may be used. The groundwater standards for each COC identified for Groundwater-3, as well as dilution factors and Groundwater RECAP Standards for each COC, are presented on **RECAP Form 17, Management Option 2 Submittal for Groundwater**, in **Appendix F**.

4.10.1.2 Groundwater Emissions to Ambient Air

Inhalation of volatile emissions from impacted groundwater located less than 15.0 feet BGS is a potential exposure pathway considered in this evaluation; therefore, MO2 calculations provided in *Appendix H* of the RECAP guidance document were used to evaluate this medium.

4.10.1.3 Groundwater Beneath an Enclosed Structure

Inhalation of volatile emissions from impacted groundwater located beneath an enclosed structure is a potential exposure pathway considered in this evaluation; therefore, MO2 calculations provided in *Appendix H* of the RECAP guidance document were used to evaluate this medium.

4.10.1.4 Additivity

Groundwater at the subject site is impacted with non-carcinogenic COCs that elicit multiple effects on the same target organ/system. Due to the groundwater classification of the impacted aquifer (Groundwater-3), additivity was not considered for the standards developed for the Groundwater-3 classifications. However, standards for Groundwater-1 and Groundwater-2 classifications must account for non-carcinogenic COCs that elicit multiple effects on the same target organ/system; therefore, additivity was applied in order to develop these standards.

Method 1 was utilized to adjust for additivity by considering the number of non-carcinogenic COCs affecting the same target organ/system (e.g., the hematological system was affected by two COCs (aliphatics C10-C16 and fluorene) found in the groundwater in AOI No. 5; however, aliphatics C10-C16 also affects the liver along with three other constituents; therefore, the groundwater standards for aliphatics C10-C16 were divided by four in order to provide a more conservative value to account for the additive effect upon the liver). A summary of the additivity values at the AOI is presented in **Table B-7, Additivity**, in **Appendix B**. The COCs affecting each target organ/systems were

identified through the use of the *Integrated Risk Information System* (IRIS) database. An IRIS report was not available for TPH-D. The target organ/systems affected by this COC were identified utilizing *Table D-3, TPH Fraction Specific Chronic Reference Doses*, in *Appendix D* of the RECAP guidance document. The critical effects of the carbon subfractions for TPH-D were used to identify the target organ/systems affected by TPH-D. Groundwater Standards adjusted for additive effects are presented on **RECAP Form 17, Appendix F**.

4.10.1.5 Limiting Groundwater RECAP Standard

The Limiting RECAP Standard for each COC in groundwater was identified by selecting the higher adjusted groundwater values for Groundwater-3, Groundwater-2, and Groundwater-1. Next, each RECAP standard was compared to the constituent's water solubility value and the lower of the two values was chosen as the limiting RECAP standard. If the limiting RECAP standard is less than the appropriate quantitation limit, then the quantitation limit shall be identified as the limiting RECAP standard. The Limiting RECAP Standards are displayed on **RECAP Form 17, Appendix F**.

4.10.1.6 Hazard Index

The Hazard Index was not calculated for groundwater in AOI No. 3 due to all constituents being below their applicable RECAP Standard. The Hazard Index was not calculated for groundwater in AOI No. 5 due to the presence of free product (diesel) in monitoring wells TW-1 and MW-1.

4.10.2 Soil RECAP Standards

Subsequent to the screening of COCs as discussed in **Section 4.9**, COCs for soil in AOI No. 4 consist of aliphatics C10-C12, aliphatics C12-C16, and aromatics C10-C12. The highest historical soil concentrations for all other constituents were below their respective Soil MO1 Standard. The highest historical soil concentrations for all constituents in AOI No. 1 and AOI No. 2 were below their applicable Screening and/or MO1 Standard.

4.10.2.1 Industrial Soil

Soil standards for an industrial setting were determined for each COC impacting soil at the site. These standards were determined utilizing calculations found in *Appendix I* of the

RECAP Guidelines. Industrial soil standards are presented on **RECAP Form 11, Appendix F**.

4.10.2.2 Additivity

Soil at the subject site is impacted with non-carcinogenic COCs that elicit multiple effects on the same target organ/system; therefore, additivity is applied, where applicable, to adjust for the multiple effects (e.g., (e.g., the hematological system was affected by two COCs (aliphatics C10-C16 and fluorene) found in soil in AOI No. 4; however, aliphatics C10-C16 also affects the liver along with three other constituents; therefore, the groundwater standards for aliphatics C10-C16 were divided by four in order to provide a more conservative value to account for the additive effect upon the liver). A summary of the additivity values at the AOI is presented in **Table B-7, Appendix B**. The COCs affecting each target organ/systems were identified through the use of the IRIS database. An IRIS report was not available for TPH-D. The target organ/systems affected by this COC were identified utilizing Table D-3, TPH Fraction Specific Chronic Reference Doses, in Appendix D of the RECAP guidance document. The critical effects of the carbon subfractions for TPH-D were used to identify the target organ/systems affected by TPH-D. Soil Standards adjusted for additive effects are presented on **RECAP Form 11, Appendix F**.

4.10.2.3 Soil Protective of Groundwater

Soil standards protective of Groundwater-3 were adjusted for dilution and compared to soil standards protective of Groundwater-2 for each COC. If the soil standard protective of Groundwater-2 is larger than the soil standard protective of Groundwater-3, then the soil standard protective of Groundwater-2 was compared to the soil standard protective of Groundwater-1. The higher standard of the soil comparisons was identified as the soil standard protective of groundwater. The soil standards protective of groundwater and dilution factors are presented on **RECAP Form 11, Appendix F**.

There are three ways to calculate the RECAP Standards for Soil Protective of Groundwater:

- Method 1: Soil/Water Partition Coefficient for Organic COCs and Toxicity Characteristic Leaching Procedure (TCLP) for Inorganic COCs.
- Method 2: Synthetic Precipitation Leaching Procedure (SPLP) for Organic and Inorganic COCs.

- Method 3: Site-Specific Soil/Water Partition Coefficient for Organic and Inorganic COCs.

For this site, Method 1 was utilized to determine the soil protective of groundwater RECAP standards, and is presented on **RECAP Form 11, Appendix F**. The calculations are provided in **Appendix G**.

For Method 1, according to RECAP page H-88, the soil/water partition equation shall be used to relate the constituent concentration adsorbed to the soil organic carbon to the soil leachate concentration in the zone of contamination. According to page H-89, for inorganic COCs, the $Soil_{GW}$ shall be derived from the TCLP regulatory levels. TCLP regulatory levels represent maximum constituents concentrations in leachate that comply with the health-based criteria specified by the Safe Drinking Water Act for an assumed drinking water well downgradient of the source. To determine the $Soil_{GW}$ from the TCLP regulatory level the TCLP regulatory level shall be multiplied by a factor of 20 to back-calculate to the corresponding "acceptable" concentration in soil. If a TCLP regulatory level is not available, the $Soil_{GW}$ shall be estimated by multiplying the GW_1 by a dilution factor of 100 and then by a factor of 20.

4.10.2.4 Soil Beneath an Enclosed Structure Standard

Inhalation of volatile emissions from impacted soil located beneath an enclosed structure is a potential exposure pathway considered in this evaluation.

4.10.2.5 Limiting Soil RECAP Standard

The Limiting Soil RECAP Standard for each COC in soil was identified by comparing the Industrial Soil Standard adjusted for additivity, the Soil RECAP Standard Protective of Groundwater, and the Soil Saturation limit. The lower of these two values was then defined as the Limiting RECAP Standard for Industrial Soil. If the limiting RECAP standard is less than the appropriate quantitation limit, then the quantitation limit shall be identified as the limiting RECAP standard. The Limiting RECAP Standard is displayed on **RECAP Form 11, Appendix F**.

4.10.2.6 Hazard Index

A total hazard index may be calculated to demonstrate that the total hazard index for a given critical effect or target organ/system is less than or equal to 1.0:

$$Hazard\ Index = [(EC_1/RS_1) + (EC_2/RS_2) + \ldots + (EC_i/RS_i)$$

where,

EC_i = exposure concentration for the i^{th} COC
RS_i = limiting RECAP Standard for the i^{th} constituent prior to adjusting for additivity

If the Hazard Index for a critical effect or target organ/system is greater than 1.0 under MO2, then the AOI shall be evaluated further under MO3 or remediated to MO2 RECAP Standards that have been adjusted to account for additive health effects; otherwise, the COC concentrations exhibited at the AOI are protective of human health and the environment.

The Hazard Index was not calculated for soil in AOI No. 1, AOI No. 2, and AOI No. 4 due to all constituents being below their applicable RECAP Standard.

5.0 SUMMARY OF RECAP FINDINGS

PPM has completed the RECAP evaluation at Louisiana Retirement Systems Building Partnership in Baton Rouge, East Baton Rouge Parish, Louisiana, in accordance with the LDEQ RECAP Guidance Document.

5.1 AOI NO. 1 – INDUSTRIAL SOIL 0-15 FEET BGS

The highest soil concentrations for AOI No. 1 were compared to their Soil Screening Standards. Results of the comparison indicated that all COC concentrations were below the Soil Screening Standards, as shown in **Table 5-1, Screening Standards for AOI No. 1**, and presented on **RECAP Form 10A, Screening Option Submittal for Soil**, in **Appendix F**.

TABLE 5-1
SCREENING STANDARDS FOR AOI NO. 1

Constituents of Concern	Soil Screening Standard (mg/kg)	Area of Investigation Soil Concentration (mg/kg)	Point of Highest Concentration
Aliphatics C10-C12	1,955[1]	6.7	SB-3
Aliphatics C12-C16	3,772[1]	35	SB-3
Aliphatics C16-C35	10,000[1]	39	SB-3
Aromatics C10-C12	102[2]	<1.7	SB-3
Aromatics C12-C16	203[2]	7.7	SB-3
Aromatics C16-C21	1,746[1]	14	SB-3
Aromatics C21-C35	2,518[1]	<10	SB-3

[1] *RECAP standards based on Industrial Soil*
[2] *RECAP standards based on Soil Protective of Groundwater*

5.2 AOI NO. 2 – INDUSTRIAL SOIL >15 FEET BGS

The highest soil concentrations for AOI No. 2 were compared to their Soil MO1 Standards. Results of the comparison indicated that all COC concentrations were below the Soil RECAP Standards, as shown in **Table 5-2, MO1 Standards for AOI No. 2**, and presented on **RECAP Form 12, Management Option 1 Submittal for Soil**, in **Appendix F**.

TABLE 5-2
MO1 STANDARDS FOR AOI NO. 2

Constituents of Concern	Soil MO1 Standard (mg/kg)	Area of Investigation Soil Concentration (mg/kg)	Point of Highest Concentration
Aromatics C12-C16	10,000[1]	240	SB-1

[1] *Total Petroleum Hydrocarbons shall not exceed 10,000 ppm based on aesthetics.*

5.3 AOI NO. 3 – GROUNDWATER

The highest groundwater concentrations for AOI No. 3 were compared to their Groundwater RECAP Standards. Results of the comparison indicated that all COC concentrations were below the Groundwater RECAP Standards, as shown in **Table 5-3, MO1 Standards for AOI No. 3**, and presented on **RECAP Form 16, Management Option 1 Submittal for Groundwater**, in **Appendix F**.

TABLE 5-3
MO1 STANDARDS FOR AOI NO. 3

Constituents of Concern	Groundwater MO1 Standard (mg/L)	Area of Investigation Groundwater Concentration (mg/L)	Point of Highest Concentration
Aliphatics C10-C12	698[1]	0.19	TW-4
Aliphatics C12-C16	165[1]	0.24	TW-4
Aromatics C12-C16	3,045[2]	0.29	TW-4
Aromatics C16-C21	3,045[2]	0.18	TW-4
Aromatics C21-C35	3,045[2]	0.26	TW-4

[1] *RECAP standards based on Groundwater to Ambient Air.*
[2] *Total Petroleum Hydrocarbons shall not exceed 10,000 ppm based on aesthetics.*

5.4 AOI NO. 4 – INDUSTRIAL SOIL BES

The highest soil concentrations for AOI No. 4 were compared to their Soil MO1 Standards. Results of the comparison indicated that all constituents were below the Soil MO1 Standards, as shown in **Table 5-4, MO1 Standards for AOI No. 4**, and presented on **RECAP Form 11, Management Option 1 Submittal for Soil**, in **Appendix F**.

TABLE 5-4
MO1 STANDARDS FOR AOI NO. 4

Constituents of Concern	Soil MO1 Standard (mg/kg)	Area of Investigation Soil Concentration (mg/kg)	Point of Highest Concentration
Aliphatics >C10-C12	1,428[1]	1,300[5]	SB-7
Aliphatics >C12-C16	1,428[1]	1,300[5]	SB-7
Aliphatics >C16-C35	1,428[1]	1,300[5]	SB-7
Aromatics >C10-C12	1,428[1]	1,300[5]	SB-7
Aromatics >C12-C16	1,428[1]	1,300[5]	SB-7
Aromatics >C16-C21	1,428[1]	1,300[5]	SB-7
Aromatics >C21-C35	1,428[1]	1,300[5]	SB-7
Acenaphthene	15,311[2]	<0.033	SB-6 and SB-7
Acenaphthylene	46,135[3]	<0.033	SB-6 and SB-7
Anthracene	30,068[3]	<0.033	SB-6 and SB-7
Benz(a)anthracene	2.9[2]	<0.033	SB-6 and SB-7
Benzo(a)pyrene	0.33[2]	<0.033	SB-6 and SB-7
Benzo(b)fluoranthene	2.9[2]	<0.033	SB-6 and SB-7
Benzo(k)fluoranthene	29[2]	<0.033	SB-6 and SB-7
Chrysene	286[2]	0.037	SB-6
Dibenz(a,h)anthracene	0.33[2]	<0.033	SB-6 and SB-7
Fluoranthene	7,213[2]	0.11	SB-7
Fluorene	17,832[3]	0.88	SB-7
Indeno(1,2,3-cd)pyrene	2.9[2]	<0.033	SB-6 and SB-7
Methylnaphthalene,2-	551[2]	7.3	SB-7
Naphthalene	54[4]	1.4	SB-7
Phenanthrene	29,480[3]	2.5	SB-7
Pyrene	18,689[2]	0.44	SB-7

[1] Total Petroleum Hydrocarbons shall not exceed 10,000 ppm based on aesthetics
[2] RECAP standards based on Industrial Soil
[3] RECAP standards based on Soil Protective of Groundwater-3 Non-Drinking Water
[4] RECAP standards based on Industrial Soil Beneath an Enclosed Structure
[5] Concentration based on highest TPH-D concentration

5.5 AOI NO. 5 – GROUNDWATER BES

The highest groundwater concentrations for AOI No. 5 were compared to their Groundwater RECAP Standards. Results of the comparison indicated that all COC concentrations exceeded the Groundwater RECAP Standards, as shown in **Table 5-5, MO2 Standards for AOI No. 5**, and presented on **RECAP Form 17, Management Option 2 Submittal for Groundwater**, in **Appendix F**.

TABLE 5-5
MO2 STANDARDS FOR AOI NO. 5

Constituents of Concern	Groundwater MO2 Standard (mg/L)	Area of Investigation Groundwater Concentration (mg/L)	Point of Highest Concentration
Aliphatics >C10-C12	349[1]	FP	TW-7 and MW-1
Aliphatics >C12-C16	82[1]	FP	TW-7 and MW-1
Aliphatics >C16-C35	1,913[2]	FP	TW-7 and MW-1
Aromatics >C10-C12	1,913[2]	FP	TW-7 and MW-1
Aromatics >C12-C16	1,913[2]	FP	TW-7 and MW-1
Aromatics >C16-C21	1,913[2]	FP	TW-7 and MW-1
Aromatics >C21-C35	1,913[2]	FP	TW-7 and MW-1
Acenaphthene	4.2[3]	FP	TW-7 and MW-1
Acenaphthylene	16[3]	FP	TW-7 and MW-1
Anthracene	0.043[3]	FP	TW-7 and MW-1
Benz(a)anthracene	0.0078[4]	FP	TW-7 and MW-1
Benzo(a)pyrene	0.0016[3]	FP	TW-7 and MW-1
Benzo(b)fluoranthene	0.0048[4]	FP	TW-7 and MW-1
Benzo(k)fluoranthene	0.0025[4]	FP	TW-7 and MW-1
Chrysene	0.0016[3]	FP	TW-7 and MW-1
Dibenz(a,h)anthracene	0.0025[4]	FP	TW-7 and MW-1
Fluoranthene	0.21[3]	FP	TW-7 and MW-1
Fluorene	2[3]	FP	TW-7 and MW-1
Indeno(1,2,3-cd)pyrene	0.0037[4]	FP	TW-7 and MW-1
Methylnaphthalene,2-	25[3]	FP	TW-7 and MW-1
Naphthalene	12[1]	FP	TW-7 and MW-1
Phenanthrene	1.2[3]	FP	TW-7 and MW-1
Pyrene	0.14[3]	FP	TW-7 and MW-1

[1] *RECAP standards based on Groundwater to Ambient Air*
[2] *Total Petroleum Hydrocarbons shall not exceed 10,000 ppm based on aesthetics*
[3] *RECAP standards based on Water Solubility*
[4] *RECAP standards based on Quantitation Limits*

6.0 RECOMMENDATIONS

The RECAP Standards developed for this site indicate that COCs impacting site soil and groundwater at AOI Nos. 1, 2, 3, and 4 are within acceptable ranges for protection of human health and the environment. However, COCs impacting site groundwater at AOI No. 5 are not within acceptable ranges for protection of human health and the environment. Therefore, PPM recommends the following:

- Standards developed in this report shall be designated as the target remediation levels for impacted site soil and groundwater and that remedial actions shall be conducted to reach these levels.
- Conduct quarterly groundwater monitoring at the site to monitor the migration of petroleum hydrocarbon in the subsurface.
- Preparation of a Corrective Action Plan (CAP) which outlines the remediation of petroleum hydrocarbon impacted soil and groundwater. COCs exceeding the proposed RECAP Standards are shown in **Table B-8, RECAP Summary Table**.
- AOI Nos. 1, 2, 3, and 4 are within the RECAP Standards for soil and groundwater, and should be granted no further action.

7.0 REFERENCES

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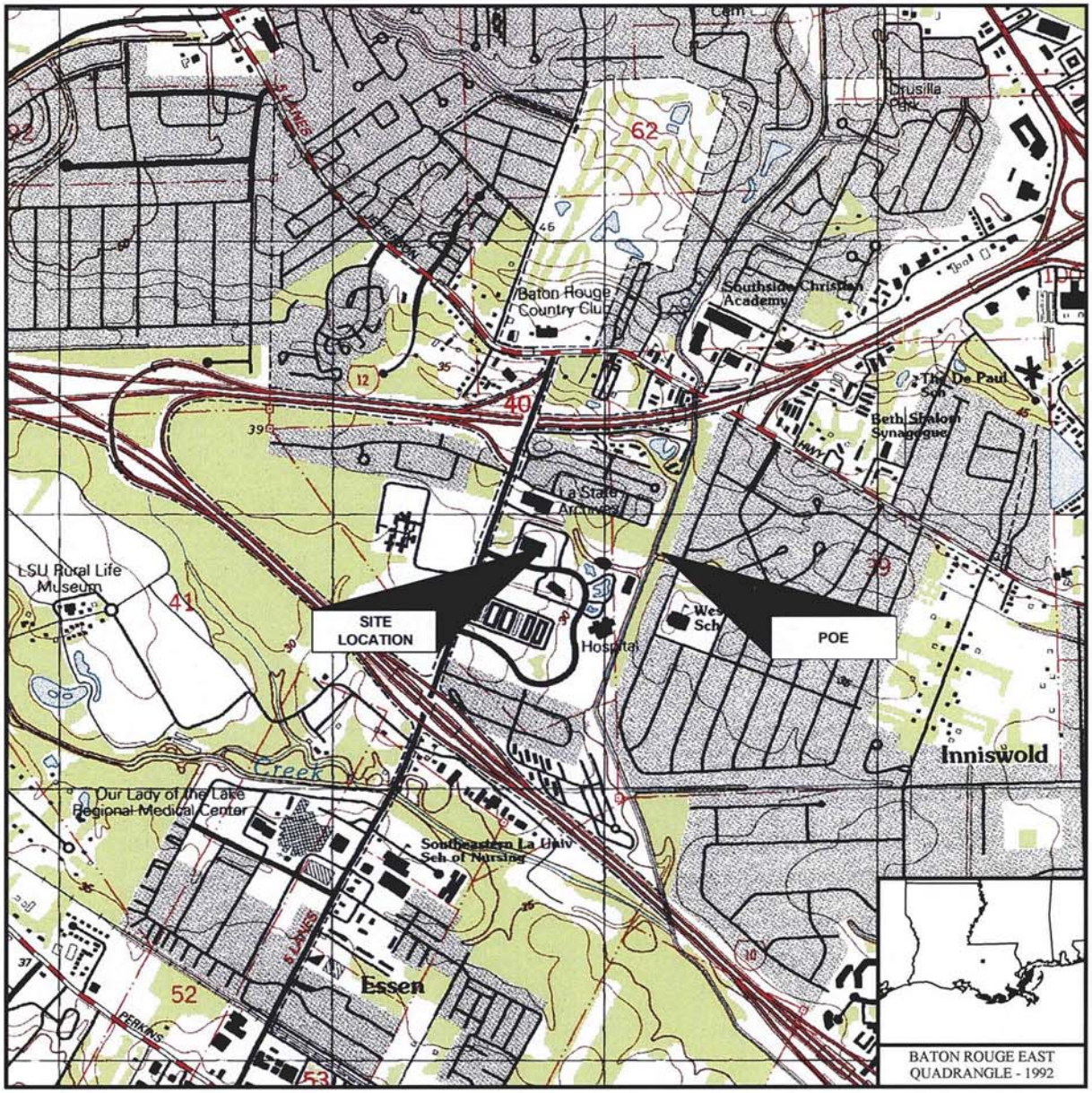
APPENDICES

APPENDIX A – FIGURES



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PPM CONSULTANTS, INC. www.ppmco.com		BEAU BOX PROPERTY MANAGEMENT **LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP** 8401 UNITED PLAZA BOULEVARD BATON ROUGE, LOUISIANA	SITE LOCATION MAP	FIGURE NUMBER 1
DRAWN BY: JCP	DRAWN DATE: 05/22/15			
PROJECT NUMBER: 503124	BILLING GROUP: RECAP			

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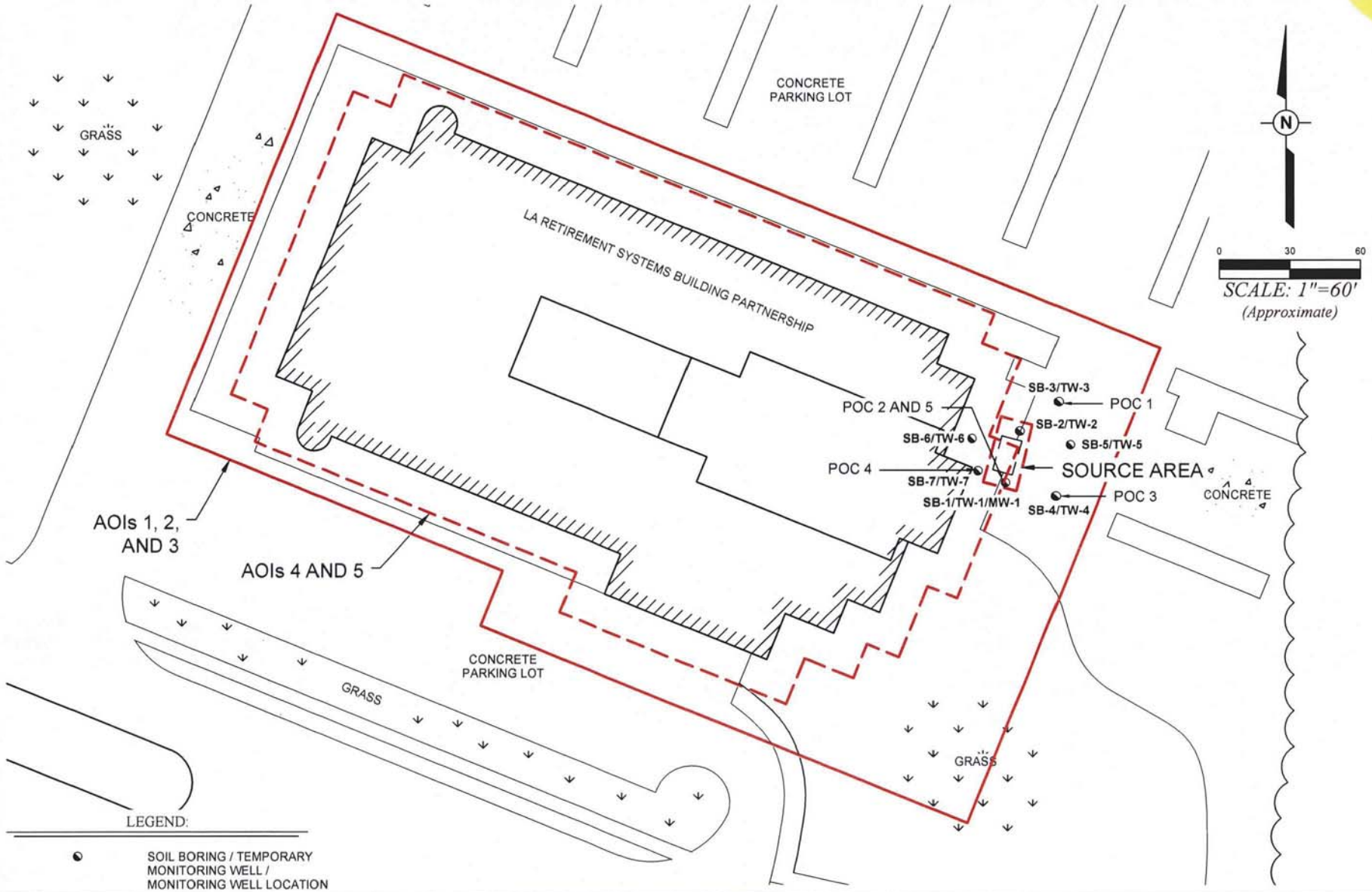

PPM CONSULTANTS, INC. www.ppmco.com		BEAU BOX PROPERTY MANAGEMENT **LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP** 8401 UNITED PLAZA BOULEVARD BATON ROUGE, LOUISIANA	SITE MAP
DRAWN BY: JCP	DRAWN DATE: 05/22/15		FIGURE NUMBER 2
PROJECT NUMBER: 503124	BILLING GROUP: RECAP		

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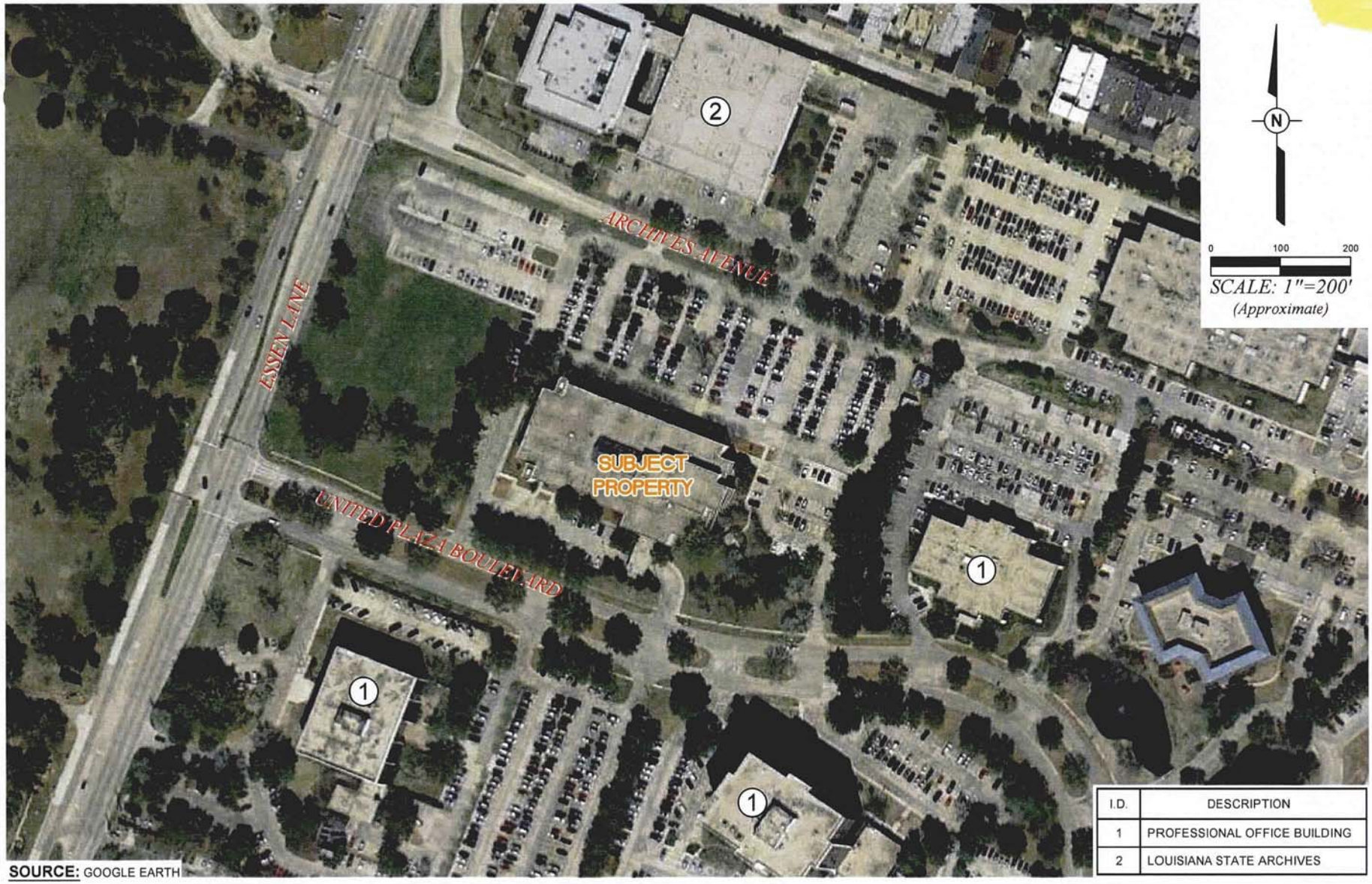

I.D.	DESCRIPTION
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2	LOUISIANA STATE ARCHIVES

SOURCE: GOOGLE EARTH

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PROJECT NUMBER:	BILLING GROUP:
503124	RECAP

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8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

REGIONAL SITE MAP

FIGURE NUMBER
3

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WATER WELL LOCATION

PPM CONSULTANTS, INC. www.ppmco.com		BEAU BOX PROPERTY MANAGEMENT **LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP** 8401 UNITED PLAZA BOULEVARD BATON ROUGE, LOUISIANA	WATER WELL SURVEY MAP	FIGURE NUMBER 4
DRAWN BY: JCP	DRAWN DATE: 05/22/15			
PROJECT NUMBER: 503124	BILLING GROUP: RECAP			

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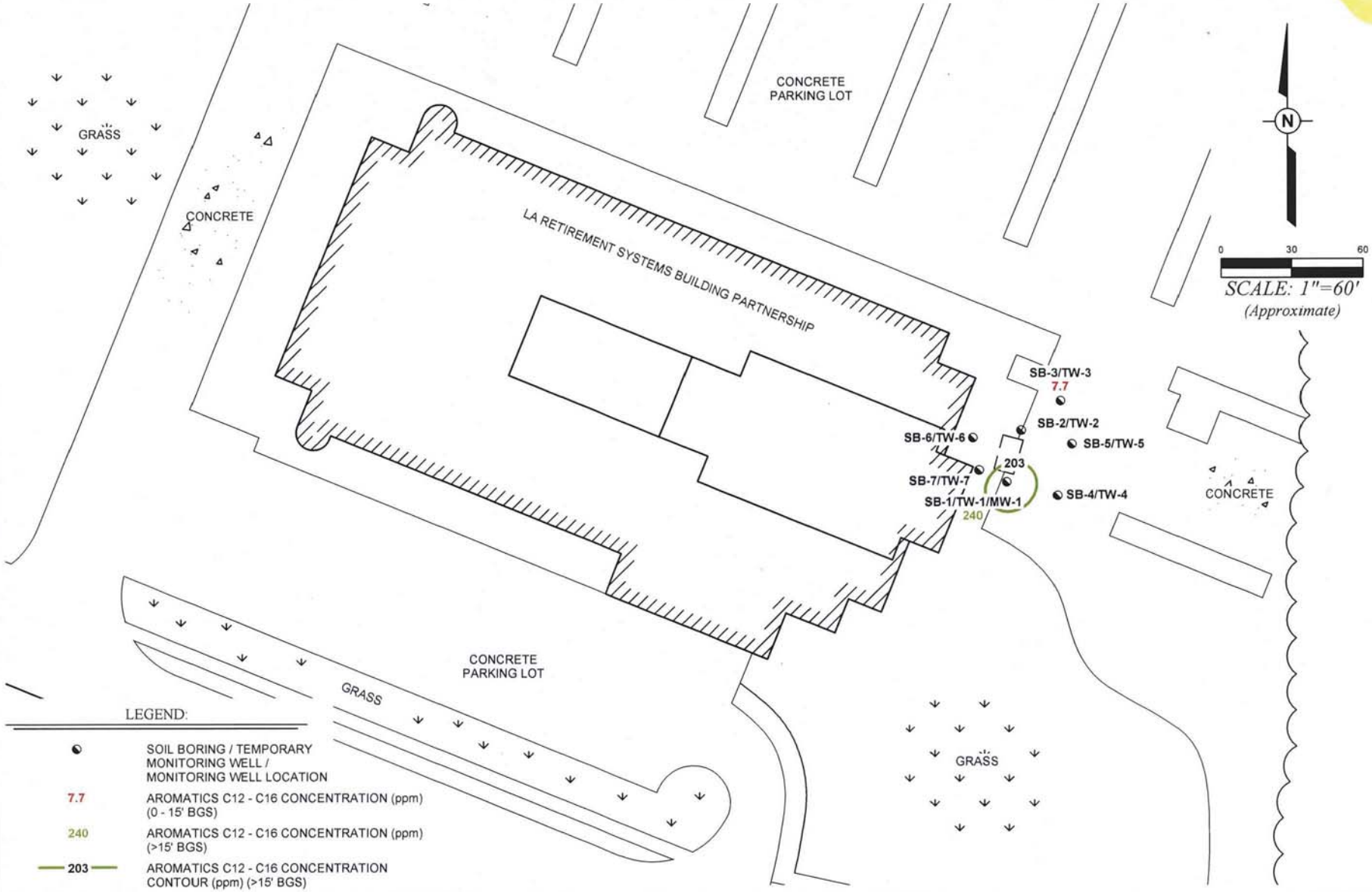

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503124	RECAP

BEAU BOX PROPERTY MANAGEMENT
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8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

AROMATICS C12 - C16 CONCENTRATIONS IN SOIL

FIGURE NUMBER
5

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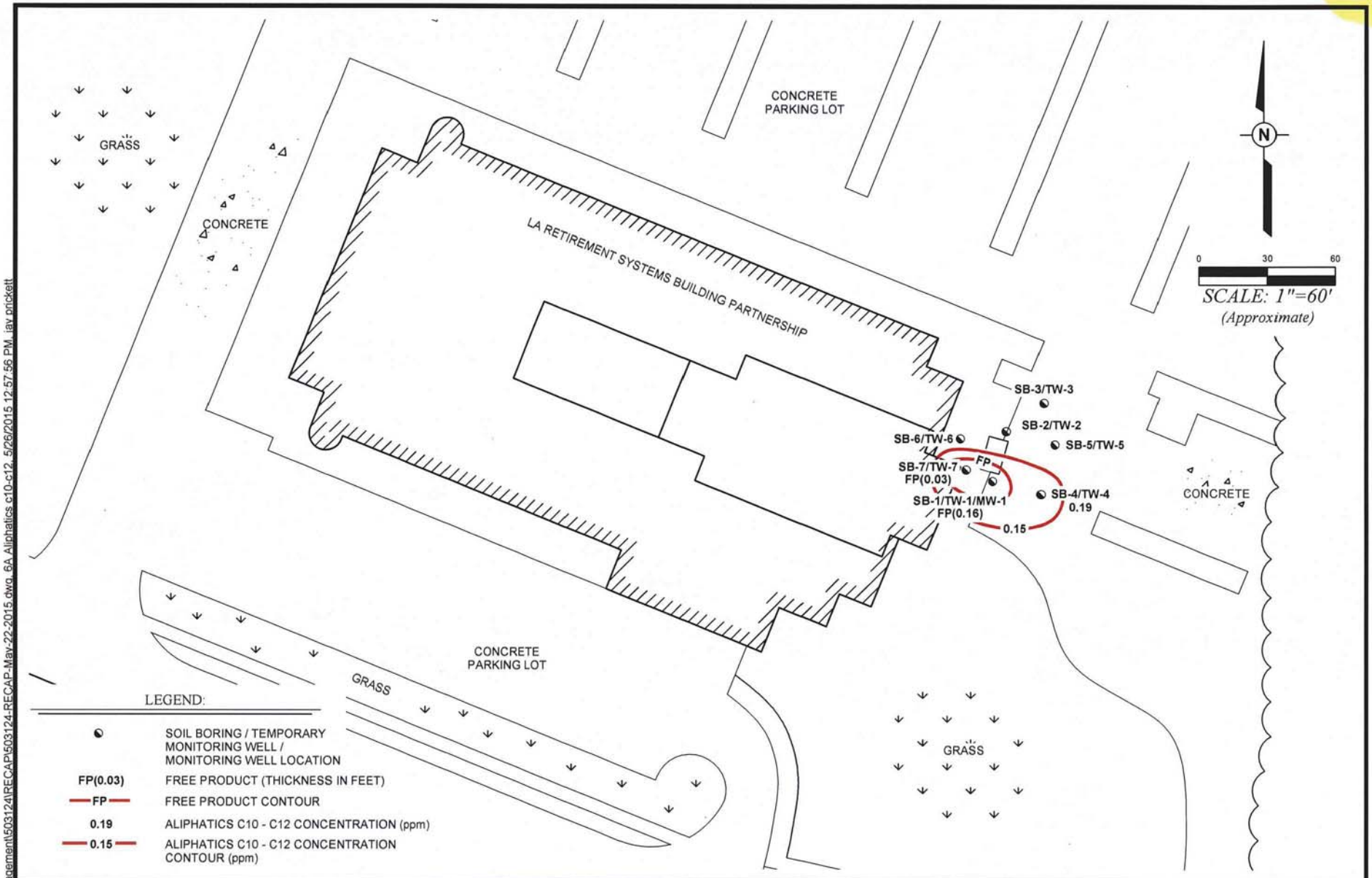

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PROJECT NUMBER:	BILLING GROUP:
503124	RECAP

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ALIPHATICS C10 - C12 CONCENTRATIONS IN GROUNDWATER

FIGURE NUMBER
6A

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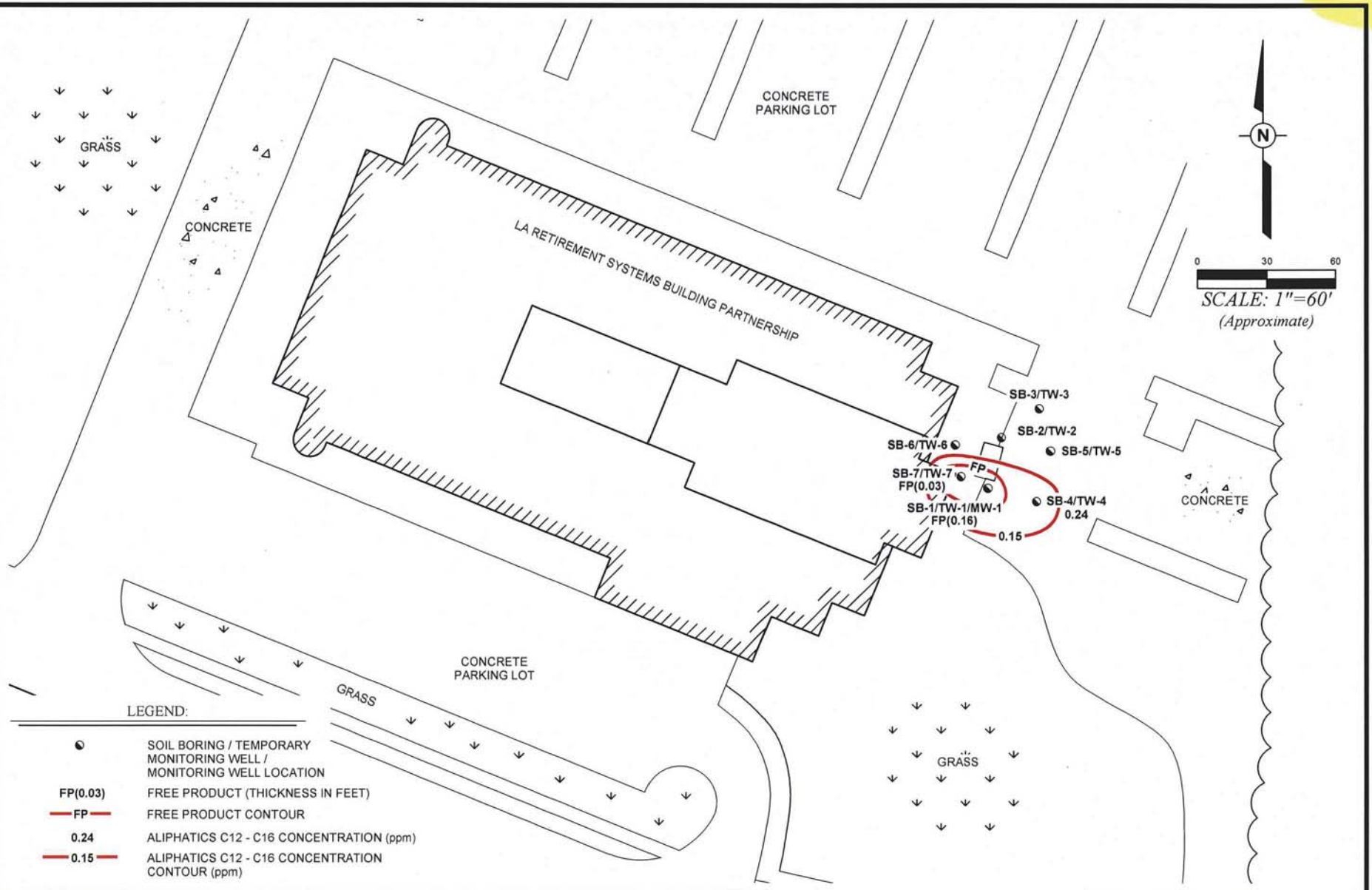

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BEAU BOX PROPERTY MANAGEMENT
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

ALIPHATICS C12 - C16 CONCENTRATIONS IN GROUNDWATER

FIGURE NUMBER
6B

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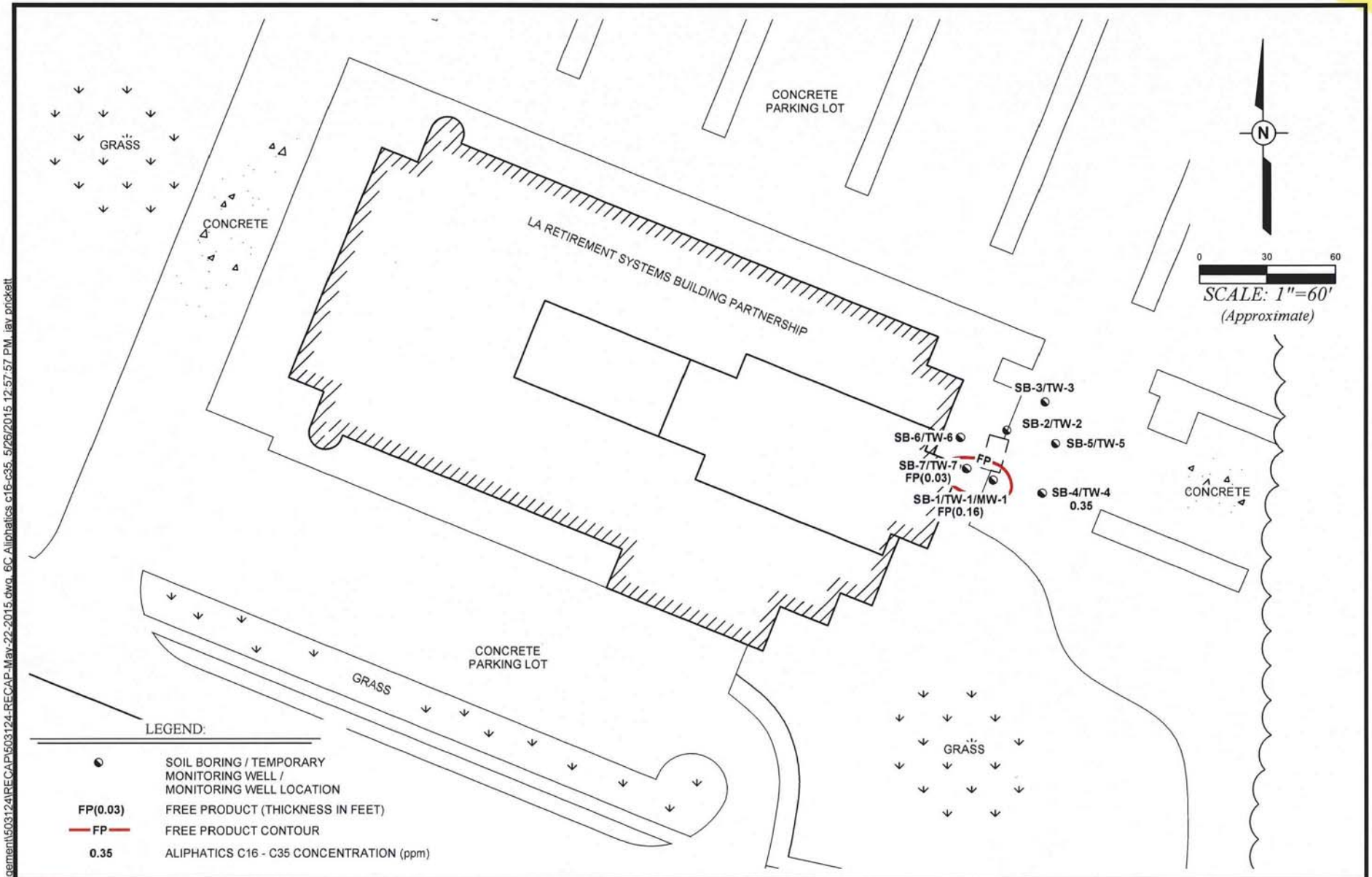

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8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

ALIPHATICS C16 - C35 CONCENTRATIONS IN GROUNDWATER

FIGURE NUMBER
6C

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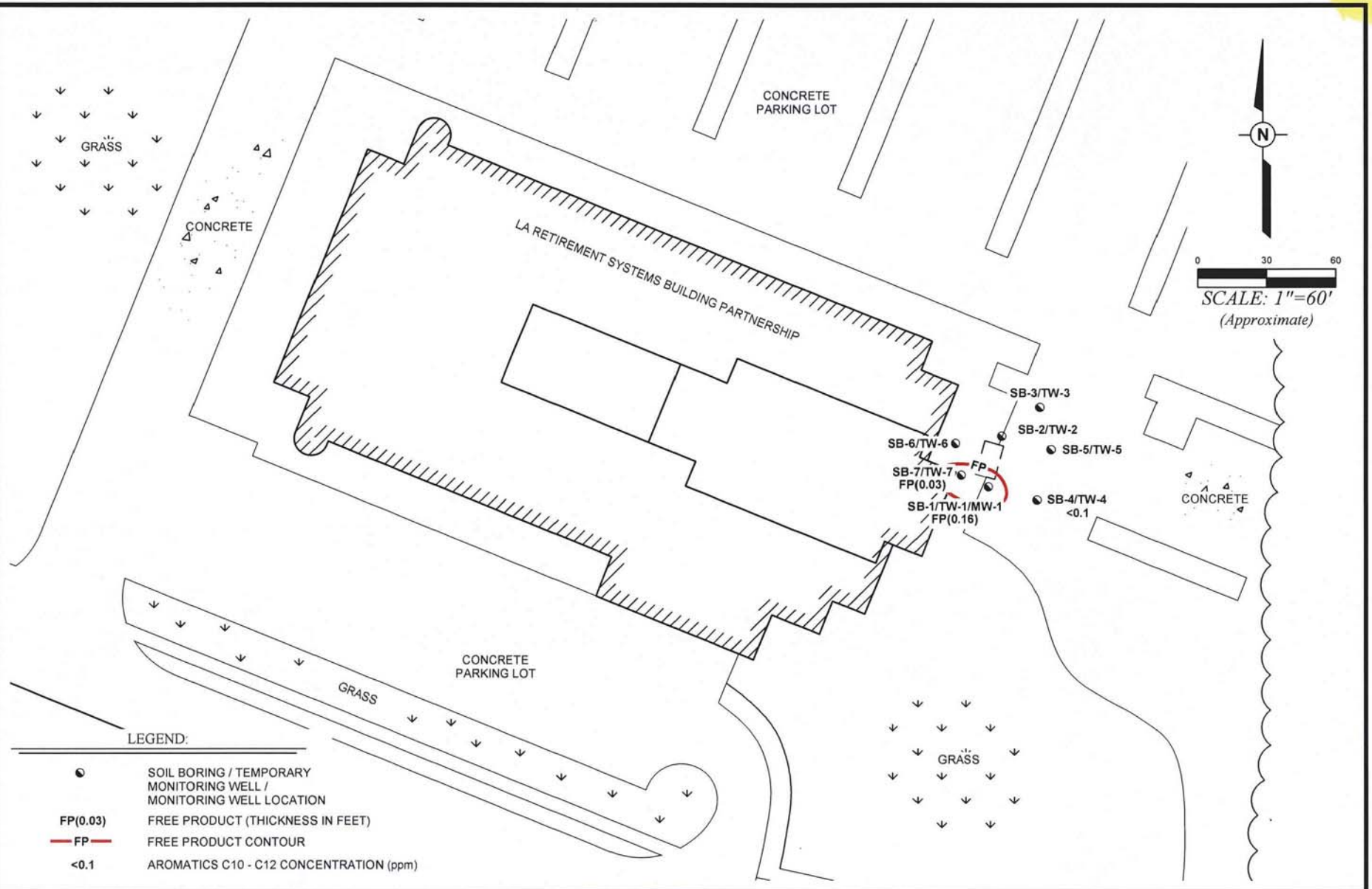

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BEAU BOX PROPERTY MANAGEMENT
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

AROMATICS C10 - C12 CONCENTRATIONS IN GROUNDWATER

FIGURE NUMBER
6D

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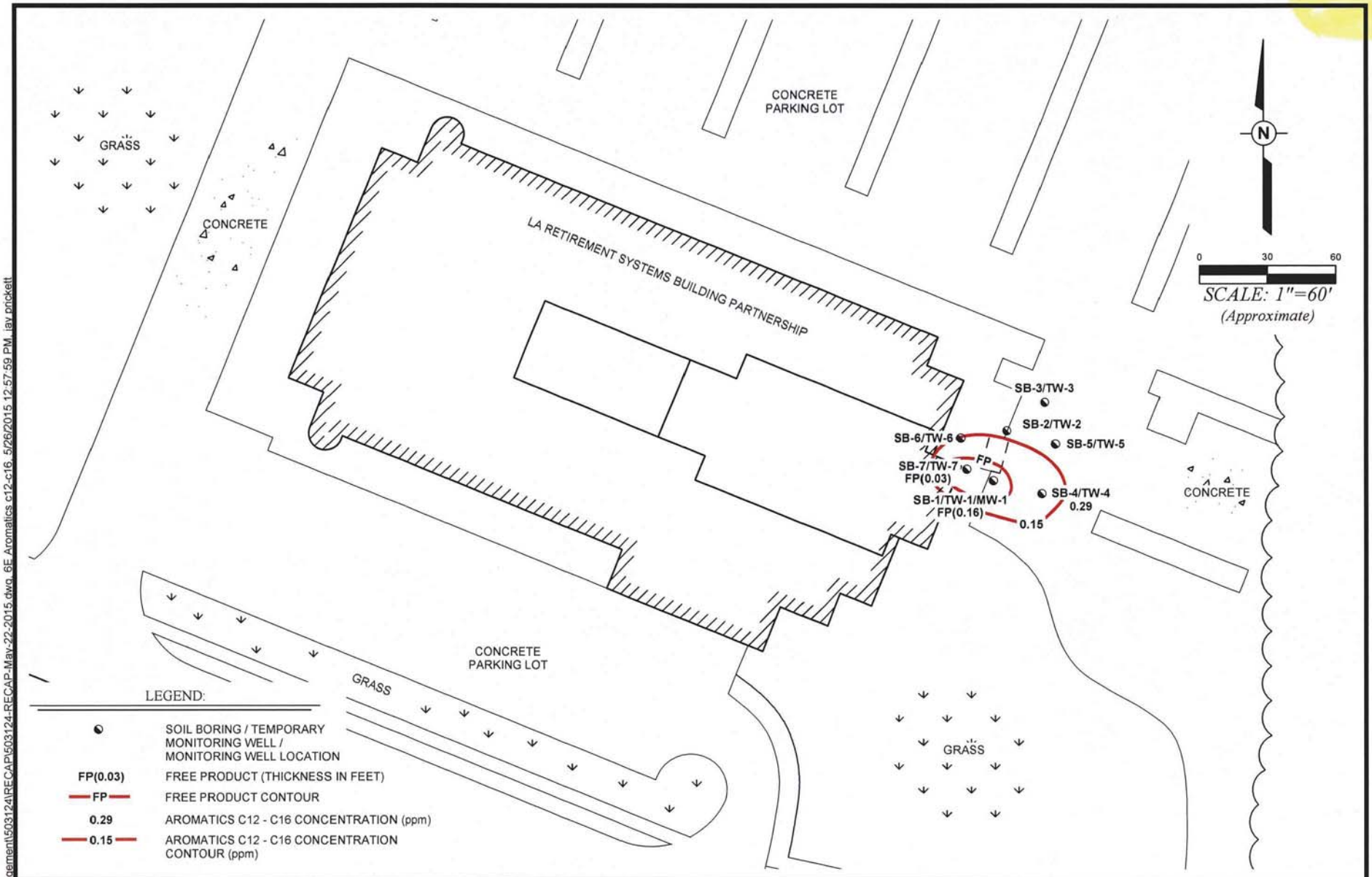

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BEAU BOX PROPERTY MANAGEMENT
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

AROMATICS C12 - C16 CONCENTRATIONS IN GROUNDWATER

FIGURE NUMBER
6E

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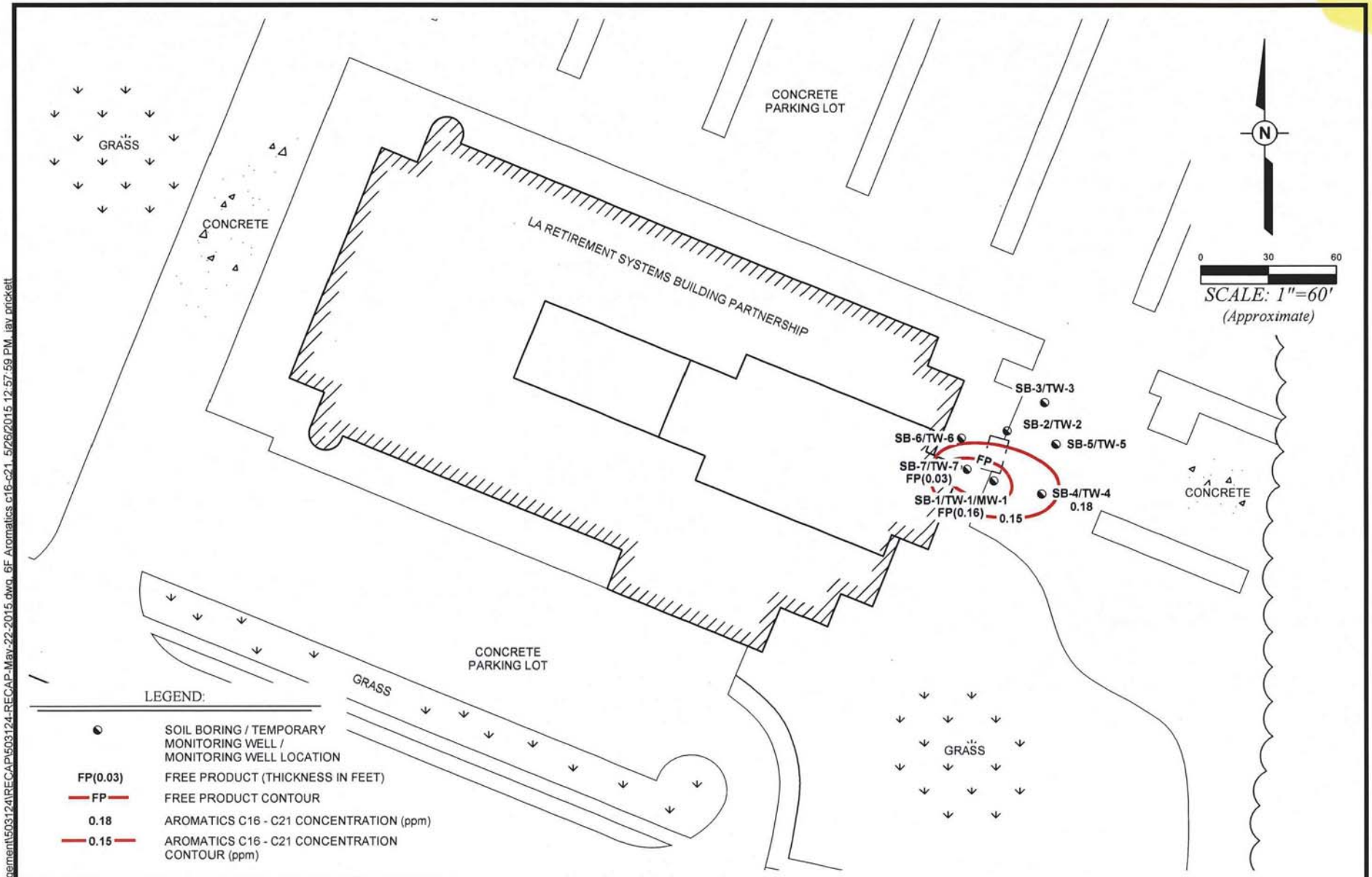

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LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

AROMATICS C16 - C21 CONCENTRATIONS IN GROUNDWATER

FIGURE NUMBER
6F

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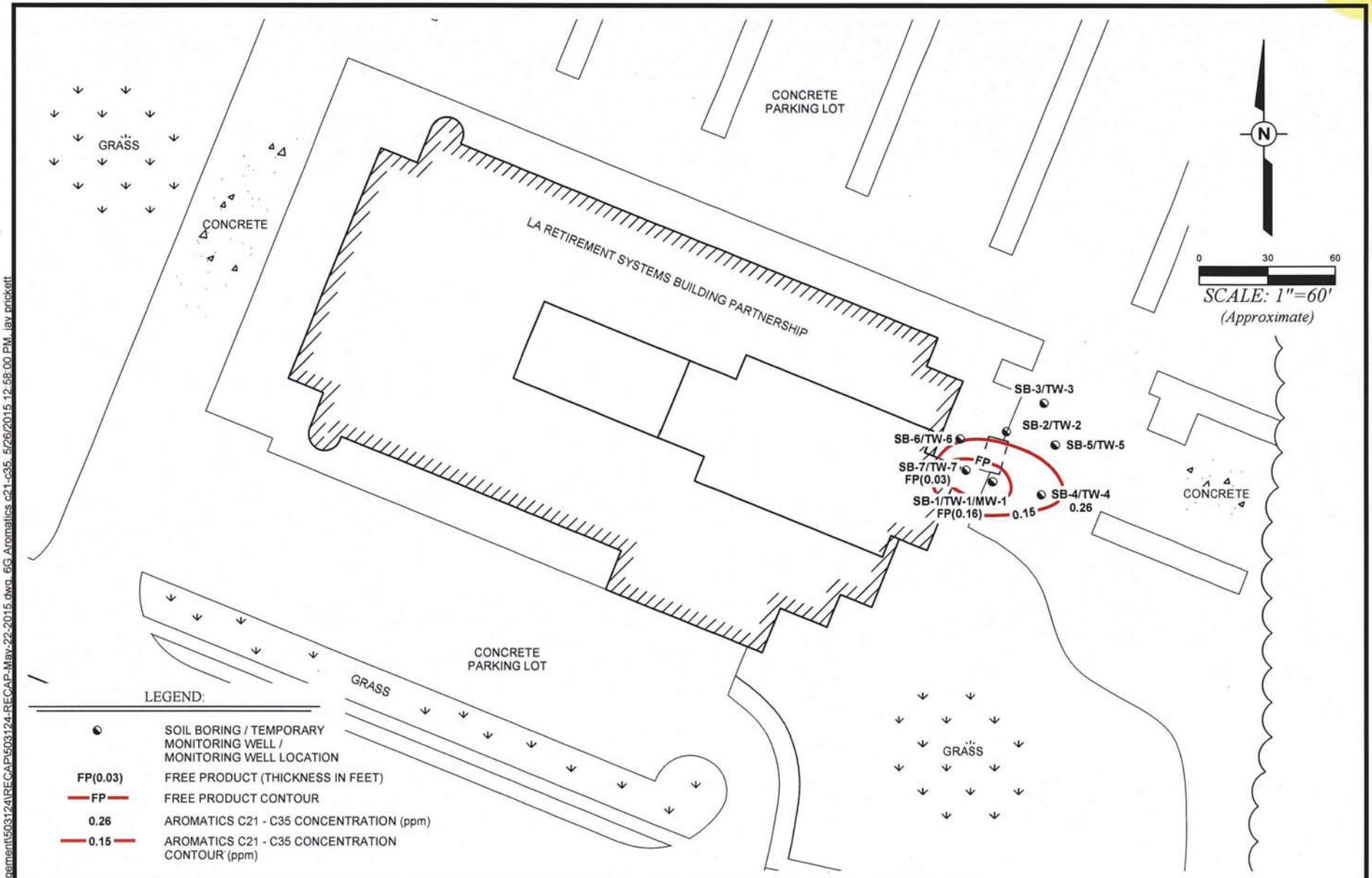

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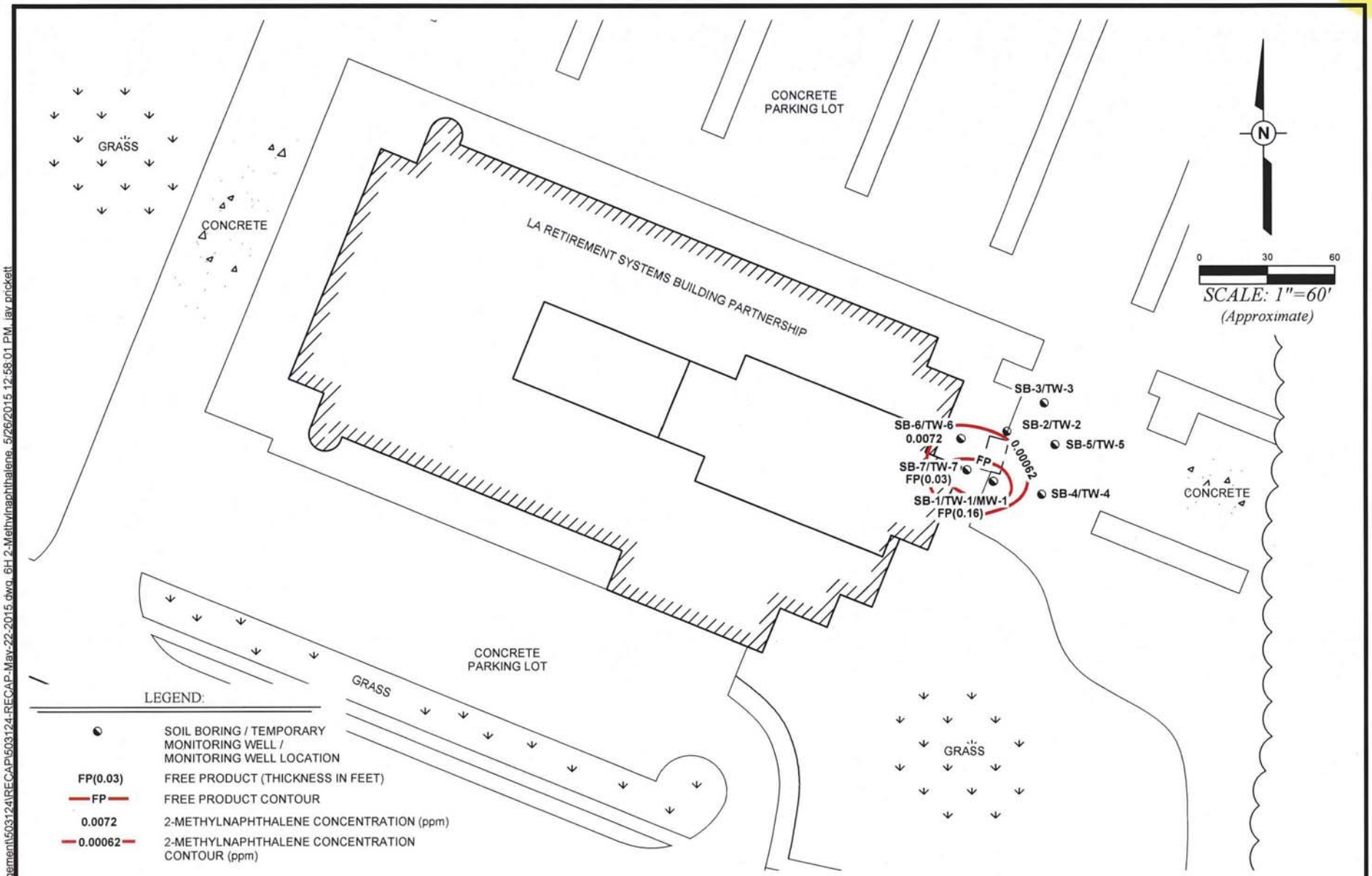
BEAU BOX PROPERTY MANAGEMENT
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

AROMATICS C21 - C35 CONCENTRATIONS IN GROUNDWATER

FIGURE NUMBER
6G



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LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

2-METHYLNAPHTHALENE CONCENTRATIONS IN GROUNDWATER

FIGURE NUMBER
6H

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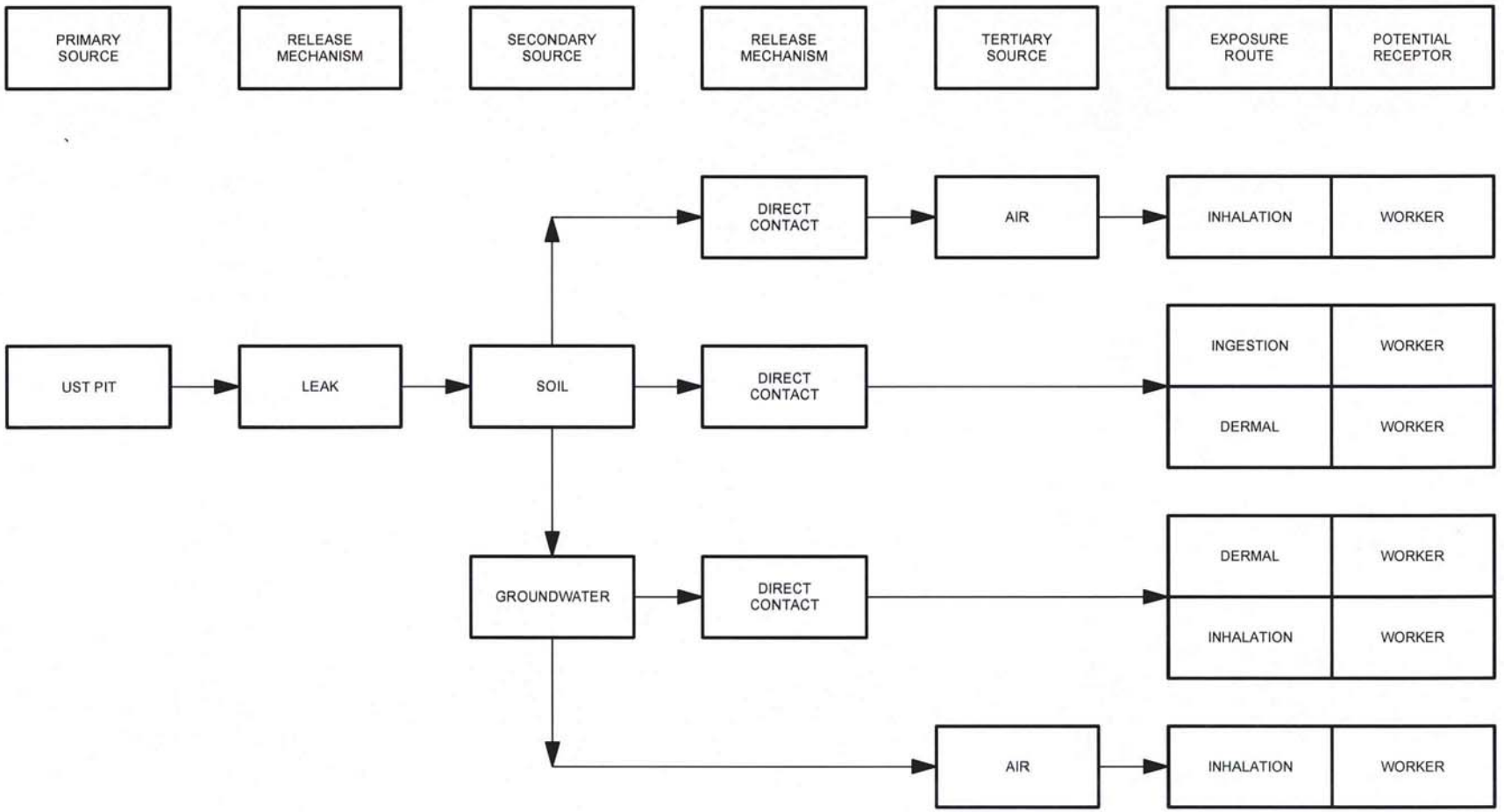

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JCP	05/22/15
PROJECT NUMBER:	BILLING GROUP:
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BEAU BOX PROPERTY MANAGEMENT
LOUISIANA RETIREMENT SYSTEMS BUILDING PARTNERSHIP
8401 UNITED PLAZA BOULEVARD
BATON ROUGE, LOUISIANA

CONCEPTUAL SITE MODEL

FIGURE NUMBER
7

Z:\Beau Box Property Management\503124\RECAP\503124-RECAP-May-22-2015.dwg, 7 Conceptual Site., 5/26/2015 12:58:01 PM, jay prickett

APPENDIX B – TABLES

TABLE B-1
DNR WATER WELL SURVEY

DNR Well No.	Well Owner	Well Use	Well Sub-Use	Well Depth (ft)	Approximate Distance (ft) From Site	Aquifer
144	LR Williams	Domestic	D	620	1229	400-BR
226	H Leonard	Domestic	D	1275	2427	1200-BR
621	Baton Rouge WW	Public Supply	--	1487	2533	1200-BR
445	BR Country Club	Irrigation	PA	518	2740	400-BR
265	BR Country Club	Public Supply	D	1191	2740	1200-BR
224	A Murphy	Domestic	D	638	2845	400-BR
1136	BR Country Club	Irrigation	--	1405	2863	1200-BR
227	J Kean	Domestic	D	1300	2931	1200-BR
8984Z	LSU Burden Center	Irrigation	--	170	2979	ACNA
145	Fletcher Webb	Domestic	PA	1210	3097	1200-BR
267	E Ducote	Domestic	D	490	3921	400-BR
271	CW Bond	Domestic	--	650	4524	600-BR
272	Fontenot Etal.	Domestic	D	530	4797	400-BR
1259	BR Country Club	Irrigation	--	515	4862	400-BR
816	BR Country Club	Irrigation	PA	520	4862	400-BR
9354Z	Wolfe Washaner	Domestic	PA	50	5017	ACNA

Notes:
D=Destroyed
PA=Plugged and Abandoned
400-BR="400-Foot" Sands of Baton Rouge Area
1200-BR="1200-Foot" Sands of Baton Rouge Area
ACNA=Aquifer Code Not Assigned

TABLE B-2
SOIL ANALYTICAL SUMMARY

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Headspace	Code	TPH-D	Code	Aliphatics >C10-C12	Code	Aliphatics >C12-C16	Code	Aliphatics >C16-C35	Code	Aromatics >C10-C12	Code	Aromatics >C12-C16	Code	Aromatics >C16-C21
SB-1	SB-1 (17-19)	2	17	19	04/03/14		94		5200		380		1300		1300		7.8		240		460
SB-1	SB-1 (21-24)	2	21	24	04/03/14		14		1800		NA		NA		NA		NA		NA		NA
SB-2	SB-2 (17-19)	2	17	19	04/03/14		28		500		NA		NA		NA		NA		NA		NA
SB-2	SB-2 (21-24)	2	21	24	04/03/14		6		70		NA		NA		NA		NA		NA		NA
SB-3	SB-3 (13-15)	1	13	15	04/03/14		6		66		6.7		35		39	<	1.7		7.7		14
SB-3	SB-3 (21-24)	2	21	24	04/03/14		1	<	5		NA		NA		NA		NA		NA		NA
SB-4	SB-4 (17-19)	2	17	19	04/03/14		1		14		NA		NA		NA		NA		NA		NA
SB-4	SB-4 (26-29)	2	26	29	04/03/14	<	1	<	5		NA		NA		NA		NA		NA		NA
SB-5	SB-5 (11-13)	1	11	13	04/03/14	<	1	<	5		NA		NA		NA		NA		NA		NA
SB-5	SB-5 (17-20)	2	17	20	04/03/14		1		62		NA		NA		NA		NA		NA		NA
SB-6	SB-6 (11-13)	4	11	13	04/09/14		296		710		NA		NA		NA		NA		NA		NA
SB-6	SB-6 (27-30)	2	27	30	04/09/14		13	<	5		NA		NA		NA		NA		NA		NA
SB-7	SB-7 (11-13)	4	11	13	04/09/14		566		1300		NA		NA		NA		NA		NA		NA
SB-7	SB-7 (27-30)	2	27	30	04/09/14		5	<	5		NA		NA		NA		NA		NA		NA
					Minimum Concentration			<	**5**		**6.7**		**35**		**39**	<	**1.7**		**7.7**		**14**
					Maximum Concentration				**5200**		**380**		**1300**		**1300**		**7.8**		**240**		**460**
					Screening Standards				**65**		**2000**		**3800**		**10000**		**100**		**200**		**1700**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-2
SOIL ANALYTICAL SUMMARY

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Headspace	Code	Aromatics >C21-C35	Code	Acenaphthene	Code	Acenaphthylene	Code	Anthracene	Code	Benz(a)-anthracene	Code	Benzo(a)-pyrene
SB-1	SB-1 (17-19)	2	17	19	04/03/14		94		80		NA		NA		NA		NA		NA
SB-1	SB-1 (21-24)	2	21	24	04/03/14		14		NA		NA		NA		NA		NA		NA
SB-2	SB-2 (17-19)	2	17	19	04/03/14		28		NA		NA		NA		NA		NA		NA
SB-2	SB-2 (21-24)	2	21	24	04/03/14		6		NA		NA		NA		NA		NA		NA
SB-3	SB-3 (13-15)	1	13	15	04/03/14		6	<	10		NA		NA		NA		NA		NA
SB-3	SB-3 (21-24)	2	21	24	04/03/14		1		NA		NA		NA		NA		NA		NA
SB-4	SB-4 (17-19)	2	17	19	04/03/14		1		NA		NA		NA		NA		NA		NA
SB-4	SB-4 (26-29)	2	26	29	04/03/14	<	1		NA		NA		NA		NA		NA		NA
SB-5	SB-5 (11-13)	1	11	13	04/03/14	<	1		NA		NA		NA		NA		NA		NA
SB-5	SB-5 (17-20)	2	17	20	04/03/14		1		NA		NA		NA		NA		NA		NA
SB-6	SB-6 (11-13)	4	11	13	04/09/14		296		NA	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
SB-6	SB-6 (27-30)	2	27	30	04/09/14		13		NA	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
SB-7	SB-7 (11-13)	4	11	13	04/09/14		566		NA	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
SB-7	SB-7 (27-30)	2	27	30	04/09/14		5		NA	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
					Minimum Concentration			<	**10**	<	**0.033**	<	**0.033**	<	**0.033**	<	**0.033**	<	**0.033**
					Maximum Concentration				**80**	<	**0.033**	<	**0.033**	<	**0.033**	<	**0.033**	<	**0.033**
					Screening Standards				**2500**		**220**		**88**		**120**		**2.9**		**0.33**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-2
SOIL ANALYTICAL SUMMARY

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Headspace	Code	Benzo(b)-fluoranthene	Code	Benzo(k)-fluoranthene	Code	Chrysene	Code	Dibenz(a,h)-anthracene	Code	Fluoranthene	Code	Fluorene
SB-1	SB-1 (17-19)	2	17	19	04/03/14		94		NA		NA		NA		NA		NA		NA
SB-1	SB-1 (21-24)	2	21	24	04/03/14		14		NA		NA		NA		NA		NA		NA
SB-2	SB-2 (17-19)	2	17	19	04/03/14		28		NA		NA		NA		NA		NA		NA
SB-2	SB-2 (21-24)	2	21	24	04/03/14		6		NA		NA		NA		NA		NA		NA
SB-3	SB-3 (13-15)	1	13	15	04/03/14		6		NA		NA		NA		NA		NA		NA
SB-3	SB-3 (21-24)	2	21	24	04/03/14		1		NA		NA		NA		NA		NA		NA
SB-4	SB-4 (17-19)	2	17	19	04/03/14		1		NA		NA		NA		NA		NA		NA
SB-4	SB-4 (26-29)	2	26	29	04/03/14	<	1		NA		NA		NA		NA		NA		NA
SB-5	SB-5 (11-13)	1	11	13	04/03/14	<	1		NA		NA		NA		NA		NA		NA
SB-5	SB-5 (17-20)	2	17	20	04/03/14		1		NA		NA		NA		NA		NA		NA
SB-6	SB-6 (11-13)	4	11	13	04/09/14		296	<	0.033	<	0.033		0.037	<	0.033	<	0.033		0.69
SB-6	SB-6 (27-30)	2	27	30	04/09/14		13	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
SB-7	SB-7 (11-13)	4	11	13	04/09/14		566	<	0.033	<	0.033	<	0.033	<	0.033		0.11		0.88
SB-7	SB-7 (27-30)	2	27	30	04/09/14		5	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
Minimum Concentration								**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**
Maximum Concentration								**<**	**0.033**	**<**	**0.033**		**0.037**	**<**	**0.033**		**0.11**		**0.88**
Screening Standards									**2.9**		**29**		**76**		**0.33**		**1200**		**230**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-2
SOIL ANALYTICAL SUMMARY

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Headspace	Code	Indeno(1,2,3-cd)-pyrene	Code	MethyInaphthalene,2-	Code	Naphthalene	Code	Phenanthrene	Code	Pyrene
SB-1	SB-1 (17-19)	2	17	19	04/03/14		94		NA		NA		NA		NA		NA
SB-1	SB-1 (21-24)	2	21	24	04/03/14		14		NA		NA		NA		NA		NA
SB-2	SB-2 (17-19)	2	17	19	04/03/14		28		NA		NA		NA		NA		NA
SB-2	SB-2 (21-24)	2	21	24	04/03/14		6		NA		NA		NA		NA		NA
SB-3	SB-3 (13-15)	1	13	15	04/03/14		6		NA		NA		NA		NA		NA
SB-3	SB-3 (21-24)	2	21	24	04/03/14		1		NA		NA		NA		NA		NA
SB-4	SB-4 (17-19)	2	17	19	04/03/14		1		NA		NA		NA		NA		NA
SB-4	SB-4 (26-29)	2	26	29	04/03/14	<	1		NA		NA		NA		NA		NA
SB-5	SB-5 (11-13)	1	11	13	04/03/14	<	1		NA		NA		NA		NA		NA
SB-5	SB-5 (17-20)	2	17	20	04/03/14		1		NA		NA		NA		NA		NA
SB-6	SB-6 (11-13)	4	11	13	04/09/14		296	<	0.033		6		1.2		1.9		0.32
SB-6	SB-6 (27-30)	2	27	30	04/09/14		13	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
SB-7	SB-7 (11-13)	4	11	13	04/09/14		566	<	0.033		7.3		1.4		2.5		0.44
SB-7	SB-7 (27-30)	2	27	30	04/09/14		5	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
					Minimum Concentration			<	**0.033**	<	**0.033**	<	**0.033**	<	**0.033**	<	**0.033**
					Maximum Concentration			<	**0.033**		**7.3**		**1.4**		**2.5**		**0.44**
					Screening Standards				**2.9**		**1.7**		**1.5**		**660**		**1100**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-2A
SOIL ANALYTICAL SUMMARY AOI NO. 1 - INDUSTRIAL SOIL 0-15 FEET BGS

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Headspace	Code	TPH-D	Code	Aliphatics >C10-C12	Code	Aliphatics >C12-C16	Code	Aliphatics >C16-C35	Code	Aromatics >C10-C12	Code	Aromatics >C12-C16	Code	Aromatics >C16-C21	Code	Aromatics >C21-C35
SB-3	SB-3 (13-15)	1	13	15	04/03/14		6		66		6.7		35		39	<	1.7		7.7		14	<	10
SB-5	SB-5 (11-13)	1	11	13	04/03/14	<	1	<	5		NA		NA		NA		NA		NA		NA		NA
Minimum Concentration								<	**5**		**6.7**		**35**		**39**	<	**1.7**		**7.7**		**14**	<	**10**
Maximum Concentration									**66**		**6.7**		**35**		**39**	<	**1.7**		**7.7**		**14**	<	**10**
Screening Standards									**65**		**2000**		**3800**		**10000**		**100**		**200**		**1700**		**2500**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-2B
SOIL ANALYTICAL SUMMARY AOI NO. 2 - INDUSTRIAL SOIL >15 FEET BGS

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Headspace	Code	TPH-D	Code	Aliphatics >C10-C12	Code	Aliphatics >C12-C16	Code	Aliphatics >C16-C35	Code	Aromatics >C10-C12	Code	Aromatics >C12-C16	Code	Aromatics >C16-C21
SB-1	SB-1 (17-19)	2	17	19	04/03/14		94		5200		380		1300		1300		7.8		240		460
SB-1	SB-1 (21-24)	2	21	24	04/03/14		14		1800		NA		NA		NA		NA		NA		NA
SB-2	SB-2 (17-19)	2	17	19	04/03/14		28		500		NA		NA		NA		NA		NA		NA
SB-2	SB-2 (21-24)	2	21	24	04/03/14		6		70		NA		NA		NA		NA		NA		NA
SB-3	SB-3 (21-24)	2	21	24	04/03/14		1	<	5		NA		NA		NA		NA		NA		NA
SB-4	SB-4 (17-19)	2	17	19	04/03/14		1		14		NA		NA		NA		NA		NA		NA
SB-4	SB-4 (26-29)	2	26	29	04/03/14	<	1	<	5		NA		NA		NA		NA		NA		NA
SB-5	SB-5 (17-20)	2	17	20	04/03/14		1		62		NA		NA		NA		NA		NA		NA
SB-6	SB-6 (27-30)	2	27	30	04/09/14		13	<	5		NA		NA		NA		NA		NA		NA
SB-7	SB-7 (27-30)	2	27	30	04/09/14		5	<	5		NA		NA		NA		NA		NA		NA
Minimum Concentration								<	**5**		**380**		**1300**		**1300**		**7.8**		**240**		**460**
Maximum Concentration									**5200**		**380**		**1300**		**1300**		**7.8**		**240**		**460**
Screening Standards									**65**		**2000**		**3800**		**10000**		**100**		**200**		**1700**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-2B
SOIL ANALYTICAL SUMMARY AOI NO. 2 - INDUSTRIAL SOIL >15 FEET BGS

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Headspace	Code	Aromatics >C21-C35	Code	Acenaphthene	Code	Acenaphthylene	Code	Anthracene	Code	Benz(a)-anthracene	Code	Benzo(a)-pyrene
SB-1	SB-1 (17-19)	2	17	19	04/03/14		94		80		NA		NA		NA		NA		NA
SB-1	SB-1 (21-24)	2	21	24	04/03/14		14		NA		NA		NA		NA		NA		NA
SB-2	SB-2 (17-19)	2	17	19	04/03/14		28		NA		NA		NA		NA		NA		NA
SB-2	SB-2 (21-24)	2	21	24	04/03/14		6		NA		NA		NA		NA		NA		NA
SB-3	SB-3 (21-24)	2	21	24	04/03/14		1		NA		NA		NA		NA		NA		NA
SB-4	SB-4 (17-19)	2	17	19	04/03/14		1		NA		NA		NA		NA		NA		NA
SB-4	SB-4 (26-29)	2	26	29	04/03/14	<	1		NA		NA		NA		NA		NA		NA
SB-5	SB-5 (17-20)	2	17	20	04/03/14		1		NA		NA		NA		NA		NA		NA
SB-6	SB-6 (27-30)	2	27	30	04/09/14		13		NA	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
SB-7	SB-7 (27-30)	2	27	30	04/09/14		5		NA	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
Minimum Concentration									**80**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**
Maximum Concentration									**80**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**
Screening Standards									**2500**		**220**		**88**		**120**		**2.9**		**0.33**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-2B
SOIL ANALYTICAL SUMMARY AOI NO. 2 - INDUSTRIAL SOIL >15 FEET BGS

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Headspace	Code	Benzo(b)-fluoranthene	Code	Benzo(k)-fluoranthene	Code	Chrysene	Code	Dibenz(a,h)-anthracene	Code	Fluoranthene	Code	Fluorene
SB-1	SB-1 (17-19)	2	17	19	04/03/14		94		NA		NA		NA		NA		NA		NA
SB-1	SB-1 (21-24)	2	21	24	04/03/14		14		NA		NA		NA		NA		NA		NA
SB-2	SB-2 (17-19)	2	17	19	04/03/14		28		NA		NA		NA		NA		NA		NA
SB-2	SB-2 (21-24)	2	21	24	04/03/14		6		NA		NA		NA		NA		NA		NA
SB-3	SB-3 (21-24)	2	21	24	04/03/14		1		NA		NA		NA		NA		NA		NA
SB-4	SB-4 (17-19)	2	17	19	04/03/14		1		NA		NA		NA		NA		NA		NA
SB-4	SB-4 (26-29)	2	26	29	04/03/14	<	1		NA		NA		NA		NA		NA		NA
SB-5	SB-5 (17-20)	2	17	20	04/03/14		1		NA		NA		NA		NA		NA		NA
SB-6	SB-6 (27-30)	2	27	30	04/09/14		13	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
SB-7	SB-7 (27-30)	2	27	30	04/09/14		5	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
Minimum Concentration								**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**
Maximum Concentration								**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**
Screening Standards									**2.9**		**29**		**76**		**0.33**		**1200**		**230**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-2B
SOIL ANALYTICAL SUMMARY AOI NO. 2 - INDUSTRIAL SOIL >15 FEET BGS

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Headspace	Code	Indeno(1,2,3-cd)-pyrene	Code	Methylnaphthalene,2-	Code	Naphthalene	Code	Phenanthrene	Code	Pyrene
SB-1	SB-1 (17-19)	2	17	19	04/03/14		94		NA		NA		NA		NA		NA
SB-1	SB-1 (21-24)	2	21	24	04/03/14		14		NA		NA		NA		NA		NA
SB-2	SB-2 (17-19)	2	17	19	04/03/14		28		NA		NA		NA		NA		NA
SB-2	SB-2 (21-24)	2	21	24	04/03/14		6		NA		NA		NA		NA		NA
SB-3	SB-3 (21-24)	2	21	24	04/03/14		1		NA		NA		NA		NA		NA
SB-4	SB-4 (17-19)	2	17	19	04/03/14		1		NA		NA		NA		NA		NA
SB-4	SB-4 (26-29)	2	26	29	04/03/14	<	1		NA		NA		NA		NA		NA
SB-5	SB-5 (17-20)	2	17	20	04/03/14		1		NA		NA		NA		NA		NA
SB-6	SB-6 (27-30)	2	27	30	04/09/14		13	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
SB-7	SB-7 (27-30)	2	27	30	04/09/14		5	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
					Minimum Concentration			**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**
					Maximum Concentration			**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**
					Screening Standards				**2.9**		**1.7**		**1.5**		**660**		**1100**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-2C
SOIL ANALYTICAL SUMMARY AOI NO. 4 - INDUSTRIAL SOIL BES

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Headspace	Code	TPH-D	Code	Acenaphthene	Code	Acenaphthylene	Code	Anthracene	Code	Benz(a)-anthracene	Code	Benzo(a)-pyrene
SB-6	SB-6 (11-13)	4	11	13	04/09/14		296		710	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
SB-7	SB-7 (11-13)	4	11	13	04/09/14		566		1300	<	0.033	<	0.033	<	0.033	<	0.033	<	0.033
							Minimum Concentration		**710**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**
							Maximum Concentration		**1300**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**
							Screening Standards		**65**		**220**		**88**		**120**		**2.9**		**0.33**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-2C
SOIL ANALYTICAL SUMMARY AOI NO. 4 - INDUSTRIAL SOIL BES

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Headspace	Code	Benzo(b)-fluoranthene	Code	Benzo(k)-fluoranthene	Code	Chrysene	Code	Dibenz(a,h)-anthracene	Code	Fluoranthene	Code	Fluorene
SB-6	SB-6 (11-13)	4	11	13	04/09/14		296	<	0.033	<	0.033		0.037	<	0.033	<	0.033		0.69
SB-7	SB-7 (11-13)	4	11	13	04/09/14		566	<	0.033	<	0.033	<	0.033	<	0.033		0.11		0.88
Minimum Concentration								**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**	**<**	**0.033**		**0.69**
Maximum Concentration								**<**	**0.033**	**<**	**0.033**		**0.037**	**<**	**0.033**		**0.11**		**0.88**
Screening Standards									**2.9**		**29**		**76**		**0.33**		**1200**		**230**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-2C
SOIL ANALYTICAL SUMMARY AOI NO. 4 - INDUSTRIAL SOIL BES

Boring ID	Sample ID	AOI	Top Interval (ft)	Bottom Interval (ft)	Sample Date	Code	Headspace	Code	Indeno(1,2,3-cd)-pyrene	Code	Methylnaphthalene,2-	Code	Naphthalene	Code	Phenanthrene	Code	Pyrene
SB-6	SB-6 (11-13)	4	11	13	04/09/14		296	<	0.033		6		1.2		1.9		0.32
SB-7	SB-7 (11-13)	4	11	13	04/09/14		566	<	0.033		7.3		1.4		2.5		0.44
Minimum Concentration								**<**	**0.033**		**6**		**1.2**		**1.9**		**0.32**
Maximum Concentration								**<**	**0.033**		**7.3**		**1.4**		**2.5**		**0.44**
Screening Standards									**2.9**		**1.7**		**1.5**		**660**		**1100**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-3
GROUNDWATER ANALYTICAL SUMMARY

Monitoring Well ID	AOI	Sample Date	Code	TPH-D	Code	Aliphatics >C10-C12	Code	Aliphatics >C12-C16	Code	Aliphatics >C16-C35	Code	Aromatics >C10-C12	Code	Aromatics >C12-C16	Code	Aromatics >C16-C21	Code	Aromatics >C21-C35
SB-1/MW-1	5	04/04/14		**FP**		**FP**		**FP**		**FP**		**FP**		**FP**		**FP**		**FP**
SB-2/TW-2	3	04/04/14		**4.2**		NA		NA		NA		NA		NA		NA		NA
SB-3/TW-3	3	04/04/14		**0.51**		NA		NA		NA		NA		NA		NA		NA
SB-4/TW-4	3	04/04/14		**8.4**		**0.19**		**0.24**		0.35	<	0.1		**0.29**		**0.18**		**0.26**
SB-5/TW-5	3	04/04/14	<	0.15		NA		NA		NA		NA		NA		NA		NA
SB-6/TW-6	5	04/10/14	<	0.15		NA		NA		NA		NA		NA		NA		NA
SB-7/TW-7	5	04/10/14		**16**		0.14		0.1		NA		NA		NA		NA		NA
MW-1	5	06/27/14		430		21		70		69		0.46		15		23		3.5
TW-7	5	02/05/15		**FP**		**FP**		**FP**		**FP**		**FP**		**FP**		**FP**		**FP**
MW-1	5	02/05/15		**FP**		**FP**		**FP**		**FP**		**FP**		**FP**		**FP**		**FP**
MW-1	5	04/21/15		NA		**5.81**		**19.8**		**17.4**		**0.169**		**2.94**		**7.51**		**1.26**
Minimum Concentrations			<	**0.15**		**0.14**		**0.1**		**0.35**	<	**0.1**		**0.29**		**0.18**		**0.26**
Maximum Concentrations				**430**		**21**		**70**		**69**		**0.46**		**15**		**23**		**3.5**
Screening Standards				**0.15**		**0.15**		**0.15**		**7.3**		**0.15**		**0.15**		**0.15**		**0.15**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-3
GROUNDWATER ANALYTICAL SUMMARY

Monitoring Well ID	AOI	Sample Date	Code	Acenaphthene	Code	Acenaphthylene	Code	Anthracene	Code	Benz(a)-anthracene	Code	Benzo(a)-pyrene	Code	Benzo(b)-fluoranthene	Code	Benzo(k)-fluoranthene	Code	Chrysene
SB-1/MW-1	5	04/04/14		FP		FP		FP		FP		FP		FP		FP		FP
SB-2/TW-2	3	04/04/14		NA		NA		NA		NA		NA		NA		NA		NA
SB-3/TW-3	3	04/04/14		NA		NA		NA		NA		NA		NA		NA		NA
SB-4/TW-4	3	04/04/14		NA		NA		NA		NA		NA		NA		NA		NA
SB-5/TW-5	3	04/04/14		NA		NA		NA		NA		NA		NA		NA		NA
SB-6/TW-6	5	04/10/14		0.00051	<	0.00018	<	0.00018	<	0.00018	<	0.00018	<	0.00018	<	0.00018	<	0.00018
SB-7/TW-7	5	04/10/14	<	0.0091	<	0.0091	<	0.0091	<	**0.0091**	<	**0.0091**	<	**0.0091**	<	**0.0091**	<	**0.0091**
MW-1	5	06/27/14	<	0.018	<	0.018	<	0.018	<	**0.018**	<	**0.018**	<	**0.018**	<	**0.018**	<	**0.018**
TW-7	5	02/05/15		FP		FP		FP		FP		FP		FP		FP		FP
MW-1	5	02/05/15		FP		FP		FP		FP		FP		FP		FP		FP
MW-1	5	04/21/15		0.268	<	0.019	<	0.019	<	0.019	<	0.019	<	0.019	<	0.019	<	0.019
Minimum Concentrations				**0.00051**	<	**0.00018**	<	**0.00018**	<	**0.00018**	<	**0.00018**	<	**0.00018**	<	**0.00018**	<	**0.00018**
Maximum Concentrations				**0.268**	<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**
Screening Standards				**0.037**		**0.1**		**0.043**		**0.0078**		**0.0002**		**0.0048**		**0.0025**		**0.0016**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-3
GROUNDWATER ANALYTICAL SUMMARY

Monitoring Well ID	AOI	Sample Date	Code	Dibenz(a,h)-anthracene	Code	Fluoranthene	Code	Fluorene	Code	Indeno(1,2,3-cd)-pyrene	Code	Methyl-naphthalene,2-	Code	Naphthalene	Code	Phenanthrene	Code	Pyrene
SB-1/MW-1	5	04/04/14		FP		FP		FP		FP		FP		FP		FP		FP
SB-2/TW-2	3	04/04/14		NA		NA		NA		NA		NA		NA		NA		NA
SB-3/TW-3	3	04/04/14		NA		NA		NA		NA		NA		NA		NA		NA
SB-4/TW-4	3	04/04/14		NA		NA		NA		NA		NA		NA		NA		NA
SB-5/TW-5	3	04/04/14		NA		NA		NA		NA		NA		NA		NA		NA
SB-6/TW-6	5	04/10/14	<	0.00018	<	0.00018		0.00062	<	0.00018		**0.0072**		0.0045		0.00069	<	0.00018
SB-7/TW-7	5	04/10/14	<	**0.0091**	<	0.0091		0.021	<	**0.0091**		**0.25**		**0.05**		0.044		0.011
MW-1	5	06/27/14	<	**0.018**	<	0.018		**0.23**	<	**0.018**		**1.7**		**0.33**		**0.4**		0.73
TW-7	5	02/05/15		FP		FP		FP		FP		FP		FP		FP		FP
MW-1	5	02/05/15		FP		FP		FP		FP		FP		FP		FP		FP
MW-1	5	04/21/15	<	0.019	<	0.019		0.449	<	0.019		2.34		0.645		0.724	<	**0.019**
		Minimum Concentrations	<	**0.00018**	<	**0.00018**		**0.00062**	<	**0.00018**		**0.0072**		**0.0045**		**0.00069**	<	**0.00018**
		Maximum Concentrations	<	**0.019**	<	**0.019**		**0.449**	<	**0.019**		**2.34**		**0.645**		**0.724**		**0.73**
		Screening Standards		**0.0025**		**0.15**		**0.024**		**0.0037**		**0.00062**		**0.01**		**0.18**		**0.018**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-3A
GROUNDWATER ANALYTICAL SUMMARY AOI NO. 3 - GROUNDWATER

Monitoring Well ID	AOI	Sample Date	Code	TPH-D	Code	Aliphatics >C10-C12	Code	Aliphatics >C12-C16	Code	Aliphatics >C16-C35	Code	Aromatics >C10-C12	Code	Aromatics >C12-C16	Code	Aromatics >C16-C21	Code	Aromatics >C21-C35
SB-2/TW-2	3	04/04/14		**4.2**		NA		NA		NA		NA		NA		NA		NA
SB-3/TW-3	3	04/04/14		**0.51**		NA		NA		NA		NA		NA		NA		NA
SB-4/TW-4	3	04/04/14		8.4		0.19		0.24		0.35	<	0.1		0.29		0.18		0.26
SB-5/TW-5	3	04/04/14	<	0.15		NA		NA		NA		NA		NA		NA		NA
Minimum Concentrations			<	**0.15**		**0.19**		**0.24**		**0.35**	<	**0.1**		**0.29**		**0.18**		**0.26**
Maximum Concentrations				**8.4**		**0.19**		**0.24**		**0.35**	<	**0.1**		**0.29**		**0.18**		**0.26**
Screening Standards				**0.15**		**0.15**		**0.15**		**7.3**		**0.15**		**0.15**		**0.15**		**0.15**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-3B
GROUNDWATER ANALYTICAL SUMMARY AOI NO. 5 - GROUNDWATER BES

Monitoring Well ID	AOI	Sample Date	Code	TPH-D	Code	Aliphatics >C10-C12	Code	Aliphatics >C12-C16	Code	Aliphatics >C16-C35	Code	Aromatics >C10-C12	Code	Aromatics >C12-C16	Code	Aromatics >C16-C21	Code	Aromatics >C21-C35
SB-1/MW-1	5	04/04/14		FP		FP		FP		FP		FP		FP		FP		FP
SB-6/TW-6	5	04/10/14	<	0.15		NA		NA		NA		NA		NA		NA		NA
SB-7/TW-7	5	04/10/14		16		0.14		0.1		NA		NA		NA		NA		NA
MW-1	5	06/27/14		430		21		70		69		0.46		15		23		3.5
TW-7	5	02/05/15		FP		FP		FP		FP		FP		FP		FP		FP
MW-1	5	02/05/15		FP		FP		FP		FP		FP		FP		FP		FP
MW-1	5	04/21/15		NA		5.81		19.8		17.4		0.169		2.94		7.51		1.26
Minimum Concentrations			<	**0.15**		**0.14**		**0.1**		**17.4**	<	**0.169**		**2.94**		**7.51**		**1.26**
Maximum Concentrations				**430**		**21**		**70**		**69**		**0.46**		**15**		**23**		**3.5**
Screening Standards				**0.15**		**0.15**		**0.15**		**7.3**		**0.15**		**0.15**		**0.15**		**0.15**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-3B
GROUNDWATER ANALYTICAL SUMMARY AOI NO. 5 - GROUNDWATER BES

Monitoring Well ID	AOI	Sample Date	Code	Acenaphthene	Code	Acenaphthylene	Code	Anthracene	Code	Benz(a)-anthracene	Code	Benzo(a)-pyrene	Code	Benzo(b)-fluoranthene	Code	Benzo(k)-fluoranthene	Code	Chrysene
SB-1/MW-1	5	04/04/14		FP		FP		FP		FP		FP		FP		FP		FP
SB-6/TW-6	5	04/10/14		0.00051	<	0.00018	<	0.00018	<	0.00018	<	0.00018	<	0.00018	<	0.00018	<	0.00018
SB-7/TW-7	5	04/10/14	<	0.0091	<	0.0091	<	0.0091	<	**0.0091**	<	**0.0091**	<	**0.0091**	<	**0.0091**	<	**0.0091**
MW-1	5	06/27/14	<	0.018	<	0.018	<	0.018	<	**0.018**	<	**0.018**	<	**0.018**	<	**0.018**	<	**0.018**
TW-7	5	02/05/15		FP		FP		FP		FP		FP		FP		FP		FP
MW-1	5	02/05/15		FP		FP		FP		FP		FP		FP		FP		FP
MW-1	5	04/21/15		0.268	<	0.019	<	0.019	<	0.019	<	0.019	<	0.019	<	0.019	<	0.019
		Minimum Concentrations		**0.00051**	<	**0.00018**	<	**0.00018**	<	**0.00018**	<	**0.00018**	<	**0.00018**	<	**0.00018**	<	**0.00018**
		Maximum Concentrations		**0.268**	<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**	<	**0.019**
		Screening Standards		**0.037**		**0.1**		**0.043**		**0.0078**		**0.0002**		**0.0048**		**0.0025**		**0.0016**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-3B
GROUNDWATER ANALYTICAL SUMMARY AOI NO. 5 - GROUNDWATER BES

Monitoring Well ID	AOI	Sample Date	Code	Dibenz(a,h)-anthracene	Code	Fluoranthene	Code	Fluorene	Code	Indeno(1,2,3-cd)-pyrene	Code	Methyl-naphthalene,2-	Code	Naphthalene	Code	Phenanthrene	Code	Pyrene
SB-1/MW-1	5	04/04/14		FP		FP		FP		FP		FP		FP		FP		FP
SB-6/TW-6	5	04/10/14	<	0.00018	<	0.00018		0.00062	<	0.00018		0.0072		0.0045		0.00069	<	0.00018
SB-7/TW-7	5	04/10/14	<	0.0091	<	0.0091		0.021	<	0.0091		0.25		0.05		0.044		0.011
MW-1	5	06/27/14	<	0.018	<	0.018		0.23	<	0.018		1.7		0.33		0.4		0.73
TW-7	5	02/05/15		FP		FP		FP		FP		FP		FP		FP		FP
MW-1	5	02/05/15		FP		FP		FP		FP		FP		FP		FP		FP
MW-1	5	04/21/15	<	0.019	<	0.019		0.449	<	0.019		2.34		0.645		0.724	<	0.019
Minimum Concentrations			<	**0.00018**	<	**0.00018**		**0.00062**	<	**0.00018**		**0.0072**		**0.0045**		**0.00069**	<	**0.00018**
Maximum Concentrations			<	**0.019**	<	**0.019**		**0.449**	<	**0.019**		**2.34**		**0.645**		**0.724**		**0.73**
Screening Standards				**0.0025**		**0.15**		**0.024**		**0.0037**		**0.00062**		**0.01**		**0.18**		**0.018**

Notes:
Bold RED type indicate concentration exceeds the RECAP SS.
Bold BLUE type indicates highest concentration for each COC.
NA - Not Analyzed for Parameter
All concentrations are in parts per million (ppm)

TABLE B-4
CHEMICAL/PHYSICAL PROPERTIES

Constituents of Concern	CAS No.	Molecular Weight (g/gmol)	Soil Organic Carbon Partition Coefficient (cm^3/g)	Henry's Law Constant (atm-m)	Diffusivity in Air (cm^3/s)	Diffusivity in Water (cm^3/s)	Water Solubility (mg/L)	Oral Slope Factor (kg-d/mg)	Inhalation Slope Factor (kg-d/mg)	Oral Reference Dose (mg/kg-d)	Inhalation Reference Dose (mg/kg-d)	Dermal Adsorption Factor
Aliphatics C10-C12	NA	160.0	2.51E+05	2.93E+00	1.00E-01	1.00E-05	-	-	-	1.00E-01	3.00E-01	0.00
Aliphatics C12-C16	NA	200.0	5.01E+06	1.27E+01	1.00E-01	1.00E-05	-	-	-	1.00E-01	3.00E-01	0.00
Aliphatics C16-C35	NA	270.0	6.31E+08	1.20E+02	1.00E-01	1.00E-05	-	-	-	2.00E+00	2.00E+00	0.10
Aromatics C10-C12	NA	130.0	2.51E+03	3.41E-03	1.00E-01	1.00E-05	-	-	-	4.00E-02	6.00E-02	0.00
Aromatics C12-C16	NA	150.0	5.01E+03	1.29E-03	1.00E-01	1.00E-05	-	-	-	4.00E-02	6.00E-02	0.00
Aromatics C16-C21	NA	190.0	1.58E+04	3.17E-04	1.00E-01	1.00E-05	-	-	-	3.00E-02	3.00E-02	0.10
Aromatics C21-C35	NA	240.0	1.26E+05	1.63E-05	1.00E-01	1.00E-05	-	-	-	3.00E-02	3.00E-02	0.10
Acenaphthene	83-32-9	154.2	4.90E+03	1.55E-04	4.21E-02	7.69E-06	4.24E+00	-	-	6.00E-02	6.00E-02	0.00
Acenaphthylene	208-96-8	152.2	2.00E+03	1.14E-04	4.39E-02	7.53E-06	1.60E+01	-	-	6.00E-02	6.00E-02	0.00
Anthracene	120-12-7	178.2	2.35E+04	6.50E-05	3.24E-02	7.74E-06	4.30E-02	-	-	3.00E-01	3.00E-01	0.00
Benzo(a)anthracene	56-55-3	228.3	3.58E+05	3.35E-06	5.10E-02	9.00E-06	9.40E-03	7.30E-01	3.10E-01	-	-	0.13
Benzo(a)pyrene	50-32-8	252.3	9.69E+05	1.13E-06	4.30E-02	9.00E-06	1.60E-03	7.30E+00	3.10E+00	-	-	0.13
Benzo(b)fluoranthene	205-99-2	252.3	1.23E+06	1.11E-04	2.26E-02	5.56E-06	1.50E+03	7.30E-01	3.10E-01	-	-	0.13
Benzo(k)fluoranthene	207-08-9	252.3	1.23E+06	8.29E-07	2.26E-02	5.56E-06	8.00E-04	7.30E-02	3.10E-02	-	-	0.13
Chrysene	218-01-9	228.3	3.98E+05	9.46E-05	2.48E-02	6.21E-06	1.60E-03	7.30E-03	3.10E-03	-	-	0.13
Dibenz(a,h)anthracene	53-70-3	278.4	1.79E+06	1.47E-08	2.02E-02	5.18E-06	2.50E-03	7.30E+00	3.10E+00	-	-	0.13
Fluoranthene	206-44-0	202.3	4.91E+04	1.61E-05	3.02E-02	6.35E-06	2.06E-01	-	-	4.00E-02	4.00E-02	0.13
Fluorene	86-73-7	166.2	7.71E+03	6.36E-05	3.63E-02	7.88E-06	1.98E+00	-	-	4.00E-02	4.00E-02	0.00
Indeno(1,2,3-cd)pyrene	193-39-5	276.3	3.47E+06	1.60E-06	1.90E-02	5.66E-06	2.20E-05	7.30E-01	3.10E-01	-	-	0.13
2-Methylnaphthalene	91-57-6	142.2	2.24E+03	5.80E-05	4.80E-02	7.84E-06	2.46E+01	-	-	2.00E-02	8.60E-04	0.00
Naphthalene	91-20-3	128.2	1.19E+03	4.83E-04	5.90E-02	7.50E-06	3.10E+01	-	-	2.00E-02	8.60E-04	0.00
Phenanthrene	85-01-8	178.2	4.80E+03	2.33E-05	3.24E-02	7.74E-06	1.15E+00	-	-	3.00E-01	3.00E-01	0.00
Pyrene	129-00-0	202.3	6.80E+04	1.10E-05	2.72E-02	7.24E-06	1.35E-01	-	-	3.00E-01	3.00E-01	0.00

TABLE B-5
CHEMICAL RECAP PROPERTIES

Constituents of Concern	CAS No.	Maximum Contaminant Level (mg/L)	LAC 33:IX Drinking Water Source (mg/L)	LAC 33:IX Non-Drinking Water Source (mg/L)	Quantitation Limits		Octanol Water Partition Coefficient (mg/L)	BCF (L/kg)	Organic or Inorganic	Volatile or Non-Volatile	Carcinogen or Non-Carcinogen
					Ground water (mg/L)	Soil (mg/kg)					
Aliphatics C10-C12	NA	-	-	-	1.50E-01	-	-	0.00E+00	Organic	Volatile	Non-Carcinogen
Aliphatics C12-C16	NA	-	-	-	1.50E-01	-	-	0.00E+00	Organic	Volatile	Non-Carcinogen
Aliphatics C16-C35	NA	-	-	-	1.50E-01	-	-	0.00E+00	Organic	Non-Volatile	Non-Carcinogen
Aromatics C10-C12	NA	-	-	-	1.50E-01	-	-	0.00E+00	Organic	Volatile	Non-Carcinogen
Aromatics C12-C16	NA	-	-	-	1.50E-01	-	-	0.00E+00	Organic	Volatile	Non-Carcinogen
Aromatics C16-C21	NA	-	-	-	1.50E-01	-	-	0.00E+00	Organic	Non-Volatile	Non-Carcinogen
Aromatics C21-C35	NA	-	-	-	1.50E-01	-	-	0.00E+00	Organic	Non-Volatile	Non-Carcinogen
Acenaphthene	83-32-9	-	-	-	1.00E-02	-	8.32E+03	3.87E+02	Organic	Volatile	Non-Carcinogen
Acenaphthylene	208-96-8	-	-	-	-	-	-	2.69E+02	Organic	Volatile	Non-Carcinogen
Anthracene	120-12-7	-	-	-	1.00E-02	-	3.55E+04	9.20E+02	Organic	Volatile	Non-Carcinogen
Benzo(a)anthracene	56-55-3	-	-	-	7.80E-03	-	5.01E+05	1.26E+04	Organic	Non-Volatile	Carcinogen
Benzo(a)pyrene	50-32-8	2.00E-04	-	-	-	3.30E-01	1.29E+05	8.29E+05	Organic	Non-Volatile	Carcinogen
Benzo(b)fluoranthene	205-99-2	-	-	-	4.80E-03	-	1.58E+06	3.03E+04	Organic	Non-Volatile	Carcinogen
Benzo(k)fluoranthene	207-08-9	-	-	-	2.50E-03	-	1.58E+06	3.03E+04	Organic	Non-Volatile	Carcinogen
Chrysene	218-01-9	-	-	-	1.50E-03	-	5.01E+05	1.26E+04	Organic	Non-Volatile	Carcinogen
Dibenz(a,h)anthracene	53-70-3	-	-	-	2.50E-03	3.30E-01	4.90E+06	7.28E+04	Organic	Non-Volatile	Carcinogen
Fluoranthene	206-44-0	-	-	-	1.00E-02	-	1.32E+05	4.43E+03	Organic	Non-Volatile	Non-Carcinogen
Fluorene	86-73-7	-	-	-	1.00E-02	-	1.62E+04	1.80E+03	Organic	Volatile	Non-Carcinogen
Indeno(1,2,3-cd)pyrene	193-39-5	-	-	-	3.70E-03	-	4.47E+06	7.28E+04	Organic	Non-Volatile	Carcinogen
2-Methylnaphthalene	91-57-6	-	-	-	-	-	-	2.60E+03	Organic	Volatile	Non-Carcinogen
Naphthalene	91-20-3	-	-	-	1.00E-02	-	2.29E+03	3.10E+02	Organic	Volatile	Non-Carcinogen
Phenanthrene	85-01-8	-	-	-	-	-	-	5.10E+03	Organic	Volatile	Non-Carcinogen
Pyrene	129-00-0	-	-	-	1.00E-02	-	1.29E+05	6.90E+01	Organic	Volatile	Non-Carcinogen

NA - Not available

Constituents with a Henry's Law Constant greater than 0.00001 and a molecular weight less that 200 grams per mole are considered to be volatile by the LDEQ
Constituents that have a Slope Factor are considered to be carcinogens and those having a Reference Dose are considered to be non-carcinogens.
Constituents that have a Soil Organic Carbon Partition Coefficient are organic compounds.

TABLE B-6A
TARGET ORGANS/SYSTEMS (MO1)
AOI NO. 2 - INDUSTRIAL SOIL >15 FEET BGS

Target Organ/System	Constituents of Concern	Additivity
Soil Medium		
Decreased body weight	Aromatics C12-C16	1

Note: Choose the larger additivity value for each constituent of concern.

Source: USEPA Integrated Risk Information System (IRIS), http://www.gov/ngispgm3/iris/index.html.

TABLE B-6B
TARGET ORGANS/SYSTEMS (MO1)
AOI NO. 3 - GROUNDWATER

Target Organ/System	Constituents of Concern	Additivity
Groundwater Medium		
Liver	Aliphatics C10-C16	1
Decreased Body Weight	Aromatics C12-C16	1
Kidney	Aromatics C16-C35	1

Note: Choose the larger additivity value for each constituent of concern.

Source: USEPA Integrated Risk Information System (IRIS), http://www.gov/ngispgm3/iris/index.html.

TABLE B-6C
TARGET ORGANS/SYSTEMS (MO1)
AOI NO. 4 - INDUSTRIAL SOIL BES

Target Organ/System	Constituents of Concern	Additivity
Soil Medium		
Kidney	Aromatics C16-C35, Fluoranthene, Pyrene	3
Liver	Aliphatics C10-C16, Aliphatics C16-C35, Acenaphthene, Fluoranthene	4
Hematological system	Aliphatics C10-C16, Fluorene	2
Nasal cavity	2-Methylnaphthalene, Naphthalene	2
Decreased body weight	Aromatics C10-C16, 2-Methylnaphthalene, Naphthalene	3

Source: USEPA Integrated Risk Information System (IRIS), http://www.gov/ngispgm3/iris/index.html.

TABLE B-6D
TARGET ORGANS/SYSTEMS (MO2)
AOI NO. 5 - GROUNDWATER BES

Target Organ/System	Constituents of Concern	Additivity
Groundwater Medium		
Kidney	Aromatics C16-C35, Fluoranthene, Pyrene	3
Liver	Aliphatics C10-C16, Aliphatics C16-C35, Acenaphthene, Fluoranthene	4
Hematological system	Aliphatics C10-C16, Fluorene	2
Nasal cavity	2-Methylnaphthalene, Naphthalene	2
Decreased body weight	Aromatics C10-C16, 2-Methylnaphthalene, Naphthalene	3

Note: Choose the larger additivity value for each constituent of concern.

Source: USEPA Integrated Risk Information System (IRIS), http://www.gov/ngispgm3/iris/index.html.

TABLE B-7A
ADDITIVITY
AOI NO. 2 - INDUSTRIAL SOIL >15 FEET BGS

Constituents of Concern	CAS No.	Additive Effects	
		Soil	Groundwater
Aromatics C12-C16	NA	1	--

If more than one constituent is present in soil that elicits noncarcinogenic effects on the same target organ/system, adjust the RECAP standard to account for additivity according to the guidelines presented in Section 2.14 of the RECAP guidelines.

Additive effects are not considered for carcinogens.

Additivity is NOT taken into account for RECAP standards that are based on MCL, LAC 33:IX Drinking Water, or LAC 33:IX Non-Drinking Water.

TABLE B-7B
ADDITIVITY
AOI NO. 3 - GROUNDWATER

Constituents of Concern	CAS No.	Additive Effects	
		Soil	Groundwater
Aliphatics C10-C12	NA	-	1
Aliphatics C12-C16	NA	-	1
Aromatics C12-C16	NA	-	1
Aromatics C16-C21	NA	-	1
Aromatics C21-C35	NA	-	1

If more than one constituent is present in soil that elicits noncarcinogenic effects on the same target organ/system, adjust the RECAP standard to account for additivity according to the guidelines presented in Section 2.14 of the RECAP guidelines.

Additive effects are not considered for carcinogens.

Additivity is NOT taken into account for RECAP standards that are based on MCL, LAC 33:IX Drinking Water, or LAC 33:IX Non-Drinking Water.

TABLE B-7C
ADDITIVITY
AOI NO. 4 - INDUSTRIAL SOIL BES

Constituents of Concern	CAS No.	Additive Effects		Additive Effects	
		Soil	Groundwater	Soil BES	Groundwater BES
Aliphatics >C10-C12	NA	4	-	-	-
Aliphatics >C12-C16	NA	4	-	-	-
Aliphatics >C16-C35	NA	3	-	-	-
Aromatics >C10-C12	NA	3	-	-	-
Aromatics >C12-C16	NA	3	-	-	-
Aromatics >C16-C21	NA	1	-	-	-
Aromatics >C21-C35	NA	1	-	-	-
Acenaphthene	83-32-9	4	-	2	-
Acenaphthylene	208-96-8	1	-	2	-
Anthracene	120-12-7	1	-	2	-
Benzo(a)anthracene	56-55-3	1	-	-	-
Benzo(a)pyrene	50-32-8	1	-	-	-
Benzo(b)fluoranthene	205-99-2	1	-	-	-
Benzo(k)fluoranthene	207-08-9	1	-	-	-
Chrysene	218-01-9	1	-	-	-
Dibenz(a,h)anthracene	53-70-3	1	-	-	-
Fluoranthene	206-44-0	4	-	-	-
Fluorene	86-73-7	2	-	2	-
Indeno(1,2,3-cd)pyrene	193-39-5	1	-	-	-
2-Methylnaphthalene	91-57-6	3	-	4	-
Naphthalene	91-20-3	3	-	4	-
Phenanthrene	85-01-8	1	-	2	-
Pyrene	129-00-0	3	-	2	-

If more than one constituent is present in soil that elicits noncarcinogenic effects on the same target organ/system, adjust the RECAP standard to account for additivity according to the guidelines presented in Section 2.14 of the RECAP guidelines.

Additive effects are not considered for carcinogens.

Additivity is NOT taken into account for RECAP standards that are based on MCL, LAC 33:IX Drinking Water, or LAC 33:IX Non-Drinking Water.

TABLE B-7D
ADDITIVITY
AOI NO. 5 - GROUNDWATER BES

Constituents of Concern	CAS No.	Additive Effects		Additive Effects	
		Soil	Groundwater	Soil BES	Groundwater BES
Aliphatics >C10-C12	NA	-	4	-	-
Aliphatics >C12-C16	NA	-	4	-	-
Aliphatics >C16-C35	NA	-	3	-	-
Aromatics >C10-C12	NA	-	3	-	-
Aromatics >C12-C16	NA	-	3	-	-
Aromatics >C16-C21	NA	-	1	-	-
Aromatics >C21-C35	NA	-	1	-	-
Acenaphthene	83-32-9	-	4	-	1
Acenaphthylene	208-96-8	-	1	-	1
Anthracene	120-12-7	-	1	-	1
Benzo(a)anthracene	56-55-3	-	1	-	-
Benzo(a)pyrene	50-32-8	-	1	-	-
Benzo(b)fluoranthene	205-99-2	-	1	-	-
Benzo(k)fluoranthene	207-08-9	-	1	-	-
Chrysene	218-01-9	-	1	-	-
Dibenz(a,h)anthracene	53-70-3	-	1	-	-
Fluoranthene	206-44-0	-	4	-	-
Fluorene	86-73-7	-	2	-	1
Indeno(1,2,3-cd)pyrene	193-39-5	-	1	-	-
2-Methylnaphthalene	91-57-6	-	3	-	2
Naphthalene	91-20-3	-	3	-	2
Phenanthrene	85-01-8	-	1	-	1
Pyrene	129-00-0	-	3	-	1

If more than one constituent is present in soil that elicits noncarcinogenic effects on the same target organ/system, adjust the RECAP standard to account for additivity according to the guidelines presented in Section 2.14 of the RECAP guidelines.

Additive effects are not considered for carcinogens.

Additivity is NOT taken into account for RECAP standards that are based on MCL, LAC 33:IX Drinking Water, or LAC 33:IX Non-Drinking Water.

TABLE B-8
RECAP SUMMARY TABLE

Medium	Boring (depth, ft)	Parameters											
		Aliphatics C10-C12	Aliphatics C12-C16	Aliphatics C16-C35	Aromatics C10-C12	Aromatics C12-C16	Aromatics C16-C21	Aromatics C21-C35	Acenaphthene	Acenap-hthylene	Anthracene	Benz(a)-anthracene	Benzo(a)-pyrene
AOI No. 5 - Groundwater BES													
Groundwater Limiting RS (mg/L):		349	82	1,913	1,913	1,913	1,913	1,913	4.2	16	0.043	0.0078	0.0016
Groundwater	SB-7/TW-7	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
Groundwater	MW-1	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**

Medium	Boring (depth, ft)	Parameters										
		Benzo(b)-fluoranthene	Benzo(k)-fluoranthene	Chrysene	Dibenz(a,h)-anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	2-Methylnap-hthalene	Naphthalene	Phenanthrene	Pyrene
AOI No. 5 - Groundwater BES												
Groundwater Limiting RS (mg/L):		0.0048	0.0025	0.0016	0.0025	0.21	2	0.0037	25	12	1.2	0.14
Groundwater	SB-7/TW-7	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
Groundwater	MW-1	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**

mg/kg = Milligrams per kilogram
mg/L = Milligrams per liter
-- = Constituent Concentration does not exceed limiting RS.
Note: Bold sample concentrations are those that exceed the LRS.

APPENDIX C – BORING LOGS

PPM CONSULTANTS

Client:	Beau Box Property Management
Site:	Louisiana Retirement Systems Building Partnership
Location:	8401 United Plaza Blvd., Baton Rouge, LA
Agency Interest No.:	79956
PPM Project No.:	503124
Project Type:	LSI

LOG OF BORING SB-1/TW-1/MW-1

Boring Information:

Date / Time / Logged By:	4/3/14 / 0855 / AB
Drilling Company:	Crescent Geotechnical Svc. & QRI
Drilling Method:	DPT
Total Boring Depth:	24'
Initial Saturation (ft)/Date:	19'
Static GW level (ft)/Date:	11.69 / 4/11/14
Surface Elevation (ft):	NM
Sampling Interval:	2'-3'

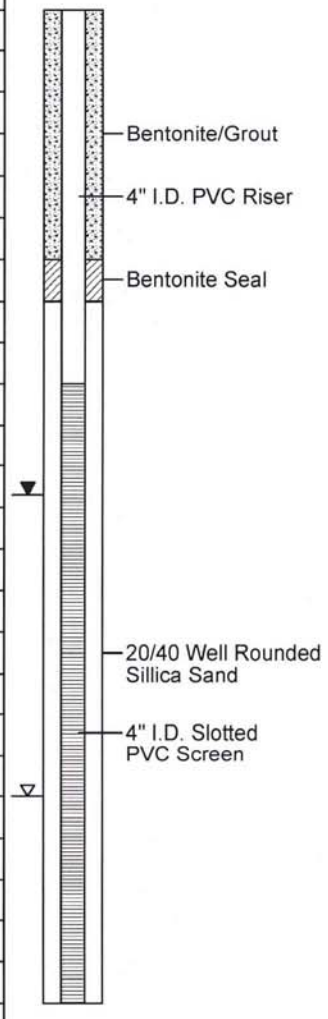
Well Information:

Well Type:	Type II
Well Purpose:	Monitoring
Well Construction Date:	4/9/14
Total Well Depth:	24'
Screened Interval:	9'-24'
Development Method:	Peristaltic Pump
Gallons Purged:	NM

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	USCS Symbol	Water Level	Graphic	DESCRIPTION	Sample No./Interval	Percent Recovery	Headspace Concentration (ppm)
0					Light brown Silty Clay, dry	1		<1
						2		<1
5						3		<1
					Light brown Clay, dry, slight hydrocarbon odor	4		<1
10		CL	▼			5		7
					..., moderate hydrocarbon odor	6		10
						7		23
15					Light brown Silty Clay, red diesel fuel observed	8		62
			▽			9		94*
20					Light brown Silty Clay, wet, slight hydrocarbon odor	10		42
						11		14*
25					..., miost, slight hydrocarbon odor			
					End of boring at 24 feet			

Well Schematic: MW-1



NOTES:
* Indicates sample submitted for laboratory analysis
NM - Not measured

02-18-2015 \\Ppmbr2\ppm_projects\Beau Box Investments\503124 - LA Retirement Systems\LSI 2014\Boring Logs\SB1 - TW1 - MW1.bor

PPM CONSULTANTS

Client:	Beau Box Property Management
Site:	Louisiana Retirement Systems Building Partnership
Location:	8401 United Plaza Blvd., Baton Rouge, LA
Agency Interest No.:	79956
PPM Project No.:	503124
Project Type:	LSI

LOG OF BORING SB-2/TW-2

Boring Information:

Date / Time / Logged By:	4/3/14 / 1030 / AB
Drilling Company:	Crescent Geotechnical Services
Drilling Method:	DPT
Total Boring Depth:	24'
Initial Saturation (ft)/Date:	19'
Static GW level (ft)/Date:	11.20'
Surface Elevation (ft):	NM
Sampling Interval:	2'-3'

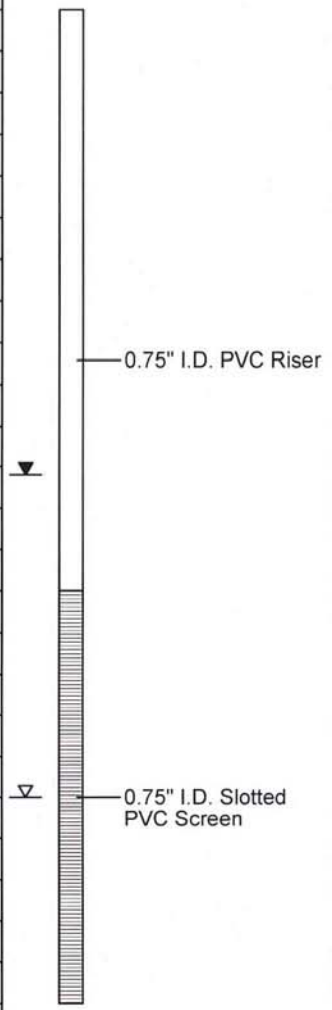
Well Information:

Well Type:	Type I
Well Purpose:	Sampling
Well Construction Date:	4/3/14
Total Well Depth:	24'
Screened Interval:	14'-24'
Development Method:	Peristaltic Pump
Gallons Purged:	1

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	USCS Symbol	Water Level	Graphic	DESCRIPTION	Sample No./Interval	Percent Recovery	Headspace Concentration (ppm)
0					Gray-brown Silty Clay, dry	1		<1
					Brown Silty Clay, dry	2		<1
5					Light brown Silty Clay, dry	3		<1
					Brown Silty Clay with brown Sand and gravel layer from 8 to 8.5 feet, dry	4		<1
					Brown Clay, dry	5		2
10		CL	▼		..., sight hydrocarbon odor	6		<1
					Light brown-gray Silty Clay with brown Sand and gravel layer from 13 to 13.5 feet, dry, strong hydrocarbon odor	7		9
15					Light brown-gray Silty Clay, dry, strong hydrocarbon odor	8		6
			▽		..., sheen on soil	9		28*
20					Light brown Silty Clay, wet, light sheen observed	10		16
		ML			Light brown Clayey Silty, moist, slight hydrocarbon odor	11		6*
25					End of boring at 24 feet			

Well Schematic: TW-2



NOTES:
* Indicates sample submitted for laboratory analysis
NM - Not measured

02-18-2015 \\Ppmbr2\ppm_projects\Beau Box Investments\503124 - LA Retirement Systems\LSI 2014\Boring Logs\SB2 - TW2.bor

PPM CONSULTANTS

Client:	Beau Box Property Management
Site:	Louisiana Retirement Systems Building Partnership
Location:	8401 United Plaza Blvd., Baton Rouge, LA
Agency Interest No.:	79956
PPM Project No.:	503124
Project Type:	LSI

LOG OF BORING SB-3/TW-3

Boring Information:

Date / Time / Logged By:	4/3/14 / 1235 / AB
Drilling Company:	Crescent Geotechnical Services
Drilling Method:	DPT
Total Boring Depth:	24'
Initial Saturation (ft)/Date:	19'
Static GW level (ft)/Date:	11.22'
Surface Elevation (ft):	NM
Sampling Interval:	2'-3'

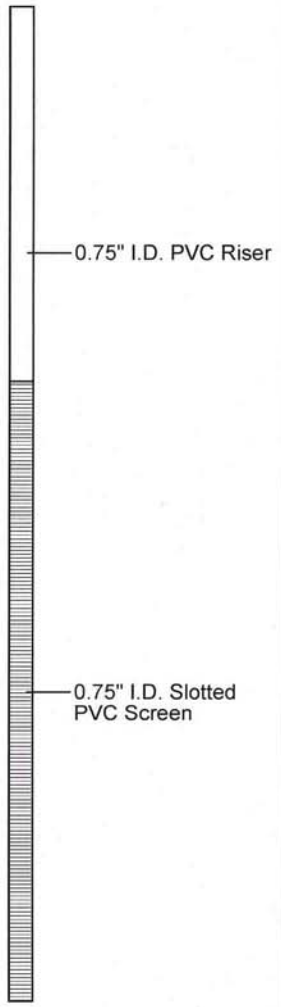
Well Information:

Well Type:	Type I
Well Purpose:	Sampling
Well Construction Date:	4/3/14
Total Well Depth:	24'
Screened Interval:	9'-24'
Development Method:	Peristaltic Pump
Gallons Purged:	1

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	USCS Symbol	Water Level	Graphic	DESCRIPTION	Sample No./Interval	Percent Recovery	Headspace Concentration (ppm)
0		CL	▼		Light brown Clay, dry	1		<1
					Brown-gray Silty Clay with brown Sand and gravel layer from 3 to 3.5 feet, dry	2		<1
5					Brown-gray Silty Clay to brown Clay, dry	3		<1
					Brown Clay with brown Sand and gravel layer from 7 to 7.5 feet, dry	4		<1
10					Brown Clay, dry, slight hydrocarbon odor	5		1
						6		1
					Light brown Silty Clay with orange streaks, dry, moderate hydrocarbon odor	7		6*
15					No recovery	8		NA
		CL	▽		Light brown Silty Clay with orange streaks, wet, slight hydrocarbon odor	9		3
20						10		3
		ML			Light brown Clayey Silt with orange streaks, moist, slight hydrocarbon odor	11		1*
25					End of boring at 24 feet			

Well Schematic: TW-3



NOTES:
* Indicates sample submitted for laboratory analysis
NM - Not measured
NA - Not applicable

02-18-2015 \\Ppmbr2\ppm_projects\Beau Box Investments\503124 - LA Retirement Systems\LSI 2014\Boring Logs\SB3 - TW3.bor

PPM CONSULTANTS

Client:	Beau Box Property Management
Site:	Louisiana Retirement Systems Building Partnership
Location:	8401 United Plaza Blvd., Baton Rouge, LA
Agency Interest No.:	79956
PPM Project No.:	503124
Project Type:	LSI

LOG OF BORING SB-4/TW-4

Boring Information:

Date / Time / Logged By:	4/3/14 / 1430 / AB
Drilling Company:	Crescent Geotechnical Services
Drilling Method:	DPT
Total Boring Depth:	29'
Initial Saturation (ft)/Date:	NA
Static GW level (ft)/Date:	15.75'
Surface Elevation (ft):	NM
Sampling Interval:	2'-3'

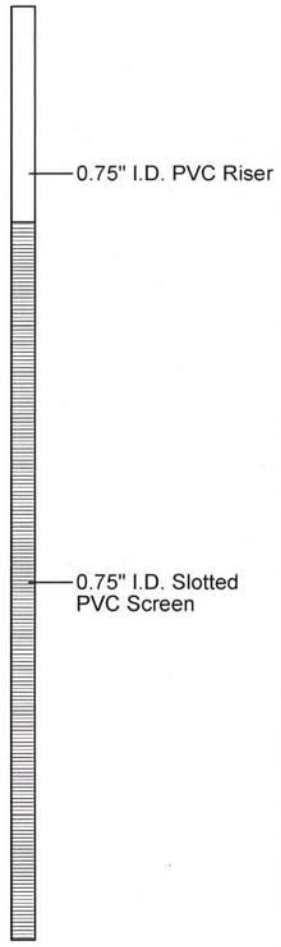
Well Information:

Well Type:	Type I
Well Purpose:	Sampling
Well Construction Date:	4/3/14
Total Well Depth:	26'
Screened Interval:	6'-26'
Development Method:	Peristaltic Pump
Gallons Purged:	1

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	USCS Symbol	Water Level	Graphic	DESCRIPTION	Sample No./Interval	Percent Recovery	Headspace Concentration (ppm)
0					Brown Clay, dry	1		<1
					Brown Silty Clay, dry	2		<1
5						3		<1
					Brown Clay with brown Sand and gravel layer from 8 to 8.5 feet, dry	4		<1
10					Brown Clay, dry	5		<1
						6		<1
					..., slight hydrocarbon odor	7		1
15		CL	▼		Light brown Slity Clay, dry, slight hydrocarbon odor	8		1
						9		1*
20						10		1
					Light brown Clay, dry	11		<1
25					Light brown Silty Clay, dry	12		1
					Light brown Clay, dry	13		<1*
30					End of boring at 29 feet			

Well Schematic: TW-4



NOTES:
* Indicates sample submitted for laboratory analysis
NM - Not measured
NA - Not applicable

PPM CONSULTANTS

Client:	Beau Box Property Management
Site:	Louisiana Retirement Systems Building Partnership
Location:	8401 United Plaza Blvd., Baton Rouge, LA
Agency Interest No.:	79956
PPM Project No.:	503124
Project Type:	LSI

LOG OF BORING SB-5/TW-5

Boring Information:

Date / Time / Logged By:	4/3/14 / 1635 / AB
Drilling Company:	Crescent Geotechnical Services
Drilling Method:	DPT
Total Boring Depth:	20'
Initial Saturation (ft)/Date:	12'
Static GW level (ft)/Date:	8.25'
Surface Elevation (ft):	NM
Sampling Interval:	2'-3'

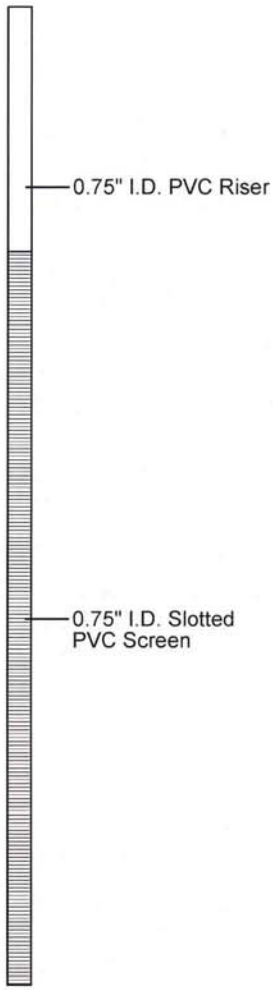
Well Information:

Well Type:	Type I
Well Purpose:	Sampling
Well Construction Date:	4/3/14
Total Well Depth:	20'
Screened Interval:	5'-20'
Development Method:	Peristaltic Pump
Gallons Purged:	1

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	USCS Symbol	Water Level	Graphic	DESCRIPTION	Sample No./Interval	Percent Recovery	Headspace Concentration (ppm)
0		SP			Brown Sand with gray Clay, dry	1		1
		SP/CL			Gray Sand, dry	2		<1
5					Brown Silty Clay, dry			
					Brown Silty Clay, dry	3		<1
		CL	▼		Brown Clay, dry	4		<1
10						5		<1
			▽		Brown Sand with gravel, wet	6		<1*
		SP				7		<1
15						8		<1
		CL			Brown Silty Clay, wet	9		1*
20					End of boring at 20 feet			

Well Schematic: TW-5



NOTES:
* Indicates sample submitted for laboratory analysis
NM - Not measured

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PPM CONSULTANTS

Client:	Beau Box Property Management
Site:	Louisiana Retirement Systems Building Partnership
Location:	8401 United Plaza Blvd., Baton Rouge, LA
Agency Interest No.:	79956
PPM Project No.:	503124
Project Type:	LSI

LOG OF BORING SB-6/TW-6

Boring Information:

Date / Time / Logged By:	4/9/14 / 0940 / AB
Drilling Company:	QRI
Drilling Method:	DPT
Total Boring Depth:	30'
Initial Saturation (ft)/Date:	NA
Static GW level (ft)/Date:	24.89'
Surface Elevation (ft):	NM
Sampling Interval:	2'-3'

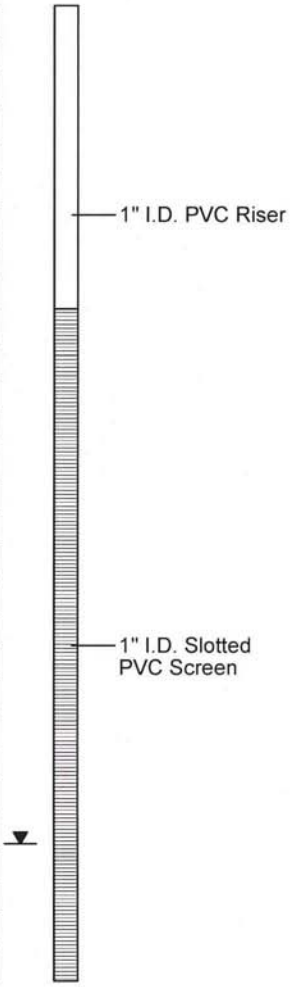
Well Information:

Well Type:	Type I
Well Purpose:	Sampling
Well Construction Date:	4/9/14
Total Well Depth:	29'
Screened Interval:	9'-29'
Development Method:	Peristaltic Pump
Gallons Purged:	1

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	USCS Symbol	Water Level	Graphic	DESCRIPTION	Sample No./Interval	Percent Recovery	Headspace Concentration (ppm)
0		CL	▼		Brown Silty Clay, dry	1		<1
						2		2
5						3		2
					..., with red streaks	4		3
10					Brown Clay with red streaks, dry, slight hydrocarbon odor	5		7
						6		296*
					Brown-gray Silty Clay, dry, hydrocarbon odor, sheen observed on soil	7		274
15						8		177
					..., moist			
					Brown-gray Silty Clay, dry, moderate hydrocarbon odor	9		54
20						10		22
					Brown-gray Clay, dry, slight hydrocarbon odor			
					Brown-gray Clay, dry	11		6
25						12		45
		ML			Brown-gray Clayey Silt, moist	13		13*
30					End of boring at 30 feet			

Well Schematic: TW-6



NOTES:
* Indicates sample submitted for laboratory analysis
NM - Not measured
NA - Not applicable

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PPM CONSULTANTS

Client:	Beau Box Property Management
Site:	Louisiana Retirement Systems Building Partnership
Location:	8401 United Plaza Blvd., Baton Rouge, LA
Agency Interest No.:	79956
PPM Project No.:	503124
Project Type:	LSI

LOG OF BORING SB-7/TW-7

Boring Information:

Date / Time / Logged By:	4/9/14 / 1330 / AB
Drilling Company:	QRI
Drilling Method:	DPT
Total Boring Depth:	30'
Initial Saturation (ft)/Date:	NA
Static GW level (ft)/Date:	13.95'
Surface Elevation (ft):	NM
Sampling Interval:	2'-3'

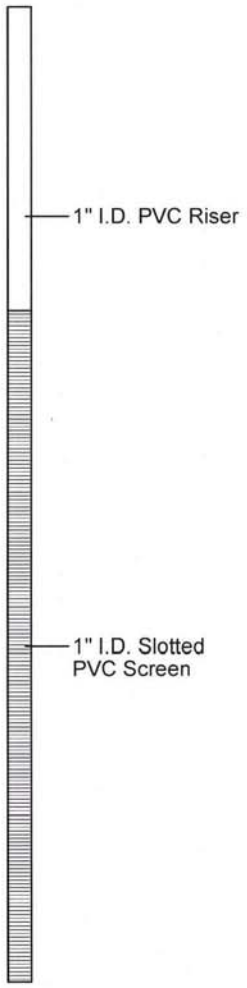
Well Information:

Well Type:	Type I
Well Purpose:	Sampling
Well Construction Date:	4/9/14
Total Well Depth:	29'
Screened Interval:	9'-29'
Development Method:	Peristaltic Pump
Gallons Purged:	1

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	USCS Symbol	Water Level	Graphic	DESCRIPTION	Sample No./Interval	Percent Recovery	Headspace Concentration (ppm)
0					Brown Silty Clay, dry	1		2
					Brown Clay, dry	2		11
5					Brown-gray Silty Clay, dry	3		20
					Brown-gray Clay with red streaks, dry	4		35
10					Brown Clay with red streaks, dry, moderate hydrocarbon odor	5		254
						6		566*
		CL	▼		Brown-gray Silty Clay, strong hydrocarbon odor, sheen observed on soil	7		527
15					Brown-gray Silty Clay, dry, slight hydrocarbon odor	8		56
						9		19
20					Brown-gray Clay, dry, slight htdrocarbon odor	10		8
					Brown-gray Clay, dry	11		6
25					Brown Silty Clay, moist	12		17
		ML			Brown-gray Clayey Silt, moist	13		5*
30					End of boring at 30 feet			

Well Schematic: TW-7



NOTES:
* Indicates sample submitted for laboratory analysis
NM - Not measured
NA - Not applicable

02-18-2015 \\Ppmbr2\ppm_projects\Beau Box Investments\503124 - LA Retirement Systems\LSI 2014\Boring Logs\SB7 - TW7.bor