

**1R - 501**

**INITIAL REPORT**

**04/16/2008**

1R501



April 16, 2008

RECEIVED

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RETURN RECEIPT NO. 7099 3400 0017 1737 2039

APR 13 2008

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

Oil Conservation Division  
Environmental Bureau

**RE: Notice of Potential Groundwater Impact  
Pride Energy Company – State 36 #2 Reserve Pit (API # 30-025-36909)  
T19S-R37E, Section 36, Unit Letter O  
Lea County, New Mexico**

Dear Mr. von Gonten:

On behalf of Pride Energy Company, Trident Environmental submits to the NMOCD this notification of potential groundwater impact at the above-referenced site in accordance with NM Rule 116.

Preliminary assessment of the soil and groundwater conditions was conducted by Elke Environmental during closure activities associated with the former reserve pit in February and March 2008. After our review of the data collected by Elke Environmental (Attachment A), we re-sampled the on site monitoring well on March 27, 2008, to verify groundwater impact. Based on the results of the re-sampling activity (Attachment B) we have determined that the constituents of concern are chloride (557 mg/L) and total dissolved solids (1,770 mg/L). The laboratory did not detect benzene, toluene, ethylbenzene, or xylenes (BTEX) in the March sample. Analyses for regulated hydrocarbons did not occur during Elke's February sampling event.

Elke Environmental had the monitoring well installed upgradient (northwest) of the former reserve pit, however we suspect a more appropriate location would have been at the southeast edge based on the prevailing groundwater gradient in the Monument area.

April 16, 2008

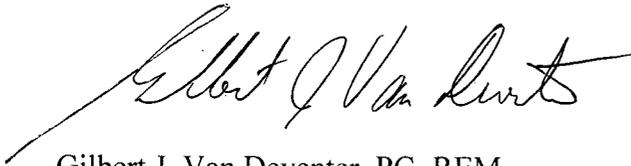
Page 2

The possibility remains that there is an upgradient offsite source due to regional impacts in the Monument area. Therefore, we plan to install at least one additional monitoring well at the southeast edge of the former reserve pit for a better assessment of the magnitude of impact to groundwater as soon as we can schedule a drilling contractor (within 30 days).

We understand that future corrective actions at this site may be subject to New Mexico Rule 19 (19.15.1.19 NMAC), however at this time it is not conclusive. After completing the above monitoring well and collecting the analytical data we will prepare a site investigation report. The report will include a work plan for further site characterization, a monitoring program, and a design for an effective abatement option within 60 days of commencing drilling operations.

Please feel free to contact me at (432) 638-8740 or Mr. Matt Pride at (918) 524-9200.

Sincerely,



Gilbert J. Van Deventer, PG, REM  
Project Manager

Attachments: soil and groundwater sampling data forms, laboratory analytical Reports, Form C-144, and Form C-141

Copy: Pride Energy Company (Matt Pride)  
R. T. Hicks Consultants, Ltd, (Randy Hicks)  
NMOCD District I (Hobbs NM)

**ATTACHMENT A**

**FORM C-144**

**PRELIMINARY**

**SOIL & GROUNDWATER SAMPLING RESULTS  
(ELKE ENVIRONMENTAL)**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-144  
June 1, 2004

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

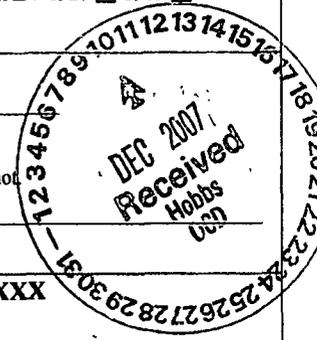
**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes  No

Type of action: Registration of a pit or below-grade tank  Closure of a pit or below-grade tank

Operator: Pride Energy Company Telephone: 918-524-9200 e-mail address: larrym@pride-energy.com  
Address: P O Box 701950 Tulsa, OK 74170-1950  
Facility or well name: State of New Mexico 36 #2 API #: 30-025-36909 U/L or Qtr/Qtr O Sec 36 T 19S R 37E  
County: Lea Latitude 32-36-43.8 Longitude 103-12-14.4 NAD: 1927  1983   
Surface Owner: Federal  State  Private  Indian

<b>Pit</b> Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Pit Volume _____ bbl	<b>Below-grade tank</b> Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not _____						
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) <b>GW = 48'</b>	<table border="1"> <tr> <td>Less than 50 feet</td> <td>(20 points) <b>XXX</b></td> </tr> <tr> <td>50 feet or more, but less than 100 feet</td> <td>(10 points)</td> </tr> <tr> <td>100 feet or more</td> <td>( 0 points)</td> </tr> </table>	Less than 50 feet	(20 points) <b>XXX</b>	50 feet or more, but less than 100 feet	(10 points)	100 feet or more	( 0 points)
Less than 50 feet	(20 points) <b>XXX</b>						
50 feet or more, but less than 100 feet	(10 points)						
100 feet or more	( 0 points)						
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	<table border="1"> <tr> <td>Yes</td> <td>(20 points)</td> </tr> <tr> <td>No</td> <td>( 0 points) <b>XXX</b></td> </tr> </table>	Yes	(20 points)	No	( 0 points) <b>XXX</b>		
Yes	(20 points)						
No	( 0 points) <b>XXX</b>						
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	<table border="1"> <tr> <td>Less than 200 feet</td> <td>(20 points)</td> </tr> <tr> <td>200 feet or more, but less than 1000 feet</td> <td>(10 points)</td> </tr> <tr> <td>1000 feet or more</td> <td>( 0 points) <b>XXX</b></td> </tr> </table>	Less than 200 feet	(20 points)	200 feet or more, but less than 1000 feet	(10 points)	1000 feet or more	( 0 points) <b>XXX</b>
Less than 200 feet	(20 points)						
200 feet or more, but less than 1000 feet	(10 points)						
1000 feet or more	( 0 points) <b>XXX</b>						
<b>Ranking Score (Total Points)</b>							
<b>20 points</b>							



If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite  offsite  If offsite, name of facility \_\_\_\_\_. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No  Yes  If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: All excess drilling fluid will be removed. A burial pit will be excavated and lined with a 20 mil liner. The drilling mud will be mixed with Elke Environmental Solidification Product at a 20(mud) to 1(product) ratio to solidify the mud then placed in the burial pit. After all mud is removed the pit bottoms will be sampled Per NMOCD guidelines. The drilling pit will be backfilled with clean native soil and contoured to the surrounding area. A final report will be submitted after completion of The job.  
NMOCD Hobbs will be given 48 hrs notice before start of job and 48 hrs notice before testing.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines , a general permit , or an (attached) alternative OCD-approved plan .

Date: 12-10-07  
Printed Name/Title Logan Anderson - Agent Signature [Signature]

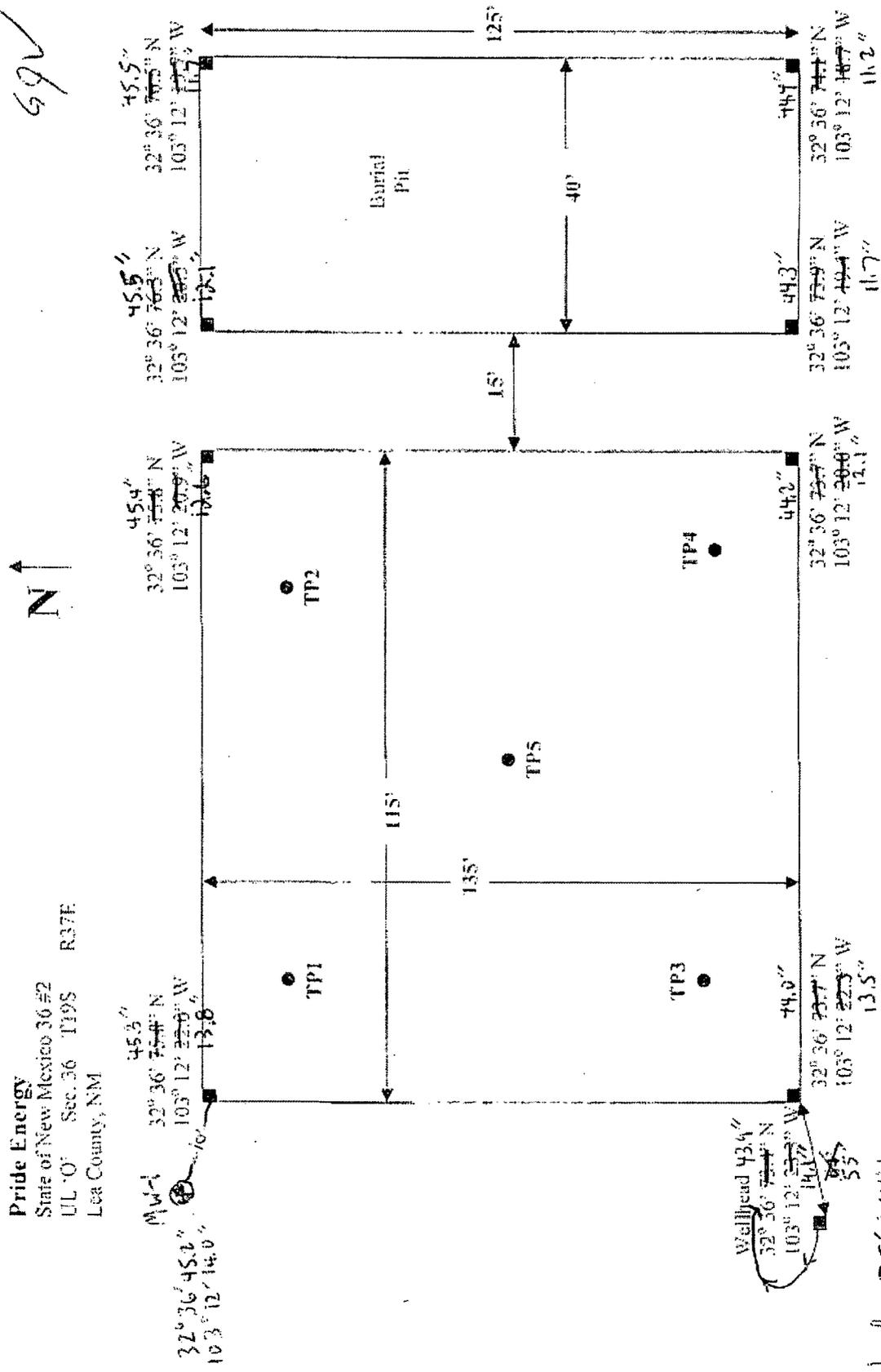
Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:  
Printed Name/Title CHRIS WILLIAMS Signature [Signature] Date: 12/10/07

Revised lat/long readings; added MW-1 location; MW-1 re-sampled on 03-27-08  
 analysis for major ions, TDS, & BTEX

69V

Pride Energy  
 State of New Mexico 36 #2  
 UL '0' Sec. 36 T19S R37E  
 Lea County, NM



Wellhead ~ 55' WNW  
 of southwest corner of pH

# Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768

## Field Analytical Report Form

Client Pride Energy

Analyst Jason Jessup

Site State of New Mexico 36 #2

Sample ID	Date	Depth	TPH / PPM	Cl / PPM	PID / PPM	GPS
TP1	2-18-08	8'		11,422		32° 36' 75.2" N 103° 12' 21.9" W
TP1	2-18-08	10'		2,109		32° 36' 75.2" N 103° 12' 21.9" W
TP1	2-18-08	12'		10,856		32° 36' 75.2" N 103° 12' 21.9" W
TP1	2-18-08	14'		22,566		32° 36' 75.2" N 103° 12' 21.9" W
TP1	2-18-08	16'		1,865		32° 36' 75.2" N 103° 12' 21.9" W
TP1	2-18-08	18'		14,717		32° 36' 75.2" N 103° 12' 21.9" W
TP1	2-18-08	20'		10,613		32° 36' 75.2" N 103° 12' 21.9" W
TP1	2-19-08	22'		9,962		32° 36' 75.2" N 103° 12' 21.9" W
TP1	2-19-08	24'		10,583		32° 36' 75.2" N 103° 12' 21.9" W
TP1	2-28-08	25'		6,248		32° 36' 75.2" N 103° 12' 21.9" W
TP1	2-28-08	30'		2,367		32° 36' 75.2" N 103° 12' 21.9" W
TP1	2-28-08	35'		3,630		32° 36' 75.2" N 103° 12' 21.9" W
TP1	2-28-08	40'		5,529	23.1	32° 36' 75.2" N 103° 12' 21.9" W
TP2	2-18-08	8'		4,833		32° 36' 75.4" N 103° 12' 20.5" W
TP2	2-18-08	10'		2,375		32° 36' 75.4" N 103° 12' 20.5" W
TP2	2-18-08	12'		944		32° 36' 75.4" N 103° 12' 20.5" W
TP2	2-18-08	14'		823		32° 36' 75.4" N 103° 12' 20.5" W
TP2	2-18-08	16'		1,854		32° 36' 75.4" N 103° 12' 20.5" W

# Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768

## Field Analytical Report Form

Client Pride Energy Analyst Jason Jessup

Site State of New Mexico 36 #2

Sample ID	Date	Depth	TPH / PPM	Cl / PPM	PID / PPM	GPS
TP2	2-18-08	18'		875		32° 36' 75.4" N 103° 12' 20.5" W
TP2	2-18-08	20'		1,354		32° 36' 75.4" N 103° 12' 20.5" W
TP2	2-19-08	22'		772		32° 36' 75.4" N 103° 12' 20.5" W
TP2	2-19-08	23'		580		32° 36' 75.4" N 103° 12' 20.5" W
TP2	2-19-08	24'		622		32° 36' 75.4" N 103° 12' 20.5" W
TP2	2-28-08	25'		280		32° 36' 75.4" N 103° 12' 20.5" W
TP2	2-28-08	30'		151	5.5	32° 36' 75.4" N 103° 12' 20.5" W
TP3	2-18-08	8'		6,959		32° 36' 73.7" N 103° 12' 21.7" W
TP3	2-18-08	10'		7,914		32° 36' 73.7" N 103° 12' 21.7" W
TP3	2-18-08	12'		5,292		32° 36' 73.7" N 103° 12' 21.7" W
TP3	2-18-08	14'		1,322		32° 36' 73.7" N 103° 12' 21.7" W
TP3	2-18-08	16'		1,154		32° 36' 73.7" N 103° 12' 21.7" W
TP3	2-18-08	18'		868		32° 36' 73.7" N 103° 12' 21.7" W
TP3	2-18-08	20'		1,422		32° 36' 73.7" N 103° 12' 21.7" W
TP3	2-19-08	22'		1,644		32° 36' 73.7" N 103° 12' 21.7" W
TP3	2-19-08	23'		666		32° 36' 73.7" N 103° 12' 21.7" W
TP3	2-19-08	24'		350		32° 36' 73.7" N 103° 12' 21.7" W
TP3	2-28-08	25'		90	9.3	32° 36' 73.7" N 103° 12' 21.7" W

# Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768

## Field Analytical Report Form

Client Pride Energy

Analyst Jason Jessup

Site State of New Mexico 36 #2

Sample ID	Date	Depth	TPH / PPM	CI / PPM	PID / PPM	GPS
TP4	2-18-08	8'		14,168		32° 36' 73.9" N 103° 12' 20.5" W
TP4	2-18-08	10'		21,472		32° 36' 73.9" N 103° 12' 20.5" W
TP4	2-18-08	12'		21,690		32° 36' 73.9" N 103° 12' 20.5" W
TP4	2-18-08	14'		13,942		32° 36' 73.9" N 103° 12' 20.5" W
TP4	2-18-08	16'		13,301		32° 36' 73.9" N 103° 12' 20.5" W
TP4	2-18-08	18'		1,986		32° 36' 73.9" N 103° 12' 20.5" W
TP4	2-18-08	20'		7,344		32° 36' 73.9" N 103° 12' 20.5" W
TP4	2-19-08	22'		2,696		32° 36' 73.9" N 103° 12' 20.5" W
TP4	2-19-08	23'		1,499		32° 36' 73.9" N 103° 12' 20.5" W
TP4	2-19-08	24'		5,217		32° 36' 73.9" N 103° 12' 20.5" W
TP4	2-28-08	25'		221	7.7	32° 36' 73.9" N 103° 12' 20.5" W
TP5	2-18-08	8'		1,159		32° 36' 74.5" N 103° 12' 21.2" W
TP5	2-18-08	10'		1,197		32° 36' 74.5" N 103° 12' 21.2" W
TP5	2-18-08	12'		609		32° 36' 74.5" N 103° 12' 21.2" W
TP5	2-18-08	14'		730		32° 36' 74.5" N 103° 12' 21.2" W
TP5	2-18-08	16'		603		32° 36' 74.5" N 103° 12' 21.2" W
TP5	2-18-08	18'		890		32° 36' 74.5" N 103° 12' 21.2" W
TP5	2-18-08	20'		657		32° 36' 74.5" N 103° 12' 21.2" W





# **Analytical Report 298237**

**for**

**Elke Environmental, Inc.**

**Project Manager: Logan Anderson**

**Pride Energy**

**27-FEB-08**



**12600 West I-20 East Odessa, Texas 79765**

Texas certification numbers:  
Houston, TX T104704215

Florida certification numbers:  
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675  
Norcross(Atlanta), GA E87429

South Carolina certification numbers:  
Norcross(Atlanta), GA 98015

North Carolina certification numbers:  
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America  
Midland - Corpus Christi - Atlanta



27-FEB-08

Project Manager: **Logan Anderson**  
**Elke Environmental, Inc.**  
4817 Andrews Hwy  
P.O. Box 14167 Odessa, tx 79768  
Odessa, TX 79762

Reference: XENCO Report No: **298237**  
**Pride Energy**  
Project Address: State of New Mexico 36 # 2

**Logan Anderson:**

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 298237. 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. 298237 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

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

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**Sample Cross Reference 298237**



**Elke Environmental, Inc., Odessa, TX**

Pride Energy

<b>Sample Id</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Sample Depth</b>	<b>Lab Sample Id</b>
TP1 @ 40'	S	Feb-22-08 10:10	40 ft	298237-001
TP2 @ 30'	S	Feb-22-08 09:35	30 ft	298237-002
TP3 @ 25'	S	Feb-22-08 08:45	25 ft	298237-003
TP4 @ 25'	S	Feb-22-08 09:00	25 ft	298237-004
TP5 @ 35'	S	Feb-22-08 10:50	35 ft	298237-005



# Certificate of Analysis Summary 298237

## Elke Environmental, Inc., Odessa, TX

**Project Id:** Contact: Logan Anderson  
**Project Location:** State of New Mexico 36 # 2  
**Date Received in Lab:** Sat Feb-23-08 09:28 am  
**Report Date:** 27-FEB-08  
**Project Manager:** Brent Barron, II

Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	Extracted:	Analyzed:	Units/RL:
298237-001	TP1 @ 40'	40 ft	SOIL	Feb-22-08 10:10	Feb-26-08 08:28	Feb-25-08 16:57	mg/kg RL 35.0% 51.9
298237-002	TP2 @ 30'	30 ft	SOIL	Feb-22-08 09:35	Feb-26-08 16:24	Feb-25-08 16:57	mg/kg RL 62.0% 5.11
298237-003	TP3 @ 25'	25 ft	SOIL	Feb-22-08 08:45	Feb-26-08 16:24	Feb-25-08 16:57	mg/kg RL 95.1% 5.24
298237-004	TP4 @ 25'	25 ft	SOIL	Feb-22-08 09:00	Feb-26-08 16:24	Feb-25-08 16:57	mg/kg RL 139% 5.45
298237-005	TP5 @ 35'	35 ft	SOIL	Feb-22-08 10:50	Feb-26-08 16:24	Feb-25-08 16:57	mg/kg RL 33.5% 5.09
<b>Analysis Requested</b>							
<b>Determination of Inorganic Anions per Ion Chromatography by Chloride</b>							
<b>Percent Moisture</b>							
<b>TPH by SW8015 Mod</b>							
C6-C12 Gasoline Range Hydrocarbons							
C12-C28 Diesel Range Hydrocarbons							
C28-C35 Oil Range Hydrocarbons							
Total TPH							

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretation and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end user of the data hereby presented. Our liability is limited to the amount invested for this work under unless otherwise agreed to in writing.

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Alliana - Corpus Christi

  
 Brent Barron  
 Odessa Laboratory Director



**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(PQL) and above the SQL(MDL).
- 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.
- \* Outside XENCO'S scope of NELAC Accreditation

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11381 Meadowglen Lane Suite L Houston, Tx 77082-2647	Phone	Fax
9701 Harry Hines Blvd , Dallas, TX 75220	(281) 589-0692	(281) 589-0695
5332 Blackberry Drive, Suite 104, San Antonio, TX 78238	(214) 902 0300	(214) 351-9139
2505 N. Falkenburg Rd., Tampa, FL 33619	(210) 509-3334	(210) 509-3335
5757 NW 158th St, Miami Lakes, FL 33014	(813) 620-2000	(813) 620-2033
6017 Financial Dr., Norcross, GA 30071	(305) 823-8500	(305) 823-8555
	(770) 449-8800	(770) 449-5477



# Form 2 - Surrogate Recoveries



Project Name: Pride Energy

Work Order #: 298237

Project ID:

Lab Batch #: 715577

Sample: 298237-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	86.1	100	86	70-135	
o-Terphenyl	46.3	50.0	93	70-135	

Lab Batch #: 715577

Sample: 298237-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	97.5	100	98	70-135	
o-Terphenyl	51.1	50.0	102	70-135	

Lab Batch #: 715577

Sample: 298237-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	51.0	50.0	102	70-135	

Lab Batch #: 715577

Sample: 298237-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	88.4	100	88	70-135	
o-Terphenyl	46.7	50.0	93	70-135	

Lab Batch #: 715577

Sample: 298237-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	92.6	100	93	70-135	
o-Terphenyl	49.6	50.0	99	70-135	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



# Form 2 - Surrogate Recoveries



Project Name: Pride Energy

Work Order #: 298237

Project ID:

Lab Batch #: 715577

Sample: 298237-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	90.2	100	90	70-135	
o-Terphenyl	48.2	50.0	96	70-135	

Lab Batch #: 715577

Sample: 298237-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	86.5	100	87	70-135	
o-Terphenyl	45.1	50.0	90	70-135	

Lab Batch #: 715577

Sample: 505090-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	54.3	50.0	109	70-135	

Lab Batch #: 715577

Sample: 505090-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	96.7	100	97	70-135	
o-Terphenyl	50.0	50.0	100	70-135	

Lab Batch #: 715577

Sample: 505090-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	98.9	100	99	70-135	
o-Terphenyl	52.0	50.0	104	70-135	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



# Blank Spike Recovery



Project Name: Pride Energy

Work Order #: 298237

Project ID:

Lab Batch #: 715635

Sample: 715635-1-BKS

Matrix: Solid

Date Analyzed: 02/26/2008

Date Prepared: 02/26/2008

Analyst: IRO

Reporting Units: mg/kg

Batch #: 1

### BLANK/BLANK SPIKE RECOVERY STUDY

Determination of Inorganic Anions per Ion Chro	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
Chloride	ND	10.0	9.64	96	75-125	

Lab Batch #: 715639

Sample: 715639-1-BKS

Matrix: Solid

Date Analyzed: 02/26/2008

Date Prepared: 02/26/2008

Analyst: IRO

Reporting Units: mg/kg

Batch #: 1

### BLANK/BLANK SPIKE RECOVERY STUDY

Determination of Inorganic Anions per Ion Chro	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
Chloride	ND	10.0	9.78	98	75-125	

Blank Spike Recovery [D] = 100\*[C]/[B]

All results are based on MDL and validated for QC purposes.



# BS / BSD Recoveries



Project Name: **Pride Energy**

Work Order #: 298237

Analyst: SHE

Lab Batch ID: 715577

Sample: 505090-1-BKS

Batch #: 1

Date Prepared: 02/25/2008

Project ID:

Date Analyzed: 02/25/2008

Matrix: Solid

Units: mg/kg

BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blank Spike Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1000	923	92	1000	888	89	4	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	906	91	1000	879	88	3	70-135	35	

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



# Form 3 - MS Recoveries



Project Name: Pride Energy

Work Order #: 298237

Lab Batch #: 715635

Date Analyzed: 02/26/2008

QC- Sample ID: 298154-009 S

Reporting Units: mg/kg

Project ID:

Analyst: IRO

Date Prepared: 02/26/2008

Batch #: 1

Matrix: Soil

### MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	5330	2000	7690	118	75-125	

Lab Batch #: 715639

Date Analyzed: 02/26/2008

QC- Sample ID: 298237-002 S

Reporting Units: mg/kg

Date Prepared: 02/26/2008

Analyst: IRO

Batch #: 1

Matrix: Soil

### MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	62.0	102	172	108	75-125	

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



# Form 3 - N - / MSD Recoveries



Project Name: Pride Energy

Work Order #: 298237

Lab Batch ID: 715577

Date Analyzed: 02/26/2008

Reporting Units: mg/kg

Project ID:

QC-Sample ID: 298237-001 S

Batch #: 1 Matrix: Soil

Date Prepared: 02/25/2008

Analyst: SHE

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1000	905	91	1000	901	90	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	50.1	1000	911	86	1000	916	87	1	70-135	35	

Matrix Spike Duplicate Percent Recovery: [G] = 100\*(F-A)/E

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B  
Relative Percent Difference RPD = 200\*(D-G)/(D+G)

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = In-Reference, NA = Not Applicable, N = See Narrative, EQ = Estimated Quantitation Limit



# Sample Duplicate Recovery



Project Name: Pride Energy

Work Order #: 298237

Lab Batch #: 715635  
Date Analyzed: 02/26/2008  
QC- Sample ID: 298154-009 D  
Reporting Units: mg/kg

Project ID:  
Date Prepared: 02/26/2008 Analyst: IRO  
Batch #: 1 Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Determination of Inorganic Anions per Ion Chromatography by Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	5330	5060	5	20	

Lab Batch #: 715639  
Date Analyzed: 02/26/2008  
QC- Sample ID: 298237-002 D  
Reporting Units: mg/kg

Date Prepared: 02/26/2008 Analyst: IRO  
Batch #: 1 Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Determination of Inorganic Anions per Ion Chromatography by Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	62.0	61.0	2	20	

Lab Batch #: 715608  
Date Analyzed: 02/25/2008  
QC- Sample ID: 298208-001 D  
Reporting Units: %

Date Prepared: 02/25/2008 Analyst: RBA  
Batch #: 1 Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	2.65	2.60	2	20	

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



**Environmental Lab of Texas**  
Variance/ Corrective Action Report- Sample Log-In

Client: Elke Env.  
Date/ Time: 2-23-08 9:27  
Lab ID #: 298237  
Initials: CL

**Sample Receipt Checklist**

	Yes	No	Client Initials
#1 Temperature of container/ cooler?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4 ° C
#2 Shipping container in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
#3 Custody Seals intact on shipping container/ cooler?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not Present
#4 Custody Seals intact on sample bottles/ container?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not Present
#5 Chain of Custody present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
#6 Sample instructions complete of Chain of Custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
#7 Chain of Custody signed when relinquished/ received?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
#8 Chain of Custody agrees with sample label(s)?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ID written on Con/Lid
#9 Container label(s) legible and intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not Applicable
#10 Sample matrix/ properties agree with Chain of Custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
#11 Containers supplied by ELDT?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
#12 Samples in proper container/ bottle?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Below
#13 Samples properly preserved?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Below
#14 Sample bottles intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
#15 Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
#16 Containers documented on Chain of Custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
#17 Sufficient sample amount for indicated test(s)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Below
#18 All samples received within sufficient hold time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Below
#19 Subcontract of sample(s)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not Applicable
#20 VOC samples have zero headspace?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not Applicable

**Variance Documentation**

Contact: Kim Baker Contacted by: Andrea Date/ Time: 2-23-08/12:08

Regarding: #8 CoC states sample 016-07 sampled on 2/23/08 container state 2-27-08 Sample -07  
on CoC states TP2 @ 35' container states TP5 @ 35'

Corrective Action Taken:

Per Kim all samples taken 2-27-08 sample -02 name is TP2 @ 30' and sample -05  
name is TP5 @ 35'

- Check all that Apply:
- See attached e-mail/ fax
  - Client understands and would like to proceed with analysis
  - Cooling process had begun shortly after sampling event

# Analytical Report 298423

for

**Elke Environmental, Inc.**

**Project Manager: Logan Anderson**

**Pride Energy**

**03-MAR-08**



**12600 West I-20 East Odessa, Texas 79765**

Texas certification numbers:

Houston, TX T104704215

Florida certification numbers:

Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675  
Norcross(Atlanta), GA E87429

South Carolina certification numbers:

Norcross(Atlanta), GA 98015

North Carolina certification numbers:

Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America  
Midland - Corpus Christi - Atlanta



03-MAR-08

Project Manager: **Logan Anderson**  
**Elke Environmental, Inc.**  
4817 Andrews Hwy  
P.O. Box 14167 Odessa, tx 79768  
Odessa, TX 79762

Reference: XENCO Report No: **298423**  
**Pride Energy**  
Project Address: State of New Mexico 36 # 2

**Logan Anderson:**

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 298423. 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. 298423 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

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*Certified and approved by numerous States and Agencies.*

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**Sample Cross Reference 298423**



**Elke Environmental, Inc., Odessa, TX**  
Pride Energy

<b>Sample Id</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Sample Depth</b>	<b>Lab Sample Id</b>
MW-1	W	Fcb-25-08 10:45	43.8 - 52.4 ft	298423-001



# Certificate of Analysis Summary 298423

## Elke Environmental, Inc., Odessa, TX

Project Name: **Fride Energy**

Date Received in Lab: **Wed Feb-27-08 10:41 am**

Report Date: **03-MAR-08**

Project Manager: **Brent Barron, II**

Project Id:

Contact: **Logan Anderson**

Project Location: **State of New Mexico 36 # 2**

Analysis Requested	Lab Id:	Field Id:	Depth:	Matrix:	Sampled:
	298423-101	MW-1	43.8-52.4 ft	WATER	Feb-25-08 10:45
<b>Anions by EPA 300/300.1</b>	<b>Extracted:</b>	<b>Analyzed:</b>	<b>Units/RL:</b>		
Chloride	Feb-29-08 10:58	mg/L	RL		
	459		5.00		
<b>TPH By SW8015 Mod</b>	<b>Extracted:</b>	<b>Analyzed:</b>	<b>Units/RL:</b>		
C6-C12 Gasoline Range Hydrocarbons	Feb-29-08 14:09	mg/L	RL		
C12-C28 Diesel Range Hydrocarbons	Mar-01-08 00:28	mg/L	RL		
C28-C35 Oil Range Hydrocarbons	ND	ND	1.50		
Total TPH	1.79	1.50	1.50		
	ND	ND	1.50		
	1.79				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end user of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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**Brent Barron**  
Odessa Laboratory Director



# 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(PQL) and above the SQL(MDL).
  - 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.
- \* Outside XENCO'S scope of NELAC Accreditation

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 9701 Harry Hines Blvd , Dallas, TX 75220  
 5332 Blackberry Drive, Suite 104, San Antonio, TX 78238  
 2505 N. Falkenburg Rd., Tampa, FL 33619  
 5757 NW 158th St. Miami Lakes, FL 33014  
 6017 Financial Dr., Norcross, GA 30071

Phone	Fax
(281) 589-0692	(281) 589-0695
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(770) 449-8800	(770) 449-5477



# Form 2 - Surrogate Recoveries



Project Name: Pride Energy

Work Order #: 298423

Project ID:

Lab Batch #: 716047

Sample: 298423-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	8.29	10.0	83	70-135	
o-Terphenyl	4.37	5.00	87	70-135	

Lab Batch #: 716047

Sample: 298542-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.0	10.0	110	70-135	
o-Terphenyl	4.97	5.00	99	70-135	

Lab Batch #: 716047

Sample: 505337-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.5	10.0	105	70-135	
o-Terphenyl	4.68	5.00	94	70-135	

Lab Batch #: 716047

Sample: 505337-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9.33	10.0	93	70-135	
o-Terphenyl	5.07	5.00	101	70-135	

Lab Batch #: 716047

Sample: 505337-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.4	10.0	104	70-135	
o-Terphenyl	4.58	5.00	92	70-135	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



# Blank Spike Recovery



Project Name: Pride Energy

Work Order #: 298423

Project ID:

Lab Batch #: 716008

Sample: 716008-1-BKS

Matrix: Water

Date Analyzed: 02/29/2008

Date Prepared: 02/29/2008

Analyst: LATCOR

Reporting Units: mg/L

Batch #: 1

## BLANK /BLANK SPIKE RECOVERY STUDY

Anions by EPA 300/300.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	9.31	93	85-115	

Blank Spike Recovery [D] = 100\*[C]/[B]  
 All results are based on MDL and validated for QC purposes.



# BS / BSD Recoveries



Project Name: Pride Energy

Work Order #: 298423

Analyst: SHE

Lab Batch ID: 716047

Sample: 505337-1-BKS

Batch #: 1

Date Prepared: 02/29/2008

Project ID:

Date Analyzed: 03/29/2008

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
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
C6-C12 Gasoline Range Hydrocarbons	ND	100	90.0	90	100	88.3	88	2	70-135	25	
C12-C28 Diesel Range Hydrocarbons	ND	100	79.2	79	100	77.8	78	2	70-135	25	

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



# Form 3 - MS Recoveries



Project Name: Pride Energy

Work Order #: 298423

Lab Batch #: 716047

Date Analyzed: 03/01/2008

QC- Sample ID: 298542-001 S

Reporting Units: mg/L

Date Prepared: 02/29/2008

Batch #: 1

Project ID:

Analyst: SHE

Matrix: Water

## MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod  Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	100	87.4	87	70-135	
C12-C28 Diesel Range Hydrocarbons	ND	100	77.2	77	70-135	

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



# Sample Duplicate Recovery



Project Name: Pride Energy

Work Order #: 298423

Lab Batch #: 716008  
Date Analyzed: 02/29/2008  
QC- Sample ID: 298555-001 D  
Reporting Units: mg/L

Date Prepared: 02/29/2008  
Batch #: 1  
Project ID:  
Analyst: LATCOR  
Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by EPA 300/300.1	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	ND	ND	NC	20	

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

**Environmental Lab of Texas**  
 1 Xmas Laboratory Company

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST  
 12600 West 150 East  
 Odessa, Texas 79766  
 Phone: 432-883-8000  
 Fax: 432-883-1713

Project Manager: Logan Anderson  
 Company Name: Elke Environmental  
 Company Address: P.O. Box 14167  
 City/State/Zip: Odessa, TX 79766  
 Telephone No: 432-366-0043  
 Sampler Signature: [Signature]  
 Project Name: LAKE ENERGY  
 Project Loc: STATE OF NEW MEXICO  
 Report Format:  Standard  TRRP  NPDES

ORDER # 218423

DATE	TIME	RECEIVED BY	DATE	TIME	RECEIVED BY
2-26-08	10:30	[Signature]	2-26-08	10:41	[Signature]
2-27-08	10:41 A	[Signature]	2-27-08	10:41	[Signature]

LABORATORY COMMENTS:  
 Sample Containers intact  
 VOLUME: 100 ml  
 CUSTOMER: STATE OF NEW MEXICO  
 CUSTOMER ADDRESS: STATE OF NEW MEXICO  
 SAMPLE HAND DELIVERED BY: [Signature]  
 TEMPERATURE (C): 3.5

**Environmental Lab of Texas**  
Variance/ Corrective Action Report- Sample Log-In

Client: Elke Env.  
Date/ Time: 2-27-08 10:41  
Lab ID #: 298423  
Initials: al

**Sample Receipt Checklist**

			Client Initials		
#1	Temperature of container/ cooler?	<u>Yes</u>	No	<u>3.5</u> °C	
#2	Shipping container in good condition?	<u>Yes</u>	No		
#3	Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	<u>Not Present</u>	
#4	Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	<u>Not Present</u>	
#5	Chain of Custody present?	<u>Yes</u>	No		
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No		
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No		
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No		
#11	Containers supplied by ELOT?	<u>Yes</u>	No		
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below	
#13	Samples properly preserved?	<u>Yes</u>	No	See Below	
#14	Sample bottles intact?	<u>Yes</u>	No		
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No		
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No		
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below	
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below	
#19	Subcontract of sample(s)?	<u>Yes</u>	No	<u>Not Applicable</u>	
#20	VOC samples have zero headspace?	<u>Yes</u>	No	Not Applicable	

**Variance Documentation**

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

- Check all that Apply:
- See attached e-mail/ fax
  - Client understands and would like to proceed with analysis
  - Cooling process had begun shortly after sampling event

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-144  
June 1, 2004

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

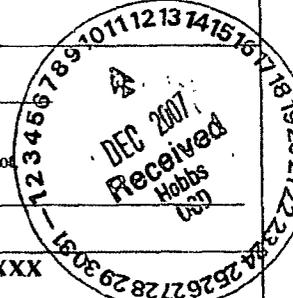
**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes  No

Type of action: Registration of a pit or below-grade tank  Closure of a pit or below-grade tank

Operator: Pride Energy Company Telephone: 918-524-9200 e-mail address: Jarrym@pride-energy.com  
 Address: P O Box 701950 Tulsa, OK 74170-1950  
 Facility or well name: State of New Mexico 36 #2 API #: 30-025-36909 U/L or Qtr/Qtr O Sec 36 T J9S R 37E  
 County: Lea Latitude 32-36-43.8 Longitude 103-12-14.4 NAD: 1927  1983   
 Surface Owner: Federal  State  Private  Indian

<b>Pit</b> Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Pit Volume _____ bbl	<b>Below-grade tank</b> Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: _____	
	Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) <b>GW = 48'</b>	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) ( 0 points) XXX
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) ( 0 points) XXX
<b>Ranking Score (Total Points)</b>		<b>20 points</b>



**If this is a pit closure:** (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite  offsite  If offsite, name of facility \_\_\_\_\_ (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No  Yes  If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: All excess drilling fluid will be removed. A burial pit will be excavated and lined with a 20 mil liner. The drilling mud will be mixed with Elke Environmental Solidification Product at a 20(mud) to 1(product) ratio to solidify the mud then placed in the burial pit. After all mud is removed the pit bottoms will be sampled Per NMOCD guidelines. The drilling pit will be backfilled with clean native soil and contoured to the surrounding area. A final report will be submitted after completion of The job.  
 NMOCD Hobbs will be given 48 hrs notice before start of job and 48 hrs notice before testing.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines , a general permit , or an (attached) alternative OCD-approved plan .

Date: 12-10-07  
 Printed Name/Title: Logan Anderson - Agent Signature: [Signature]

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:  
 Printed Name/Title: CHRIS WILLIAMS Signature: [Signature] Date: 12/10/07

File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

1. OWNER OF WELL

Name: Pride Energy Work Phone: \_\_\_\_\_  
Contact: \_\_\_\_\_ Home Phone: \_\_\_\_\_  
Address: P.O. Box 701950  
City: Tulsa State: OK Zip: 74170

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 36 Township: 19S Range: 37E N.M.P.M.  
in Lea County.

B. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System  
Zone in the \_\_\_\_\_ Grant.  
U.S.G.S. Quad Map \_\_\_\_\_

C. Latitude: 32 d 36 m 45.2 s Longitude: 103 d 12 m 14.0 s

D. East \_\_\_\_\_ (m), North \_\_\_\_\_ (m), UTM Zone 13, NAD \_\_\_\_\_ (27 or 83)

E. Tract No. \_\_\_\_\_, Map No. \_\_\_\_\_ of the \_\_\_\_\_ Hydrographic Survey

F. Lot No. \_\_\_\_\_, Block No. \_\_\_\_\_ of Unit/Tract 0 of the  
\_\_\_\_\_ Subdivision recorded in \_\_\_\_\_ County.

G. Other: \_\_\_\_\_

H. Give State Engineer File Number if existing well: \_\_\_\_\_

I. On land owned by (required): State of New Mexico

3. DRILLING CONTRACTOR

License Number: WD-1456  
Name: White Drilling Company, Inc. Work Phone: 325-893-2950  
Agent: John W. White Home Phone: 325-893-2950  
Mailing Address: P.O. Box 906  
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD: State of New Mexico 36-#2 MW-1

Drilling began: 02/22/08; Completed: 02/22/08; Type tools: Air Rotary;  
Size of hole: 6 1/8 in.; Total depth of well: 51.0 ft.;  
Completed well is: shallow (shallow, artesian);  
Depth to water upon completion of well: 41.02 ft.

File Number: \_\_\_\_\_ Trn Number: \_\_\_\_\_  
Form: wr-20 page 1 of 4

File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: State of New Mexico 36-#2 MW-1

Depth in Feet		Thickness	Description of water-bearing formation	Estimated Yield (GPM)
From	To	in feet		
28.0	51.0	23.0	Tan sand & red shale.	
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
2.0	Sch. 40	4.0	0.0	30.0	31.0			
2.0	.020	4.0	31.0	51.0	20.0		31.0	51.0
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
From	To				
51.0	29.0	6 1/8	12.0		8/16 sand.
29.0	10.0	6 1/8	2.5		Bentonite Pellets
10.0	0.0	6 1/8	9.0	1.997	Cement
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging location: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Plugging Method: \_\_\_\_\_  
 Date Well Plugged: \_\_\_\_\_

Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

File Number: \_\_\_\_\_ Trn Number: \_\_\_\_\_  
 Form: wr-20 page 2 of 4





File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

1. OWNER OF WELL

Name: Pride Energy Work Phone: \_\_\_\_\_  
Contact: \_\_\_\_\_ Home Phone: \_\_\_\_\_  
Address: P.O. Box 701950  
City: Tulsa State: OK Zip: 74170

2. LOCATION OF WELL (A,B,C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 36 Township: 19S Range: 37E N.M.P.M.  
in Lea County.

B. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System  
Zone in the \_\_\_\_\_ Grant.  
U.S.G.S. Quad Map \_\_\_\_\_

C. Latitude: 32 d 36 m 44.3 s Longitude: 103 d 12 m 13.5 s

D. East \_\_\_\_\_ (m), North \_\_\_\_\_ (m), UTM Zone 13, NAD \_\_\_\_\_ (27 or 83)

E. Tract No. \_\_\_\_\_, Map No. \_\_\_\_\_ of the \_\_\_\_\_ Hydrographic Survey

F. Lot No. \_\_\_\_\_, Block No. \_\_\_\_\_ of Unit/Tract 0 of the  
\_\_\_\_\_ Subdivision recorded in \_\_\_\_\_ County.

G. Other: \_\_\_\_\_

H. Give State Engineer File Number if existing well: \_\_\_\_\_

I. On land owned by (required): State of New Mexico

3. DRILLING CONTRACTOR

License Number: WD-1456  
Name: White Drilling Company, Inc. Work Phone: 325-893-2950  
Agent: John W. White Home Phone: 325-893-2950  
Mailing Address: P.O. Box 906  
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD: State of New Mexico 36-#2 TP-1

Drilling began: 02/22/08; Completed: 02/22/08; Type tools: Air Rotary;  
Size of hole: 6 1/8 in.; Total depth of well: 30.0 ft.;  
Completed well is: shallow (shallow, artesian);  
Depth to water upon completion of well: Dry ft.

File Number: \_\_\_\_\_ Trn Number: \_\_\_\_\_

File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: State of New Mexico 36-#2 TP-1

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
30.0	10.0	6 1/8	5.0		Bentonite Pellets
10.0	0.0	6 1/8	3.0	1.997	Cement
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contractor: White Drilling Company, Inc.  
 Address: P.O. Box 906, Clyde, TX 79510  
 Plugging Method: Hand Mix  
 Date Well Plugged: 2/22/08

Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

	No. Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

File Number: \_\_\_\_\_ Form: wr-20      Page 2 of 4      Tcn Number: \_\_\_\_\_





File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

1. OWNER OF WELL

Name: Pride Energy Work Phone: \_\_\_\_\_  
Contact: \_\_\_\_\_ Home Phone: \_\_\_\_\_  
Address: P.O. Box 701950  
City: Tulsa State: OK Zip: 74170

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A.      1/4      1/4      1/4 Section: 36 Township: 19S Range: 37E N.M.P.M.  
in Lea County.

B. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System  
Zone in the \_\_\_\_\_ Grant.  
U.S.G.S. Quad Map \_\_\_\_\_

C. Latitude: 32 d 36 m 44.7 s Longitude: 103 d 12 m 12.6 s

D. East \_\_\_\_\_ (m), North \_\_\_\_\_ (m), UTM Zone 13, NAD \_\_\_\_\_ (27 or 83)

E. Tract No. \_\_\_\_\_, Map No. \_\_\_\_\_ of the \_\_\_\_\_ Hydrographic Survey

F. Lot No. \_\_\_\_\_, Block No. \_\_\_\_\_ of Unit/Tract 0 of the  
\_\_\_\_\_ Subdivision recorded in \_\_\_\_\_ County.

G. Other: \_\_\_\_\_

H. Give State Engineer File Number if existing well: \_\_\_\_\_

I. On land owned by (required): State of New Mexico

3. DRILLING CONTRACTOR

License Number: WD-1456  
Name: White Drilling Company, Inc. Work Phone: 325-893-2950  
Agent: John W. White Home Phone: 325-893-2950  
Mailing Address: P.O. Box 906  
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD: State of New Mexico 36-#2 TP-2

Drilling began: 02/22/08 ; Completed: 02/22/08 ; Type tools: Air Rotary ;  
Size of hole: 6 1/8 in.; Total depth of well: 30.0 ft.;  
Completed well is: shallow (shallow, artesian);  
Depth to water upon completion of well: Dry ft.

File Number: \_\_\_\_\_ Trn Number: \_\_\_\_\_  
Form: WR-20 page 1 of 4

File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: State of New Mexico 36-#2 TP-2

Depth in Feet		Thickness	Description of water-bearing formation	Estimated Yield (GPM)
From	To	in feet		
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
From	To				
30.0	10.0	6 1/8	5.0		Bentonite Pellets
10.0	0.0	6 1/8	3.0	1.997	Cement
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contractor: White Drilling Company, Inc.  
 Address: P.O. Box 906, Clyde, TX 79510  
 Plugging Method: Hand Mix  
 Date Well Plugged: 2/22/08

Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

	No. Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

File Number: \_\_\_\_\_  
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 Trn Number: \_\_\_\_\_





File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

1. OWNER OF WELL

Name: Pride Energy Work Phone: \_\_\_\_\_  
Contact: \_\_\_\_\_ Home Phone: \_\_\_\_\_  
Address: P.O. Box 701950  
City: Tulsa State: OK Zip: 74170

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 36 Township: 19S Range: 37E N.M.P.M.  
in Lea County.

B. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System  
Zone in the \_\_\_\_\_ Grant.  
U.S.G.S. Quad Map \_\_\_\_\_

C. Latitude: 32 d 36 m 45.3 s Longitude: 103 d 12 m 13.4 s

D. East \_\_\_\_\_ (m), North \_\_\_\_\_ (m), UTM Zone 13, NAD \_\_\_\_\_ (27 or 83)

E. Tract No. \_\_\_\_\_, Map No. \_\_\_\_\_ of the \_\_\_\_\_ Hydrographic Survey

F. Lot No. \_\_\_\_\_, Block No. \_\_\_\_\_ of Unit/Tract 0 of the  
\_\_\_\_\_ Subdivision recorded in \_\_\_\_\_ County.

G. Other: \_\_\_\_\_

H. Give State Engineer File Number if existing well: \_\_\_\_\_

I. On land owned by (required): State of New Mexico

3. DRILLING CONTRACTOR

License Number: WD-1456  
Name: White Drilling Company, Inc. Work Phone: 325-893-2950  
Agent: John W. White Home Phone: 325-893-2950  
Mailing Address: P.O. Box 906  
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD: State of New Mexico 36-#2 TP-3

Drilling began: 02/22/08; Completed: 02/22/08; Type tools: Air Rotary;  
Size of hole: 6 1/8 in.; Total depth of well: 40.0 ft.;  
Completed well is: shallow (shallow, artesian);  
Depth to water upon completion of well: Dry ft.

File Number: \_\_\_\_\_  
Form: wr-20

Trn Number: \_\_\_\_\_

File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: State of New Mexico 36-#2 TP-3

Depth in Feet		Thickness	Description of water-bearing formation	Estimated Yield (GPM)
From	To	in feet		
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole	Sacks	Cubic Feet	Method of Placement
From	To	Diameter	of mud	of Cement	
40.0	10.0	6 1/8	8.0		Bentonite Pellets
10.0	0.0	6 1/8	3.0	1.997	Cement
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contractor: White Drilling Company, Inc.  
 Address: P.O. Box 906, Clyde, TX 79510  
 Plugging Method: Hand Mix  
 Date Well Plugged: 2/22/08

Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

	No. Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

File Number: \_\_\_\_\_ Trn Number: \_\_\_\_\_





File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

1. OWNER OF WELL

Name: Pride Energy Work Phone: \_\_\_\_\_  
Contact: \_\_\_\_\_ Home Phone: \_\_\_\_\_  
Address: P.O. Box 701950  
City: Tulsa State: OK Zip: 74170

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A.    1/4    1/4    1/4 Section: 36 Township: 19S Range: 37E N.M.P.M.  
in Lea County.  
B. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System  
Zone in the \_\_\_\_\_ Grant.  
U.S.G.S. Quad Map \_\_\_\_\_  
C. Latitude: 32 d 36 m 45.1 s Longitude: 103 d 12 m 13.0 s  
D. East \_\_\_\_\_ (m), North \_\_\_\_\_ (m), UTM Zone 13, NAD \_\_\_\_\_ (27 or 83)  
E. Tract No. \_\_\_\_\_, Map No. \_\_\_\_\_ of the \_\_\_\_\_ Hydrographic Survey  
F. Lot No. \_\_\_\_\_, Block No. \_\_\_\_\_ of Unit/Tract 0 of the  
\_\_\_\_\_ Subdivision recorded in \_\_\_\_\_ County.  
G. Other: \_\_\_\_\_

H. Give State Engineer File Number if existing well: \_\_\_\_\_

I. On land owned by (required): State of New Mexico

3. DRILLING CONTRACTOR

License Number: WD-1456  
Name: White Drilling Company, Inc. Work Phone: 325-893-2950  
Agent: John W. White Home Phone: 325-893-2950  
Mailing Address: P.O. Box 906  
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD: State of New Mexico 36-#2 TP-4

Drilling began: 02/22/08 ; Completed: 02/22/08 ; Type tools: Air Rotary ;  
Size of hole: 6 1/8 in.; Total depth of well: 30.0 ft.;  
Completed well is: shallow (shallow, artesian);  
Depth to water upon completion of well: Dry ft.

File Number: \_\_\_\_\_ Trn Number: \_\_\_\_\_  
Form: wr-20 page 1 of 4

File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: State of New Mexico 36-#2 TP-4

Depth in Feet		Thickness	Description of	Estimated Yield
From	To	in feet	water-bearing formation	(GPM)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
From	To				
30.0	10.0	6 1/8	5.0		Bentonite Pellets
10.0	0.0	6 1/8	3.0	1.997	Cement
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contract to: White Drilling Company, Inc.  
 Address: P.O. Box 906, Clyde, TX 79510  
 Plugging Method: Hand Mix  
 Date Well Plugged: 2/22/08

Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

File Number: \_\_\_\_\_ Form: wr-20 page 2 of 4 Tzn Number: \_\_\_\_\_





File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

1. OWNER OF WELL

Name: Pride Energy Work Phone: \_\_\_\_\_  
Contact: \_\_\_\_\_ Home Phone: \_\_\_\_\_  
Address: P.O. Box 701950  
City: Tulsa State: OK Zip: 74170

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 36 Township: 19S Range: 37E N.M.P.M.  
in Lea County.

B. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System  
Zone in the \_\_\_\_\_ Grant.  
U.S.G.S. Quad Map \_\_\_\_\_

C. Latitude: 32 d 36 m 45.1 s Longitude: 103 d 12 m 13.0 s

D. East \_\_\_\_\_ (m), North \_\_\_\_\_ (m), UTM Zone 13, NAD \_\_\_\_\_ (27 or 83)

E. Tract No. \_\_\_\_\_, Map No. \_\_\_\_\_ of the \_\_\_\_\_ Hydrographic Survey

F. Lot No. \_\_\_\_\_, Block No. \_\_\_\_\_ of Unit/Tract 0 of the  
\_\_\_\_\_ Subdivision recorded in \_\_\_\_\_ County.

G. Other: \_\_\_\_\_

H. Give State Engineer File Number if existing well: \_\_\_\_\_

I. On land owned by (required): State of New Mexico

3. DRILLING CONTRACTOR

License Number: WD-1456  
Name: White Drilling Company, Inc. Work Phone: 325-893-2950  
Agent: John W. White Home Phone: 325-893-2950  
Mailing Address: P.O. Box 906  
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD: State of New Mexico 36-#2 TP-5

Drilling began: 02/22/08; Completed: 02/22/08; Type tools: Air Rotary;  
Size of hole: 6 1/8 in.; Total depth of well: 40.0 ft.;  
Completed well is: shallow (shallow, artesian);  
Depth to water upon completion of well: Dry ft.

File Number: \_\_\_\_\_ Trn Number: \_\_\_\_\_  
Form: wr-20 page 1 of 4

File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: State of New Mexico 36-#2 TP-5

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
40.0	10.0	6 1/8	8.0		Bentonite Pellets
10.0	0.0	6 1/8	3.0	1.997	Cement

8. PLUGGING RECORD

Plugging Contractor: White Drilling Company, Inc.  
 Address: P.O. Box 906, Clyde, TX 79510  
 Plugging Method: Hand Mix  
 Date Well Plugged: 2/22/08

Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
1			
2			
3			
4			
5			

File Number: \_\_\_\_\_ Trn Number: \_\_\_\_\_  
 Form: wr-20 page 2 of 4





# **ATTACHMENT B**

## **SECOND GROUNDWATER SAMPLING RESULTS (TRIDENT ENVIRONMENTAL)**



Pride Energy Co. - State 36 #2  
T19S - R37E - Section 36 - Unit Letter O  
View facing southeast showing monitoring well MW-1 (foreground) and former drilling pit (background).

**WELL SAMPLING DATA FORM**

CLIENT: Pride Energy Company WELL ID: MW- 1  
 SITE NAME: State 36 #2 DATE: March 27, 2008  
 SITE LOCATION: T19S-R37E-Sec 36 Unit O SAMPLER: Gil Van Deventer  
 LAT/LONG: N 33° 36' 45.2", W 103° 12' 14.0"

PURGING METHOD:  Hand Bailed  Pump If Pump, Type: \_\_\_\_\_

SAMPLING METHOD:  Disposable Bailer  Direct from Discharge Hose  Other: \_\_\_\_\_

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

Gloves  Alconox  Distilled Water Rinse  Other: \_\_\_\_\_

DISPOSAL METHOD OF PURGE WATER:  Surface Discharge  Drums  SWD Disposal Facility

TOTAL DEPTH OF WELL: 52.4 Feet  
 DEPTH TO WATER: 43.88 Feet  
 HEIGHT OF WATER COLUMN: 8.52 Feet  
 WELL DIAMETER: 2.0 Inch

32'-52' bgs Well Screen Interval (adjusted from driller's well record)  
4.2 Minimum gallons to purge 3 well volumes  
5 Actual Gallons purged

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg/L	PHYSICAL APPEARANCE AND REMARKS
10:32 AM	1	20.1	2.39	7.00	4.2	Silty reddish
10:35 AM	2	19.2	2.43	7.02	5.7	
10:38 AM	3	19.3	2.33	7.05	5.7	Clearing somewhat
10:40 AM	4	19.3	2.23	7.07	5.7	
10:48 AM	5	20.1	2.68	7.05	6.2	
10:50 AM						Collected samples in the following containers:
						2 - 40 ml VOA + + 2 - 500 ml plastic
:Total Time (hr:min)		:Total Vol (gal)			:Average Flow Rate (gal/min)	

COMMENTS: Hanna Model HI98130 used to obtain temperature, conductivity, & pH, measurements.

Milwaukee Model SM600 used to obtain dissolved oxygen measurements.

Delivered samples to Xenco Laboratories /Environmental Lab of Texas for BTEX, Major Ions, and TDS analyses.

# **Analytical Report 300607**

**for**

**R.T. Hicks Consultants, LTD**

**Project Manager: Randy Hicks**

**Pride Energy Company**

**State 36 # 2**

**03-APR-08**



**12600 West I-20 East Odessa, Texas 79765**

Texas certification numbers:  
Houston, TX T104704215

Florida certification numbers:  
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675  
Norcross(Atlanta), GA E87429

South Carolina certification numbers:  
Norcross(Atlanta), GA 98015

North Carolina certification numbers:  
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America  
Midland - Corpus Christi - Atlanta



03-APR-08

Project Manager: **Randy Hicks**  
**R.T. Hicks Consultants, LTD**  
901 Rio Grande Blvd. NW, Suite F-142  
Albuquerque, NM 87104

Reference: XENCO Report No: **300607**  
**Pride Energy Company**  
Project Address: T19S-R37E, Section 36, Unit Letter O

**Randy Hicks:**

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 300607. 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. 300607 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

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**Sample Cross Reference 300607**



**R.T. Hicks Consultants, LTD, Albuquerque, NM**  
Pride Energy Company

<b>Sample Id</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Sample Depth</b>	<b>Lab Sample Id</b>
MW-1	W	Mar-27-08 10:50		300607-001



# Certificate of Analysis Summary 300607

R.T. Hicks Consultants, LTD, Albuquerque, NM

**Project Name: Pride Energy Company**

**Project Id:** State 36 # 2

**Date Received in Lab:** Mar-28-08 02:30 pm

**Contact:** Randy Hicks

**Report Date:** 03-APR-08

**Project Location:** T19S-R37E, Section 36, Unit Letter O

**Project Manager:** Brent Barron, II

<b>Analysis Requested</b>	<b>Lab Id:</b> 300607-001 <b>Field Id:</b> MW-1 <b>Depth:</b> <b>Matrix:</b> WATER <b>Sampled:</b> Mar-27-08 10:50			
<b>Alkalinity by SM2320B</b>	<b>Extracted:</b> <b>Analyzed:</b> Apr-01-08 10:30 <b>Units/RL:</b> mg/L RL			
Alkalinity, Carbonate (as CaCO3)	ND	4.00		
Alkalinity, Bicarbonate (as CaCO3)	240	4.00		
Alkalinity, Total (as CaCO3)	240	4.00		
<b>Anions by EPA 300/300.1</b>	<b>Extracted:</b> <b>Analyzed:</b> Apr-01-08 21:25 <b>Units/RL:</b> mg/L RL			
Chloride	557 D	10.0		
Sulfate	182 D	10.0		
<b>BTEX by EPA 8021B</b>	<b>Extracted:</b> Apr-01-08 09:28 <b>Analyzed:</b> Apr-01-08 15:40 <b>Units/RL:</b> mg/L RL			
Benzene	ND	0.0010		
Toluene	ND	0.0020		
o-Xylenes	ND	0.0010		
m,p-Xylenes	ND	0.0020		
o-Xylene	ND	0.0010		
Xylenes, Total	ND			
Total BTEX	ND			
<b>Metals per ICP by SW846 6010B</b>	<b>Extracted:</b> <b>Analyzed:</b> Apr-01-08 10:56 <b>Units/RL:</b> mg/L RL			
Calcium	184	0.100		
Magnesium	41.4	0.010		
Potassium	5.09	0.500		
Sodium	164	0.500		
<b>TDS by SM2540C</b>	<b>Extracted:</b> <b>Analyzed:</b> Mar-31-08 16:00 <b>Units/RL:</b> mg/L RL			
Total dissolved solids	1770	10.0		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron

Odessa Laboratory Director



## 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(PQL) and above the SQL(MDL).
  - 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.
- \* Outside XENCO'S scope of NELAC Accreditation

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(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(770) 449-8800	(770) 449-5477



# Form 2 - Surrogate Recoveries



Project Name: Pride Energy Company

Work Order #: 300607

Project ID: State 36 # 2

Lab Batch #: 718729

Sample: 300607-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0291	0.0300	97	80-120	

Lab Batch #: 718729

Sample: 300748-002 S / MS

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0291	0.0300	97	80-120	

Lab Batch #: 718729

Sample: 300748-002 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0345	0.0300	115	80-120	

Lab Batch #: 718729

Sample: 506766-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0265	0.0300	88	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 718729

Sample: 506766-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



# Form 2 - Surrogate Recoveries



Project Name: Pride Energy Company

Work Order #: 300607

Project ID: State 36 # 2

Lab Batch #: 718729

Sample: 506766-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



# Blank Spike Recovery



Project Name: Pride Energy Company

Work Order #: 300607

Project ID:

State 36 # 2

Lab Batch #: 718713

Sample: 718713-1-BKS

Matrix: Water

Date Analyzed: 04/01/2008

Date Prepared: 04/01/2008

Analyst: WRU

Reporting Units: mg/L

Batch #: 1

### BLANK /BLANK SPIKE RECOVERY STUDY

Alkalinity by SM2320B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Alkalinity, Total (as CaCO3)	ND	200	174	87	80-120	

Lab Batch #: 718755

Sample: 718755-1-BKS

Matrix: Water

Date Analyzed: 04/01/2008

Date Prepared: 04/01/2008

Analyst: MAB

Reporting Units: mg/L

Batch #: 1

### BLANK /BLANK SPIKE RECOVERY STUDY

Anions by EPA 300/300.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	5.00	4.99	100	85-115	
Sulfate	ND	5.00	4.78	96	90-110	

Blank Spike Recovery [D] = 100\*[C]/[B]

All results are based on MDL and validated for QC purposes.



# BS / BSD Recoveries



Project Name: Pride Energy Company

Work Order #: 300607

Analyst: SHE

Lab Batch ID: 718729

Sample: 506766-1-BKS

Date Prepared: 04/01/2008

Batch #: 1

Project ID: State 36 # 2

Date Analyzed: 04/01/2008

Matrix: Water

Units: mg/L

BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
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
BTEX by EPA 8021B											
Benzene	ND	0.1000	0.0930	93	0.1	0.0851	85	9	70-125	25	
Toluene	ND	0.1000	0.0933	93	0.1	0.0855	86	9	70-125	25	
Ethylbenzene	ND	0.1000	0.1051	105	0.1	0.0963	96	9	71-129	25	
m,p-Xylenes	ND	0.2000	0.2173	109	0.2	0.1991	100	9	70-131	25	
o-Xylene	ND	0.1000	0.1012	101	0.1	0.0924	92	9	71-133	25	

Relative Percent Difference RPD =  $200 * [(D-F) / (D+F)]$

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



# Form 3 - MSMSD Recoveries



Project Name: Pride Energy Company

Work Order #: 300607

Project ID: Statc 36 # 2

Lab Batch ID: 718729

Batch #: 1 Matrix: Water

Date Analyzed: 04/01/2008

QC- Sample ID: 300748-002 S Date Prepared: 04/01/2008 Analyst: SHE

Reporting Units: mg/L

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spiked Sample %R [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
BTEX by EPA 8021B											
Benzene	ND	0.1000	0.0832	83	0.1000	0.0893	89	7	70-125	25	
Toluene	ND	0.1000	0.0834	83	0.1000	0.0893	89	7	70-125	25	
Ethylbenzene	ND	0.1000	0.0937	94	0.1000	0.1011	101	7	71-129	25	
m,p-Xylenes	ND	0.2000	0.1927	96	0.2000	0.2085	104	8	70-131	25	
o-Xylene	ND	0.1000	0.0912	91	0.1000	0.0993	99	8	71-133	25	

Lab Batch ID: 718755

Batch #: 1 Matrix: Water

Date Analyzed: 04/01/2008

QC- Sample ID: 300410-001 S Date Prepared: 04/01/2008 Analyst: MAB

Reporting Units: mg/L

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spiked Sample %R [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Anions by EPA 300/300.1											
Chloride	107	5.00	102	0	5.00	102	0	NC	90-110	20	X
Sulfate	333	5.00	303	0	5.00	303	0	NC	90-110	20	X

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B  
Relative Percent Difference RPD = 200\*(D-G)/(D+G)

Matrix Spike Duplicate Percent Recovery [G] = 100\*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable  
N = Sec Narrative, EQ = Estimated Quantitation Limit



# Sample Duplicate Recovery



Project Name: Pride Energy Company

Work Order #: 300607

Lab Batch #: 718713

Date Analyzed: 04/01/2008

QC- Sample ID: 300607-001 D

Reporting Units: mg/L

Project ID: State 36 # 2

Analyst: WRU

Matrix: Water

Date Prepared: 04/01/2008

Batch #: 1

### SAMPLE / SAMPLE DUPLICATE RECOVERY

Alkalinity by SM2320B  Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Alkalinity, Total (as CaCO3)	240	270	12	20	
Alkalinity, Bicarbonate (as CaCO3)	240	270	12	20	
Alkalinity, Carbonate (as CaCO3)	ND	ND	NC	20	

Lab Batch #: 718755

Date Analyzed: 04/01/2008

QC- Sample ID: 300410-001 D

Reporting Units: mg/L

Date Prepared: 04/01/2008

Analyst: MAB

Matrix: Water

Batch #: 1

### SAMPLE / SAMPLE DUPLICATE RECOVERY

Anions by EPA 300/300.1  Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	107	107	0	20	
Sulfate	333	334	0	20	

Lab Batch #: 718664

Date Analyzed: 04/01/2008

QC- Sample ID: 300607-001 D

Reporting Units: mg/L

Date Prepared: 04/01/2008

Analyst: LATCOR

Matrix: Water

Batch #: 1

### SAMPLE / SAMPLE DUPLICATE RECOVERY

Metals per ICP by SW846 6010B  Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Calcium	184	180	2	25	
Magnesium	41.4	41.4	0	25	
Potassium	5.09	4.91	4	25	
Sodium	164	161	2	25	

Lab Batch #: 718707

Date Analyzed: 03/31/2008

QC- Sample ID: 300683-001 D

Reporting Units: mg/L

Date Prepared: 03/31/2008

Analyst: RBA

Matrix: Water

Batch #: 1

### SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C  Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	12500	12500	0	30	

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



**Environmental Lab of Texas**  
Variance/ Corrective Action Report- Sample Log-In

Client: R-T Hicks  
 Date/ Time: 03-28-08 (1430)  
 Lab ID #: 300607  
 Initials: JEP

**Sample Receipt Checklist**

			Client Initials
#1 Temperature of container/ cooler?	(Yes)	No	-1.5 <sup>deg</sup> C
#2 Shipping container in good condition?	(Yes)	No	
#3 Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)
#4 Custody Seals intact on sample bottles/ container? / (LID)	(Yes)	No	Not Present
#5 Chain of Custody present?	(Yes)	No	
#6 Sample instructions complete of Chain of Custody?	(Yes)	No	
#7 Chain of Custody signed when relinquished/ received?	(Yes)	No	
#8 Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid
#9 Container label(s) legible and intact?	(Yes)	No	Not Applicable
#10 Sample matrix/ properties agree with Chain of Custody?	(Yes)	No	
#11 Containers supplied by ELOT?	Yes	(No)	
#12 Samples in proper container/ bottle?	(Yes)	No	See Below
#13 Samples properly preserved?	(Yes)	No	See Below
#14 Sample bottles intact?	(Yes)	No	
#15 Preservations documented on Chain of Custody?	(Yes)	No	
#16 Containers documented on Chain of Custody?	(Yes)	No	
#17 Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below
#18 All samples received within sufficient hold time?	(Yes)	No	See Below
#19 Subcontract of sample(s)?	Yes	No	(Not Applicable)
#20 VOC samples have zero headspace?	(Yes)	No	Not Applicable

**Variance Documentation**

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- Check all that Apply:
- See attached e-mail/ fax
  - Client understands and would like to proceed with analysis
  - Cooling process had begun shortly after sampling event

# **ATTACHMENT C**

**FORM C-141**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company	Pride Energy Company	Contact	Matt Pride
Address	P O Box 701950 Tulsa, OK 74170	Telephone No.	918-524-9200
Facility Name	State 36 #2	Facility Type	Drilling Pit

Surface Owner	State	Mineral Owner	State	API No.	30-025-36909
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	36	19S	37E	990	SOUTH	2310	EAST	LEA

Latitude 33° 36' 45.2" Longitude 103° 12' 14.0"

**NATURE OF RELEASE**

Type of Release	Drilling pit fluids	Volume of Release	Unknown	Volume Recovered	None
Source of Release	Drilling pit	Date and Hour of Occurrence	Unknown	Date and Hour of Discovery	April 16, 2008
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? By phone to: Glenn von Gonten, NMOCD - Santa Fe Larry Johnson, NMOCD-District I (Hobbs)			
By Whom?		Date and Hour	April 16, 2008 (8:35 AM)		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. Unknown			

If a Watercourse was Impacted, Describe Fully.

Drilling mud solidified onsite by Elke Environmental in accordance with NMOCD-approved C-144 (12-10-07). After mud was removed Elke Environmental conducted soil sampling with a trackhoe and air rotary drilling rig. The soils did not meet NMOCD-recommended guidelines and a monitoring well was installed at the northwest corner of the drilling pit. Groundwater water samples were collected and analyses indicated chloride and TDS concentrations exceeded WQCC standards.

Describe Cause of Problem and Remedial Action Taken.

Suspected downward migration of drilling fluids to water table. Pride Energy has retained an environmental consultant to develop a site investigation work plan and monitoring program to enable characterization of the site and a design for an effective abatement option, if necessary. An additional monitoring well located at the southeast corner of the drilling pit will be necessary to confirm if groundwater impact is a result of the drilling pit as a source. The possibility remains that there is an upgradient offsite source due to regional impacts in the Monument area.

Describe Area Affected and Cleanup Action Taken.\*

A plat map and field and laboratory analytical results are attached.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	<i>Matthew L. Pride</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name:	By: Pride Production Co., Inc. Title: General Partner	Approved by District Supervisor:	
Title:	By: Matthew L. Pride Title: President	Approval Date:	Expiration Date:
E-mail Address:	mattp@pride-energy.com	Conditions of Approval:	
Date:	April 16, 2008	Phone:	(432) 638-8740
			Attached <input type="checkbox"/>

\* Attach Additional Sheets If Necessary