AP - 076

AGWMR

01/21/2011

AP-076

Certified Mail Return Receipt No. 7009 2250 0001 4928 0063

TRIDENT ENVIRONMENTAL

January 21, 2011

Mr. Glenn von Gonten
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: 2010 Annual Groundwater Monitoring Report
South Four Lakes #13 Site (AP-76)
T12S-R34E-Section 1, Unit Letter L, Lea County, New Mexico

Dear Mr. von Gonten:

As agent for Pride Energy Company (Pride), Trident Environmental submits this *2010 Annual Groundwater Monitoring Report* for the above-referenced site.

Groundwater Monitoring Results

Groundwater monitoring activities have been performed at the site on a quarterly basis since January 2008 as summarized in the following tables. A site plan showing the most recent groundwater elevation and the chloride/TDS concentrations in monitoring wells MW-1 and MW-2 is shown in Figure 1. Figure 2 is a graph depicting chloride and TDS concentrations and groundwater elevation versus time at monitoring wells MW-1 and MW-2.

Summary of Groundwater Monitoring Results (MW-1)

Monitoring Well	Sample Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)	Chloride (mg/L)	TDS (mg/L)	BTEX (mg/L)
MW-1	01/23/08	27.5	4116.22	**1,330**	NA	<0.003
	03/13/08	27.63	4116.09	**665**	**1,461**	<0.003
	06/19/08	27.88	4115.84	**736**	**1,560**	<0.003
	09/09/08	28.05	4115.67	**760**	**1,790**	<0.003
	12/08/08	28.11	4115.61	**710**	**1,720**	<0.003
	03/18/09	28.28	4115.44	**750**	**1,770**	<0.003
	06/17/09	28.46	4115.26	**760**	**1830**	<0.003
	09/21/09	28.49	4115.23	**1040**	**2220**	<0.003
	12/11/09	28.55	4115.17	**820**	**1930**	<0.003
	03/24/10	28.65	4115.07	**780**	**1820**	---
	06/15/10	28.75	4114.97	**940**	**2150**	---
	09/13/10	28.82	4114.90	**1080**	**2280**	---
	12/13/10	28.88	4114.84	**813**	**2170**	---
MW-2	Continued on next page					

Summary of Groundwater Monitoring Results (MW-2)

Monitoring Well	Sample Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)	Chloride (mg/L)	TDS (mg/L)	BTEX (mg/L)
MW-2	06/19/08	27.54	4115.71	**320**	976	<0.003
	09/09/08	27.71	4115.54	172	848	<0.003
	12/08/08	27.80	4115.45	164	732	<0.003
	03/18/09	27.95	4115.30	168	720	<0.003
	06/17/09	28.19	4115.06	188	769	<0.003
	09/21/09	28.15	4115.10	240	747	<0.003
	12/11/09	28.21	4115.04	220	866	<0.003
	03/24/10	28.30	4114.95	232	842	---
	06/15/10	28.41	4114.84	220	870	---
	09/13/10	28.50	4114.75	260	935	---
	12/13/10	28.54	4114.71	173	876	---

Total Dissolved Solids (TDS), chloride, and BTEX concentrations listed in milligrams per liter (mg/L).
Values in boldface type indicate concentrations exceed WQCC standards.
BTOC - Below Top of Casing; AMSL – Above Mean Sea Level
NA Indicates parameter was not analyzed for this constituent.

The constituents of concern in groundwater are chloride and TDS as they remain above the New Mexico's Water Quality Control Commission (WQCC) standards, of 250 mg/L and 1,000 mg/L, respectively; however, horizontal dispersion of the chloride and TDS in groundwater does not extend beyond approximately 75 to 100 feet downgradient (southeast) of the southeast corner of the pit as evidenced by the results of monitoring well MW-2 where background chloride and TDS levels are observed in groundwater. Benzene, toluene, ethylbenzene, and xylenes (BTEX) are not a constituent of concern as concentrations remained below laboratory detection limits and WQCC standards for two years; therefore, analysis for these constituents has been suspended. Quarterly ground water sampling and monitoring will continue.

We look forward to working with you on this project. If you have any questions please call me at 432-638-8740 or Matt Pride at 918-524-9200.

Sincerely,

Gilbert Van Deventer, REM, PG
Trident Environmental

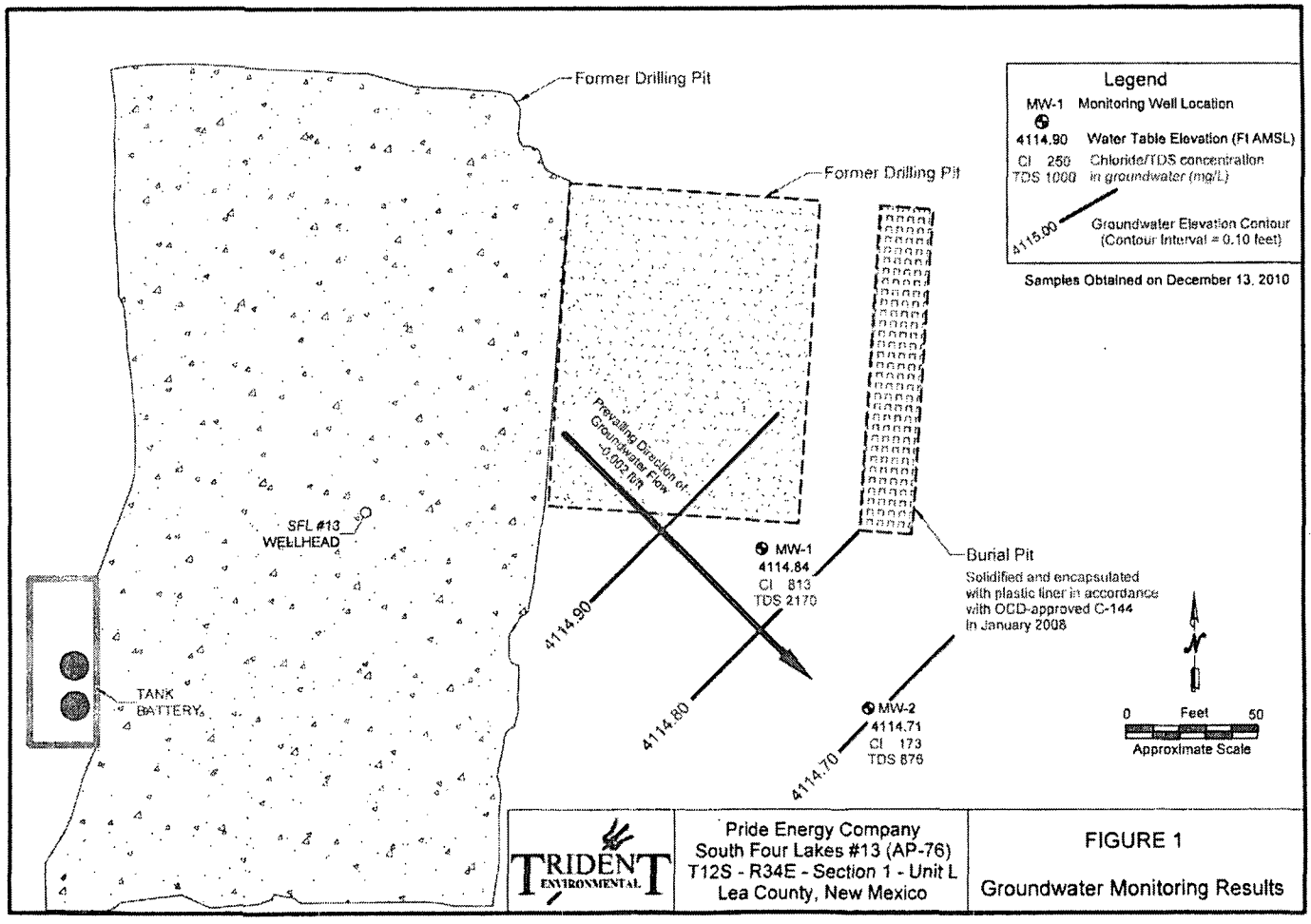
cc: Matt Pride (Pride Energy Co., Tulsa, OK)
Larry Hill (NMOCD -District 1, Hobbs, NM)

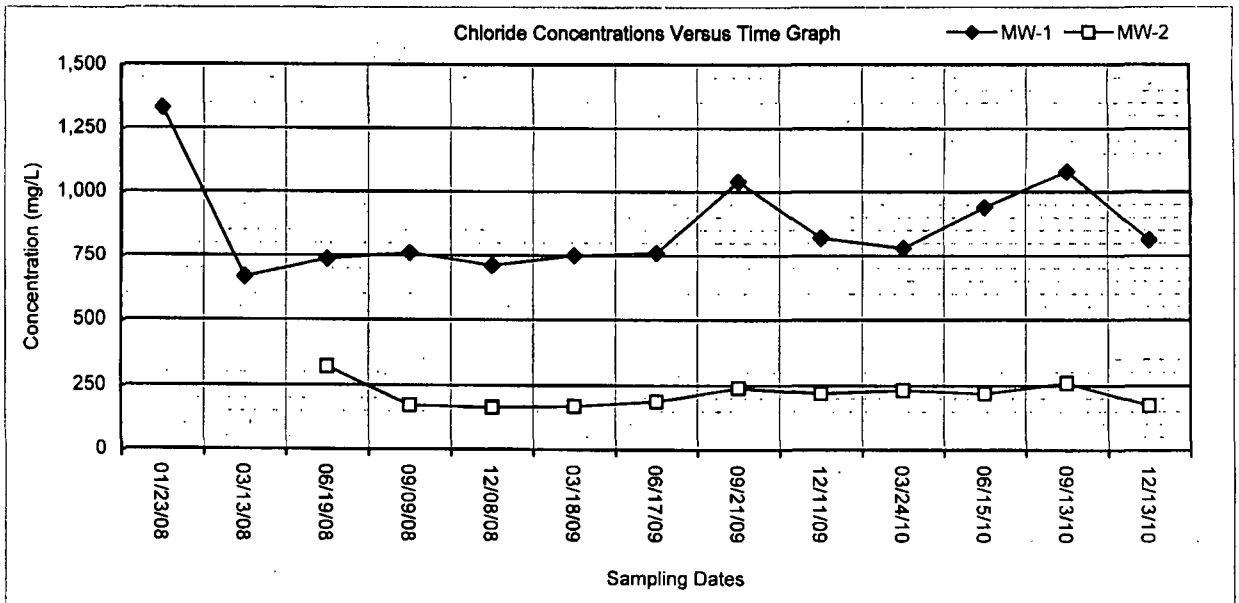
Attachments: *Figures, well sampling data form, and laboratory analytical reports*

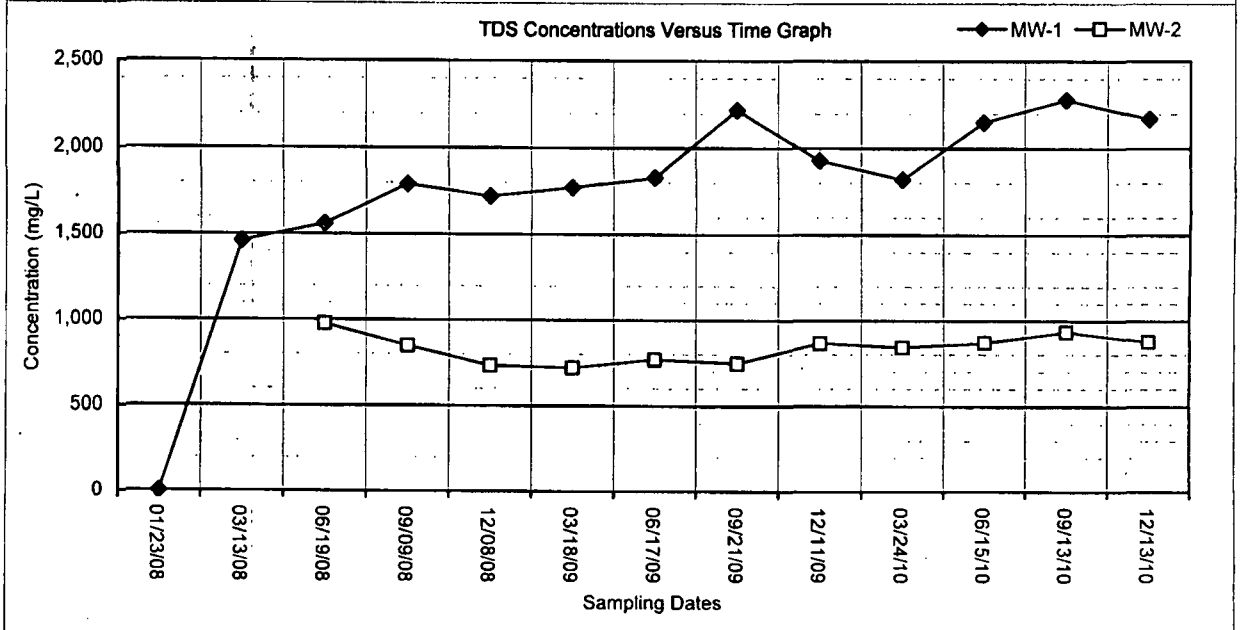
FIGURE 1

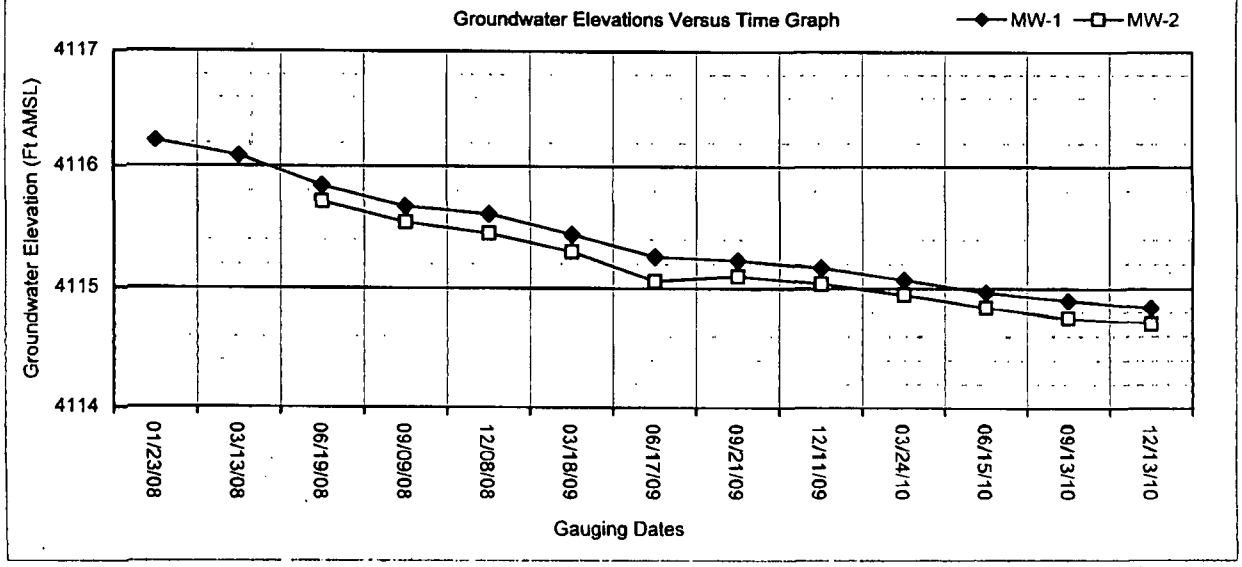
GRAPHS

WELL SAMPLING DATA FORM


Former Drilling Pit
Former Drilling Pit
Legend
MW-1 Monitoring Well Location
4114.90 Water Table Elevation (Ft AMSL)
Cl 250 Chloride/TDS concentration
TDS 1000 in groundwater (mg/L)
4115.00 Groundwater Elevation Contour (Contour Interval = 0.10 feet)
Samples Obtained on December 13, 2010
Prevailing Direction of Groundwater Flow ~0.002 ft/ft
SFL #13 WELLHEAD
TANK BATTERY
MW-1
4114.84
Cl 813
TDS 2170
Burial Pit
Solidified and encapsulated with plastic liner in accordance with OCD-approved C-144 in January 2008
4114.90
4114.80
MW-2
4114.71
Cl 173
TDS 876
4114.70
N
0 Feet 50
Approximate Scale
TRIDENT ENVIRONMENTAL
Pride Energy Company
South Four Lakes #13 (AP-76)
T12S - R34E - Section 1 - Unit L
Lea County, New Mexico
FIGURE 1
Groundwater Monitoring Results


Chloride Concentrations Versus Time Graph
MW-1
MW-2
Concentration (mg/L)
1,500
1,250
1,000
750
500
250
0
01/23/08
03/13/08
06/19/08
09/09/08
12/08/08
03/18/09
06/17/09
09/21/09
12/11/09
03/24/10
06/15/10
09/13/10
12/13/10
Sampling Dates


TDS Concentrations Versus Time Graph
MW-1
MW-2
Concentration (mg/L)
2,500
2,000
1,500
1,000
500
0
01/23/08
03/13/08
06/19/08
09/09/08
12/08/08
03/18/09
06/17/09
09/21/09
12/11/09
03/24/10
06/15/10
09/13/10
12/13/10
Sampling Dates


Groundwater Elevations Versus Time Graph
MW-1
MW-2
Groundwater Elevation (Ft AMSL)
4117
4116
4115
4114
01/23/08
03/13/08
06/19/08
09/09/08
12/08/08
03/18/09
06/17/09
09/21/09
12/11/09
03/24/10
06/15/10
09/13/10
12/13/10
Gauging Dates

WELL SAMPLING DATA FORM

CLIENT: Pride Energy Company
SITE NAME: South Four Lakes #13
SITE LOCATION: T12S-R34E-Sec1 Unit Letter L ~ Lea County, NM
SAMPLER: Rozanne Johnson (1st, 2nd, & 3rd Qtrs) and Gil Van Deventer (4th Qtr)

PURGING METHOD: ☐ Hand Bailed ☑ Pump, Type: _____
SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____
SPOSAL METHOD OF PURGE WATER: ☐ On-site Drum ☐ Drums ☑ SWD Disposal Facility

Quarter	Date	Time	Monitoring Well No.	Depth to Water (ft btoc)	Total Depth (ft)	Water Column Height (ft)	Well Factor 2"=.16 4"=.65	Calc. Well Vol. (gal)	Volume Purged (gal)	No. of Well Volumes Purged	Temp. °C	Cond. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
First	03/24/10	13:45	MW-1	28.65	43.26	14.61	0.16	2.3	8	3.4	18.5	3.26	7.45	Silt and sand, then cleared during purge
	03/24/10	13:00	MW-2	28.30	42.10	13.80	0.16	2.2	8	3.6	18.5	1.32	7.34	Silt and sand, then cleared during purge
Second	06/15/10	8:25	MW-1	28.75	43.26	14.51	0.16	2.3	8	3.4	18.7	3.67	7.31	Silt and sand, then cleared during purge
	06/15/10	7:35	MW-2	28.41	42.10	13.69	0.16	2.2	8	3.7	18.6	1.29	7.34	Silt and sand, then cleared during purge
Third	09/13/10	13:10	MW-1	28.82	43.26	14.44	0.16	2.3	8	3.5	22.3	3.95	6.78	Silt and sand, then cleared during purge
	09/13/10	12:15	MW-2	28.50	42.10	13.60	0.16	2.2	8	3.7	21.4	1.38	7.35	Silt and sand, then cleared during purge
Fourth	12/13/10	13:47	MW-1	28.88	43.26	14.38	0.16	2.3	25	10.9	16.8	3.24	7.75	Silt and sand, then cleared during purge
	12/13/10	16:00	MW-2	28.54	42.10	13.56	0.16	2.2	22	10.1	17.2	0.64	7.85	Silt and sand, then cleared during purge

COMMENTS: Equipment decontamination consists of gloves, Alconox, and Distilled Water Rinse.
Myron Model 6P (1st, 2nd, & 3rd Qtrs) and Hanna Model 98130 instrument (4th Qtr) used to obtain pH, conductivity, and temperature measurements.
Delivered samples to Cardinal Laboratories in Hobbs NM (1st, 2nd, & 3rd Qtrs) and Xenco Laboratories in Odessa TX (4th Qtr) for chloride and TDS analysis.

LABORATORY ANALYTICAL REPORTS

Analytical Report 400566

for

Trident Environmental

Project Manager: Gil Van Deventer

Pride Energy Company

South Four Lakes # 13 (AP-76)

20-DEC-10

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370)
Xenco-Boca Raton (EPA Lab Code: FL01273):
Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)
North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)

Xenco Phoenix (EPA Lab Code: AZ00901):
Arizona(AZ0757), California(06244CA), Texas(104704435-10-2), Nevada(NAC-445A), DoD(65816)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

20-DEC-10

Project Manager: **Gil Van Deventer**
Trident Environmental
P.O. Box 7624
Midland, TX 79708

Reference: XENCO Report No: **400566**
Pride Energy Company
Project Address: T12S-R34E-Sec 1 Unit Letter L - Lea County, NM

Gil Van Deventer:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 400566. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 400566 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 400566

Trident Environmental, Midland, TX

Pride Energy Company

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	Dec-13-10 13:47		400566-001
MW-2	W	Dec-13-10 14:07		400566-002

CASE NARRATIVE

Client Name: Trident Environmental
Project Name: Pride Energy Company

Project ID:	*South Four Lakes # 13 (A1*	*Report Date:*	*20-DEC-10*
Work Order Number:	*400566*	*Date Received:*	*12/14/2010*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-835912 Anions by E300
E300MI

Batch 835912, Chloride recovered above QC limits in the Matrix Spike.
Samples affected are: 400566-001, -002.
The Laboratory Control Sample for Chloride is within laboratory Control Limits

Batch: LBA-835988 TDS by SM2540C

Certificate of Analysi ımmary 400566

Trident Environmental, Midland, TX

Project Name: Pride Energy Company

Project Id: South Four Lakes # 13 (AP-76)
Contact: Gil Van Deventer
Project Location: T12S-R34E-Sec 1 Unit Letter L - Lea Cou

Date Received in Lab: Tue Dec-14-10 12:30 pm
Report Date: 20-DEC-10
Project Manager: Brent Barron, II

Analysis Requested									
	Lab Id:	400566-001		400566-002					
	Field Id:	MW-1		MW-2					
	Depth:								
	Matrix:	WATER		WATER					
	Sampled:	Dec-13-10 13:47		Dec-13-10 14:07					
Anions by E300	*Extracted:*								
	Analyzed:	Dec-14-10 15:10		Dec-14-10 15:10					
	Units/RL:	mg/L	RL	mg/L	RL				
Chloride		813	25.0	173	5.00				
TDS by SM2540C	*Extracted:*								
	Analyzed:	Dec-14-10 16:00		Dec-14-10 16:00					
	Units/RL:	mg/L	RL	mg/L	RL				
Total dissolved solids		2170	5.00	876	5.00				

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

* Outside XENCO's scope of NELAC Accreditation.

Xenco Laboratories

BS / BSL ecoveries

Project Name: Pride Energy Company

Work Order #: 400566 **Project ID:** South Four Lakes # 13 (AP-76)

Analyst: LATCOR **Date Prepared:** 12/14/2010 **Date Analyzed:** 12/14/2010

Lab Batch ID: 835912 **Sample:** 835912-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	ND	10.0	9.33	93	10	9.44	94	1	80-120	20	

Analyst: WRU **Date Prepared:** 12/14/2010 **Date Analyzed:** 12/14/2010

Lab Batch ID: 835988 **Sample:** 835988-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Total dissolved solids	<	1000	940	94	1000	954	95	1	80-120	30	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Pride Energy Company

k Order #: 400566

ab Batch #: 835912

Project ID: South Four Lakes # 13 (AP-76)

Date Analyzed: 12/14/2010 **Date Prepared:** 12/14/2010 **Analyst:** LATCOR

QC- Sample ID: 400475-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	129	100	262	133	80-120	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

I Below Reporting Limit

Final 1.000

Sample Duplicate Recovery

Project Name: Pride Energy Company

Work Order #: 400566

Lab Batch #: 835912 **Project ID:** South Four Lakes # 13 (AP-76)

Date Analyzed: 12/14/2010 15:10 **Date Prepared:** 12/14/2010 **Analyst:** LATCOR

QC- Sample ID: 400475-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	129	130	1	20	

Lab Batch #: 835988

Date Analyzed: 12/14/2010 16:00 **Date Prepared:** 12/14/2010 **Analyst:** WRU

QC- Sample ID: 400564-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	10600	11100	5	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

12600 West I-20 East - Odessa TX 79765 Tel (432) 563-1800 Fax (432) 563-1713

Xenco Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name:	BILL TO Company:	PO#
Trident Environmental	Pride Energy Company / Matt Pride	
Project Manager:	**Address:** (Street, City, Zip)	
Gil Van Deventer / Trident Environmental	PO Box 710950, Tulsa, OK 74170-1950	
Address: (Street, City, Zip)	**Phone#:**	**Fax#:**
PO Box 12177, Odessa TX 79768	(918) 524-9200	(918) 524-9292
Phone #:	**Fax #:**	
(432) 638-8740	(413) 403-9968	
Project #:	**Project Name:**	
South Four Lakes #13 (AP-76)	Pride Energy Company	
Project Location:	**Sampler Signature:**	
T12S-R34E-Sec1 Unit Letter L ~ Lea County, NM		

LAB # (LAB USE ONLY 400546)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (BTEX only)	HNO_3	$NaHSO_4$	H_2SO_4	ICE	NONE	SAMPLING: DATE	TIME
-01	MW-1	G	1	X								X		12/13/10	1347
-02	MW-2	G	1	X								X		12/13/10	1407

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021 B	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Total Dissolved Solids (160.1 or SM2540C)	Chloride / Cl (SM4500 B or 300.1)		Turn Around Time ~ 24 Hours
														X	X			
														X	X			

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	12/14/10	12:30			
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:
			Andrea Elam	12.14.10	12:30

Delivered By: (Circle One)	Sample Condition	Cool	Intact	CHECKED BY:
Sampler - UPS - Bus - Other:	Yes	X	Yes	(Initials) AE
	No		No	2.6°C

Phone Results		Yes		No
Fax Results		Yes		No Additional Fax Number:

REMARKS:

Email Results to:

gil@trident-environmental.com
mattp@pride-energy.com

500 ml poly

XENCO Laboratories	Document Title: Sample Receipt Checklist
Atlanta, Boca Raton, Corpus Christi, Dallas	Document No.: SYS-SRC
Houston, Miami, Odessa, Philadelphia	Revision/Date: No. 01, 5/27/2010
Phoenix, San Antonio, Tampa	Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Trident Env.

Date/Time: 12 14.10 12:30

Lab ID # : 400566

Initials: AE

Sample Receipt Checklist

1. Samples on ice?	Blue	(Water)	No	
2. Shipping container in good condition?	(Yes)	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	(Yes)	No	N/A	
4. Chain of Custody present?	(Yes)	No		
5. Sample instructions complete on chain of custody?	(Yes)	No		
6. Any missing / extra samples?	Yes	(No)		
7. Chain of custody signed when relinquished / received?	(Yes)	No		
8. Chain of custody agrees with sample label(s)?	(Yes)	No		
9. Container labels legible and intact?	(Yes)	No		
10. Sample matrix / properties agree with chain of custody?	(Yes)	No		
11. Samples in proper container / bottle?	(Yes)	No		
12. Samples properly preserved?	(Yes)	No	N/A	
13. Sample container intact?	(Yes)	No		
14. Sufficient sample amount for indicated test(s)?	(Yes)	No		
15. All samples received within sufficient hold time?	(Yes)	No		
16. Subcontract of sample(s)?	Yes	No	(N/A)	
17. VOC sample have zero head space?	Yes	No	(N/A)	

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	2.6 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

Contact:_____ Contacted by:_____ Date/Time:_____

Regarding: _____

_____

Corrective Action Taken: _____

_____

_____

_____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

September 21, 2010

GIL VAN DEVENTER

TRIDENT ENVIRONMENTAL

P. O. BOX 7624

MIDLAND, TX 79708

RE: SOUTH FOUR LAKES #13

Enclosed are the results of analyses for samples received by the laboratory on 09/17/10 10:36.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRIDENT ENVIRONMENTAL
GIL VAN DEVENTER
P. O. BOX 7624
MIDLAND TX, 79708
Fax To: (413) 403-9968

Received:	09/17/2010	Sampling Date:	09/13/2010
Reported:	09/21/2010	Sampling Type:	Water
Project Name:	SOUTH FOUR LAKES #13	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T12S-R34E-SEC1 U LTR L ~ LEA CTY - N		

Sample ID: MW - 1 (H020876-01)

Chloride, SM4500Cl-B mg/L **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1080**	4.00	09/20/2010	ND	112	112	100	3.64	

TDS 160.1 mg/L **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	**2280**	5.00	09/20/2010	ND				0.978	

mple ID: MW - 2 (H020876-02)

Chloride, SM4500Cl-B mg/L **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**260**	4.00	09/20/2010	ND	112	112	100	3.64	

TDS 160.1 mg/L **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	**935**	5.00	09/17/2010	ND				0.978	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 * 101 E. MARLAND * HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene, Lab Director/Quality Manager

101 East Marland - Hobbs, New Mexico 88240
Tel (575) 393-2326
Fax (575) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: Trident Environmental	BILL TO Company: Pride Energy Company / Matt Pride — PO#
Project Manager: Gil Van Deventer / Trident Environmental	Address (Street, City, Zip): P. O. Box 710950 - Tulsa, OK 74170-1950
Address (Street, City, Zip): P. O. Box 7624 - Midland, Texas 79708-7624	Phone #: (918) 524-9200 — Fax#: (918) 524-9292
Phone #: (432) 638-8740 — Fax #: (413) 403-9968	
Project #: South Four Lakes #13	Project Name: Pride Energy Company
Project Location: T12S-R34E-Sec1 Unit Letter L - Lea County - New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310 rozanne@valornet.com

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	Grab or (C)omp.	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2-40ml VOA)	HNO3	NaHSO4	H2SO4	ICE (1-Liter HDPE)	NONE	SAMPLING: DATE (2010)	TIME	MTBE 8021B/8021	BTEX 8021B	TPH (418.1/TX1005/TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GCMS Vol. 8260B/624	GCMS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Anions (Cl, SO4, CO3, HCO3)	Cations (Ca, Mg, Na, K)	Solubles	Total Dissolved Solids (160.1/SM2540C)	Chlorides (SM4500 B)	Turn Around Time - 24 Hours
H20676	MW-1	G	1	X								X		9-13	13:10																				X	X	
2	MW-2	G	1	X								X		9-13	12:15																				X	X	

Relinquished by: Rozanne Johnson	Date: 9-17-10	Time: 7:52	Received by:	Date: 9-17-10	Time: 7:52
Relinquished by:	Date: 9-17-10	Time: 10:36	Received By: (Laboratory Staff) Nicole Stenson	Date: 9/17/10	Time: 10:36

Phone Results: Yes / No — Fax Results: Yes / No — Additional Fax Number:

REMARKS: Email Results to: gil@trident-environmental.com; mattp@pride-energy.com; rozanne@valornet.com

Delivered By: (Circle One) Sampler - UPS - Bus - Other

Sample Condition: Cool: Yes / Intact: Yes — CHECKED BY: (Initials)

T 5°C

#426

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

June 24, 2010

Gil Van Deventer
Trident Environmental
P.O. Box 7624
Midland, TX 79708-7624

Re: South Four Lakes #13

Enclosed are the results of analyses for sample number H20152, received by the laboratory on 06/18/10 at 10:02 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 3 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
TRIDENT ENVIRONMENTAL
ATTN: GIL VAN DEVENTER
P.O. BOX 7624
MIDLAND, TX 79708-7624
FAX TO: (413) 403-9968

Receiving Date: 06/18/10
Reporting Date: 06/22/10
Project Number: SOUTH FOUR LAKES #13
Project Name: PRIDE ENERGY COMPANY
Project Location: T12S-R34E-SEC1 UNIT LETTER L ~ LEA COUNTY, NEW MEXICO

Sampling Date: 06/15/10
Sample Type: WATER
Sample Condition: COOL & INTACT @ 1.5°C
Sample Received By: HM
Analyzed By: HM

LAB NO	SAMPLE ID	Cl⁻ (mg/L)	TDS (mg/L)
Analysis Date		06/22/10	06/21/10
H20152-1	MW-1	940	2,150
H20152-2	MW-2	220	870
Quality Control		500	NR
True Value QC		500	NR
% Recovery		100	NR
Relative Percent Difference		< 0.1	2.9
METHOD: Standard Methods, EPA		4500-Cl B	160.1

Not accredited for Chloride and TDS.

Chemist

06/24/10
Date

H20152 Trident

101 East Marland - Hobbs, New Mexico 88240
Tel (575) 393-2326
Fax (575) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: Trident Environmental	BILL TO Company: Pride Energy Company / Matt Pride — PO#
Project Manager: Gil Van Deventer / Trident Environmental	Address: (Street, City, Zip) P. O. Box 710950 - Tulsa, OK 74170-1950
Address: (Street, City, Zip) P. O. Box 7624 - Midland, Texas 79708-7624	Phone#: (918) 524-9200 — Fax#: (918) 524-9292
Phone #: (432) 638-8740 — Fax #: (413) 403-9968	
Project #: South Four Lakes #13	Project Name: Pride Energy Company
Project Location: T12S-R34E-Sec1-Unit Letter L - Lea County - New Mexico	Sampler Signature: Rozanne Johnson (575)631-6310 rozanne@valornet.com

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl (2 drops VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1 Use Only)	NONE	SAMPLING: DATE (2010)	TIME
H20152-1	MW-1	G	1	X								X		6-16	8:25
	MW-2	G	1	X								X		6-16	7:35

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Anions (Cl, SO4, CO3, HCO3)	Cations (Ca, Mg, Na, K)	Sulfates	Total Dissolved Solids (160.1 / SM2540C)	Chlorides (325.3 / SM4500 B)	Turn Around Time - 24 Hours
																		X	X	X	
																		X	X	X	

Relinquished by	Date	Time	Received by	Date	Time
Rozanne Johnson	6-18-10	8:15		6.18.10	8:15
Relinquished by	Date	Time	Received By: (Laboratory Staff)	Date	Time
	6-18-10	5:00		06/18/10	

Delivered By: (Circle One) Sampler - UPS - Bus - Other

Sample Condition: Yes / No — Cool: Yes / No — Intact: Yes / No

CHECKED BY (Initials):

Phone Results: Yes / No

Fax Results: Yes / No — Additional Fax Number:

REMARKS:

Email Results to:
gil@trident-environmental.com
mattp@pride-energy.com
rozanne@valornet.com

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

April 1, 2010

Gil Van Deventer
Trident Environmental
P.O. Box 7624
Midland, TX 79708-7624

Re: South Four Lakes #13

Enclosed are the results of analyses for sample number H19556, received by the laboratory on 03/29/10 at 10:20 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 3 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
TRIDENT ENVIRONMENTAL
ATTN: GIL VAN DEVENTER
P.O. BOX 7624
MIDLAND, TX 79708-7624
FAX TO: (413) 403-9968

Receiving Date: 03/29/10
Reporting Date: 03/30/10
Project Number: SOUTH FOUR LAKES #13
Project Name: PRIDE ENERGY COMPANY
Project Location: T12S-R34E-SEC1 UNIT LETTER L - LEA COUNTY - NEW MEXICO

Sampling Date: 03/24/10
Sample Type: WATER
Sample Condition: COOL & INTACT @ -1.0°C
Sample Received By: JH
Analyzed By: HM/SJ

LAB NO	SAMPLE ID	Cl⁻ (mg/L)	TDS (mg/L)
Analysis Date		03/29/10	03/29/10
H19556-1	MW-1	780	1,820
H19556-2	MW-2	232	842
Quality Control		500	NR
True Value QC		500	NR
% Recovery		100	NR
Relative Percent Difference		< 0.1	6.2

METHOD: Standard Methods, EPA	4500-Cl B	160.1

Not accredited for Chloride and TDS.

Chemist

04/01/10
Date

H19556 Trident

101 East Marland - Hobbs, New Mexico 88240
Tel (575) 393-2326
Fax (575) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: Trident Environmental	Bill TO Company: Pride Energy Company / Matt Pride	PO#	
Project Manager: Gil Van Deventer / Trident Environmental	Address: (Street, City, Zip) P. O. Box 710950 ~ Tulsa, OK 74170-1950		
Address: (Street, City, Zip) P. O. Box 7624 ~ Midland, Texas 79708-7624	Phone#: (918) 524-9200	Fax#: (918) 524-9292	
Phone #: (432) 638-8740	Fax #: (413) 403-9968		
Project #: South Four Lakes #13	Project Name: Pride Energy Company		
Project Location: T12S-R34E Sec1 Unit Letter L ~ Lea County - New Mexico	Sampler Signature:	Rozanne Johnson (575)631-6310 rozanne@valornet.com	

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 drops VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1 Liter HDPE)	NONE	SAMPLING: DATE (2010)	TIME	MTBE 8021B/602	BTEX 8021B	TPH 418.1/TX1005 / TX1006 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GCMS Vol. 8260B/624	GCMS Semi. Vol. 8270C/625	PCBs 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Anions (Cl, SO4, CO3, HCO3)	Cations (Ca, Mg, Na, K)	Solubilities	Total Dissolved Solids (160.1 / SM2540C)	Chlorides (325.3 / SM4500 B)	Turn Around Time ~ 24 Hours
H19356-1	MW-1	G	1	X								1		3-24	13:45																			X	X	
2	MW-2	G	1	X								1		3-24	13:00																			X	X	

Relinquished by: Rozanne Johnson	Date: 03-29-2010	Time: 10:20	Received by:
Relinquished by:	Date:	Time:	Received by: (Laboratory Staff) Jodie Henson 3/29/10 10:20
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition: Yes / No	Cool: Yes / No	Intact: Yes / No

CHECKED BY: (Initials) JH

Phone Results: Yes / No
Fax Results: Yes / No Additional Fax Number:

REMARKS:

Email Results to:
gil@trident-environmental.com
mattp@pride-energy.com
rozanne@valornet.com

#26