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February 27, 2015

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

**RE: 2014 Annual Groundwater Monitoring Report  
State 36 #2 Site (NMOCD Case # 1R-501)  
T19S-R37E-Section 36, Unit Letter O, Lea County, New Mexico**

Dear Mr. Griswold:

As agent for Pride Energy Company (Pride), Trident Environmental submits this *2014 Annual Groundwater Monitoring Report* for the above-referenced site.

*Groundwater Sampling Procedures*

During each quarterly sampling event the four monitoring wells (MW-1, MW-2, MW-3, and MW-4) were gauged for depth to groundwater using an electronic water level indicator immediately prior to purging operations. A minimum of three well volumes of groundwater was purged from each monitoring well using a 3-stage submersible pump which was decontaminated using an Alconox solution and a distilled water rinse between sampling points. Groundwater parameters (pH, temperature, and conductivity) were measured using a Hanna Model 98130 multimeter and recorded on a well sample data form. At the end of purging, water samples for each monitoring well were transferred into 500 milliliter (ml) plastic containers for laboratory analysis of chloride using EPA Method E300.1 and TDS using EPA Method 160.1. For each set of samples, chain of custody forms documenting sample identification numbers, collection times, and delivery times to the laboratory were completed. All water samples were placed in an ice-filled cooler immediately after collection and transported to Permian Basin Environmental Lab (Midland, Texas) for analysis.

*Groundwater Monitoring Results*

Groundwater monitoring activities have been performed at the site on a quarterly basis since January 2008 as summarized in Table 1. A site map showing the most recent groundwater elevation and the chloride/TDS concentrations in the four on site monitoring wells (MW-1, MW-2, MW-3, and MW-4) is shown in Figure 1. Figure 2 is a graph depicting groundwater elevation versus time for each monitoring well. Figures 3 and 4 depict chloride and TDS concentrations, respectively. A well sampling data form, laboratory analytical reports, and chains of custody documentation for each 2014 sampling event are attached.

Conclusions regarding groundwater conditions are summarized as follows:

- The local water table is at a depth of approximately 42 feet bgs and slopes towards the northeast at a magnitude of approximately 0.004 ft/ft, which is anomalous to the prevailing southeast trending regional gradient.
- The base of the aquifer within the shallow Quaternary colluvium deposits is about 50 ft bgs, where red clay of the Triassic Dockum Group was encountered during well installations, therefore the saturated thickness is estimated at only 6 feet. A non-level erosional unconformity represented by the top of the Triassic red clay and a localized groundwater divide (Nicholson and Clebsch, Ground-Water Report 6, *Geology and Ground-Water Conditions in Southeast New Mexico*, 1961) helps to explain the thin saturated thickness and anomalous local gradient observed at the site (Figure 5).
- The potential well yield for possible beneficial use of groundwater at the site is very low due to the limited thickness of the aquifer (less than 10 feet), observations of low yields during monitoring well development activities, and water table elevation declines of approximately 0.1 feet per year. In the unlikely event a water well is completed in the area, the expected yield would be less than 150 gallons per day which is considered inadequate for any beneficial domestic, irrigation, or municipal use.
- Chloride and TDS concentrations from groundwater samples collected at monitoring wells MW-1, MW-2, MW-3, and MW-4 exceed WQCC standards. The highest chloride and TDS levels during the most recent sampling event in December 2014 have been observed in monitoring well MW-3 with concentrations of 1,370 mg/L and 3,930 mg/L, respectively.
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) are not a constituent of concern as concentrations remained below laboratory detection limits and WQCC standards for two years; therefore, analysis for these constituents has been discontinued.

Pride Energy Company plans to continue ground water monitoring activities and submit an annual groundwater monitoring report next year.

We look forward to working with you on this project. If you have any questions or comments you may contact me at 432.638.8740 (gil@trident-environmental.com) or Matt Pride at 918.524.9200 (mattpp@pride-energy.com).

Sincerely,

Gilbert Van Deventer, REM, PG  
Trident Environmental

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

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

**TABLE 1**  
**Summary of Groundwater Monitoring Results**

**FIGURE 1**  
**Site Map with Groundwater Monitoring Results**

**FIGURE 2**  
**Groundwater Elevations versus Time Graph**

**FIGURE 3**  
**Chloride Concentrations Versus Time Graph**

**FIGURE 4**  
**TDS Concentrations Versus Time Graph**

**WELL SAMPLING DATA FORM**

**Table 1**  
**Summary of Groundwater Monitoring Results**  
**State 36 #2 (1R-501)**

Monitoring Well	Sample Date	Depth to Groundwater (feet BTOC)	Top of Casing Elevation (feet AMSL)	Groundwater Elevation (feet AMSL)	Well Depth (feet BTOC)	Chloride (mg/L)	TDS (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
MW-1	02/25/08	43.80	3603.21	3559.41	52.40	489	---	---	---	---	---
	03/27/08	43.88	3603.21	3559.33	52.40	557	1,770	< 0.001	< 0.002	< 0.001	< 0.003
	06/17/08	43.89	3603.21	3559.32	52.40	594	1,370	---	---	---	---
	09/10/08	43.97	3603.21	3559.24	52.40	440	1,260	<0.001	<0.001	<0.001	<0.003
	12/17/08	43.96	3603.21	3559.25	52.40	440	1,290	<0.001	<0.001	<0.001	<0.003
	03/19/09	44.02	3603.21	3559.19	52.40	430	1,240	<0.001	<0.001	<0.001	<0.003
	06/18/09	44.02	3603.21	3559.19	52.40	428	1,330	<0.001	<0.001	<0.001	<0.003
	09/17/09	44.08	3603.21	3559.13	52.40	456	1,530	<0.001	<0.001	<0.001	<0.003
	12/10/09	44.13	3603.21	3559.08	52.40	450	1,360	<0.001	<0.001	<0.001	<0.003
	03/31/10	44.14	3603.21	3559.07	52.40	468	1,330	---	---	---	---
	06/16/10	44.20	3603.21	3559.01	52.40	447	1,420	---	---	---	---
	09/22/10	44.09	3603.21	3559.12	52.40	1,470	3,940	---	---	---	---
	12/13/10	44.12	3603.21	3559.09	52.40	491	1,790	---	---	---	---
	03/17/11	44.14	3603.21	3559.07	52.40	512	1,840	---	---	---	---
	06/30/11	44.24	3603.21	3558.97	52.40	447	1,410	---	---	---	---
	09/29/11	44.23	3603.21	3558.98	52.40	453	770	---	---	---	---
	12/20/11	44.31	3603.21	3558.90	52.40	527	3,810	---	---	---	---
	03/29/12	44.34	3603.21	3558.87	52.40	504	1,380	---	---	---	---
	06/20/12	44.37	3603.21	3558.84	52.40	551	1,420	---	---	---	---
	09/26/12	44.44	3603.21	3558.77	52.40	532	1,900	---	---	---	---
	12/27/12	44.46	3603.21	3558.75	52.40	463	1,740	---	---	---	---
	03/18/13	44.59	3603.21	3558.62	52.40	614	1,760	---	---	---	---
	06/11/13	44.63	3603.21	3558.58	52.40	574	1,820	---	---	---	---
	09/23/13	44.58	3603.21	3558.63	52.40	538	1,860	---	---	---	---
	12/30/13	44.63	3603.21	3558.58	52.40	636	1,430	---	---	---	---
	03/24/14	44.64	3603.21	3558.57	52.40	643	1,660	---	---	---	---
	07/03/14	44.73	3603.21	3558.48	52.40	717	1,820	---	---	---	---
	09/27/14	44.74	3603.21	3558.47	52.40	428	1,580	---	---	---	---
	12/12/14	44.76	3603.21	3558.45	52.40	468	1,630	---	---	---	---
MW-2	05/08/08	43.25	3602.47	3559.22	57.61	1,450	2,730	< 0.001	< 0.002	< 0.001	< 0.003
	06/17/08	43.31	3602.47	3559.16	57.61	1,980	2,730	---	---	---	---
	09/10/08	43.37	3602.47	3559.10	57.61	1,580	3,440	<0.001	<0.001	<0.001	<0.003
	12/17/08	43.38	3602.47	3559.09	57.61	1,300	2,900	<0.001	<0.001	<0.001	<0.003
	03/19/09	43.41	3602.47	3559.06	57.61	1,080	2,380	<0.001	<0.001	<0.001	<0.003
	06/18/09	43.42	3602.47	3559.05	57.61	920	2,300	<0.001	<0.001	<0.001	<0.003
	09/17/09	43.47	3602.47	3559.00	57.61	810	1,980	<0.001	<0.001	<0.001	<0.003
	12/10/09	43.53	3602.47	3558.94	57.61	860	1,870	<0.001	<0.001	<0.001	<0.003
	03/31/10	43.55	3602.47	3558.92	57.61	691	1,520	---	---	---	---
	06/16/10	43.66	3602.47	3558.81	57.61	723	2,020	---	---	---	---
	09/22/10	43.54	3602.47	3558.93	57.61	923	3,080	---	---	---	---
	12/13/10	43.55	3602.47	3558.92	57.61	936	2,750	---	---	---	---
	03/17/11	43.55	3602.47	3558.92	57.61	765	2,560	---	---	---	---
	06/30/11	43.67	3602.47	3558.80	57.61	788	1,180	---	---	---	---
	09/29/11	43.65	3602.47	3558.82	57.61	616	1,380	---	---	---	---
	12/20/11	43.73	3602.47	3558.74	57.61	579	2,100	---	---	---	---
	03/29/12	43.76	3602.47	3558.71	57.61	572	1,660	---	---	---	---
	06/20/12	43.79	3602.47	3558.68	57.61	721	1,800	---	---	---	---
	09/26/12	43.86	3602.47	3558.61	57.61	556	1,810	---	---	---	---
	12/27/12	43.88	3602.47	3558.59	57.61	466	1,690	---	---	---	---
	03/18/13	43.91	3602.47	3558.56	57.61	604	1,630	---	---	---	---
	06/11/13	43.95	3602.47	3558.52	57.61	702	1,880	---	---	---	---
	09/23/13	44.01	3602.47	3558.46	57.61	586	1,790	---	---	---	---
	12/30/13	44.06	3602.47	3558.41	57.61	564	1,500	---	---	---	---
	03/24/14	44.07	3602.47	3558.40	57.61	575	1,630	---	---	---	---
	07/03/14	44.15	3602.47	3558.32	57.61	691	1,660	---	---	---	---
	09/27/14	44.17	3602.47	3558.30	57.61	442	1,400	---	---	---	---
	12/12/14	44.18	3602.47	3558.29	57.61	463	1,510	---	---	---	---

Continued on next page

**Table 1**  
**Summary of Groundwater Monitoring Results**  
**State 36 #2 (1R-501)**

Monitoring Well	Sample Date	Depth to Groundwater (feet BTOC)	Top of Casing Elevation (feet AMSL)	Groundwater Elevation (feet AMSL)	Well Depth (feet BTOC)	Chloride (mg/L)	TDS (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
MW-3	06/17/08	43.83	3602.81	3558.98	53.83	<b>733</b>	<b>1,810</b>	---	---	---	---
	09/10/08	43.85	3602.81	3558.96	53.83	<b>580</b>	<b>1,660</b>	<0.001	<0.001	<0.001	<0.003
	12/17/08	43.91	3602.81	3558.90	53.83	<b>570</b>	<b>1,580</b>	<0.001	<0.001	<0.001	<0.003
	03/19/09	43.91	3602.81	3558.90	53.83	<b>560</b>	<b>1,620</b>	<0.001	<0.001	<0.001	<0.003
	06/18/09	43.97	3602.81	3558.84	53.83	<b>520</b>	<b>1,530</b>	<0.001	<0.001	<0.001	<0.003
	09/17/09	44.03	3602.81	3558.78	53.83	<b>500</b>	<b>1,410</b>	<0.001	<0.001	<0.001	<0.003
	12/10/09	44.07	3602.81	3558.74	53.83	<b>500</b>	<b>1,360</b>	<0.001	<0.001	<0.001	<0.003
	03/31/10	44.07	3602.81	3558.74	53.83	<b>489</b>	<b>1,230</b>	---	---	---	---
	06/16/10	44.14	3602.81	3558.67	53.83	<b>489</b>	<b>1,440</b>	---	---	---	---
	09/22/10	44.07	3602.81	3558.74	53.83	<b>420</b>	<b>1,520</b>	---	---	---	---
	12/13/10	44.10	3602.81	3558.71	53.83	<b>290</b>	<b>1,350</b>	---	---	---	---
	03/17/11	44.07	3602.81	3558.74	53.83	<b>434</b>	<b>1,420</b>	---	---	---	---
	06/30/11	44.19	3602.81	3558.62	53.83	<b>426</b>	<b>1,310</b>	---	---	---	---
	09/29/11	44.18	3602.81	3558.63	53.83	<b>439</b>	890	---	---	---	---
	12/20/11	44.28	3602.81	3558.53	53.83	<b>494</b>	<b>1,220</b>	---	---	---	---
	03/29/12	44.29	3602.81	3558.52	53.83	<b>642</b>	<b>1,830</b>	---	---	---	---
	06/20/12	44.31	3602.81	3558.50	53.83	<b>1,040</b>	<b>2,500</b>	---	---	---	---
	09/26/12	44.37	3602.81	3558.44	53.83	<b>1,160</b>	<b>3,460</b>	---	---	---	---
	12/27/12	44.40	3602.81	3558.41	53.83	<b>1,030</b>	<b>3,500</b>	---	---	---	---
	03/18/13	44.43	3602.81	3558.38	53.83	<b>1,380</b>	<b>3,500</b>	---	---	---	---
	06/11/13	44.47	3602.81	3558.34	53.83	<b>1,770</b>	<b>4,510</b>	---	---	---	---
	09/23/13	44.52	3602.81	3558.29	53.83	<b>995</b>	<b>4,180</b>	---	---	---	---
	12/30/13	44.58	3602.81	3558.23	53.83	<b>1,830</b>	<b>3,600</b>	---	---	---	---
	03/24/14	44.59	3602.81	3558.22	53.83	<b>1,670</b>	<b>4,450</b>	---	---	---	---
	07/03/14	44.65	3602.81	3558.16	53.83	<b>1,850</b>	<b>4,500</b>	---	---	---	---
	09/27/14	44.70	3602.81	3558.11	53.83	<b>1,110</b>	<b>4,030</b>	---	---	---	---
	12/12/14	44.74	3602.81	3558.07	53.83	<b>1,370</b>	<b>3,930</b>	---	---	---	---
MW-4	06/17/08	43.54	3602.35	3558.81	50.30	<b>1,070</b>	<b>2,150</b>	---	---	---	---
	09/10/08	43.61	3602.35	3558.74	50.30	<b>820</b>	<b>2,070</b>	<0.001	<0.001	<0.001	<0.003
	12/17/08	43.63	3602.35	3558.72	50.30	<b>830</b>	<b>1,970</b>	<0.001	<0.001	<0.001	<0.003
	03/19/09	43.67	3602.35	3558.68	50.30	<b>810</b>	<b>1,970</b>	<0.001	<0.001	<0.001	<0.003
	06/18/09	43.68	3602.35	3558.67	50.30	<b>740</b>	<b>1,860</b>	<0.001	<0.001	<0.001	<0.003
	09/17/09	43.78	3602.35	3558.57	50.30	<b>740</b>	<b>1,690</b>	<0.001	<0.001	<0.001	<0.003
	12/10/09	43.81	3602.35	3558.54	50.30	<b>660</b>	<b>1,570</b>	<0.001	<0.001	<0.001	<0.003
	03/31/10	43.83	3602.35	3558.52	50.30	<b>691</b>	<b>1,560</b>	---	---	---	---
	06/16/10	43.88	3602.35	3558.47	50.30	<b>606</b>	<b>1,580</b>	---	---	---	---
	09/22/10	43.78	3602.35	3558.57	50.30	<b>669</b>	<b>1,940</b>	---	---	---	---
	12/13/10	43.81	3602.35	3558.54	50.30	<b>646</b>	<b>2,020</b>	---	---	---	---
	03/17/11	43.83	3602.35	3558.52	50.30	<b>778</b>	<b>2,530</b>	---	---	---	---
	06/30/11	43.94	3602.35	3558.41	50.30	<b>758</b>	<b>1,910</b>	---	---	---	---
	09/29/11	43.93	3602.35	3558.42	50.30	<b>662</b>	<b>1,180</b>	---	---	---	---
	12/20/11	44.01	3602.35	3558.34	50.30	<b>623</b>	<b>1,600</b>	---	---	---	---
	03/29/12	44.05	3602.35	3558.30	50.30	<b>606</b>	<b>1,860</b>	---	---	---	---
	06/20/12	44.09	3602.35	3558.26	50.30	<b>797</b>	<b>1,790</b>	---	---	---	---
	09/26/12	44.15	3602.35	3558.20	50.30	<b>579</b>	<b>1,620</b>	---	---	---	---
	12/27/12	44.19	3602.35	3558.16	50.30	<b>493</b>	<b>1,690</b>	---	---	---	---
	03/18/13	44.20	3602.35	3558.15	50.30	<b>608</b>	<b>1,590</b>	---	---	---	---
	06/11/13	44.24	3602.35	3558.11	50.30	<b>505</b>	<b>1,790</b>	---	---	---	---
	09/23/13	44.31	3602.35	3558.04	50.30	<b>532</b>	<b>1,840</b>	---	---	---	---
	12/30/13	44.36	3602.35	3557.99	50.30	<b>632</b>	<b>1,440</b>	---	---	---	---
	03/24/14	44.38	3602.35	3557.97	50.30	<b>607</b>	<b>1,600</b>	---	---	---	---
	07/03/14	44.47	3602.35	3557.88	50.30	<b>685</b>	<b>1,700</b>	---	---	---	---
	09/27/14	44.48	3602.35	3557.87	50.30	<b>426</b>	<b>1,400</b>	---	---	---	---
	12/12/14	44.46	3602.35	3557.89	50.30	<b>494</b>	<b>1,530</b>	---	---	---	---
WQCC Standards						250	1000	0.01	0.75	0.75	0.62

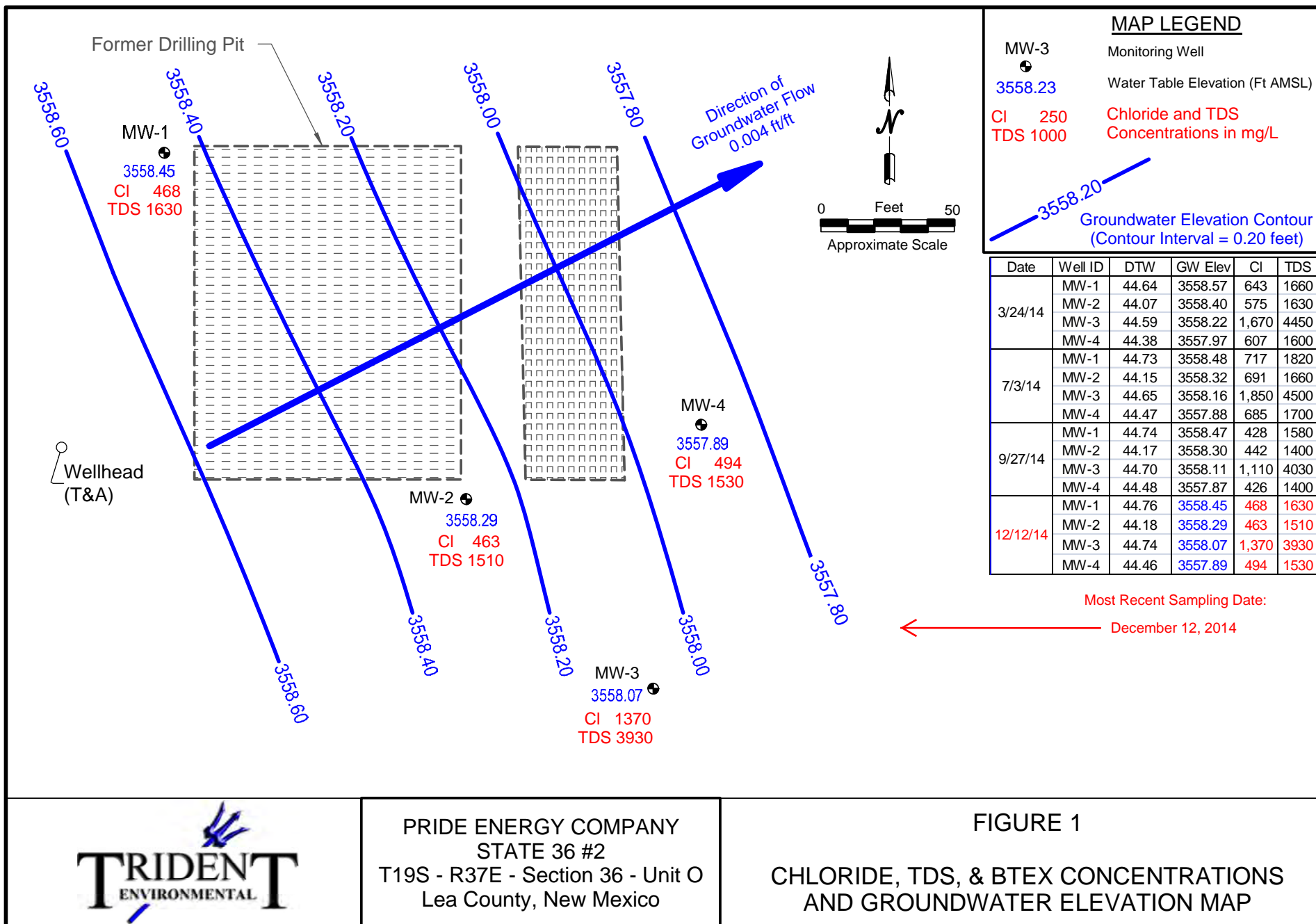
\* TDS in MW-1 on 09/22/10 is not consistent with previous sampling events nor with chloride value. Likely due to lab error (not filtered?)

Total Dissolved Solids (TDS), chloride, and BTEX concentrations listed in milligrams per liter (mg/L)

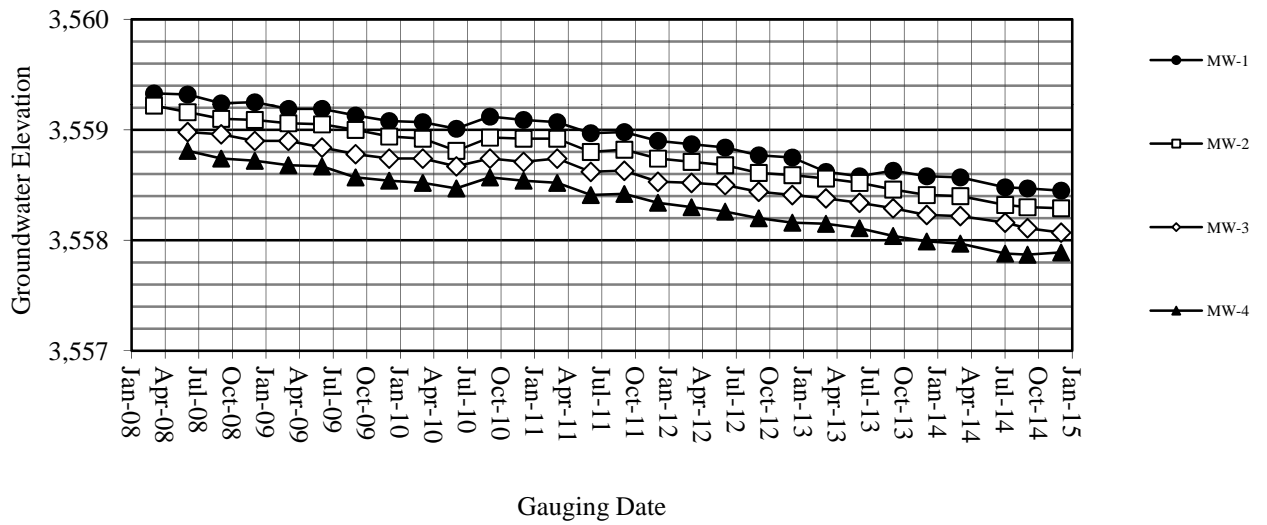
Values in boldface type indicate concentrations exceed New Mexico Water Quality Commission (WQCC) standard:

AMSL - Above Mean Sea Level; BTOC - Below Top of Casing

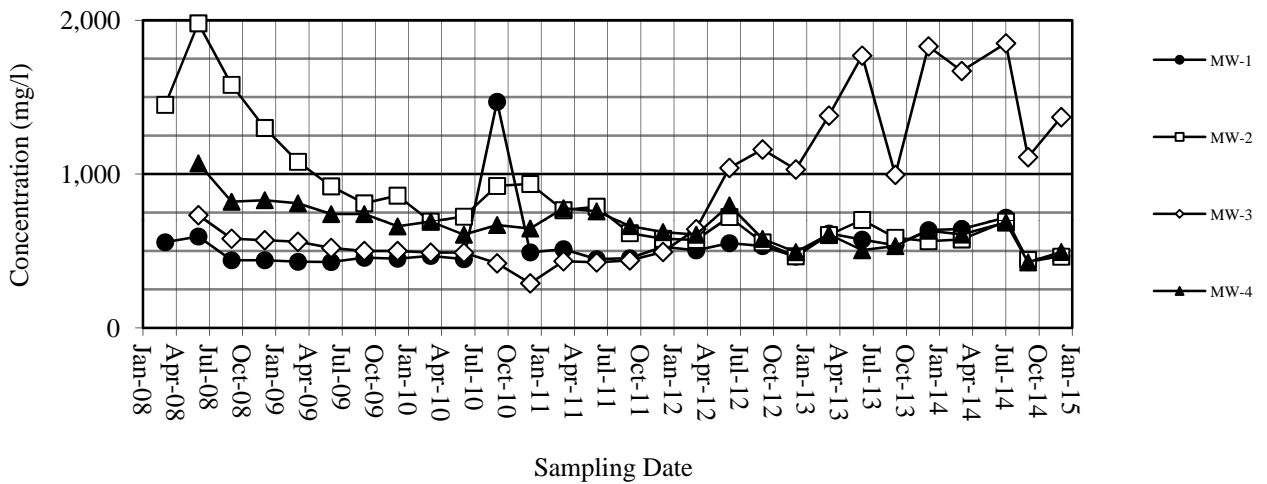
--- Indicates not sampled, analyzed, or measured for this parameter



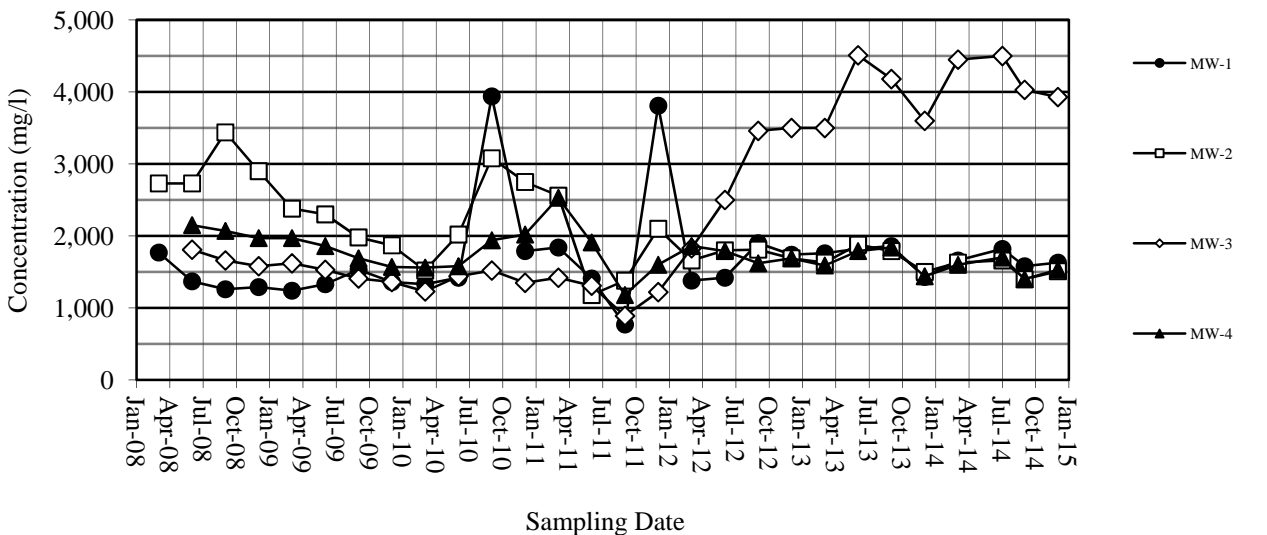
**Figure 2: Groundwater Elevations (Ft AMSL) vs Time**



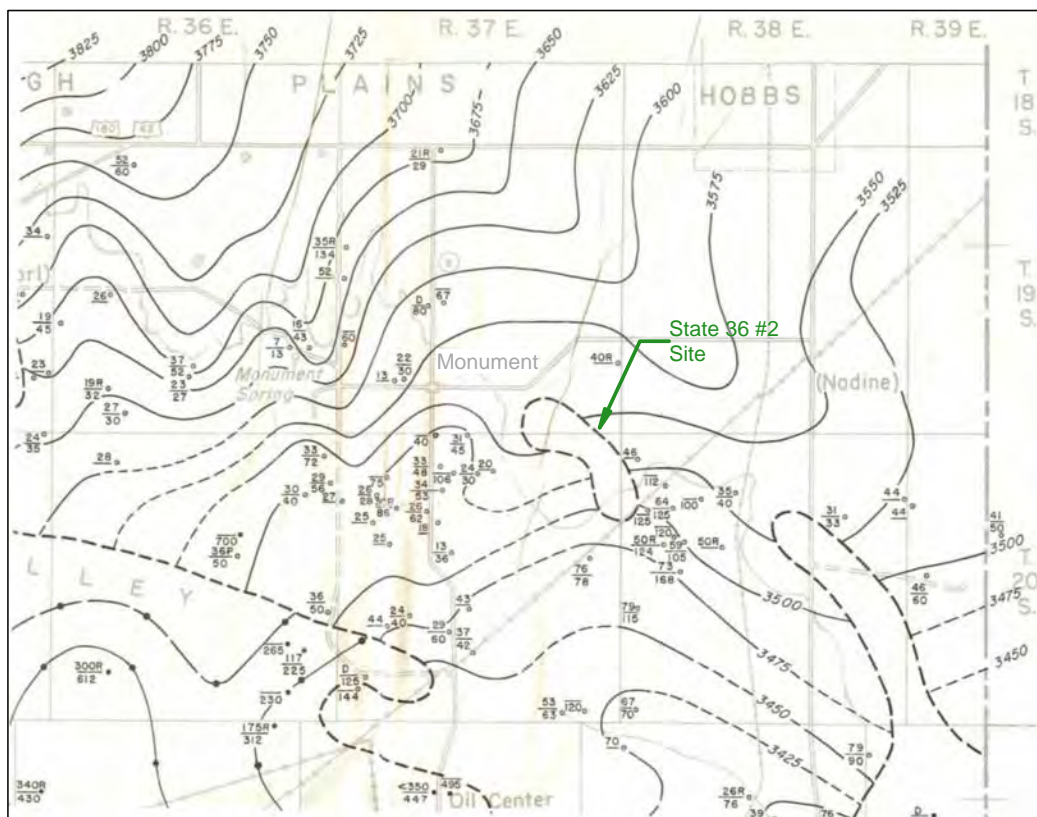
**Figure 3: Chloride Concentrations vs Time**



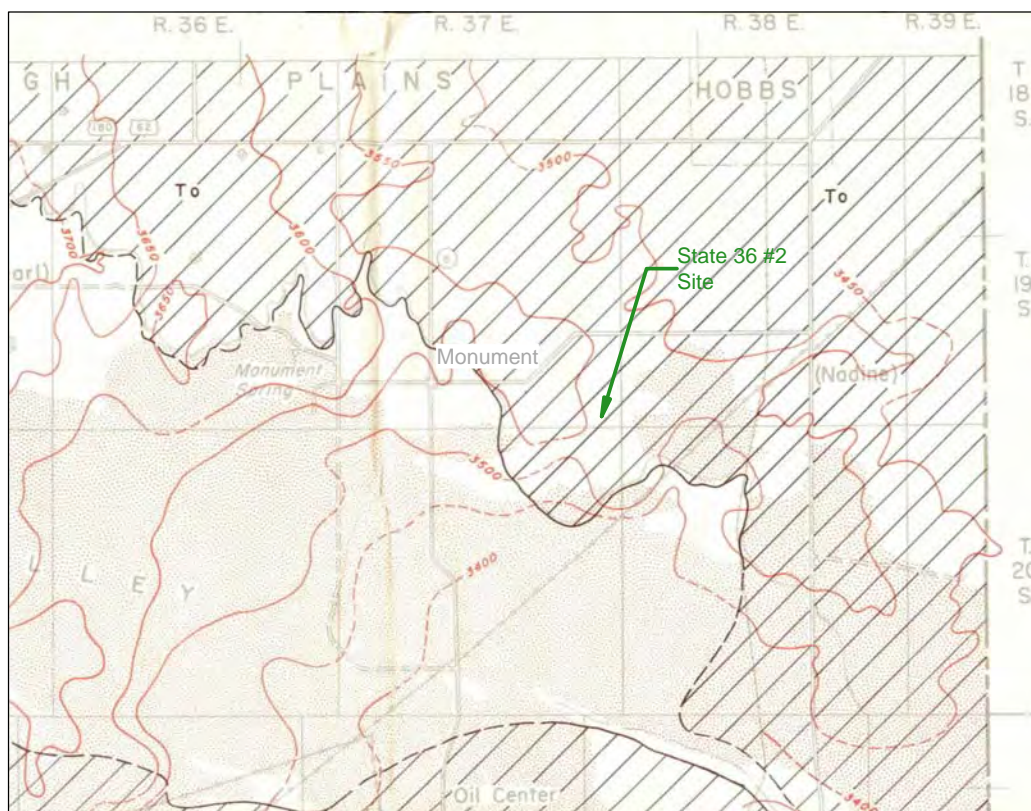
**Figure 4: TDS Concentrations vs Time**







Water Table Elevation Map  
based on 1953-1954 data



Red Bed Surface Map  
(base of aquifer)



PRIDE ENERGY COMPANY  
STATE 36 #2  
T19S - R37E - Section 36 - Unit O  
Lea County, New Mexico

FIGURE 5  
Water Table and Red Bed  
Surface Maps  
(Nicholson & Clebsch, 1954)



# WELL SAMPLING DATA FORM



CLIENT: Pride Energy Company  
 SITE NAME: State 36 #2 (OCD Case # 1R501)  
 SITE LOCATION: T19S R37E Sec 36 Unit O, Lea County, NM  
 SAMPLER: Gil Van Deventer

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type Whaler Model WP-9012 Mega Purger (12-volt submersible pump)  
 SAMPLING METHOD: ☐ Disposable Bailer ☒ Direct from Discharge Hose ☐ Other: \_\_\_\_\_  
 DISPOSAL METHOD OF PURGE WATER: ☐ On-site Drum ☐ Drums ☒ SWD Disposal Facility

Quarter	Date	Time	Monitoring Well No.	Depth to Water (ft btoc)	Total Depth (ft)	Water Column Height (ft)	Well Factor 2"=.16 4"=.65	Calc. Well Vol. (gal)	Volume Purged (gal)	No. of Well Volumes Purged	Temp. °C	Cond. mS/cm	pH	Purge Method	PHYSICAL APPEARANCE AND REMARKS
First	3/24/14	15:30	MW-1	44.64	52.37	7.73	0.16	1.2	10	8.1	19.6	2.24	6.76	Pump	Clear
		18:15	MW-2	44.07	57.61	13.54	0.16	2.2	15	6.9	19.3	2.27	6.91	Pump	Clear Cloudy, but cleared during purge
		16:00	MW-3	44.59	53.83	9.24	0.16	1.5	10	6.8	19.8	4.87	6.67	Pump	Clear
		17:15	MW-4	44.38	50.30	5.92	0.16	0.9	10	10.6	19.2	2.33	6.87	Pump	Clear
Second	7/3/14	17:30	MW-1	44.73	52.37	7.64	0.16	1.2	10	8.2	21.6	1.98	7.13	Pump	Clear
		19:00	MW-2	44.15	57.61	13.46	0.16	2.2	15	7.0	20.8	1.97	7.08	Pump	Clear Cloudy, but cleared during purge
		18:00	MW-3	44.65	53.83	9.18	0.16	1.5	10	6.8	21.8	4.17	6.90	Pump	Clear
		18:30	MW-4	44.47	50.30	5.83	0.16	0.9	10	10.7	21.2	2.03	7.19	Pump	Clear
Third	9/27/14	10:00	MW-1	44.74	52.37	7.63	0.16	1.2	12	9.8	21.6	2.28	7.14	Pump	Clear
		10:30	MW-2	44.17	57.61	13.44	0.16	2.2	16	7.4	21.1	2.26	7.11	Pump	Clear
		11:30	MW-3	44.70	53.83	9.13	0.16	1.5	12	8.2	20.7	4.33	7.03	Pump	Clear
		11:00	MW-4	44.48	50.30	5.82	0.16	0.9	12	12.9	20.2	2.30	7.29	Pump	Clear
Fourth	12/12/14	15:30	MW-1	44.76	52.37	7.61	0.16	1.2	10	8.2	18.7	2.11	7.14	Pump	Clear
		15:45	MW-2	44.18	57.61	13.43	0.16	2.1	15	7.0	19.0	2.12	7.20	Pump	Clear Cloudy, but cleared during purge
		16:20	MW-3	44.74	53.83	9.09	0.16	1.5	10	6.9	18.5	4.18	7.17	Pump	Clear Cloudy, but cleared during purge
		16:45	MW-4	44.46	50.30	5.84	0.16	0.9	10	10.7	19.2	2.13	7.16	Pump	Clear Cloudy, but cleared during purge

COMMENTS: Equipment decontamination consists of gloves, Alconox, and Distilled Water Rinse.  
Hanna Model 98130 instrument used to obtain pH, conductivity, and temperature measurements.  
Delivered samples to analytical laboratory for chloride (300.1) and TDS (160.1) analysis.

Note: Gate may be locked for access.  
 One of the locks combo is 5010

LABORATORY ANALYTICAL REPORTS  
AND  
CHAINS OF CUSTODY

**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
10014 SCR 1213  
Midland, TX 79706**



# Analytical Report

**Prepared for:**

Matt Pride  
Pride Energy Company  
P.O. BOX 701950  
Tulsa, OK 74170-1950

Project: Pride Energy Company  
Project Number: State 36 #2  
Location: T19S-R37E, Sec 36, Unit Letter O~ Lea County, NM  
Lab Order Number: 4C26014



**NELAP/TCEQ # T104704156-13-3**

Report Date: 04/09/14

Pride Energy Company  
P.O. BOX 701950  
Tulsa OK, 74170-1950

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Matt Pride

Fax: (918) 524-9292

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	4C26014-01	Water	03/24/14 15:30	03-26-2014 11:55
MW-2	4C26014-02	Water	03/24/14 18:15	03-26-2014 11:55
MW-3	4C26014-03	Water	03/24/14 16:00	03-26-2014 11:55
MW-4	4C26014-04	Water	03/24/14 17:15	03-26-2014 11:55

Pride Energy Company  
P.O. BOX 701950  
Tulsa OK, 74170-1950

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Matt Pride

Fax: (918) 524-9292

**MW-1**  
**4C26014-01 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>643</b>	25.0	mg/L	50	P4C2703	03/27/14	03/28/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>1660</b>	20.0	mg/L	1	P4D0203	03/28/14	04/02/14	EPA 160.1

Pride Energy Company  
P.O. BOX 701950  
Tulsa OK, 74170-1950

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Matt Pride

Fax: (918) 524-9292

**MW-2**  
**4C26014-02 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>575</b>	25.0	mg/L	50	P4C2703	03/27/14	03/28/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>1630</b>	20.0	mg/L	1	P4D0203	03/28/14	04/02/14	EPA 160.1

Pride Energy Company  
P.O. BOX 701950  
Tulsa OK, 74170-1950

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Matt Pride

Fax: (918) 524-9292

**MW-3**  
**4C26014-03 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>1670</b>	25.0	mg/L	50	P4C2703	03/27/14	03/28/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>4450</b>	20.0	mg/L	1	P4D0203	03/28/14	04/02/14	EPA 160.1



Pride Energy Company  
P.O. BOX 701950  
Tulsa OK, 74170-1950

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Matt Pride

Fax: (918) 524-9292

**MW-4**  
**4C26014-04 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>607</b>	25.0	mg/L	50	P4C2703	03/27/14	03/28/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>1600</b>	20.0	mg/L	1	P4D0203	03/28/14	04/02/14	EPA 160.1

Pride Energy Company  
P.O. BOX 701950  
Tulsa OK, 74170-1950

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Matt Pride

Fax: (918) 524-9292

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch P4C2703 - *** DEFAULT PREP ***</b>										
<b>Blank (P4C2703-BLK1)</b>				Prepared & Analyzed: 03/27/14						
Chloride	ND	0.500	mg/L							
<b>LCS (P4C2703-BS1)</b>				Prepared & Analyzed: 03/27/14						
Chloride	10.5	0.500	mg/L	10.0		105	80-120			
<b>LCS Dup (P4C2703-BSD1)</b>				Prepared & Analyzed: 03/27/14						
Chloride	10.5	0.500	mg/L	10.0		105	80-120	0.00952	20	
<b>Duplicate (P4C2703-DUP1)</b>				<b>Source: 4C26012-01</b>		Prepared: 03/27/14 Analyzed: 03/28/14				
Chloride	2920	100	mg/L		2920			0.164	20	
<b>Matrix Spike (P4C2703-MS1)</b>				<b>Source: 4C26012-01</b>		Prepared: 03/27/14 Analyzed: 03/28/14				
Chloride	5360	100	mg/L	2500	2920	97.8	80-120			
<b>Batch P4D0203 - *** DEFAULT PREP ***</b>										
<b>Blank (P4D0203-BLK1)</b>				Prepared: 03/28/14 Analyzed: 04/02/14						
Total Dissolved Solids	ND	20.0	mg/L							
<b>Duplicate (P4D0203-DUP1)</b>				<b>Source: 4C26014-04</b>		Prepared: 03/28/14 Analyzed: 04/02/14				
Total Dissolved Solids	1580	20.0	mg/L		1600			1.01	20	

Pride Energy Company  
P.O. BOX 701950  
Tulsa OK, 74170-1950


Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Matt Pride

Fax: (918) 524-9292

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:



Date: 4/9/2014

Brent Barron, Laboratory Director/Technical Director

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If you have received this material in error, please notify us immediately at 432-686-7235.

# PBMLAB

Permian Basin Environmental Lab, LP  
10014 S. County Road 1213  
Midland, Texas 79706  
Phone: 432-661-4184

Page 1 of 1  
COC No.: 1R-501-032414  
CHAIN-OF-CUSTODY AND ANALYSIS REQUEST  
LAB Order ID #

Company Name: <b>Trident Environmental</b>		BILL TO Company: <b>Pride Energy Company / Attention: Matt Pride</b>		PO#	
Project Manager: <b>Gil Van Deventer / Trident Environmental</b>		Address: <b>PO Box 710950, Tulsa, OK 74170-1950</b>		(Street, City, Zip)	
Address: <b>PO Box 12177, Odessa TX 79768</b>		Phone#: <b>(918) 524-9200</b>		Fax#: <b>(918) 524-9292</b>	
Phone #: <b>(432) 638-8740</b>		Fax #: <b>(413) 403-9968</b>		Project Name: <b>Pride Energy Company</b>	
Project #: <b>State 36 #2</b>		Project Location: <b>T19S-R37E, Sec 36, Unit Letter O ~ Lea County, NM</b>		Sampler Signature:	

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX				PRESERVATIVE METHOD				SAMPLING		
				WATER	SOIL	AIR	SLUDGE	HCL (BTEx only)	HNO <sub>3</sub>	NaHSO <sub>4</sub>	H <sub>2</sub> SO <sub>4</sub>	ICE	NONE	DATE
-01	MMW-1	G	1	X									3/24/14	1530
-02	MMW-2	G	1	X									3/24/14	1815
-03	MMW-3	G	1	X									3/24/14	1600
-04	MMW-4	G	1	X									3/24/14	1715

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
<i>[Signature]</i>	3/24/14	1155	<i>[Signature]</i>	3-26-14	1155

Delivered By: (Circle One)	Sample Condition	CHECKED BY:	(Initials)
UPS - Bus - Other:	4	<i>[Signature]</i>	<i>[Signature]</i>

REMARKS:	Phone Results	Yes	No	Additional Fax Number:
Email Results to:	Yes	X	No	

ANALYSIS REQUEST (Circle or Specify Method No.)
MTBE 8021B/602
BTEX 8021 B
TPH 418.1/TX1005 / TX1005 Extended (C35)
PAH 8270C
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7
TCLP Metals Ag As Ba Cd Cr Pb Se Hg
TCLP Volatiles
TCLP Semi Volatiles
TCLP Pesticides
RCI
GC/MS Vol. 8260B/624
GC/MS Semi. Vol. 8270C/625
Moisture Content
Cations (Ca, Mg, Na, K)
Anions (Cl, SO <sub>4</sub> , CO <sub>3</sub> , HCO <sub>3</sub> )
Total Dissolved Solids (160.1 or SM2540C)
Chloride / Cl <sup>-</sup> (SM4500 B or 300.1)
Turn Around Time ~ 24 Hours

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

**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
10014 SCR 1213  
Midland, TX 79706**



# Analytical Report

**Prepared for:**

Gilbert Vandeventer  
Trident Environmental  
P.O. Box 12177  
Odessa, TX 79768

Project: Pride Energy Company

Project Number: State 36 #2

Location: T19S-R37E, Sec 36, Unit Letter O~ Lea County, NM

Lab Order Number: 4G07004



**NELAP/TCEQ # T104704156-13-3**

Report Date: 07/21/14

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	4G07004-01	Water	07/03/14 17:30	07-04-2014 13:30
MW-2	4G07004-02	Water	07/03/14 19:00	07-04-2014 13:30
MW-3	4G07004-03	Water	07/03/14 18:00	07-04-2014 13:30
MW-4	4G07004-04	Water	07/03/14 18:30	07-04-2014 13:30

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**MW-1**  
**4G07004-01 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

Chloride	717	12.5	mg/L	25	P4G1703	07/14/14	07/17/14	EPA 300.0
Total Dissolved Solids	1820	20.0	mg/L	1	P4G1509	07/08/14	07/15/14	EPA 160.1



Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**MW-2**  
**4G07004-02 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>691</b>	12.5	mg/L	25	P4G1703	07/14/14	07/17/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>1660</b>	20.0	mg/L	1	P4G1509	07/08/14	07/15/14	EPA 160.1

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**MW-3**  
**4G07004-03 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>1850</b>	25.0	mg/L	50	P4G1703	07/14/14	07/17/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>4500</b>	20.0	mg/L	1	P4G1509	07/08/14	07/15/14	EPA 160.1

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**MW-4**  
**4G07004-04 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>685</b>	12.5	mg/L	25	P4G1703	07/14/14	07/17/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>1700</b>	20.0	mg/L	1	P4G1509	07/08/14	07/15/14	EPA 160.1

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P4G1509 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P4G1509-BLK1)**

Prepared & Analyzed: 07/15/14

Total Dissolved Solids ND 20.0 mg/L

**Duplicate (P4G1509-DUP1)**

Source: 4G03014-01

Prepared & Analyzed: 07/15/14

Total Dissolved Solids 815 20.0 mg/L 815 0.00 20

**Duplicate (P4G1509-DUP2)**

Source: 4G07004-04

Prepared & Analyzed: 07/15/14

Total Dissolved Solids 1660 20.0 mg/L 1700 2.38 20

**Batch P4G1703 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P4G1703-BLK1)**

Prepared: 07/14/14 Analyzed: 07/17/14

Chloride ND 0.500 mg/L

**LCS (P4G1703-BS1)**

Prepared: 07/14/14 Analyzed: 07/17/14

Chloride 9.85 0.500 mg/L 10.0 98.5 80-120

**LCS Dup (P4G1703-BSD1)**

Prepared: 07/14/14 Analyzed: 07/17/14

Chloride 9.36 0.500 mg/L 10.0 93.6 80-120 5.06 20

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:



Date: 7/21/2014

Brent Barron, Laboratory Director/Technical Director

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If you have received this material in error, please notify us immediately at 432-686-7235.

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

[illegible]

**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
10014 SCR 1213  
Midland, TX 79706**



## Analytical Report

**Prepared for:**

Gilbert Vandeventer  
Trident Environmental  
P.O. Box 12177  
Odessa, TX 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Location: T19S-R37E, Sec 36, Unit Letter O~ Lea County, NM  
Lab Order Number: 4J02017



**NELAP/TCEQ # T104704156-13-3**

Report Date: 10/10/14



Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	4J02017-01	Water	09/27/14 10:00	10-02-2014 12:50
MW-2	4J02017-02	Water	09/27/14 10:30	10-02-2014 12:50
MW-3	4J02017-03	Water	09/27/14 11:30	10-02-2014 12:50
MW-4	4J02017-04	Water	09/27/14 11:00	10-02-2014 12:50

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**MW-1**  
**4J02017-01 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

Chloride	428	12.5	mg/L	25	P4J1002	10/10/14	10/10/14	EPA 300.0
Total Dissolved Solids	1580	20.0	mg/L	1	P4J0702	10/03/14	10/03/14	EPA 160.1

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**MW-2**  
**4J02017-02 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>442</b>	12.5	mg/L	25	P4J1002	10/10/14	10/10/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>1400</b>	20.0	mg/L	1	P4J0702	10/03/14	10/03/14	EPA 160.1

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**MW-3**  
**4J02017-03 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>1110</b>	25.0	mg/L	50	P4J1002	10/10/14	10/10/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>4030</b>	20.0	mg/L	1	P4J0702	10/03/14	10/03/14	EPA 160.1

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**MW-4**  
**4J02017-04 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>426</b>	12.5	mg/L	25	P4J1002	10/10/14	10/10/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>1400</b>	20.0	mg/L	1	P4J0702	10/03/14	10/03/14	EPA 160.1

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch P4J0702 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P4J0702-BLK1)**

Prepared & Analyzed: 10/03/14

Total Dissolved Solids ND 20.0 mg/L

**Duplicate (P4J0702-DUP1)**

Source: 4H28001-01

Prepared & Analyzed: 10/03/14

Total Dissolved Solids 400 20.0 mg/L 372 7.25 20

**Duplicate (P4J0702-DUP2)**

Source: 4H28002-01

Prepared & Analyzed: 10/03/14

Total Dissolved Solids 164 20.0 mg/L 160 2.47 20

**Batch P4J1002 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P4J1002-BLK1)**

Prepared & Analyzed: 10/10/14

Chloride ND 0.500 mg/L

**LCS (P4J1002-BS1)**

Prepared & Analyzed: 10/10/14

Chloride 9.93 0.500 mg/L 10.0 99.3 80-120

**LCS Dup (P4J1002-BSD1)**

Prepared & Analyzed: 10/10/14

Chloride 9.89 0.500 mg/L 10.0 98.9 80-120 0.383 20

**Duplicate (P4J1002-DUP1)**

Source: 4J02015-01

Prepared & Analyzed: 10/10/14

Chloride 2040 50.0 mg/L 2030 0.373 20

**Matrix Spike (P4J1002-MS1)**

Source: 4J02015-01

Prepared & Analyzed: 10/10/14

Chloride 3110 50.0 mg/L 1000 2030 108 80-120

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:



Date: 10/10/2014

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.



# PBMLAB

Permian Basin Environmental Lab, LP  
10014 S. County Road 1213  
Midland, Texas 79706  
Phone: 432-661-4184

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 6147 4302017

Page 1 of 1  
COC No.: 1R501-0914

Company Name: **Trident Environmental**  
Project Manager: **Gil Van Deventer / Trident Environmental**  
Address: (Street, City, Zip) **PO Box 12177, Odessa TX 79768**  
Phone #: **(432) 638-8740**  
Fax #: **(413) 403-9968**  
Project #: **State 36 #2**  
Project Name: **Pride Energy Company**  
Project Location: **T19S-R37E, Sec 36, Unit Letter O ~ Lea County, NM**  
Sampler Signature: \_\_\_\_\_

Address: (Street, City, Zip) **PO Box 710950, Tulsa, OK 74170-1950**  
Phone #: **(918) 524-9200**  
Fax #: **(918) 524-9292**

## ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8021B/602	
BTEX 8021 B	
TPH 418.1/TX1005 / TX1005 Extended (C35)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
TCLP Pesticides	
RCI	
GC/MS Vol. 8260B/624	
GC/MS Semi. Vol. 8270C/625	
Moisture Content	
Cations (Ca, Mg, Na, K)	
Anions (Cl, SO <sub>4</sub> , CO <sub>3</sub> , HCO <sub>3</sub> )	
Total Dissolved Solids (160.1 or SM2540C)	
Chloride / Cl <sup>-</sup> (SM4500 B or 300.1)	
Turn Around Time ~ 24 Hours	

LAB #	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX	PRESERVATIVE METHOD	SAMPLING
				WATER		
				SOIL		
				AIR		
				SLUDGE		
				HCL (BTEX only)		
				HNO <sub>3</sub>		
				NaHSO <sub>4</sub>		
				H <sub>2</sub> SO <sub>4</sub>		
				ICE		
				NONE		
				DATE		
				TIME		

-01	MMW-1	G	1	X		9/27/14	1000
-02	MMW-2	G	1	X		9/27/14	1030
-03	MMW-3	G	1	X		9/27/14	1130
-04	MMW-4	G	1	X		9/27/14	1100

Relinquished by: <u>[Signature]</u>	Date: <u>9/24/14</u>	Time: <u>12:50</u>	Received by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____

Delivered By: (Circle One)	Sample Condition	Cool	Intact	CHECKED BY: _____	(Initials)
		Yes	Yes		
		No	No		

Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____

REMARKS: \_\_\_\_\_

Email Results to: [gil@trident-environmental.com](mailto:gil@trident-environmental.com)  
[mattp@pride-energy.com](mailto:mattp@pride-energy.com)

**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
10014 SCR 1213  
Midland, TX 79706**



## Analytical Report

**Prepared for:**

Gilbert Vandeventer  
Trident Environmental  
P.O. Box 12177  
Odessa, TX 79768

Project: Pride Energy Company

Project Number: State 36 #2

Location: T19S-R37E, Sec 36, Unit Letter O~ Lea County, NM

Lab Order Number: 4L15010



**NELAP/TCEQ # T104704156-13-3**

Report Date: 12/24/14

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	4L15010-01	Water	12/12/14 15:30	12-15-2014 15:40
MW-2	4L15010-02	Water	12/12/14 15:45	12-15-2014 15:40
MW-3	4L15010-03	Water	12/12/14 16:20	12-15-2014 15:40
MW-4	4L15010-04	Water	12/12/14 16:45	12-15-2014 15:40

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**MW-1**  
**4L15010-01 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>468</b>	25.0	mg/L	50	P4L1807	12/16/14	12/18/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>1630</b>	20.0	mg/L	1	P4L1902	12/19/14	12/19/14	EPA 160.1

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**MW-2**  
**4L15010-02 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>463</b>	25.0	mg/L	50	P4L1807	12/16/14	12/18/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>1510</b>	20.0	mg/L	1	P4L1902	12/19/14	12/19/14	EPA 160.1

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**MW-3**  
**4L15010-03 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>1370</b>	25.0	mg/L	50	P4L1807	12/16/14	12/18/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>3930</b>	20.0	mg/L	1	P4L1902	12/19/14	12/19/14	EPA 160.1

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**MW-4**  
**4L15010-04 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>494</b>	25.0	mg/L	50	P4L1807	12/16/14	12/18/14	EPA 300.0
<b>Total Dissolved Solids</b>	<b>1530</b>	20.0	mg/L	1	P4L1902	12/19/14	12/19/14	EPA 160.1

Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P4L1807 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P4L1807-BLK1)**

Prepared: 12/16/14 Analyzed: 12/18/14

Chloride	ND	0.500	mg/L
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**LCS (P4L1807-BS1)**

Prepared: 12/16/14 Analyzed: 12/18/14

Chloride	20.5	0.500	mg/L	20.0	102	80-120
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**LCS Dup (P4L1807-BSD1)**

Prepared: 12/16/14 Analyzed: 12/18/14

Chloride	20.4	0.500	mg/L	20.0	102	80-120	0.597	20
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**Duplicate (P4L1807-DUP1)**

Source: 4L15007-01

Prepared: 12/16/14 Analyzed: 12/18/14

Chloride	2650	100	mg/L	2640	0.514	20
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**Matrix Spike (P4L1807-MS1)**

Source: 4L15007-01

Prepared: 12/16/14 Analyzed: 12/18/14

Chloride	4380	100	mg/L	2000	2640	87.2	80-120
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**Batch P4L1902 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P4L1902-BLK1)**

Prepared & Analyzed: 12/19/14

Total Dissolved Solids	ND	20.0	mg/L
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**Duplicate (P4L1902-DUP1)**

Source: 4L15010-04

Prepared & Analyzed: 12/19/14

Total Dissolved Solids	1500	20.0	mg/L	1530	1.98	20
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Trident Environmental  
P.O. Box 12177  
Odessa TX, 79768

Project: Pride Energy Company  
Project Number: State 36 #2  
Project Manager: Gilbert Vandeventer

Fax: (432) 413-9968

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:



Date:

12/24/2014

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

# PBMLAB

Permian Basin Environmental Lab, LP  
10014 S. County Road 1213  
Midland, Texas 79706  
Phone: 432-661-4184

415010

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name:

Trident Environmental

BILL TO Company:

Pride Energy Company / Attention: Matt Pride

PO#

Project Manager:

Gil Van Deventer / Trident Environmental

Address:

PO Box 710950, Tulsa, OK 74170-1950

Address: (Street, City, Zip)

PO Box 12177, Odessa TX 79768

Phone#:

(918) 524-9200

Fax#:

(918) 524-9292

Phone #:

(432) 638-8740

Fax #:

(413) 403-9968

Project #:

State 36 #2

Project Name:

Pride Energy Company

Project Location:

T19S-R37E, Sec 36, Unit Letter O ~ Lea County, NM

Sampler Signature:

LAB #

FIELD CODE

(LAB USE ONLY)

(G)rab or (C)omp

# CONTAINERS

MATRIX

PRESERVATIVE METHOD

SAMPLING

WATER  
SOIL  
AIR  
SLUDGE

HCL (BTEX only)  
HNO<sub>3</sub>  
NaHSO<sub>4</sub>  
H<sub>2</sub>SO<sub>4</sub>  
ICE  
NONE

DATE

TIME

MTBE 8021B/602

BTEX 8021 B

TPH 418.1/TX1005 / TX1005 Extended (C35)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

TCLP Pesticides

RCI

GC/MS Vol. 8260B/624

GC/MS Semi. Vol. 8270C/625

Moisture Content

Cations (Ca, Mg, Na, K)

Anions (Cl, SO<sub>4</sub>, CO<sub>3</sub>, HCO<sub>3</sub>)

Total Dissolved Solids (160.1 or SM2540C)

Chloride / Cl<sup>-</sup> (SM4500 B or 300.1)

Turn Around Time ~ 24 Hours

ANALYSIS REQUEST  
(Circle or Specify Method No.)

Relinquished by:

Date: 12/14/14

Received by:

Date: 12/14/14

Phone Results

Yes X No

Fax Results

Yes X No

REMARKS:

Samples not field filtered

Email Results to:

Delivered By: (Circle One)

Sample Condition

Cool Intact

CHECKED BY:

gil@trident-environmental.com

mattp@pride-energy.com

Sampled - UPS - Bus - Other:

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

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Yes

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Yes

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Yes

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Yes

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Yes

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Yes

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Yes

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Yes

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Yes

No

Yes

No