3R - 75

GENERAL CORRESPONDENCE

YEAR(S):

1999

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

September 20, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z-274-520-711

Mr. Ed Hasely
Burlington Resources
P.O. Box 4289
Farmington, New Mexico 87499-4289

RE: TAYLOR COM #2A
SAN JUAN COUNTY, NEW MEXICO

Dear Mr. Hasely:

The New Mexico Oil Conservation Division (OCD) has reviewed Burlington Resources' (BR) August 13, 1999 "TAYLOR COM#2, UNIT LETTER A, SECTION 17, TOWNSHIP 30N, RANGE 11W, NOTIFICATION OF GROUNDWATER ABOVE BENZENE STANDARD". This document contains BR's notification of discovery of ground water contamination found during the remediation of soil contamination at the Taylor Com #2A well site. The document also proposes to conduct no further investigations and to monitor ground water quality in the existing site monitor well.

Since ground water at the site is contaminated in excess of the New Mexico Water Quality Control Commission (WQCC) standards, the above referenced proposal to conduct no further ground water investigations is denied. The OCD requires that BR investigate the extent of and remediate ground water contamination pursuant to their previously approved ground water management plan.

If you have any questions, please call me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Denny Foust, OCD Aztec District Office

BURLINGTON RESOURCES
SAN JUAN DIVISION

August 13, 1999

Certified Mail: Z 186 732 850

Bill Olson
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

RE: Taylor Com. #2A
Unit Letter A, Section 17, Township 30N, Range 11W
Notification of Groundwater above Benzene Standard

Dear Mr. Olson:

As a follow-up to the E-mail dated July 30, 1999, this letter is Burlington Resources' (BR) notification of groundwater that exceeded the benzene standard at the subject location. All other BTEX constituents were below the standards, but benzene was over 10 uG/L. BR is also proposing a plan of action to address the groundwater concerns at the Taylor Com. #2A.

During a spill cleanup on the subject location, BR excavated into an apparent abandoned earthen pit. As the excavation of impacted soils continued, groundwater was encountered at approximately 9 feet below ground surface. Impacted soils continued to be excavated to the extent practical until the "core" of impacted soils had been removed (approximate depth of 12 ft.). The excavation was backfilled with clean fill. BR then installed a temporary groundwater monitoring well in the center of the former earthen pit on May 19, 1999. After developing the well and allowing it to stabilize for one week, the well was purged and sampled on May 27, 1999. The sample results are as follows:

	Lab Results (uG/L)	Standard (uG/L)
Benzene	64	10
Toluene	<0.5	750
Ethylbenzene	23	750
Total Xylenes	98	640

Included with this letter are the groundwater lab analysis, the drilling log, and the monitoring well installation record.

Plan of Action:

BR proposes to complete the existing temporary monitoring well as the permanent source well and proceed with quarterly sampling for BTEX constituents. Due to the shallow depth of the groundwater, the relatively low contaminant level, and apparent groundwater flow direction (toward the Animas River), we feel additional monitoring wells are not justified at this time. If the sampling shows the water is below standards for 4 consecutive quarters, BR proposes no additional investigation/remediation work at this site. The 2-inch PVC casing would be

removed to the extent practical from the monitoring well and the wellbore would be filled to surface with a bentonite/cement grout.

If after four quarters of sampling, the source monitoring well continues to test above standards, BR will initiate additional investigation work including possible downgradient wells and soil borings to identify the extent of the impact and potential additional sources.

Please provide written correspondence concerning our proposed plan of action. If you have questions or additional information is needed, please contact me at (505) 326-9841.

Sincerely,

Ed Hasely
Sr. Staff Environmental Representative

Attachments: Drilling Log/Wellbore Diagram
Analytical Results

cc: Denny Foust - NMOCD Aztec
Johnny Ellis (letter only)
Bruce Gantner (letter only)
Facility File
Correspondence

Drilling Log/Wellbore Diagram

RECORD OF SUBSURFACE EXPLORATION

Borehole # 1
Well # MW-1 (T)
Page 1 of 1

Philip Environmental Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name
Project Number 21073 Phase 1000.99
Project Location Taylor

Elevation
Borehole Location Taylor
GWL Depth 8'
Logged By P. Cheney
Drilled By K. Padilla
Date/Time Started 5/19 1113
Date/Time Completed 5/19

Well Logged By P. Cheney
Personnel On-Site Cheney, K. Padilla, D. Padilla
Contractors On-Site
Client Personnel On-Site Ed Hasely

Drilling Method 4 1/4" HSA
Air Monitoring Method PID

Depth (Feet)	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ	BH	S	Drilling Conditions & Blow Counts
0			Pit excavated and back filled to ≈ 12' (Ed Hasely). 1st sample at 5-7'						
5	5	18"	brown silty clay w/ black staining, soft, moderate plasticity			0.0		1.5	BC = 3 S/HS = 87.0
	7		wet at ≈ 9'						
10	10	24"	Dark gray to black, fine grained silty sand, poorly sorted, HC odor			1.1		1.4	BC = 2 S/HS = 2415.0
	12								
15	15	2"	coarse grained, well sorted sand			0.5		1.4	BC = 5 (4") S/HS: not enough sample to log and bag
	17								
20			TD = 15' set 10' of 2" screen from 15' to 5', silica sand to 3', bentonite to ground surface						
25									
30									
35									
40									

Comments: Materials: 1 silt trap, 1-10' screen 1-5' riser, 4 sacks silica sand

Geologist Signature [signature]

MONITORING WELL INSTALLATION RECORD

Phillip Environmental Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # 1
Well # MW-1
Page 1 of 1

Project Name
Project Number 21073 Phase 1000.99
Project Location Taylor

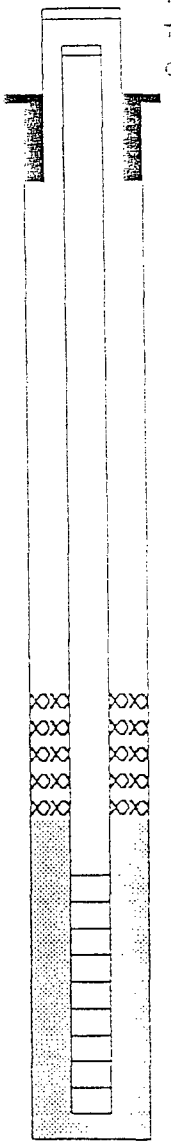
Elevation
Well Location Taylor
GWL Depth ~ 9'
Installed By R. Padilla

Date/Time Started 5/19 1113
Date/Time Completed 5/19

On-Site Geologist P. Cheney
Personnel On-Site Cheney, Padilla, D. Padilla
Contractors On-Site
Client Personnel On-Site Ed Hasely

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		N.A.
Bottom of Concrete		N.A
Top of Grout		N.A.
Bottom of Grout		N.A
Top of Well Riser		Ground Surface
Bottom of Well Riser		5'
Top of Well Screen		5'
Bottom of Well Screen		15'
Top of Peltonite Seal		Ground Surface
Bottom of Peltonite Seal		3'
Top of Gravel Pack		3'
Bottom of Gravel Pack		15'
Top of Natural Cave-In		N.A.
Bottom of Natural Cave-In		N.A
Top of Groundwater		9'
Total Depth of Borehole		15'



Top of Protective Casing
Top of Riser
Ground Surface

Top of Seal Ground Surface
Top of Gravel Pack 3'
Top of Screen 5'

Bottom of Screen 15'
Bottom of Borehole 15'

Comments: Materials: 1 silt trap 1-10' screen, 1-5' riser, 4 sacks silica sand, 1 sack bentonite

Geologist Signature Paul Cheney

Analytical Results - Groundwater

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **905106**
June 14, 1999

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name BURLINGTON DRILLING
Project Number 21057

Attention: PAUL CHENEY

On 5/28/99 Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 8021 was performed by Pinnacle Laboratories, Inc., Albuquerque, NM.

All other parameters were performed by Severn Trent (FL) Inc., Pensacola, FL.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: mt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 905106
PROJECT #	: 21057	DATE RECEIVED	: 5/28/99
PROJECT NAME	: BURLINGTON DRILLING	REPORT DATE	: 6/14/99

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	BR-TAYLOR MW1	AQUEOUS	5/27/99
02	BR-FOGELSON MW1	AQUEOUS	5/27/99

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 21057
PROJECT NAME : BURLINGTON DRILLING

PINNACLE I.D.: 905106

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	BR-TAYLOR MW1	AQUEOUS	5/27/99	NA	5/28/99	1
02	BR-FOGELSON MW1	AQUEOUS	5/27/99	NA	5/28/99	10

PARAMETER	DET. LIMIT	UNITS	BR-TAYLOR MW1	BR-FOGELSON MW1
BENZENE	0.5	**UG/L**	**64**	**5.0**
TOLUENE	0.5	UG/L	< 0.5	< 5.0
ETHYLBENZENE	0.5	**UG/L**	**23**	**210**
TOTAL XYLENES	0.5	**UG/L**	**98**	**420**
SURROGATE:				
TRIFLUOROTOLUENE (%)			85	95
SURROGATE LIMITS	(69 - 117)			

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 905106
BLANK I. D.	: 052899	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 5/28/99
PROJECT #	: 21057	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: BURLINGTON DRILLING		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
TRIFLUOROTOLEUEN (%)		100
SURROGATE LIMITS:	(69 - 117)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8021 MODIFIED		
MSMSD #	: 905111-01	PINNACLE I.D.	: 905106
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 21057	DATE ANALYZED	: 5/28/99
PROJECT NAME	: BURLINGTON DRILLING	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	10.0	10.1	101	10.5	105	4	(80 - 120)	20
TOLUENE	<0.5	10.0	10.5	105	10.5	105	0	(80 - 120)	20
ETHYLBENZENE	<0.5	10.0	10.8	108	10.8	108	0	(80 - 120)	20
TOTAL XYLENES	<0.5	30.0	32.2	107	32.0	107	1	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Committed To *Your* Success

Severn Trent Laboratories
11 East Olive Road
Pensacola FL 32514

Tel: (850) 474-1001
Fax: (850) 478-2671

SIGNATURE PAGE

Reviewed by: _____
STL Project Manager

Client: PINNACLE LABORATORIES
ALBUQUERQUE, NEW MEXICO

Project Name: PHIL
Project Number: 905106
Project Location: BURLINGTON DRILLING
Accession Number: 905635

Project Manager: KIMBERLY D. MCNEILL
Sampled By: N/S

SEVERN TRENT LABORATORIES, INC. – PENSACOLA, FLORIDA
STATE CERTIFICATIONS

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental)

State of California, Department of Health Services, Laboratory ID No. 2338 (Hazardous Waste and Wastewater)

State of Connecticut, Department of Health Services, Connecticut Lab Approval No. PH-0697 (Drinking Water, Hazardous Waste and Wastewater)

Delaware Health & Social Services, Division of Public Health, Laboratory ID No. FL094 (Drinking Water by Reciprocity with FL)

Florida DOH Laboratory ID No. 81142 (Drinking Water), Laboratory ID No. E81010 (Hazardous Waste and Wastewater)

Florida, Radioactive Materials License No. G0733-1

Foreign Soil Permit, Permit No. S-37599

Kansas Department of Health & Environment, Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Laboratory ID No. 90043 (Drinking Water)

State of Louisiana, DHH, Office of Public Health Division of Laboratories, Laboratory ID No. 98-25 (Drinking Water)

State of Maryland, DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

Commonwealth of Massachusetts, DEP, Laboratory ID No. M-FL094 (Hazardous Waste and Wastewater)

State of Michigan, Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES, Laboratory ID No. 250598-A (Wastewater)

State of New Jersey, Department of Environmental Protection & Energy, Laboratory ID No. 49006 (Wastewate and Hazardous Waster)

New York State, Department of Health, Laboratory ID No. 11503 (Wastewater and Solids/Hazardous Waste)

North Carolina Department of Environment, Health, & Natural Resources, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 (Hazardous Waste and Wastewater by Reciprocity with Florida)

State of Oklahoma, Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Commonwealth of Pennsylvania, Department of Environmental Resources, Laboratory ID No. 68-467 (Drinking Water)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater by Reciprocity with FL and Solids/Hazardous Waste by Reciprocity with CA)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Tennessee Division of Underground Storage Tanks Approved Laboratory

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

State of Washington, Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater)

West Virginia Division of Environmental Protection, Office of Water Resources, Laboratory ID No. 136 (Hazardous Waste and Wastewater by Reciprocity with FL)

American Industrial Hygiene Association (AIHA) Accredited Laboratory, Laboratory ID No. 9133

SEVERN TRENT LABORATORIES 11 East Olive Road Pensacola, Florida 32514 (850) 474-1001

Analysis Report

Analysis: Group of Single Wetchem

Accession:	905635
Client:	PINNACLE LABORATORIES
Project Number:	905106
Project Name:	PHIL
Project Location:	BURLINGTON DRILLING
Department:	WET CHEM

SEVERN TRENT LABORATORIES 11 East Olive Road Pensacola, Florida 32514 (850) 474-1001

"FINAL REPORT FORMAT - SINGLE"

Accession: 905635
Client: PINNACLE LABORATORIES
Project Number: 905106
Project Name: PHIL
Project Location: BURLINGTON DRILLING
Test: Group of Single Wetchem
Matrix: WATER
QC Level: I

Lab ID: 001 Sample Date/Time: 27-MAY-99 1015
Client Sample Id: 905106-01 Received Date: 29-MAY-99

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
CHLORIDE (4500-CL E)	MG/L	45	2		CKW22C	WH
NITRITE-NITRATE, NITROGEN (353.2)	MG/L	2.0	0.1		N3W36A	WH
SULFATE (375.4/4500E/9038)	MG/L	1000	200	+	SEW052	BE
TOTAL DISSOLVED SOLIDS (160.1)	MG/L	1800	5		TDW027	ED

Comments:

Taylor Com #2A

SEVERN TRENT LABORATORIES 11 East Olive Road Pensacola, Florida 32514 (850) 474-1001

"FINAL REPORT FORMAT - SINGLE"

Accession: 905635
Client: PINNACLE LABORATORIES
Project Number: 905106
Project Name: PHIL
Project Location: BURLINGTON DRILLING
Test: Group of Single Wetchem
Matrix: WATER
QC Level: I

Lab ID: 002
Client Sample Id: 905106-02

Sample Date/Time: 27-MAY-99 1215
Received Date: 29-MAY-99

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
CHLORIDE (4500-CL E)	MG/L	430	10	+	CKW22C	WH
NITRITE-NITRATE, NITROGEN (353.2)	MG/L	ND	0.1		N3W36A	WH
SULFATE (375.4/4500E/9038)	MG/L	9300	2000	+	SEW052	BE
TOTAL DISSOLVED SOLIDS (160.1)	MG/L	14000	5		TDW027	ED

Comments:

Fogelson 4-1

SEVERN TRENT LABORATORIES 11 East Olive Road Pensacola, Florida 32514 (850) 474-1001

"Method Report Summary"

Accession Number: 905635
Client: PINNACLE LABORATORIES
Project Number: 905106
Project Name: PHIL
Project Location: BURLINGTON DRILLING
Test: Group of Single Wetchem

Client Sample Id:	Parameter:	Unit:	Result:
905106-01	CHLORIDE (4500-CL E)	MG/L	45
	NITRITE-NITRATE, NITROGEN (353.2)	MG/L	2.0
	SULFATE (375.4/4500E/9038)	MG/L	1000
	TOTAL DISSOLVED SOLIDS (160.1)	MG/L	1800
905106-02	CHLORIDE (4500-CL E)	MG/L	430
	SULFATE (375.4/4500E/9038)	MG/L	9300
	TOTAL DISSOLVED SOLIDS (160.1)	MG/L	14000

SEVERN TRENT LABORATORIES 11 East Olive Road Pensacola, Florida 32514 (850) 474-1001

Analysis Report

Analysis: RCRA METALS - AXIAL

Accession:	905635
Client:	PINNACLE LABORATORIES
Project Number:	905106
Project Name:	PHIL
Project Location:	BURLINGTON DRILLING
Department:	METALS

SEVERN TRENT LABORATORIES 11 East Olive Road Pensacola, Florida 32514 (850) 474-1001

"FINAL REPORT FORMAT - SINGLE"

Accession: 905635
Client: PINNACLE LABORATORIES
Project Number: 905106
Project Name: PHIL
Project Location: BURLINGTON DRILLING
Test: RCRA METALS - AXIAL
Matrix: WATER
QC Level: I

Lab Id: 001 Sample Date/Time: 27-MAY-99 1015
Client Sample Id: 905106-01 Received Date: 29-MAY-99

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
SILVER (6010B)	MG/L	ND	0.005		AYW154	GSP
ARSENIC (6010B)	MG/L	ND	0.005		RYW154	GSP
BARIUM (6010B)	MG/L	0.38	0.01		BYW154	GSP
CADMIUM (6010B)	MG/L	ND	0.005		CYW154	GSP
CHROMIUM (6010B)	MG/L	0.008	0.005		HYW154	GSP
MERCURY (7470A)	MG/L	ND	0.0002		M7W047	JL
LEAD (6010B)	MG/L	0.042	0.005		PYW154	GSP
SELENIUM (6010B)	MG/L	ND	0.01		SYW154	GSP

Comments:

"FINAL REPORT FORMAT - SINGLE"

Accession: 905635
Client: PINNACLE LABORATORIES
Project Number: 905106
Project Name: PHIL
Project Location: BURLINGTON DRILLING
Test: RCRA METALS - AXIAL
Matrix: WATER
QC Level: I

Lab Id: 002 Sample Date/Time: 27-MAY-99 1215
Client Sample Id: 905106-02 Received Date: 29-MAY-99

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
SILVER (6010B)	MG/L	ND	0.005		AYW154	GSP
ARSENIC (6010B)	MG/L	0.006	0.005		RYW154	GSP
BARIUM (6010B)	MG/L	0.14	0.01		BYW154	GSP
CADMIUM (6010B)	MG/L	ND	0.005		CYW154	GSP
CHROMIUM (6010B)	MG/L	0.019	0.005		HYW154	GSP
MERCURY (7470A)	MG/L	ND	0.0002		M7W047	JL
LEAD (6010B)	MG/L	0.007	0.005		PYW154	GSP
SELENIUM (6010B)	MG/L	ND	0.01		SYW154	GSP

Comments:

"Method Report Summary"

Accession Number: 905635
Client: PINNACLE LABORATORIES
Project Number: 905106
Project Name: PHIL
Project Location: BURLINGTON DRILLING
Test: RCRA METALS - AXIAL

Client Sample Id:	Parameter:	Unit:	Result:
905106-01	BARIUM (6010B)	MG/L	0.38
	CHROMIUM (6010B)	MG/L	0.008
	LEAD (6010B)	MG/L	0.042
905106-02	ARSENIC (6010B)	MG/L	0.006
	BARIUM (6010B)	MG/L	0.14
	CHROMIUM (6010B)	MG/L	0.019
	LEAD (6010B)	MG/L	0.007

SEVERN TRENT LABORATORIES, [redacted] 11 East Olive Rd Pensac[redacted], FL 32514 (850) 474-1001

Data Qualifiers for Final Report

STL-Pensacola Inorganic/Organic and AFCEE Projects (under QAPP)

J4	(For positive results)	Temperature limits exceeded (≤2°C or ≥ 6°C)
J5	(TICs)	The reported value is quantitated as a TIC; therefore, it is estimated
J6	(For positive results)	LCS or Surrogate %R is > upper control limit (UCL) or < lower control limit (LCL)
J7	(For positive results)	The reported value is > the laboratory MDL and < lowest calibration standards; therefore, the quantitation is an estimation.
J (AFCEE description)	The analyte was positively identified, the quantitation is an estimation	
R1	(For nondetects)	Temperature limits exceeded (≤2°C or ≥ 6°C)
R2	Improper preservation, no preservative present in sample upon receipt	
R3	Improper preservation, incorrect preservative present in sample upon receipt	
R4	Holding time exceeded	
R5	Collection requirements not met, improper container used for sample	
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects	
R7	Internal standard area outside –50% to +100% of initial calibration midpoint standard.	
R8	Second source calibration verification exceeds acceptance criteria.	
R9	Improper preservation, sample not filtered in the field.	
R (AFCEE description)	The data are unusable due to deficiencies in the ability to analyze the sample and meet QC criteria	
F	< laboratory or AFCEE RL and > laboratory MDL	
F (AFCEE description)	The analyte was positively identified but the associated numerical value is below the AFCEE or lab RL	
U2	≤ Laboratory MDL (value for result will be the MDL, never below the MDL)	
U (AFCEE description)	The analyte was analyzed for but not detected. The associated numerical value is at or below the MDL	
B (AFCEE description)	The analyte was found in the associated blank, as well as in the sample	
@	Adjusted reporting limit due to sample matrix (dilution prior to digestion and/or analysis)	
+	Elevated reporting limit due to dilution into calibration range	
•	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)	
#	Elevated reporting limit due to insufficient sample size	
D	Diluted out	
M	A matrix effect was present (sample was analyzed twice to confirm or chromatogram had interfering peaks)	
S	Incorrect sample amount was submitted to the laboratory for analysis	
T	Second-column confirmation exceeded the SW-846 criteria of 40% RPD for this compound.	

ND = Not Detected at or above the STL-Pensacola reporting limit (RL)
IDL = Laboratory Instrument Detection Limit
RL = Reporting Limit (AFCEE RLs are listed in the AFCEE QAPP)
N/S = Not Submitted N/A = Not Applicable
MDL = Laboratory Method Detection Limit

Any time a sample arrives at the laboratory improperly preserved (at improper pH or temperature) or after holding time has expired or prepared or analyzed after holding time, client must be notified in writing (i.e. case narrative)

Florida Projects Inorganic/Organic
Refer to back side of this page

ICR Projects Inorganic/Organic

A1	Acceptable	R6	Rejected

Examples: ICR Flags
R6 = Laboratory extracted the sample but the refrigerator malfunctioned so the extract became warm and client was notified
R6 = Sample arrived in laboratory in good condition; however, the laboratory did not analyze it within EPA's established holding time limit.

CLP and CLP-like Projects: Refer to referenced CLP Statement of Work (SOW) for explanation of data qualifiers

SEVERN TRENT LABORATORIES 11 East Olive Road Pensacola, Florida 32514 (850) 474-1001

Quality Control Report

Analysis: Group of Single Wetchem

Accession:	905635
Client:	PINNACLE LABORATORIES
Project Number:	905106
Project Name:	PHIL
Project Location:	BURLINGTON DRILLING
Department:	WET CHEM

SEVERN TRENT LABORATORIES 11 East Olive Road Pensacola, Florida 32514 (850) 474-1001

"WetChem Quality Control Report"

Parameter:	CHLORIDE	NO2NO3	SULFATE	TDS
Batch Id:	CKW22C	N3W36A	SEW052	TDW027
Blank Result:	<2	<0.1	<5	<5
Anal. Method:	CL4500E	353.2	375.4	160.1
Prep. Method:	N/A	N/A	N/A	N/A
Analysis Date:	02-JUN-99	07-JUN-99	02-JUN-99	03-JUN-99
Prep. Date:	01-JUN-99	01-JUN-99	02-JUN-99	02-JUN-99
Sample Duplication				
Sample Dup:	905608-10	905611-1	905608-9	905635-1
Rept Limit:	<2	<0.1	<5	<5
Sample Result:	48.4	<0.1	19	1794
Dup Result:	48.4	<0.1	19	1856
Sample RPD:	0	N/C	0 G	3
Max RPD:	20	0.1	5	17
Dry Weight%	N/A	N/A	N/A	N/A
Matrix Spike				
Sample Spiked:	905608-10	905611-1	905608-9	N/A
Rept Limit:	<2	<0.1	<5	N/A
Sample Result:	48.4	<0.1	19	
Spiked Result:	73.4	0.97	38	
Spike Added:	25.0	1.00	20	
% Recovery:	100	97	95	
% Rec Limits:	79-132	71-123	61-138	
Dry Weight%	N/A	N/A	N/A	
ICV				
ICV Result:	50.2	1.94	20	
True Result:	50.0	2.00	20	
% Recovery:	100	97	100	
% Rec Limits:	90-110	90-110	90-110	
LCS				
LCS Result:				296
True Result:				293
% Recovery:				101
% Rec Limits:				73-125

"Quality Control Comments"

Batch Id:	Comments:
TDW027	906013-1,2,3,4,5,6,7,8,9,10 were added to batch on 03-Jun-99
TDW027	906043-1,2,3 were added to batch on 04-Jun-99

----- Common Footnotes WetChem -----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW STL REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
N/D = NOT DETECTED AT OR ABOVE THE STL-PENSACOLA REPORTING LIMIT (RL).
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X STL REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW STL REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
Q = THE ANALYTICAL (POST-DISTILLATION) SPIKE IS REPORTED DUE TO PERCENT RECOVERY BEING OUTSIDE ACCEPTANCE LIMITS ON THE MATRIX (PRE-DISTILLATION) SPIKE.
# = ELEVATED REPORTING LIMIT DUE TO INSUFFICIENT SAMPLE.
+ = ELEVATED REPORTING LIMIT DUE TO DILUTION INTO CALIBRATION RANGE.
* = ELEVATED REPORTING LIMIT DUE TO MATRIX INTERFERENCE (DILUTION PRIOR DIGESTION AND/OR ANALYSIS).
@ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX (DILUTION PRIOR TO DIGESTION AND/OR ANALYSIS).
P = ANALYTICAL (POST DIGESTION) SPIKE.
I = DUPLICATE INJECTION.
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
H = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X STL REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE STL REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
Z = THE SAMPLE RESULT FOR THE SPIKE IS BELOW THE REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE QC CALCULATIONS.
NH= SAMPLE AND / OR DUPLICATE RESULT IS BELOW 5 X STL REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE STL REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL". SAMPLE IS NON-HOMOGENEOUS.
(*) = REPORTING LIMITS RAISED DUE TO CLP METHOD NOT REQUIRING A CONCENTRATION STEP FOR CN.
(CA) = SEE CORRECTIVE ACTIONS FORM.
**= MATRIX INTERFERENCE
SW-846, 3rd Edition, latest EPA-approved edition.
EPA 600/4-79-020, Revised March 1983.
STANDARD METHODS, For the Examination of Water and Wastewater, latest EPA-approved edition.
NIOSH Manual of Analytical Methods, 4th Edition.
ANNUAL BOOK OF ASTM STANDARDS, VOLUMES 11.01 and 11.02, latest EPA-approved edition.
METHODS FOR THE DETERMINATION OF INORGANIC SUBSTANCES IN ENVIRONMENTAL SAMPLES, EPA600/R-93/100, AUGUST 1993
METHODS FOR SOIL ANALYSIS, PART 2, CHEMICAL AND MICROBILOGICAL PROPERTIES, 2ND EDITION.
STL-PN USES THE MOST CURRENT PROMULGATED METHODS FROM THE REFERENCES LISTED ABOVE.

1. COLIFORM. COLIFORM PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE LOGARITHM OF COLONIES PER 100 MLS OF SAMPLE ON DUPLICATE PLATES.
2. PH. PH PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS.
3. FLASHPOINT. FLASHPOINT PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION).
RPD LMTS = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.
COE = EPA/COE, EPA/CE-81-1, 1981, AMMONIA, TKN, NO3-NO2, T-PO4 AND PHENOL PREPARATION METHODS.
SAMPLES AND QC SAMPLES ARE NOT ADJUSTED FOR DRY WEIGHT UNLESS REQUESTED BY THE CLIENT.

DPH = DOLLY P. HWANG RB = REBECCA BROWN WH = WENDY HAGGARD
ED = ESTHER DANTIN CR = CYNTHIA ROBERTS AB = AMY BRADLEY
BE = BETTY EVERTON PLD = PAULA L. DOUGHTY
RH = RICKY HAGENDORFER LT = LISA TORRES

SEVERN TRENT LABORATORIES 11 East Olive Road Pensacola, Florida 32514 (850) 474-1001

Quality Control Report

Analysis: RCRA METALS - AXIAL

Accession:	905635
Client:	PINNACLE LABORATORIES
Project Number:	905106
Project Name:	PHIL
Project Location:	BURLINGTON DRILLING
Department:	METALS

SEVERN TRENT LABORATORIES 11 East Olive Road Pensacola, Florida 32514 (850) 474-1001

"Metals Quality Control Report"

Parameter:	SILVER	ARSENIC	BARIUM	CADMIUM	CHROMIUM	MERCURY
Batch Id:	AYW154	RYW154	BYW154	CYW154	HYW154	M7W047
Blank Result:	<0.005	<0.005	<0.01	<0.005	<0.005	<0.0002
Anal. Method:	6010B	6010B	6010B	6010B	6010B	7470A
Prep. Method:	3010A	3010A	3010A	3010A	3010A	7470A
Analysis Date:	08-JUN-99	08-JUN-99	08-JUN-99	08-JUN-99	08-JUN-99	09-JUN-99
Prep. Date:	07-JUN-99	07-JUN-99	07-JUN-99	07-JUN-99	07-JUN-99	09-JUN-99
Sample Duplication						
Sample Dup:	905635-2	905635-2	905635-2	905635-2	905635-2	905588-1
Rept Limit:	<0.005	<0.005	<0.01	<0.005	<0.005	<0.0002
Sample Result:	0.55	1.0	1.1	0.48	0.99	0.0050
Dup Result:	0.54	1.0	1.1	0.48	0.99	0.0048
Sample RPD:	2	0	0	0	0	4
Max RPD:	20	20	20	20	20	20
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
Matrix Spike						
Sample Spiked:	905635-2	905635-2	905635-2	905635-2	905635-2	905588-1
Rept Limit:	<0.005	<0.005	<0.01	<0.005	<0.005	<0.0002
Sample Result:	<0.005	0.006	0.14	<0.005	0.019	<0.0002
Spiked Result:	0.55	1.0	1.1	0.48	0.99	0.0050
Spike Added:	0.5	1.0	1.0	0.5	1.0	0.0050
% Recovery:	110	99	96	96	97	100
% Rec Limits:	75-125	75-125	75-125	75-125	75-125	75-125
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
ICV						
ICV Result:	0.49	1.0	1.0	0.50	1.0	0.0039
True Result:	0.5	1.0	1.0	0.5	1.0	0.0040
% Recovery:	98	100	100	100	100	98
% Rec Limits:	90-110	90-110	90-110	90-110	90-110	90-110
LCS						
LCS Result:	0.52	1.0	1.0	0.52	1.0	0.0051
True Result:	0.5	1.0	1.0	0.5	1.0	0.0050
% Recovery:	104	100	100	104	100	102
% Rec Limits:	80-120	80-120	80-120	80-120	80-120	85-115

"Metals Quality Control Report"

Parameter:	LEAD	SELENIUM
Batch Id:	PYW154	SYW154
Blank Result:	<0.005	<0.01
Anal. Method:	6010B	6010B
Prep. Method:	3010A	3010A
Analysis Date:	08-JUN-99	08-JUN-99
Prep. Date:	07-JUN-99	07-JUN-99
Sample Duplication		
Sample Dup:	905635-2	905635-2
Rept Limit:	<0.005	<0.01
Sample Result:	0.96	1.0
Dup Result:	0.97	1.0
Sample RPD:	1	0
Max RPD:	20	20
Dry Weight%	N/A	N/A
Matrix Spike		
Sample Spiked:	905635-2	905635-2
Rept Limit:	<0.005	<0.01
Sample Result:	0.007	<0.01
Spiked Result:	0.96	1.0
Spike Added:	1.0	1.0
% Recovery:	95	100
% Rec Limits:	75-125	75-125
Dry Weight%	N/A	N/A
ICV		
ICV Result:	0.98	0.99
True Result:	1.0	1.0
% Recovery:	98	99
% Rec Limits:	90-110	90-110
LCS		
LCS Result:	1.0	0.99
True Result:	1.0	1.0
% Recovery:	100	99
% Rec Limits:	80-120	80-120

--- Data Qualifiers for Metals QC Report ----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW THE REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
N/D = NOT DETECTED AT OR ABOVE THE STL-PENSACOLA REPORTING LIMIT (RL).
DISS. OR D = DISSOLVED
T & D = TOTAL AND DISSOLVED
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X THE REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW STL REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
Q = THE ANALYTICAL (POST-DIGESTION) SPIKE IS REPORTED DUE TO PERCENT RECOVERY BEING OUTSIDE ACCEPTANCE LIMITS ON THE MATRIX (PRE-DIGESTION) SPIKE.
# = ELEVATED REPORTING LIMIT DUE TO INSUFFICIENT SAMPLE.
+ = ELEVATED REPORTING LIMIT DUE TO DILUTION INTO CALIBRATION RANGE.
* = ELEVATED REPORTING LIMIT DUE TO MATRIX INTERFERENCE. (DILUTION PRIOR TO ANALYSIS)
@ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX. (DILUTION PRIOR TO DIGESTION)
P = ANALYTICAL (POST DIGESTION) SPIKE.
I = DUPLICATE INJECTION.
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
N/C* = NOT CALCULABLE; SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
H = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X STL REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE STL REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
Z = THE SAMPLE RESULT FOR THE SPIKE IS BELOW THE STL REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE QC CALCULATIONS.
NH= THE RELATIVE PERCENT DIFFERENCE (RPD) EXCEEDS THE STL CONTROL LIMIT AND IS "OUT OF CONTROL; DUE TO A NON-HOMOGENEOUS SAMPLE MATRIX.
J = (FLORIDA DEP 'J' FLAG) - MATRIX SPIKE AND POST SPIKE RECOVERY IS OUT OF THE ACCEPTABLE RANGE. SEE OUT OF CONTROL EVENTS FORM.
U = (FLORIDA DEP 'U' FLAG) - THE COMPOUND WAS ANALYZED FOR, BUT NOT DETECTED.
S = METHOD OF STANDARD ADDITIONS (MSA) WAS PERFORMED ON THIS SAMPLE.
M = A MATRIX EFFECT WAS PRESENT (SAMPLE WAS ANALYZED TWICE TO CONFIRM).
SCN = SEE CASE NARRATIVE.

FROM QUALITY CONTROL REPORT:
RPD= RELATIVE PERCENT DEVIATION.
REPT LIMIT= REPORTING LIMIT BASED ON METHOD DETECTION LIMIT STUDIES.

NOTE: ALL RESULTS REPORTED UNDER 'SAMPLE DUPLICATION' ARE THE MS/MSD.

NOTE: THE UNITS REPORTED ON THE QUALITY CONTROL REPORT ARE REPORTED ON AN AS RUN BASIS. (NOT ADJUSTED FOR DRY WEIGHT).

SW-846, 3rd Edition.
EPA 600/4-79-020, Revised March 1983.
NIOSH Manual of Analytical Methods, 4th Edition.
Standard Methods For the Examination of Water and Wastewater, 18th Edition, 1992.
Methods For the Determination of Metals in Environmental Samples - Supplement I, EPA 600/R-94-111, May 1994.

GSP = GARY ST PERE LT = LISA TORRES KN = KAREN NALL
CH = CHRIS HIGH JL = JANET LECLEAR MPE = MARTY EDWARDS

SEVERN TRENT LABORATORIES, [redacted]. 11 East Olive Rd Pensac[redacted], FL 32514 (850) 474-1001

Data Qualifiers for Final Report

STL-Pensacola Inorganic/Organic and AFCEE Projects (under QAPP)

J4	(For positive results)	Temperature limits exceeded (≤2°C or ≥ 6°C)
J5	(TICs)	The reported value is quantitated as a TIC; therefore, it is estimated
J6	(For positive results)	LCS or Surrogate %R is > upper control limit (UCL) or < lower control limit (LCL)
J7	(For positive results)	The reported value is > the laboratory MDL and < lowest calibration standards; therefore, the quantitation is an estimation.
J (AFCEE description)	The analyte was positively identified, the quantitation is an estimation	
R1	(For nondetects)	Temperature limits exceeded (≤2°C or ≥ 6°C)
R2	Improper preservation, no preservative present in sample upon receipt	
R3	Improper preservation, incorrect preservative present in sample upon receipt	
R4	Holding time exceeded	
R5	Collection requirements not met, improper container used for sample	
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects	
R7	Internal standard area outside –50% to +100% of initial calibration midpoint standard.	
R8	Second source calibration verification exceeds acceptance criteria.	
R9	Improper preservation, sample not filtered in the field.	
R (AFCEE description)	The data are unusable due to deficiencies in the ability to analyze the sample and meet QC criteria	
F	< laboratory or AFCEE RL and > laboratory MDL	
F (AFCEE description)	The analyte was positively identified but the associated numerical value is below the AFCEE or lab RL	
U2	< Laboratory MDL (value for result will be the MDL, never below the MDL)	
U (AFCEE description)	The analyte was analyzed for but not detected. The associated numerical value is at or below the MDL	
B (AFCEE description)	The analyte was found in the associated blank, as well as in the sample	
@	Adjusted reporting limit due to sample matrix (dilution prior to digestion and/or analysis)	
+	Elevated reporting limit due to dilution into calibration range	
•	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)	
#	Elevated reporting limit due to insufficient sample size	
D	Diluted out	
M	A matrix effect was present (sample was analyzed twice to confirm or chromatogram had interfering peaks)	
S	Incorrect sample amount was submitted to the laboratory for analysis	
T	Second-column confirmation exceeded the SW-846 criteria of 40% RPD for this compound.	

ND = Not Detected at or above the STL-Pensacola reporting limit (RL)
IDL = Laboratory Instrument Detection Limit
RL = Reporting Limit (AFCEE RLs are listed in the AFCEE QAPP)

N/S = Not Submitted N/A = Not Applicable
MDL = Laboratory Method Detection Limit

Any time a sample arrives at the laboratory improperly preserved (at improper pH or temperature) or after holding time has expired or prepared or analyzed after holding time, client must be notified in writing (i.e. case narrative)

Florida Projects Inorganic/Organic
Refer to back side of this page

ICR Projects Inorganic/Organic

A1	Acceptable	R6	Rejected

Examples: ICR Flags
R6 = Laboratory extracted the sample but the refrigerator malfunctioned so the extract became warm and client was notified
R6 = Sample arrived in laboratory in good condition; however, the laboratory did not analyze it within EPA's established holding time limit.

CLP and CLP-like Projects: Refer to referenced CLP Statement of Work (SOW) for explanation of data qualifiers

Severn Trent Laboratories of Florida
PROJECT SAMPLE INSPECTION FORM

Lab Accession #: 905635 Date Received: 29-May-99

1.	Was there a Chain of Custody?	(Yes)	No*		
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*		
3.	Were samples received cold? (Criteria: 2° - 6°C: STL-SOP 1055)	(Yes)	No*	N/A	
4.	Were all samples properly labeled and identified?	(Yes)	No*		
5.	Did samples require splitting? Req By: PM Client Other*	Yes*	(No)		
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*		
7.	Were all sample containers received intact?	(Yes)	No*		
8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)**	(Yes)	No*	N/A	
9.	Is there sufficient volume for analysis requested?	(Yes)	No*	N/A (Can)	
10.	Were samples received within Holding Time? (REFER TO STL-SOP 1040)	Yes	(No*)		
11.	Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section.	Yes*	No	(N/A)	
12.	If sent, were matrix spike bottles returned?	Yes	No*	(N/A)	
13.	Was Project Manager notified of problems? (initials: PAE)	(Yes)	No*	(N/A) PAE 5/29/99	

Airbill Number(s): 4412 6310 3632 **Shipped By:** FEDEX

Cooler Number(s): client Cooler **Shipping Charges:** N/A

Cooler Weight(s): N/A **Cooler Temp(s) (°C):** 2.0°C - CCK5

(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

10. The NO2 sample for sample 905106-01 was received out of hold time. PAE 5/29/99.

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: PAE **Date:** 5/29/99 **Logged By:** PAE **Date:** 5/29/99

♣ *Note all Out-of-Control and/or questionable events on Comment Section of this form.*

♦ *Note who requested the splitting of samples on the Comment Section of this form.*

\+ *All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938).*

* *According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938).*

Pinnacle Laboratories, Inc. **Interlab Chain of Custody** Date: 5/28 Page: 1 of 1

Network Project Manager: Kimberly D. McNeill

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, New Mexico 87107
(505) 344-3777 Fax (505) 344-4413

1145 905635

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL		TOX	TOC	Gen Chemistry: Cl, SO4, NO2, NO3	TDS	Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8080)	8270 BY GC/MS	PNA (8310)	8240 (TCLP 1311) ZHE	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
905106-01	5/27	1015	AQ	1	X							X	X														
-02	"	1215	"	2	X							X	X														

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:	
PROJECT #:	905106	Total Number of Containers		PENSACOLA - STL-FL	X
PROJ. NAME:	PHIL	Chain of Custody Seals		PORTLAND - ESL-OR	
QC LEVEL:	STD. IV	Received Intact?		STL - CT	
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		STL- NEW JERSEY	
TAT:	STANDARD RUSH!!	LAB NUMBER:		N. CREEK	
				BARRINGER	
DUE DATE:	6/11	COMMENTS:		SEQUOIA	
RUSH SURCHARGE:	—				
CLIENT DISCOUNT:	—				
SPECIAL CERTIFICATION REQUIRED:	YES NO				

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Francine Torino Time: 1700	Signature: Time:
Printed Name: Francine Torino Date: 5/28/99	Printed Name: Date:
Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2**
Signature: Time: 1000	Signature: Time:
Printed Name: R. ELSPERMAN Date: 5/29/99	Printed Name: Date:
Company STL-FL	Company

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: _____ PAGE: ___ OF ___

PLI Accession #: 905106

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER:

COMPANY: Philip Services
ADDRESS: 4000 Monroe Rd
Farmington, NM 87401
PHONE: (505) 326-2262
FAX:

BILL TO: Cecil Irby
COMPANY: Philip Services
ADDRESS: 4001 Monroe Rd
Farmington, NM 87401

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject		(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐		8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry: Cl, SO_4, NO_2 TDS, NO_3	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
BR-TaylorMW1	5/27	1015	water	01						X														X			X				5
BR-Fogelson MW1	5/27	1215	water	02						X														X			X				5

PROJECT INFORMATION

PROJ. NO.: 21057
PROJ. NAME: Burlington Drilling
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS	10
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	Yes
BLUE ICE/ICE	4°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☒ 1 WEEK (NORMAL) ☐

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

RELINQUISHED BY: 1.

Signature: P. Cheney Time: 1521

Printed Name: P. Cheney Date: 5/27/99

Company:

See reverse side (Force Magure)

RECEIVED BY: 1.

Signature: Time:

Printed Name: Date:

Company:

RELINQUISHED BY: 2.

Signature: Time:

Printed Name: Date:

Company:

RECEIVED BY: (LAB) 2.

Signature: Francine Tonvio Time: 1010

Printed Name: Francine Tonvio Date: 5/28/99

Pinnacle Laboratories Inc.

Olson, William

From: Louis Edward Hasely[SMTP:lhasely@br-inc.com]

Reply To: lhasely@br-inc.com

Sent: Friday, July 30, 1999 1:33 PM

To: Olson, William

Cc: Bruce Gantner; Jeff Schoenbacher; Johnny Ellis

Subject: Taylor Com. #2A - Groundwater

This note is to provide you with notification that groundwater collected from a temporary monitoring well at the Taylor Com. #2A showed benzene concentrations above standards.

Location:	Unit Letter A, Se
Depth:	Groundwater depth was approxim
Lab Results:	Benzene -
	Toluene -
	Ethylbenzene -
	Total Xylenes -

I will provide you with a written follow-up including the lab reports, drilling log, well diagram, and our proposed plan of action. Please let me know if you have any questions. Thanks.

Ed Hasely
Environmental/Safety
(505) 326-9841