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# REPORTS

DATE:

11/18/2004

~~IR0006~~

IR454

**SITE INVESTIGATION REPORT**  
**BP PIPELINES (NORTH AMERICA), INC.**  
**DENTON GATHERING SYSTEM**  
**SECTION 11, T15S R37E**  
**LOVINGTON, LEA COUNTY, NEW MEXICO**  
**DELTA PROJECT NO. F003-003**

**Prepared for:**

**Atlantic Richfield**  
**(A BP Affiliated Company)**  
**501 Westlake Park Blvd.**  
**Houston, Texas**  
**Attn: Mr. Mike Whelan**

**Prepared by:**

**Delta Environmental Consultants, Inc.**  
**2833 Trinity Square, Suite 149**  
**Carrollton, Texas 75006**  
**972-416-7171**

**November 18, 2004**

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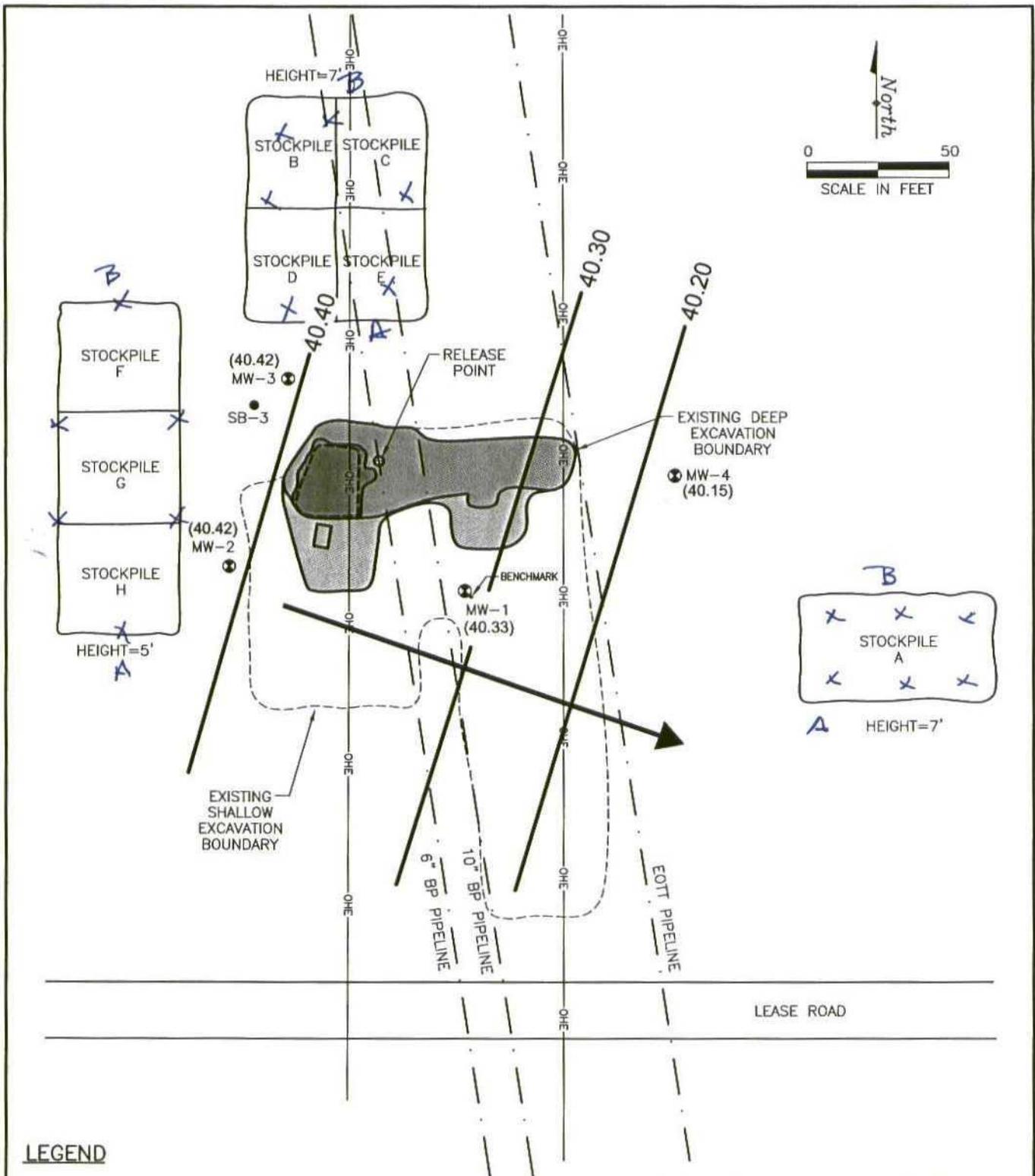
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Appendix A: Boring Logs  
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Appendix C Laboratory Analytical Reports



**LEGEND**

- ⊙ MONITOR WELL LOCATIONS
- SOIL BORING LOCATION
- OHE— OVERHEAD POWER LINE
- (40.33) GROUNDWATER ELEVATION (FT.)
- 40.20 GROUNDWATER CONTOUR LINE
- ➔ GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATION MEASUREMENTS COLLECTED ON 6/10/04

**FIGURE 3**  
**GROUNDWATER ELEVATION AND**  
**FLOW DIRECTION MAP**  
**BP PIPELINES (NORTH AMERICA)**  
**DENTON GATHERING**  
**LOVINGTON, NEW MEXICO**

PROJECT NO. F003-003	PREPARED BY BS	DRAWN BY DD
DATE 11/10/04	REVIEWED BY	FILE NAME F003-003







Solving environment-related business problems worldwide

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Carrollton, Texas 75006 USA  
972.416.7171 800.477.7411  
Fax 972.416.7175

November 19, 2004

Mr. Jack Ford  
New Mexico Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

Subject: **Site Status and Project Summary**  
BP Pipelines, NA  
Denton Gathering System Release  
Section 11 – Township 15S – Range 37E  
Lea County, New Mexico

1) Pit Samples?  
2) % of soil > approved concentrations  
42 mil 3) thickness of liner?  
A) Is there a remedial file No. ? IR454

IR454

Dear Mr. Ford:

On behalf of Atlantic Richfield (AR, a BP affiliated company), Delta Environmental Consultants, Inc. has prepared this status update for your review. A chronology of critical events is presented below for your information.

March 7, 2003 – A crude oil leak was discovered on the Denton Gathering system on property owned by Mr. Darr Angell. Initial excavation activities removed visibly affected soil and the line was repaired. Figure 1 shows the site location on the USGS topographic map for the area.

April 1, 2003 – The line was taken out of service with no plans to resume use of the line.

April 8, 2003 – Site meeting with New Mexico OCD, BNC, Delta, and Mr. Darr Angell to discuss cleanup alternatives.

April 28 through August 20, 2003 – Several episodes of over-excavation and confirmation sampling were conducted. Final samples indicate all crude oil affected soil above applicable cleanup standards have been removed, except for historical impact on the east side of the excavation next to EOTT pipeline. Excavation limits, sample locations and analytical data are shown on Figure 2.

Link Energy IR234?

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0  
September 30, 2003 – **Soil Assessment Report and Remedial Work Plan** (BNC) submitted to OCD for review.

February 25, 2004 – Delta submitted a **Workplan for Monitor Well Installation** for OCD review.

April 13, 2004 – Mr. Larry Johnson of OCD approves monitor well workplan.

June 2-4, 2004 – Monitor wells installed.

June 10, 2004 – Monitor wells surveyed, bailed and sampled

August 30, 2004 – **Site Investigation Report** submitted to OCD (Revised November 18, 2004).

### **Excavation Assessment Summary**

As indicated in the ***Soil Assessment Report and Remedial Workplan*** submitted on September 30, 2003, the site-specific cleanup targets are 10 mg/kg benzene, 50 mg/kg total BTEX, and 100 mg/kg TPH. During the course of soil excavation activities, the excavation was deepened to 22' below grade, approximately 5,000 cubic yards of affected soil were removed, and 28 confirmation samples were collected. The samples collected from the limits of the excavation (21) indicate that all hydrocarbon affected soil above site-specific target levels have been removed (see Figure 2).

Based on the results presented in the ***Soil Assessment Report and Remedial Workplan***, and reviewed here, we believe the horizontal and vertical extent of hydrocarbon impact in soil has been defined, all affected soil has been removed, and no additional soil assessment or response actions are warranted.

### **Ground Water Assessment Summary**

In accordance with the OCD approved ***Workplan for Monitor Well Installation***, four ground water monitor wells were installed in and around the excavation to evaluate the potential for ground water impact from the release. MW-1 was installed in the excavation area as near the release point as possible in the estimated downgradient direction. Monitor wells 2 and 4 were installed in estimated cross gradient positions, and MW-3 was installed in a presumed upgradient position.

Monitor Well Soil Sampling - Hollow-stem auger drilling methods were used to install monitor wells 1, 2, and 4, and soils were sampled continuously using a 5-ft split spoon. Lithology was logged continuously in each borehole. Soil samples were collected at ten foot intervals (9-10 ft bgs, 19-20 ft bgs, etc.), at the soil/groundwater interface or at depths where hydrocarbon impact was visually observed. Soil samples collected were split, with one portion being placed in a sealed plastic bag for field screening using an organic vapor meter (OVM) and the second portion retained in an appropriate glass container then placed in an ice-filled cooler. The soil sample collected from above the soil/groundwater interface with the highest OVM reading and the sample collected at the soil/groundwater interface were submitted for laboratory analysis. If no OVM readings were observed in soil samples, the sample collected at the soil/groundwater interface was submitted for laboratory analysis.

The necessity of using air rotary methods to install well MW-3 precluded the collection of soil samples. However, soil cuttings were monitored continuously by a Delta geologist for olfactory or visual evidence of hydrocarbon impact. None were observed. Samples were analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA Method 8021B. Monitor well soil sample results are summarized in Table 1.

Monitor Well Installation and Ground Water Sampling – Ground water was encountered in the borings from 59 to 61 feet below grade during drilling. Two-inch diameter PVC monitor wells were installed in the borings with 15' of well screen and blank riser pipe to surface. The wells were completed with a sand filter pack and bentonite seal then finished with a concrete plug at the surface. The monitor wells were then developed by surging and bailing. Top-of-casing measurements were collected relative to an arbitrary benchmark and the monitor wells were gauged. The resulting ground water elevation data is presented in Table 2 with a Ground Water Elevation and Flow Direction Map as Figure 3.

The four monitor wells were purged and sampled approximately one week later. The ground water samples were submitted for laboratory analysis of BTEX by EPA Method 8021B. Analytical results indicate that benzene, toluene and ethylbenzene were below laboratory method detection limits (<0.001 mg/L) in all wells. Total xylenes were below laboratory detection limits for all wells except MW-1. The total xylene concentration in MW-1 was 0.00191 mg/L. Ground water analytical data is summarized in Table 3.

### **Soil Stockpile Characterization**

Approximately 5,000 cubic yards of soil were removed during site excavation activities. The soil is stockpiled around the excavation in three areas. Eight soil samples collected in 2003 indicate the TPH concentrations in the stockpiles ranged from 38.2 mg/kg to 411 mg/kg. The stockpiles were re-sampled on October 1, 2004. Analytical results indicate the TPH concentrations range from 207 mg/kg to 6,766 mg/kg and total BTEX

concentrations range from <0.050 (6 samples) to 1.8 mg/kg. Stockpile sample analytical results are summarized in Table 4 and the laboratory report from October 2004 is included as an attachment.

**Summary and Closure Strategy**

Based on the data collected during the excavation sampling, monitor well installation and soil stockpile sampling, Delta presents the following summary.

- All soil affected with hydrocarbon concentrations above 100 mg/kg TPH, 10 mg/kg benzene and 50 mg/kg total BTEX have been removed and stockpiled on site.
- The residual hydrocarbon impact in the stockpiled soil is generally lower mobility, heavy hydrocarbons with no remaining benzene, toluene or ethylbenzene.
- The residual hydrocarbons in the stockpiled soil are unlikely to leach to ground water at concentrations above NM WQCC target concentrations.
- Monitor well soil samples confirm that the release of hydrocarbons was confined to the previously excavated area.
- Ground water flow direction is apparently to the east and southeast.
- Monitor well water sample data indicates that ground water has not been affected by petroleum hydrocarbons at concentrations greater than the site-specific cleanup standards.

Given the data summarized above and in previous reports, and conversations with both yourself and Larry Johnson Delta proposes to complete the site work and close the case by;

1. Placing a polyethylene liner in the bottom of the excavation to reduce infiltration, then backfilling the most highly affected soil up to 2 feet below grade.
2. Placing a second polyethylene liner at 2 feet below grade to prevent ponding of rainfall in the excavation, then completing backfilling with the remaining soil as cover.
3. The excavation will be "crowned" to allow for subsequent settling of the backfilled soil.
4. The monitor wells will be plugged and abandoned.
5. Finally, a Site Closure Report will be prepared documenting site closure activities for your review and concurrence.

We appreciate your interest in this project. If you have any questions please do not hesitate to give me a call at 972-416-7171.

Sincerely,

**DELTA ENVIRONMENTAL CONSULTANTS, INC.**



Mark T. Smith  
Project Manager

Attachments:

- Tables 1 - 4
- Figures 1 - 3
- October 2004 Stockpile Sample Analytical Report – Pace Analytical Report for Project #2039808
- Soil Assessment Report and Remedial Workplan, September 30, 2003 (BNC)
- Site Investigation Report, November 18, 2004 (Delta)

cc: Larry Johnson – NM OCD Hobbs  
Mike Whelan – AR – Houston  
Jim Lucari – BP Legal (w/o reports)

**TABLE 1**  
**Soil Analytical Data**  
**BP Pipelines NA, Inc.**  
**Denton Gathering Site**  
**Lea County, New Mexico**

Soil Boring / Monitor Well	Date Sampled	Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	m,p-xylenes (mg/kg)	o-xylenes (mg/kg)
Soil Target Levels (mg/kg)			10	---	---	---	---
MW-1	6/2/04	54-55	<0.025	<0.025	<0.025	<0.025	<0.025
MW-1	6/2/04	59-60	<0.025	<0.025	<0.025	<0.025	<0.025
MW-2	6/4/04	60-61	<0.025	<0.025	<0.025	<0.025	<0.025
MW-4	6/2/04	59-60	<0.025	<0.025	<0.025	<0.025	<0.025

Notes:

mg/kg = milligrams per kilogram

Samples analyzed by EPA Method 8021B

\*Detection limit for all BTEX constituents and samples was 0.025 mg/kg

**Table 2**  
**Ground Water Elevation Data**  
**BP Pipelines NA, Inc.**  
**Denton Gathering Site**  
**Lea County, New Mexico**

Monitor Well	Date Gauged	Top of Casing	Depth to Product	Depth to Water	Product Thickness	Elevation of Water
MW-1	6/10/04	96.28	NP	55.95	0	40.33
MW-2	6/10/04	100.10	NP	59.68	0	40.42
MW-3	6/10/04	100.15	NP	59.73	0	40.42
MW-4	6/10/04	99.82	NP	59.67	0	40.15

Notes:

Monitor wells were surveyed based on a relative Benchmark of 100.00 feet on June 10, 2004.

NP = free product not present

**TABLE 3**  
**Ground Water Analytical Data**  
**BP Pipelines NA, Inc.**  
**Denton Gathering Site**  
**Lea County, New Mexico**

Monitor Well	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	m,p-xylenes (mg/L)	o-xylenes (mg/L)
NM WQCC Standard	(mg/L)	0.01	0.75	0.75	0.62 (total xylenes)	
MW-1	6/10/04	<0.001	<0.001	<0.001	0.00191	<0.001
MW-2	6/10/04	<0.001	<0.001	<0.001	<0.001	<0.001
MW-3	6/10/04	<0.001	<0.001	<0.001	<0.001	<0.001
MW-4	6/10/04	<0.001	<0.001	<0.001	<0.001	<0.001
Trip Blank	---	<0.001	<0.001	<0.001	<0.001	<0.001

Notes:

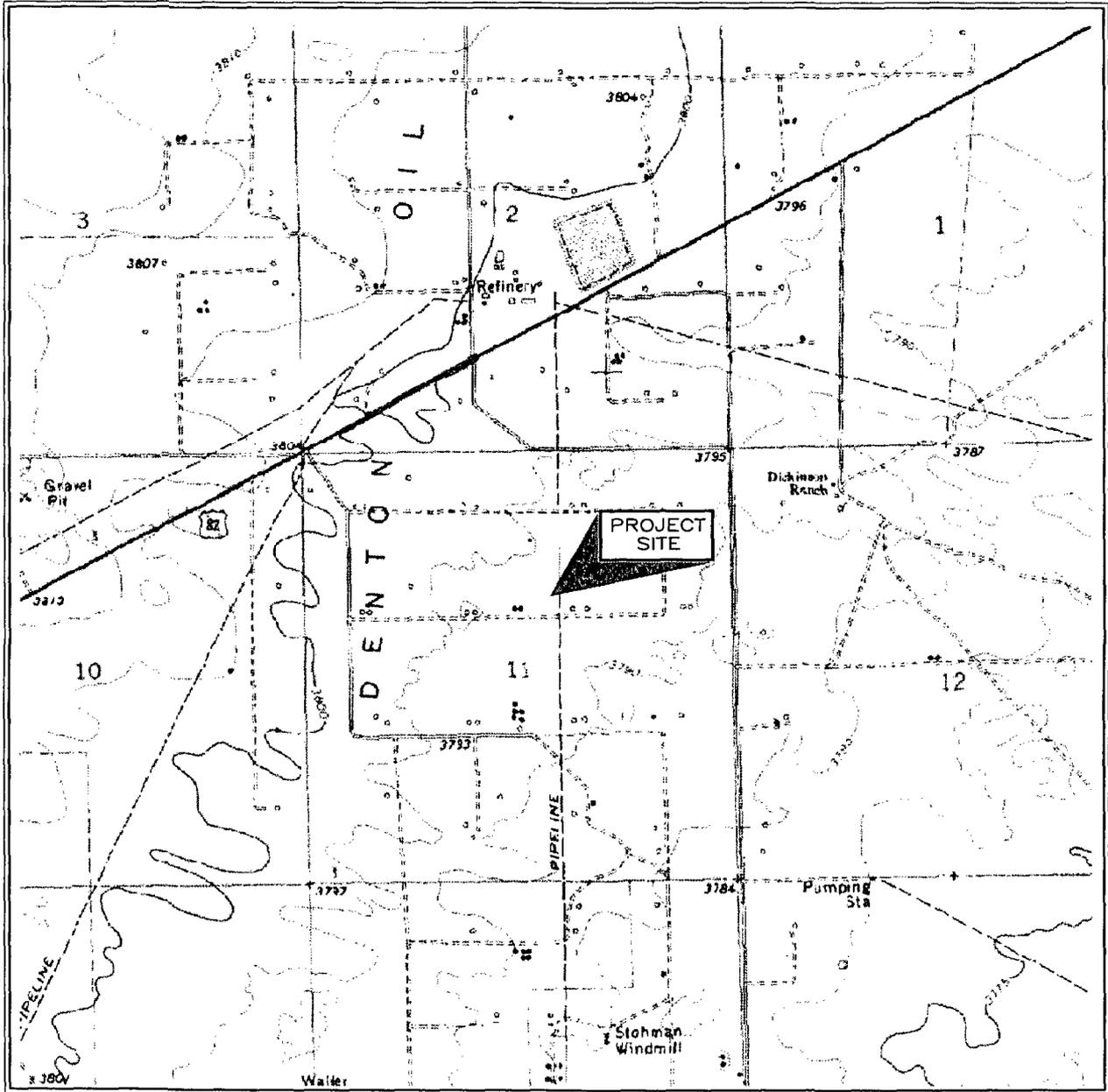
NM WQCC = New Mexico Water Quality Control Commission  
mg/L = milligrams per Liter  
Samples analyzed by EPA Method 8021B  
Detection limit for all samples and constituents was 0.001 mg/L



PRAIRIEVIEW QUADRANGLE  
TEXAS

LAT=32° 2' 3.8"N  
LONG=103° 10' 10"W

PHOTOREVISED 1970



SCALE 1:24000



(Miles)



(Feet)

CONTOUR INTERVAL 5 FEET



NORTH

1014 SLR 10/16/03



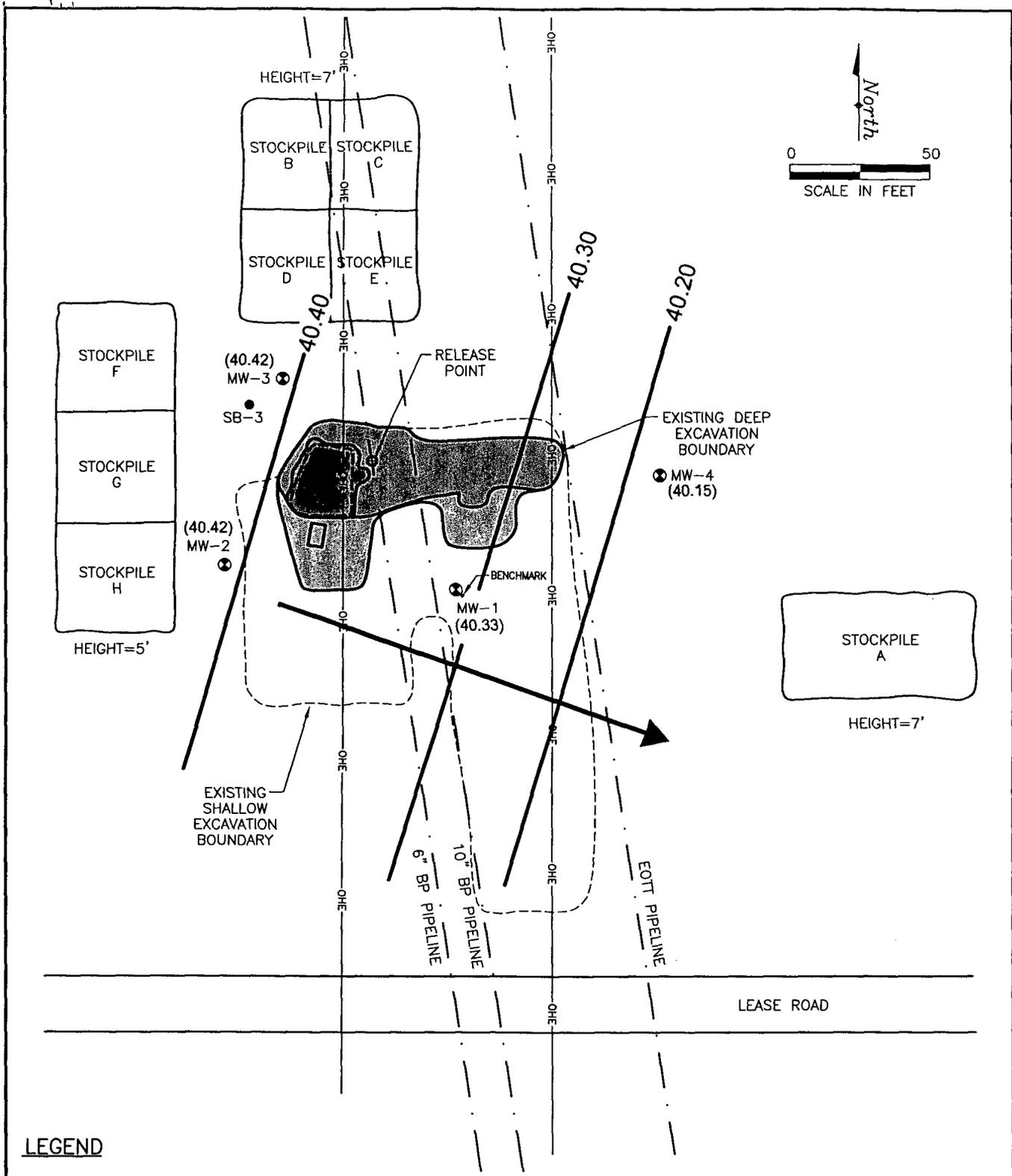
SITE LOCATION MAP

BP PIPELINES (NORTH AMERICA)  
DENTON GATHERING  
LOVINGTON, NEW MEXICO

JOB No.  
1014-2

FIGURE  
1





**LEGEND**

- ⊙ MONITOR WELL LOCATIONS
- SOIL BORING LOCATION
- OHE— OVERHEAD POWER LINE
- (40.33) GROUNDWATER ELEVATION (FT.)
- 40.20 GROUNDWATER CONTOUR LINE
- ➔ GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATION MEASUREMENTS COLLECTED ON 6/10/04

**FIGURE 3**  
**GROUNDWATER ELEVATION AND**  
**FLOW DIRECTION MAP**  
**BP PIPELINES (NORTH AMERICA)**  
**DENTON GATHERING**  
**LOVINGTON, NEW MEXICO**

PROJECT NO. F003-003	PREPARED BY BS	DRAWN BY DD
DATE 11/10/04	REVIEWED BY	FILE NAME F003-003



Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555



Report of Laboratory Analysis  
Project Number: 2039808





## Sample Cross Reference Report

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.459.0333  
Fax: 504.459.0555

Client: Delta Environmental Consulting

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample ID	Lab ID	Matrix	Collection Date/Time		Received Date/Time	
STOCKILE A	20302628	Soil	10/01/2004	11:30	10/05/2004	10:45
STOCKILE B	20302629	Soil	10/01/2004	11:50	10/05/2004	10:45
STOCKILE C	20302630	Soil	10/01/2004	11:45	10/05/2004	10:45
STOCKILE D	20302632	Soil	10/01/2004	12:00	10/05/2004	10:45
STOCKILE E	20302633	Soil	10/01/2004	12:15	10/05/2004	10:45
STOCKILE F	20302635	Soil	10/01/2004	12:30	10/05/2004	10:45
STOCKILE G	20302636	Soil	10/01/2004	12:20	10/05/2004	10:45
STOCKILE H	20302637	Soil	10/01/2004	12:35	10/05/2004	10:45

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWRW - E-10266  
LELAP (NELAP WW/HZ) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)

10/19/2004 18:14:18



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: STOCKILE A

Site: None

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample Qu:

Lab ID: 20302628

Matrix: Soil

% Moisture: Not Corrected

Description: None

Prep Level: Soil

Batch: 50489

Method: SW 8015B TPH Diesel & Oil Range Organics

Units: mg/kg

Target List: TPHLOW

Collected: 10/01/04

Received: 10/05/04

Prep Factor: 1

Leached: n/a

Prepared: 10/15/04

Analyzed: 10/18/04 16:04 DGS

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Diesel Range Organics (C10-C28)	1	1080		10.0	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWIRW - E-10266  
LELAP (NELAP WW/H2) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: STOCKILE A

Site: None

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample Qu:

Lab ID: 20302628

Matrix: Soil

% Moisture: Not Corrected

Description: None

Prep Level: Soil

Batch: 50349

Method: SW 8015B TPH Gasoline Range Organics (C6-C10)

Units: ug/kg

Target List: TPHGPTMED

Collected: 10/01/04

Received: 10/05/04

Prep Factor: 1

Leached: n/a

Prepared: 10/12/04

Analyzed: 10/14/04 23:53 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Gasoline Range Organics (C6-C10)	1	9440		2500	
1 compound(s) reported						

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
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Kansas Dept. of Health & Environment/ELWRTW - E-10266  
LELAP (NELAP WWTW) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0335  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: STOCKILE A

Site: None

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample Qu:

Lab ID: 20302628

Matrix: Soil

% Moisture: Not Corrected

Description: None

Prep Level: Soil

Batch: 50348

Method: SW 8021 BTEX

Units: ug/kg

Target List: BTEXMED

Collected: 10/01/04

Received: 10/05/04

Prep Factor: 1

Leached: n/a

Prepared: 10/12/04

Analyzed: 10/14/04 23:52 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
71-43-2	Benzene	1	ND		25.0	
100-41-4	Ethylbenzene	1	ND		25.0	
108-88-3	Toluene	1	ND		25.0	
1330-20-7	m,p-Xylene	1	ND		50.0	
95-47-6	o-Xylene	1	ND		25.0	

5 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
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LELAP (NELAP WWHZ) - 02006  
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Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Sahit Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting  
 Site: None  
 Client ID: STOCKILE B  
 Project: GLN/DENTON GATHERING F003-003 Project No.: 2039808 Sample Qu:  
 Lab ID: 20302629 Matrix: Soil % Moisture: Not Corrected  
 Description: None Prep Level: Soil Batch: 50489  
 Method: SW 8015B TPH Diesel & Oil Range Organics Units: mg/kg Target List: TPHLOW  
 Collected: 10/01/04 Received: 10/05/04  
 Prep Factor: 1 Leached: n/a Prepared: 10/15/04 Analyzed: 10/19/04 10:53 DGS

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Diesel Range Organics (C10-C28)	10	6610	D1	100.	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
 DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
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 EQB - Certified Puerto Rico Chemist  
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 Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting  
 Client ID: STOCKILE B Site: None  
 Project: GLN/DENTON GATHERING F003-003 Project No.: 2039808 Sample Qu:  
 Lab ID: 20302629 Matrix: Soil % Moisture: Not Corrected  
 Description: None Prep Level: Soil Batch: 50349  
 Method: SW 8015B TPH Gasoline Range Organics (C6-C10) Units: ug/kg Target List: TPHGPTMED  
 Collected: 10/01/04 Received: 10/05/04  
 Prep Factor: 1 Leached: n/a Prepared: 10/12/04 Analyzed: 10/15/04 02:48 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Gasoline Range Organics (C6-C10)	1	156000		2500	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
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 EQB - Certified Puerto Rico Chemist  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
 Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

<b>Client ID:</b> <u>STOCKILE B</u>	<b>Client:</b> <u>Delta Environmental Consulting</u>	<b>Site:</b> <u>None</u>
<b>Project:</b> <u>GLN/DENTON GATHERING F003-003</u>	<b>Project No.:</b> <u>2039808</u>	<b>Sample Qu:</b>
<b>Lab ID:</b> <u>20302629</u>	<b>Matrix:</b> <u>Soil</u>	<b>% Moisture:</b> <u>Not Corrected</u>
<b>Description:</b> <u>None</u>	<b>Prep Level:</b> <u>Soil</u>	<b>Batch:</b> <u>50348</u>
<b>Method:</b> <u>SW 8021 BTEX</u>	<b>Units:</b> <u>ug/kg</u>	<b>Target List:</b> <u>BTEXMED</u>
<b>Prep Factor:</b> <u>1</u>	<b>Collected:</b> <u>10/01/04</u>	<b>Received:</b> <u>10/05/04</u>
<b>Leached:</b> <u>n/a</u>	<b>Prepared:</b> <u>10/12/04</u>	<b>Analyzed:</b> <u>10/15/04 02:47 CCW</u>

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
71-43-2	Benzene	1	ND		25.0	
100-41-4	Ethylbenzene	1	ND		25.0	
108-88-3	Toluene	1	ND		25.0	
1330-20-7	m,p-Xylene	1	ND		50.0	
95-47-6	o-Xylene	1	1800		25.0	

5 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWIFW - E-10266  
LELAP (NELAP WW/H2) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting  
 Client ID: STOCKILE C Site: None  
 Project: GLN/DENTON GATHERING F003-003 Project No.: 2039808 Sample Qu:  
 Lab ID: 20302630 Matrix: Soil % Moisture: Not Corrected  
 Description: None Prep Level: Soil Batch: 50489  
 Method: SW 8015B TPH Diesel & Oil Range Organics Units: mg/kg Target List: TPHLOW  
 Collected: 10/01/04 Received: 10/05/04  
 Prep Factor: 1 Leached: n/a Prepared: 10/15/04 Analyzed: 10/18/04 17:46 DGS

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Diesel Range Organics (C10-C28)	1	1670		10.0	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
 DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
 Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
 Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
 Florida Dept. of Health/Hazardous Waste - E87595  
 Kansas Dept. of Health & Environment/ELWHW - E-10266  
 LELAP (NELAP WW/HZ) - 02006  
 EQB - Certified Puerto Rico Chemist  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
 Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverband Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: STOCKILE C

Site: None

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample Qu:

Lab ID: 20302630

Matrix: Soil

% Moisture: Not Corrected

Description: None

Prep Level: Soil

Batch: 50349

Method: SW 8015B TPH Gasoline Range Organics (C6-C10)

Units: ug/kg

Target List: TPHGPTMED

Collected: 10/01/04

Received: 10/05/04

Prep Factor: 1

Leached: n/a

Prepared: 10/12/04

Analyzed: 10/15/04 03:10 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Gasoline Range Organics (C6-C10)	1	6160		2500	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWIW - E-10266  
LELAP (NELAP WW/HZ) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting  
 Client ID: STOCKILE C Site: None  
 Project: GLN/DENTON GATHERING F003-003 Project No.: 2039808 Sample Qu:  
 Lab ID: 20302630 Matrix: Soil % Moisture: Not Corrected  
 Description: None Prep Level: Soil Batch: 50348  
 Method: SW 8021 BTEX Units: ug/kg Target List: BTEXMED  
 Collected: 10/01/04 Received: 10/05/04  
 Prep Factor: 1 Leached: n/a Prepared: 10/12/04 Analyzed: 10/15/04 03:09 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
71-43-2	Benzene	1	ND		25.0	
100-41-4	Ethylbenzene	1	ND		25.0	
108-88-3	Toluene	1	ND		25.0	
1330-20-7	m,p-Xylene	1	ND		50.0	
95-47-6	o-Xylene	1	ND		25.0	

5 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
 DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
 Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
 Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
 Florida Dept. of Health/Hazardous Waste - E87595  
 Kansas Dept. of Health & Environment/ELWHW - E-10266  
 LELAP (NELAP WWHZ) - 02006  
 EQB - Certified Puerto Rico Chemist  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
 Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: STOCKILE D

Site: None

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample Qu:

Lab ID: 20302632

Matrix: Soil

% Moisture: Not Corrected

Description: None

Prep Level: Soil

Batch: 50489

Method: SW 8015B TPH Diesel & Oil Range Organics

Units: mg/kg

Target List: TPHLOW

Collected: 10/01/04

Received: 10/05/04

Prep Factor: 1

Leached: n/a

Prepared: 10/15/04

Analyzed: 10/19/04 11:18 DGS

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Diesel Range Organics (C10-C28)	10	4510	D1	100.	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
LELAP (NELAP WW/H2) - 02066  
EOB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rosa, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: STOCKILE D

Site: None

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample Qu:

Lab ID: 20302632

Matrix: Soil

% Moisture: Not Corrected

Description: None

Prep Level: Soil

Batch: 50349

Method: SW 8015B TPH Gasoline Range Organics (C6-C10)

Units: ug/kg

Target List: TPHGPTMED

Collected: 10/01/04

Received: 10/05/04

Prep Factor: 1

Leached: n/a

Prepared: 10/12/04

Analyzed: 10/15/04 03:31 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Gasoline Range Organics (C6-C10)	1	68100		2500	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - EB7595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
LELAP (NELAP WW/HZ) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: STOCKILE D

Site: None

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample Qu:

Lab ID: 20302632

Matrix: Soil

% Moisture: Not Corrected

Description: None

Prep Level: Soil

Batch: 50348

Method: SW 8021 BTEX

Units: ug/kg

Target List: BTEXMED

Collected: 10/01/04

Received: 10/05/04

Prep Factor: 1

Leached: n/a

Prepared: 10/12/04

Analyzed: 10/15/04 03:31 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
71-43-2	Benzene	1	ND		25.0	
100-41-4	Ethylbenzene	1	ND		25.0	
108-88-3	Toluene	1	ND		25.0	
1330-20-7	m,p-Xylene	1	ND		50.0	
95-47-6	o-Xylene	1	688.	Ph	25.0	

5 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - EB7595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
LELAP (NELAP WW/HZ) - 02006  
EOB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Slatit Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: <u>STOCKILE E</u>	Site: <u>None</u>	
Project: <u>GLN/DENTON GATHERING F003-003</u>	Project No.: <u>2039808</u>	Sample Qu:
Lab ID: <u>20302633</u>	Matrix: <u>Soil</u>	% Moisture: <u>Not Corrected</u>
Description: <u>None</u>	Prep Level: <u>Soil</u>	Batch: <u>50489</u>
Method: <u>SW 8015B TPH Diesel &amp; Oil Range Organics</u>	Units: <u>mg/kg</u>	Target List: <u>TPHLOW</u>
Prep Factor: <u>1</u>	Collected: <u>10/01/04</u>	Received: <u>10/05/04</u>
Leached: <u>n/a</u>	Prepared: <u>10/15/04</u>	Analyzed: <u>10/18/04 18:37 DGS</u>

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Diesel Range Organics (C10-C28)	1	2220		10.0	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - EB7595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
LELAP (NELAP WW/HZ) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Slatt Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: STOCKILE E

Site: None

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample Qu:

Lab ID: 20302633

Matrix: Soil

% Moisture: Not Corrected

Description: None

Prep Level: Soil

Batch: 50349

Method: SW 8015B TPH Gasoline Range Organics (C6-C10)

Units: ug/kg

Target List: TPHGPTMED

Collected: 10/01/04

Received: 10/05/04

Prep Factor: 1

Leached: n/a

Prepared: 10/12/04

Analyzed: 10/15/04 03:53 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Gasoline Range Organics (C6-C10)	1	11500		2500	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWRW - E-10266  
LELAP (NELAP WW/H2) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Slatit Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: STOCKILE E

Site: None

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample Qu:

Lab ID: 20302633

Matrix: Soil

% Moisture: Not Corrected

Description: None

Prep Level: Soil

Batch: 50348

Method: SW 8021 BTEX

Units: ug/kg

Target List: BTEXMED

Collected: 10/01/04

Received: 10/05/04

Prep Factor: 1

Leached: n/a

Prepared: 10/12/04

Analyzed: 10/15/04 03:53 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
71-43-2	Benzene	1	ND		25.0	
100-41-4	Ethylbenzene	1	ND		25.0	
108-88-3	Toluene	1	ND		25.0	
1330-20-7	m,p-Xylene	1	ND		50.0	
95-47-6	o-Xylene	1	ND		25.0	

5 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/VELWHW - E-10266  
LELAP (NELAP WW/H2) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting  
 Site: None  
 Client ID: STOCKILE F  
 Project: GLN/DENTON GATHERING F003-003 Project No.: 2039808 Sample Qu:  
 Lab ID: 20302635 Matrix: Soil % Moisture: Not Corrected  
 Description: None Prep Level: Soil Batch: 50489  
 Method: SW 8015B TPH Diesel & Oil Range Organics Units: mg/kg Target List: TPHLOW  
 Collected: 10/01/04 Received: 10/05/04  
 Prep Factor: 1 Leached: n/a Prepared: 10/15/04 Analyzed: 10/18/04 19:03 DGS

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Diesel Range Organics (C10-C28)	1	369.		10.0	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
 DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
 Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
 Louisiana Dept. of Health and Hospitals (ELAP) Drinking Water LA 030013  
 Florida Dept. of Health/Hazardous Waste - EB7595  
 Kansas Dept. of Health & Environment/ELWHW - E-10266  
 LELAP (NELAP WW/H2) - 02006  
 EQB - Certified Puerto Rico Chemist  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
 Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting  
 Client ID: STOCKILE F Site: None  
 Project: GLN/DENTON GATHERING F003-003 Project No.: 2039808 Sample Qu:  
 Lab ID: 20302635 Matrix: Soil % Moisture: Not Corrected  
 Description: None Prep Level: Soil Batch: 50349  
 Method: SW 8015B TPH Gasoline Range Organics (C6-C10) Units: ug/kg Target List: TPHGPTMED  
 Collected: 10/01/04 Received: 10/05/04  
 Prep Factor: 1 Leached: n/a Prepared: 10/12/04 Analyzed: 10/15/04 04:15 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Gasoline Range Organics (C6-C10)	1	ND		2500	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
 DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
 Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
 Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
 Florida Dept. of Health/Hazardous Waste - E87595  
 Kansas Dept. of Health & Environment/ELWHW - E-10266  
 LELAP (NELAP WW/HZ) - 02006  
 EQB - Certified Puerto Rico Chemist  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
 Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

<b>Client ID:</b> <u>STOCKILE F</u>	<b>Client:</b> <u>Delta Environmental Consulting</u>
<b>Project:</b> <u>GLN/DENTON GATHERING F003-003</u>	<b>Site:</b> <u>None</u>
<b>Lab ID:</b> <u>20302635</u>	<b>Project No.:</b> <u>2039808</u> <b>Sample Qu:</b>
<b>Description:</b> <u>None</u>	<b>Matrix:</b> <u>Soil</u> <b>% Moisture:</b> <u>Not Corrected</u>
<b>Method:</b> <u>SW 8021 BTEX</u>	<b>Prep Level:</b> <u>Soil</u> <b>Batch:</b> <u>50348</u>
<b>Prep Factor:</b> <u>1</u>	<b>Units:</b> <u>ug/kg</u> <b>Target List:</b> <u>BTEXMED</u>
<b>Leached:</b> <u>n/a</u>	<b>Collected:</b> <u>10/01/04</u> <b>Received:</b> <u>10/05/04</u>
	<b>Prepared:</b> <u>10/12/04</u> <b>Analyzed:</b> <u>10/15/04</u> <u>04:14 CCW</u>

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
71-43-2	Benzene	1	ND		25.0	
100-41-4	Ethylbenzene	1	ND		25.0	
108-88-3	Toluene	1	ND		25.0	
1330-20-7	m,p-Xylene	1	ND		50.0	
95-47-6	o-Xylene	1	ND		25.0	

5 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
LELAP (NELAP WW/HZ) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: STOCKILE G

Site: None

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample Qu:

Lab ID: 20302636

Matrix: Soil

% Moisture: Not Corrected

Description: None

Prep Level: Soil

Batch: 50489

Method: SW 8015B TPH Diesel & Oil Range Organics

Units: mg/kg

Target List: TPHLOW

Collected: 10/01/04

Received: 10/05/04

Prep Factor: 1

Leached: n/a

Prepared: 10/15/04

Analyzed: 10/18/04

19:29 DGS

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Diesel Range Organics (C10-C28)	1	207.		10.0	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
LELAP (NELAP WW/HZ) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting  
 Client ID: STOCKILE G Site: None  
 Project: GLN/DENTON GATHERING F003-003 Project No.: 2039808 Sample Qu:  
 Lab ID: 20302636 Matrix: Soil % Moisture: Not Corrected  
 Description: None Prep Level: Soil Batch: 50349  
 Method: SW 8015B TPH Gasoline Range Organics (C6-C10) Units: ug/kg Target List: TPHGPTMED  
 Collected: 10/01/04 Received: 10/05/04  
 Prep Factor: 1 Leached: n/a Prepared: 10/12/04 Analyzed: 10/15/04 04:37 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Gasoline Range Organics (C6-C10)	1	ND		2500	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
 DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
 Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
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 Kansas Dept. of Health & Environment/ELWHW - E-10266  
 LELAP (NELAP WW/HZ) - 02006  
 EQB - Certified Puerto Rico Chemist  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
 Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverview Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: STOCKILE G

Site: None

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample Qu:

Lab ID: 20302636

Matrix: Soil

% Moisture: Not Corrected

Description: None

Prep Level: Soil

Batch: 50348

Method: SW 8021 BTEX

Units: ug/kg

Target List: BTEXMED

Collected: 10/01/04

Received: 10/05/04

Prep Factor: 1

Leached: n/a

Prepared: 10/12/04

Analyzed: 10/15/04 04:36 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
71-43-2	Benzene	1	ND		25.0	
100-41-4	Ethylbenzene	1	ND		25.0	
108-88-3	Toluene	1	ND		25.0	
1330-20-7	m,p-Xylene	1	ND		50.0	
95-47-6	o-Xylene	1	ND		25.0	

5 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWITW - E-10266  
LELAP (NELAP WW/HZ) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting  
 Client ID: STOCKILE H Site: None  
 Project: GLN/DENTON GATHERING F003-003 Project No.: 2039808 Sample Qu:  
 Lab ID: 20302637 Matrix: Soil % Moisture: Not Corrected  
 Description: None Prep Level: Soil Batch: 50489  
 Method: SW 8015B TPH Diesel & Oil Range Organics Units: mg/kg Target List: TPHLOW  
 Collected: 10/01/04 Received: 10/05/04  
 Prep Factor: 1 Leached: n/a Prepared: 10/15/04 Analyzed: 10/18/04 19:54 DGS

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Diesel Range Organics (C10-C28)	1	596.		10.0	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
 DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
 Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
 Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
 Florida Dept. of Health/Hazardous Waste - E87595  
 Kansas Dept. of Health & Environment/ELWHW - E-10266  
 LELAP (NELAP WW/HZ) - 02006  
 EQB - Certified Puerto Rico Chemist  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
 Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: STOCKILE H

Site: None

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample Qu:

Lab ID: 20302637

Matrix: Soil

% Moisture: Not Corrected

Description: None

Prep Level: Soil

Batch: 50349

Method: SW 8015B TPH Gasoline Range Organics (C6-C10)

Units: ug/kg

Target List: TPHGPTMED

Prep Factor: 1

Leached: n/a

Collected: 10/01/04

Received: 10/05/04

Prepared: 10/12/04

Analyzed: 10/15/04 04:58 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
	TPH - Gasoline Range Organics (C6-C10)	1	ND		2500	

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - EB7595  
Kansas Dept. of Health & Environment/ELWHRW - E-10266  
LELAP (NELAP WW/H2) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Rivorbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Client: Delta Environmental Consulting

Client ID: STOCKILE H

Site: None

Project: GLN/DENTON GATHERING F003-003

Project No.: 2039808

Sample Qu:

Lab ID: 20302637

Matrix: Soil

% Moisture: Not Corrected

Description: None

Prep Level: Soil

Batch: 50348

Method: SW 8021 BTEX

Units: ug/kg

Target List: BTEXMED

Collected: 10/01/04

Received: 10/05/04

Prep Factor: 1

Leached: n/a

Prepared: 10/12/04

Analyzed: 10/15/04 04:58 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
71-43-2	Benzene	1	ND		25.0	
100-41-4	Ethylbenzene	1	ND		25.0	
108-88-3	Toluene	1	ND		25.0	
1330-20-7	m,p-Xylene	1	ND		50.0	
95-47-6	o-Xylene	1	ND		25.0	

5 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWITW - E-10266  
LELAP (NELAP WW/12) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Quality Control

Pace Analytical Services, Inc.  
1000 Rivetbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Method: Med Soil GC Organics

Project: 2039808

Batch: 50349      LCS: 50349S1      10/14/2004 11:31:00 P

Units: ug/kg      MS: 50349MS      10/15/2004 2:04:00 AM

Parameter Name	LCS	LCS	LCSD	LCS	MS	MS	MSD (1)MS	DUP	QC Limits		Max	Qu
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	RPD	LCS	MS/MSD	RPD	
TPH - Gasoline Range Organics (C6-C	25000	133			25000	113	113	0	48 - 147	27 - 150	50	

\* denotes recovery outside of QC limits.  
MS spike concentrations are not corrected for moisture content of the spiked sample.  
(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.

10/19/2004 18:14:36

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP) Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWRW - E-10266  
LELAP (NELAP WW/HZ) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Method: Med Soil GC Organics

Project: 2039808

Batch: 50349

LCS: 50349S2

10/14/2004 1:32:00 PM

Units: ug/kg

MS:

Parameter Name	LCS	LCS	LCSD	LCS	MS	MS	MSD (1)	MS	DUP	QC Limits		Max	Qu
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	RPD	RPD	LCS	MS/MSD	RPD	
TPH - Gasoline Range Organics (C6-C	25000	133			25000					48 - 147	27 - 150	50	

\* denotes recovery outside of QC limits.

MS spike concentrations are not corrected for moisture content of the spiked sample.

(1) MS RPD is calculated via SW-846 rules; on the basis of spiked sample concentrations rather than spike recoveries.

10/19/2004 18:14:36

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
LELAP (NELAP WW/142) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Quality Control

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd, Suite F  
 Saint Rose, LA 70087  
 Phone: 504.469.0333  
 Fax: 504.469.0555

Method: Low Soil GC Organics

Project: 2039808

Batch: 50489

LCS: 50489S1

10/18/2004 3:38:00 PM

Units: mg/kg

MS: 50489MS

10/18/2004 4:29:00 PM

Parameter Name	LCS Spike	LCS %Rec	LCSD %Rec	LCS RPD	MS Spike	MS %Rec	MSD (1) %Rec	MS DUP RPD	QC Limits LCS	MS/MSD	Max RPD	Qu
TPH - Diesel Range Organics (C10-C2)		40	88			40	703 *	0	200 *	56 - 138	0 - 178	50 Q3

\* denotes recovery outside of QC limits.  
 MS spike concentrations are not corrected for moisture content of the spiked sample.  
 (1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.

10/19/2004 18:14:36

Laboratory Certifications:  
 Louisiana Dept. of Health and Hospitals (ELAP) Drinking Water LA 030013  
 Florida Dept. of Health/Hazardous Waste - E87595  
 Kansas Dept. of Health & Environment/ELWHW - E-10266  
 IELAP (NELAP WW/WI) - 02006  
 EQB - Certified Puerto Rico Chemist  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
 Foreign Soil Import (U.S. Territories)



# Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Method: Med Soil GC Volatile Organics

Project: 2039808

Batch: 50348

LCS: 50348S1 10/14/2004 11:08:00 P

Units: ug/kg

MS: 50348MS 10/15/2004 12:14:00 A

Parameter Name	LCS	LCS	LCS	LCS	MS	MS	MSD	(1)MS	DUP	QC Limits		Max	Qu
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	RPD	RPD	LCS	MS/MSD	RPD	
Benzene	1000	95			1000	104	104	0	0	70 - 128	51 - 134	50	
Ethylbenzene	1000	97			1000	127	133	4	4	81 - 131	50 - 153	50	
Toluene	1000	96			1000	109	112	3	3	80 - 132	57 - 139	50	
m,p-Xylene	2000	104			2000	109	109	0	0	88 - 139	61 - 148	50	
o-Xylene	1000	103			1000	133	129	3	3	88 - 134	50 - 164	50	

\* denotes recovery outside of QC limits.  
MS spike concentrations are not corrected for moisture content of the spiked sample.  
(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.

10/19/2004 18:14:36

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWRW - E-10266  
LELAP (NELAP WW/HZ) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Method: Med Soil GC Volatile Organics

Report: 2039808

Batch: 50348

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20302628	Sample	112	111						
20302629	Sample G1	223*	381*						
20302630	Sample	105	101						
20302632	Sample G1	171*	218*						
20302633	Sample	125	114						
20302635	Sample	81	85						
20302636	Sample	79	81						
20302637	Sample	83	82						
20302877	Sample G1	294*	416*						
20302878	Sample G1	200*	219*						
20302879	Sample G1	149*	154*						
20302880	Sample	100	111						
20302881	Sample	125	125						
20302882	Sample G1	139*	154*						
50348B1	Blank	89	89						
50348MS	Spike	116	118						
50348MSD	Spike Dup G1	155*	121						
50348S1	LCS	110	103						

QC limits:                    70-130        70-130

Sur 1: 4-Bromofluorobenzene (PID) (S)  
Sur 2: 4-Bromofluorobenzene (PID) confirmat

\* denotes surrogate recovery outside of QC limits.  
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.  
A Lab ID consisting of a batch number with a B suffix is a method blank.  
A Lab ID consisting of a batch number with a S suffix is an LCS.  
A Lab ID with a MS suffix is a matrix spike.  
A Lab ID with a MSD suffix is a matrix spike duplicate.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELW/WW - E-10266  
LELAP (NELAP WW/HZ) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Method: Med Soil GC Organics

Report: 2039808

Batch: 50349

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20302628	Sample G1		193*						
20302629	Sample G1		938*						
20302630	Sample G1		163*						
20302632	Sample G1		503*						
20302633	Sample G1		196*						
20302635	Sample		104						
20302636	Sample		106						
20302637	Sample		104						
20302877	Sample G1 D1		1071D						
20302878	Sample G1		365*						
20302879	Sample G1		246*						
20302880	Sample G1		144*						
20302881	Sample G1		195*						
20302882	Sample G1		251*						
20304903	Sample		87						
20304906	Sample		91						
20304907	Sample		92						
20304908	Sample		89						
50349B1	Blank		123						
50349B2	Blank		125						
50349MS	Spike G1		209*						
50349MSD	Spike Dup G1		205*						
50349S1	LCS		119						
50349S2	LCS		120						

QC limits: 70-130

Sur 2: 4-Bromofluorobenzene (FID) (S)

\* denotes surrogate recovery outside of QC limits.  
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.  
A Lab ID consisting of a batch number with a B suffix is a method blank.  
A Lab ID consisting of a batch number with a S suffix is an LCS.  
A Lab ID with a MS suffix is a matrix spike.  
A Lab ID with a MSD suffix is a matrix spike duplicate.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
LELAP (MELAP WW/HZ) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Method: Low Soil GC Organics

Report: 2039808

Batch: 50489

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20302628	Sample	100							
20302629	Sample D1	109							
20302630	Sample	111							
20302632	Sample D1	113							
20302633	Sample	97							
20302635	Sample	93							
20302636	Sample	91							
20302637	Sample	103							
20305009	Sample	99							
20306156	Sample	90							
20306157	Sample	102							
50489B1	Blank	92							
50489MS	Spike	112							
50489MSD	Spike Dup	107							
50489S1	LCS	82							

QC limits: 40-140

Sur 1: o-Terphenyl (S)

\* denotes surrogate recovery outside of QC limits.  
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.  
A Lab ID consisting of a batch number with a B suffix is a method blank.  
A Lab ID consisting of a batch number with a S suffix is an LCS.  
A Lab ID with a MS suffix is a matrix spike.  
A Lab ID with a MSD suffix is a matrix spike duplicate.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWRW - E-10266  
LELAP (NELAP WW/H2) 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70067

Phone: 504.469.0333  
Fax: 504.469.0555

Lab ID: 50348B1

Description: Med Soil Method Blan

Project No.: 2039808

Method: Med Soil GC Volatile Organics

Batch: 50348

Units: ug/kg

Prep Factor: 1

Leached:

Prepared: 12-Oct-04

Analyzed: 14-Oct-04 22:47

CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
71-43-2	Benzene	1	ND		25.0
100-41-4	Ethylbenzene	1	ND		25.0
108-88-3	Toluene	1	ND		25.0
1330-20-7	m,p-Xylene	1	ND		50.0
95-47-6	o-Xylene	1	ND		25.0

5 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor.  
RL denotes sample Reporting Limit.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

10/19/2004 18:14:37

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELW/WW - E-10266  
LELAP (NELAP WW/HZ) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Lab ID: 50349B1

Description: Med Soil Method Blan

Project No.: 2039808

Method: Med Soil GC Organics

Batch: 50349

Units: ug/kg

Prep Factor: 1

Leached:

Prepared: 12-Oct-04

Analyzed: 14-Oct-04 22:47

CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
	TPH - Gasoline Range Organics (C6-C	1	ND		2500

1 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor.  
RL denotes sample Reporting Limit.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

10/19/2004 18:14:37

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
I ELAP (NELAP WW/HZ) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



# Report of Method Blank

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 Saint Rose, LA 70087  
 Phone: 504.469.0333  
 Fax: 504.469.0555

Lab ID: 50349B2

Description: Med Soil Method Blan

Project No.: 2039808

Method: Med Soil GC Organics

Batch: 50349

Units: ug/kg

Prep Factor: 1

Leached:

Prepared: 13-Oct-04

Analyzed: 14-Oct-04 13:10

CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
	TPH - Gasoline Range Organics (C6-C	1	ND		2500

1 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
 DF denotes Dilution Factor.  
 RL denotes sample Reporting Limit.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

10/19/2004 18:14:38

Laboratory Certifications:  
 Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
 Florida Dept. of Health/Hazardous Waste - E87595  
 Kansas Dept. of Health & Environment/ELWHW - E-10266  
 LELAP (NELAP WW/HZ) - 02006  
 EQB - Certified Puerto Rico Chemist  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
 Foreign Soil Import (U.S. Territories)



# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Lab ID: 50489B1

Description: Low Soil Method Blan

Project No.: 2039808

Method: Low Soil GC Organics

Batch: 50489

Units: mg/kg

Prep Factor: 1

Leached:

Prepared: 15-Oct-04

Analyzed: 18-Oct-04 15:13

DGS

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
	TPH - Diesel Range Organics (C10-C2)	1	ND		10.0
	TPH - Oil Range Organics (>C28-C40)	1	ND		50.0

2 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor.  
RL denotes sample Reporting Limit.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

10/19/2004 18:14:38

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA 030013  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
LELAP (NELAP WW/12) - 02006  
EQB - Certified Puerto Rico Chemist  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



## Report Qualifiers

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

Project No.: 2039808

### Analyte Qualifiers

Qualifier	Qualifier Description
G1	Interferences are present which caused poor surrogate recovery.
Ph	The relative percent difference between the two detectors is greater than 40%, indicating interference on one or more detectors. The higher of the two values is reported.

### General Qualifiers

Qualifier	Qualifier Description
D1	The analysis was performed at a dilution due to the high analyte concentration.

### QC Qualifiers

Qualifier	Qualifier Description
Q3	The matrix spike recoveries are poor due to the presence of this analyte in the sample at a concentration greater than 4 times the spiked amount. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample.

10/19/2004 18:14:38

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