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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 (mattp@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          |

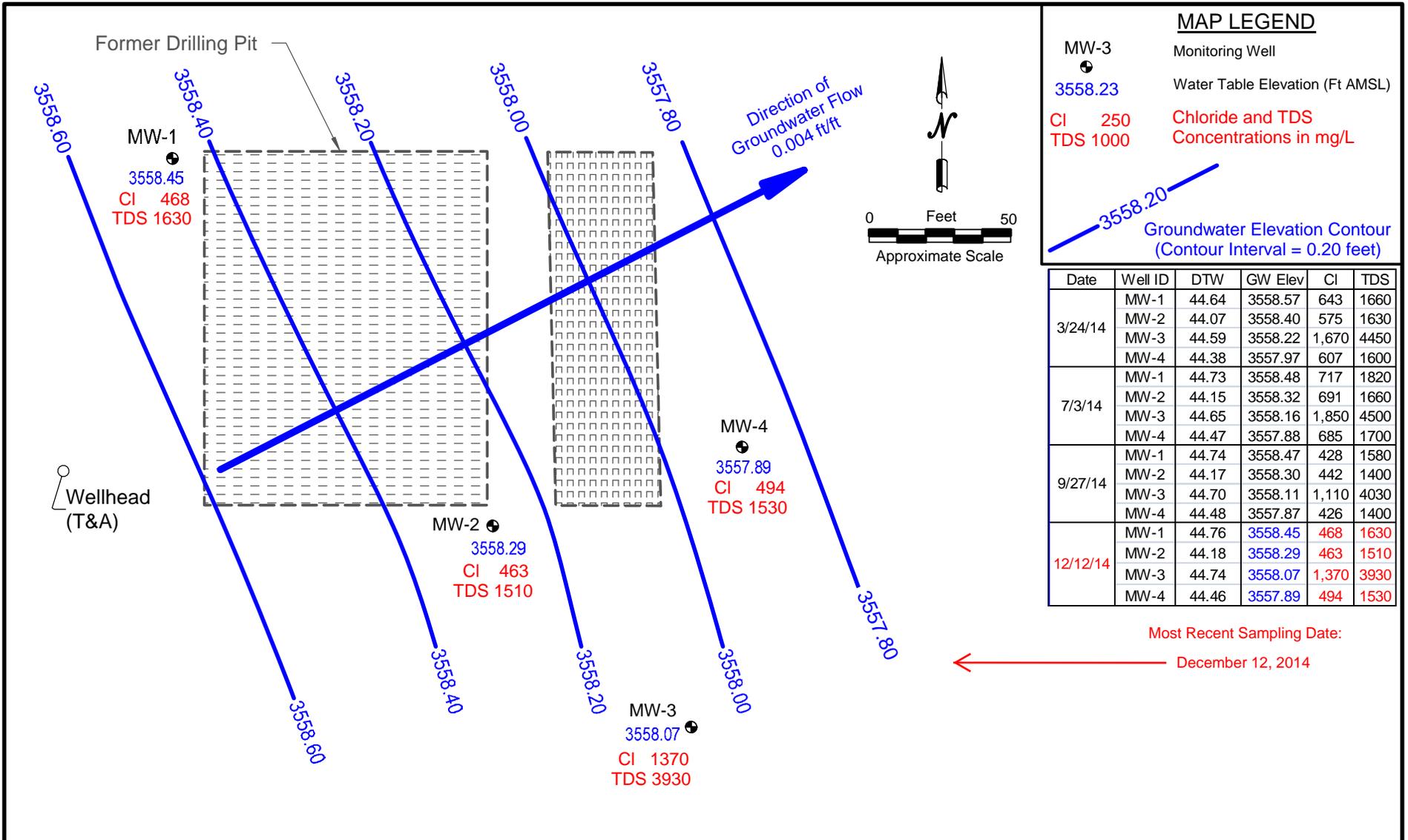
\* TDS in MW-1 on 09/22/10 is not consistent with previous sampling events nor with chloride value. Likely due to lab error (not filtered?)

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

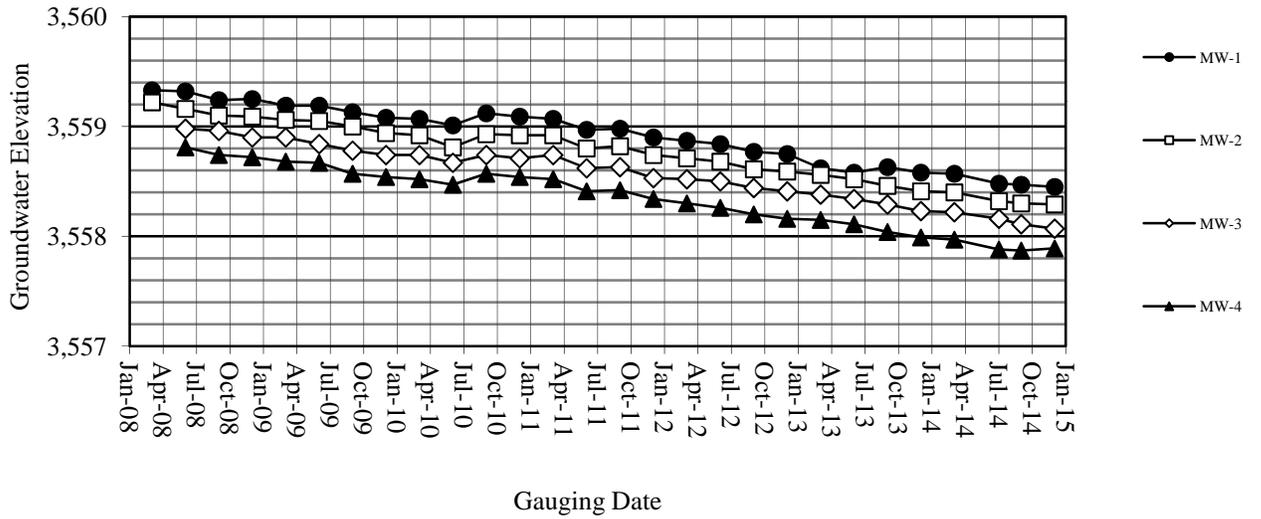
--- Indicates not sampled, analyzed, or measured for this parameter



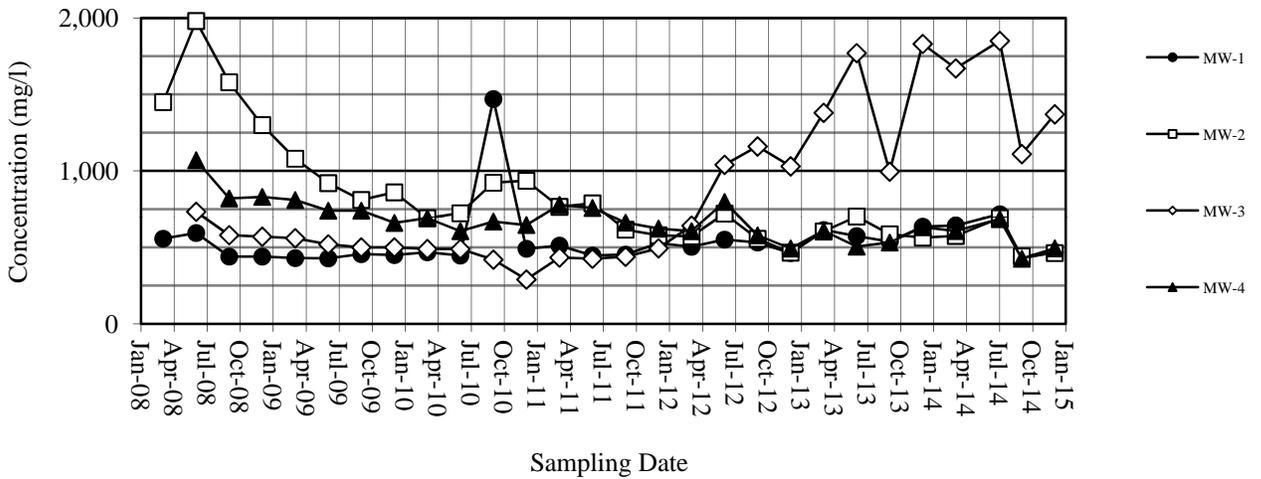
PRIDE ENERGY COMPANY  
 STATE 36 #2  
 T19S - R37E - Section 36 - Unit O  
 Lea County, New Mexico

**FIGURE 1**  
 CHLORIDE, TDS, & BTEX CONCENTRATIONS  
 AND GROUNDWATER ELEVATION MAP

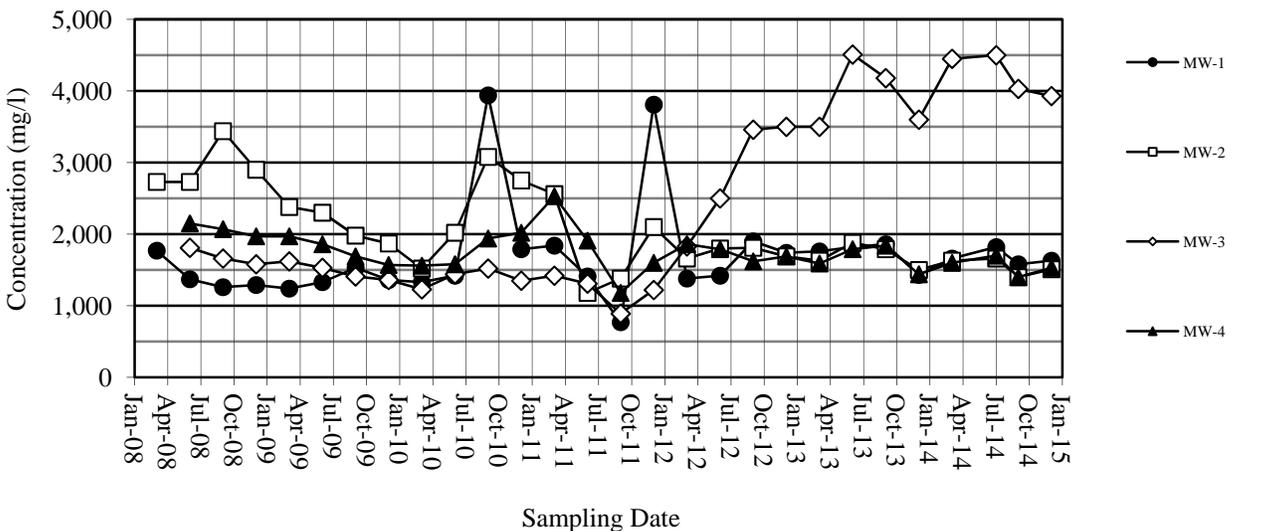
**Figure 2: Groundwater Elevations (Ft AMSL) vs Time**

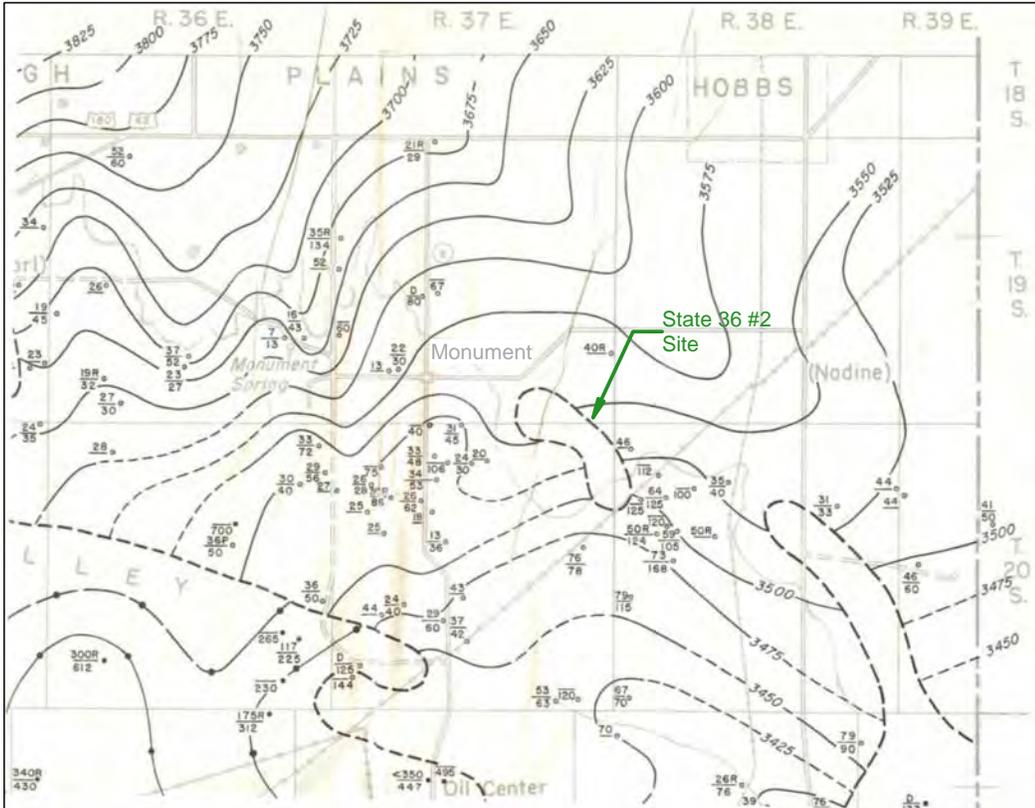


**Figure 3: Chloride Concentrations vs Time**

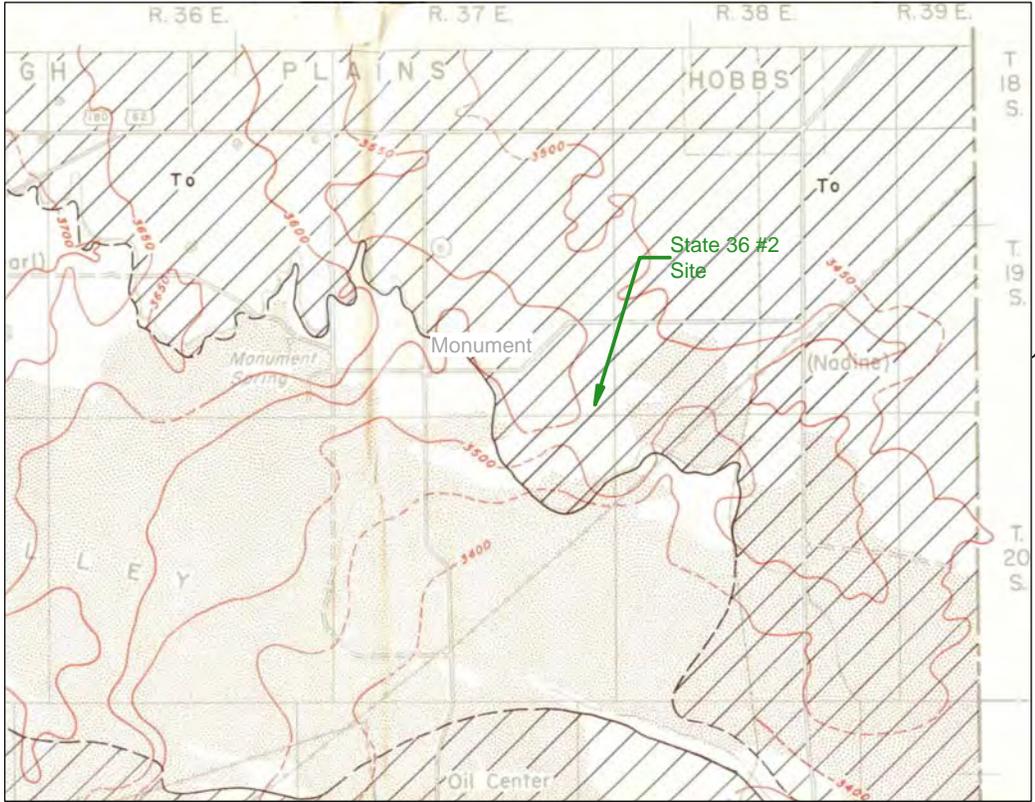


**Figure 4: TDS Concentrations vs Time**





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**

| <b>Sample ID</b> | <b>Laboratory ID</b> | <b>Matrix</b> | <b>Date Sampled</b> | <b>Date Received</b> |
|------------------|----------------------|---------------|---------------------|----------------------|
| 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<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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> Source: 4C26012-01 Prepared: 03/27/14 Analyzed: 03/28/14   |        |                 |       |             |               |      |             |         |           |       |
| Chloride   | 2920   | 100             | mg/L  |             | 2920          |      |             | 0.164   | 20        |       |
| <b>Matrix Spike (P4C2703-MS1)</b> Source: 4C26012-01 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> Source: 4C26014-04 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: 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:

BILL TO Company: Pride Energy Company / Attention: Matt Pride  
 Address: (Street, City, Zip) PO Box 710950, Tulsa, OK 74170-1950  
 Phone #: (918) 524-9200  
 Fax #: (918) 524-9292

PO#  
 ANALYSIS REQUEST  
 (Circle or Specify Method No.)

| LAB #<br>(LAB USE ONLY) | FIELD CODE | (G)rab or (C)omp | # CONTAINERS | MATRIX |      |     |        | PRESERVATIVE METHOD |                  |                    |                                | DATE    | TIME |
|-------------------------|------------|------------------|--------------|--------|------|-----|--------|---------------------|------------------|--------------------|--------------------------------|---------|------|
|                         |            |                  |              | WATER  | SOIL | AIR | SLUDGE | HCL (BTEX only)     | HNO <sub>3</sub> | NaHSO <sub>4</sub> | H <sub>2</sub> SO <sub>4</sub> |         |      |
| -01                     | MW-1       | G                | 1            | X      |      |     |        |                     |                  |                    |                                | 3/24/14 | 1530 |
| -02                     | MW-2       | G                | 1            | X      |      |     |        |                     |                  |                    |                                | 3/24/14 | 1815 |
| -03                     | MW-3       | G                | 1            | X      |      |     |        |                     |                  |                    |                                | 3/24/14 | 1600 |
| -04                     | MW-4       | G                | 1            | X      |      |     |        |                     |                  |                    |                                | 3/24/14 | 1715 |

Relinquished by: *[Signature]* Date: 3/26/14 Time: 1155  
 Received by: *[Signature]* Date: 3-26-14 Time: 1155

Delivered By: (Circle One)  UPS - Bus - Other:  Sample Condition: 4  Cool  Intact

Checked By: *[Signature]* (Initials) *[Signature]*

| REMARKS:   | Phone Results | Fax Results | Samples not field filtered | Additional Fax Number: |
|--|---------------|-------------|----------------------------|------------------------|
| MTBE 8021B/602   | Yes           | Yes         | X                          | No                     |
| BTEX 8021 B  | Yes           | Yes         | X                          | No                     |
| TPH 418.1/TX1005 / TX1005 Extended (C35)                           | Yes           | Yes         | X                          | No                     |
| PAH 8270C  | Yes           | Yes         | X                          | No                     |
| Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7                   | Yes           | Yes         | X                          | No                     |
| TCLP Metals Ag As Ba Cd Cr Pb Se Hg                                | Yes           | Yes         | X                          | No                     |
| TCLP Volatiles   | Yes           | Yes         | X                          | No                     |
| TCLP Semi Volatiles  | Yes           | Yes         | X                          | No                     |
| TCLP Pesticides  | Yes           | Yes         | X                          | No                     |
| RCI  | Yes           | Yes         | X                          | No                     |
| GC/MS Vol. 8260B/624   | Yes           | Yes         | X                          | No                     |
| GC/MS Semi. Vol. 8270C/625   | Yes           | Yes         | X                          | No                     |
| Moisture Content   | Yes           | Yes         | X                          | No                     |
| Cations (Ca, Mg, Na, K)  | Yes           | Yes         | X                          | No                     |
| Anions (Cl, SO <sub>4</sub> , CO <sub>3</sub> , HCO <sub>3</sub> ) | Yes           | Yes         | X                          | No                     |
| Total Dissolved Solids (160.1 or SM2540C)                          | Yes           | Yes         | X                          | No                     |
| Chloride / Cl <sup>-</sup> (SM4500 B or 300.1)                     | Yes           | Yes         | X                          | No                     |
| Turn Around Time ~ 24 Hours  | Yes           | Yes         | X                          | No                     |

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: 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**

| <b>Sample ID</b> | <b>Laboratory ID</b> | <b>Matrix</b> | <b>Date Sampled</b> | <b>Date Received</b> |
|------------------|----------------------|---------------|---------------------|----------------------|
| 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 |
|---------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|

**Permian Basin Environmental Lab, L.P.**

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

|                               |             |      |      |    |         |          |          |           |  |
|-------------------------------|-------------|------|------|----|---------|----------|----------|-----------|--|
| <b>Chloride</b>               | <b>717</b>  | 12.5 | mg/L | 25 | P4G1703 | 07/14/14 | 07/17/14 | EPA 300.0 |  |
| <b>Total Dissolved Solids</b> | <b>1820</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-2**  
**4G07004-02 (Water)**

| Analyte | Result | Reporting<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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 |
|---|--------|-----------------|-------|---------------------------------------|---------------|------|-------------------------------|------|-----------|-------|
| <b>Batch P4G1509 - *** DEFAULT PREP ***</b> |        |                 |       |                                       |               |      |                               |      |           |       |
| <b>Blank (P4G1509-BLK1)</b>                 |        |                 |       | Prepared & Analyzed: 07/15/14         |               |      |                               |      |           |       |
| Total Dissolved Solids                      | ND     | 20.0            | mg/L  |                                       |               |      |                               |      |           |       |
| <b>Duplicate (P4G1509-DUP1)</b>             |        |                 |       | Source: 4G03014-01                    |               |      | Prepared & Analyzed: 07/15/14 |      |           |       |
| Total Dissolved Solids                      | 815    | 20.0            | mg/L  |                                       | 815           |      |                               | 0.00 | 20        |       |
| <b>Duplicate (P4G1509-DUP2)</b>             |        |                 |       | Source: 4G07004-04                    |               |      | Prepared & Analyzed: 07/15/14 |      |           |       |
| Total Dissolved Solids                      | 1660   | 20.0            | mg/L  |                                       | 1700          |      |                               | 2.38 | 20        |       |
| <b>Batch P4G1703 - *** DEFAULT PREP ***</b> |        |                 |       |                                       |               |      |                               |      |           |       |
| <b>Blank (P4G1703-BLK1)</b>                 |        |                 |       | Prepared: 07/14/14 Analyzed: 07/17/14 |               |      |                               |      |           |       |
| Chloride                                    | ND     | 0.500           | mg/L  |                                       |               |      |                               |      |           |       |
| <b>LCS (P4G1703-BS1)</b>                    |        |                 |       | Prepared: 07/14/14 Analyzed: 07/17/14 |               |      |                               |      |           |       |
| Chloride                                    | 9.85   | 0.500           | mg/L  | 10.0                                  |               | 98.5 | 80-120                        |      |           |       |
| <b>LCS Dup (P4G1703-BSD1)</b>               |        |                 |       | 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.



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

Page 1 of 1  
 COC No.: 1R501-0714  
 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 #  
(LAB USE ONLY)

FIELD CODE

(G)rab or (C)omp

# CONTAINERS

MATRIX

WATER  
SOIL  
AIR  
SLUDGE

PRESERVATIVE METHOD

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

SAMPLING

DATE  
TIME

4607048

MMW-1

G

1

X

X

7/3/14

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

MMW-2

MMW-3

G

1

X

X

7/3/14

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

MMW-4

G

1

X

X

7/3/14

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

Relinquished by:

Date: Time:

Received by:

Date: Time:

Relinquished by:

Date: Time:

Received By: (Laboratory Staff)

Date: Time:

Delivered By: (Circle One)

Sample Condition

CHECKED BY:

Sampler - UPS - Bus - Other:

Yes

No

Cool

Yes

No

Intact

Yes

No

(Initials)

REMARKS:

Samples not field filtered

Email Results to:

gil@trident-environmental.com

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: 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**

| <b>Sample ID</b> | <b>Laboratory ID</b> | <b>Matrix</b> | <b>Date Sampled</b> | <b>Date Received</b> |
|------------------|----------------------|---------------|---------------------|----------------------|
| 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<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**Permian Basin Environmental Lab, L.P.**

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

|                               |             |      |      |    |         |          |          |           |  |
|-------------------------------|-------------|------|------|----|---------|----------|----------|-----------|--|
| <b>Chloride</b>               | <b>428</b>  | 12.5 | mg/L | 25 | P4J1002 | 10/10/14 | 10/10/14 | EPA 300.0 |  |
| <b>Total Dissolved Solids</b> | <b>1580</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-2**  
**4J02017-02 (Water)**

| Analyte | Result | Reporting<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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 |
|---|--------|-----------------|-------|--|---------------|------|-------------|-------|-----------|-------|
| <b>Batch P4J0702 - *** DEFAULT PREP ***</b> |        |                 |       |  |               |      |             |       |           |       |
| <b>Blank (P4J0702-BLK1)</b>                 |        |                 |       | Prepared & Analyzed: 10/03/14                    |               |      |             |       |           |       |
| Total Dissolved Solids                      | ND     | 20.0            | mg/L  |  |               |      |             |       |           |       |
| <b>Duplicate (P4J0702-DUP1)</b>             |        |                 |       | Source: 4H28001-01 Prepared & Analyzed: 10/03/14 |               |      |             |       |           |       |
| Total Dissolved Solids                      | 400    | 20.0            | mg/L  |  | 372           |      |             | 7.25  | 20        |       |
| <b>Duplicate (P4J0702-DUP2)</b>             |        |                 |       | Source: 4H28002-01 Prepared & Analyzed: 10/03/14 |               |      |             |       |           |       |
| Total Dissolved Solids                      | 164    | 20.0            | mg/L  |  | 160           |      |             | 2.47  | 20        |       |
| <b>Batch P4J1002 - *** DEFAULT PREP ***</b> |        |                 |       |  |               |      |             |       |           |       |
| <b>Blank (P4J1002-BLK1)</b>                 |        |                 |       | Prepared & Analyzed: 10/10/14                    |               |      |             |       |           |       |
| Chloride                                    | ND     | 0.500           | mg/L  |  |               |      |             |       |           |       |
| <b>LCS (P4J1002-BS1)</b>                    |        |                 |       | Prepared & Analyzed: 10/10/14                    |               |      |             |       |           |       |
| Chloride                                    | 9.93   | 0.500           | mg/L  | 10.0   |               | 99.3 | 80-120      |       |           |       |
| <b>LCS Dup (P4J1002-BSD1)</b>               |        |                 |       | Prepared & Analyzed: 10/10/14                    |               |      |             |       |           |       |
| Chloride                                    | 9.89   | 0.500           | mg/L  | 10.0   |               | 98.9 | 80-120      | 0.383 | 20        |       |
| <b>Duplicate (P4J1002-DUP1)</b>             |        |                 |       | Source: 4J02015-01 Prepared & Analyzed: 10/10/14 |               |      |             |       |           |       |
| Chloride                                    | 2040   | 50.0            | mg/L  |  | 2030          |      |             | 0.373 | 20        |       |
| <b>Matrix Spike (P4J1002-MS1)</b>           |        |                 |       | 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:

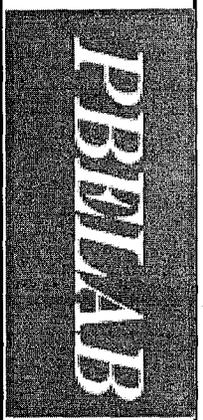


Date: 10/10/2014

Brent Barron, Laboratory Director/Technical Director

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

Page 1 of 1  
 COC No.: 1R501-0914  
 CHAIN-OF-CUSTODY AND ANALYSIS REQUEST  
 LAB Order ID # 4502017

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: \_\_\_\_\_

BILL TO Company: Pride Energy Company / Attention: Matt Pride  
 Address: (Street, City, Zip) PO Box 710950, Tulsa, OK 74170-1950  
 Phone #: (918) 524-9200  
 Fax #: (918) 524-9292

PO Box 12177, Odessa TX 79768  
 Phone #: (432) 638-8740  
 Fax #: (413) 403-9968  
 Project Name: Pride Energy Company  
 Project #: State 36 #2

| LAB #<br>(LAB USE ONLY) | FIELD CODE | (G)rab or (C)omp | # CONTAINERS | MATRIX |      |     |        | PRESERVATIVE METHOD |                  |                    |                                | DATE    | TIME |
|-------------------------|------------|------------------|--------------|--------|------|-----|--------|---------------------|------------------|--------------------|--------------------------------|---------|------|
|                         |            |                  |              | WATER  | SOIL | AIR | SLUDGE | HCL (BTEX only)     | HNO <sub>3</sub> | NaHSO <sub>4</sub> | H <sub>2</sub> SO <sub>4</sub> |         |      |
| -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 |

|  |   |
|--|---|
| 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)                          | X |
| Chloride / Cl <sup>-</sup> (SM4500 B or 300.1)                     | X |
| Turn Around Time ~ 24 Hours  |   |

Relinquished by: [Signature] Date: 10/21/14 Time: 12:50  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

REMARKS: \_\_\_\_\_  
 Phone Results: Yes  No   
 Fax Results: Yes  No   
 Samples not field filtered: Yes  No   
 Additional Fax Number: \_\_\_\_\_

Delivered By: (Circle One) Sampler  
 Sample Condition: Cool  Intact   
 CHECKED BY: \_\_\_\_\_ (Initials)  
 Date: 10/21/14 Time: 12:50

REMARKS: \_\_\_\_\_  
 Email Results to: gjl@trident-environmental.com  
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**

| <b>Sample ID</b> | <b>Laboratory ID</b> | <b>Matrix</b> | <b>Date Sampled</b> | <b>Date Received</b> |
|------------------|----------------------|---------------|---------------------|----------------------|
| 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     |

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

| Analyte | Result | Reporting<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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 |  |

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

| Analyte | Result | Reporting<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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 |  |

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

| Analyte | Result | Reporting<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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 |  |

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

| Analyte | Result | Reporting<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

**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 |  |

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**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 P4L1807 - *** DEFAULT PREP ***</b>  |        |                 |       |             |               |      |             |       |           |       |
| <b>Blank (P4L1807-BLK1)</b> Prepared: 12/16/14 Analyzed: 12/18/14                          |        |                 |       |             |               |      |             |       |           |       |
| Chloride   | ND     | 0.500           | mg/L  |             |               |      |             |       |           |       |
| <b>LCS (P4L1807-BS1)</b> Prepared: 12/16/14 Analyzed: 12/18/14                             |        |                 |       |             |               |      |             |       |           |       |
| Chloride   | 20.5   | 0.500           | mg/L  | 20.0        |               | 102  | 80-120      |       |           |       |
| <b>LCS Dup (P4L1807-BSD1)</b> Prepared: 12/16/14 Analyzed: 12/18/14                        |        |                 |       |             |               |      |             |       |           |       |
| Chloride   | 20.4   | 0.500           | mg/L  | 20.0        |               | 102  | 80-120      | 0.597 | 20        |       |
| <b>Duplicate (P4L1807-DUP1)</b> Source: 4L15007-01 Prepared: 12/16/14 Analyzed: 12/18/14   |        |                 |       |             |               |      |             |       |           |       |
| Chloride   | 2650   | 100             | mg/L  |             | 2640          |      |             | 0.514 | 20        |       |
| <b>Matrix Spike (P4L1807-MS1)</b> Source: 4L15007-01 Prepared: 12/16/14 Analyzed: 12/18/14 |        |                 |       |             |               |      |             |       |           |       |
| Chloride   | 4380   | 100             | mg/L  | 2000        | 2640          | 87.2 | 80-120      |       |           |       |
| <b>Batch P4L1902 - *** DEFAULT PREP ***</b>  |        |                 |       |             |               |      |             |       |           |       |
| <b>Blank (P4L1902-BLK1)</b> Prepared & Analyzed: 12/19/14                                  |        |                 |       |             |               |      |             |       |           |       |
| Total Dissolved Solids   | ND     | 20.0            | mg/L  |             |               |      |             |       |           |       |
| <b>Duplicate (P4L1902-DUP1)</b> Source: 4L15010-04 Prepared & Analyzed: 12/19/14           |        |                 |       |             |               |      |             |       |           |       |
| Total Dissolved Solids   | 1500   | 20.0            | mg/L  |             | 1530          |      |             | 1.98  | 20        |       |

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### 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.

# PBRI LAB

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

4115010

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: Trident Environmental  
 Project Manager: Gail 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 Location: T19S-R37E, Sec 36, Unit Letter O ~ Lea County, NM

BILL TO Company: Pride Energy Company / Attention: Matt Pride  
 Address: (Street, City, Zip) PO Box 710950, Tulsa, OK 74170-1950  
 Phone #: (918) 524-9200  
 Fax #: (918) 524-9292

Project Name: Pride Energy Company  
 Sampler Signature: [Signature]

ANALYSIS REQUEST  
 (Circle or Specify Method No.)

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

| LAB #<br>(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 | TIME |          |      |  |  |
| -01                     |            |                  | 1            | X      |      |     |        |                     |                  |                    |                                |          |      |      |      |          |      |  |  |
| -02                     |            |                  | 1            | X      |      |     |        |                     |                  |                    |                                |          |      |      |      | 12-12-14 | 1530 |  |  |
| -03                     |            |                  | 1            | X      |      |     |        |                     |                  |                    |                                |          |      |      |      | 12-12-14 | 1545 |  |  |
| -04                     |            |                  | 1            | X      |      |     |        |                     |                  |                    |                                |          |      |      |      | 12-12-14 | 1620 |  |  |
|                         |            |                  | 1            | X      |      |     |        |                     |                  |                    |                                |          |      |      |      | 12-12-14 | 1645 |  |  |

| Phone Results          | Yes | No | Additional Fax Number: |
|------------------------|-----|----|------------------------|
| REMARKS:               |     |    |                        |
| Phone Results          | X   |    |                        |
| Fax Results            |     | X  |                        |
| Additional Fax Number: |     |    |                        |

Relinquished by: [Signature] Date: 12/15/14 Time: 1540  
 Received by: [Signature] Date: 12/15/14 Time: 1540

REMARKS: Samples not field filtered

Delivered By: (Circle One)  
 Sample Condition: Cool Intact  
 Yes  No   
 Checked By: [Signature] (Initials)

Email Results to: gill@trident-environmental.com  
 mattp@pride-energy.com

Sampler - UPS - Bus - Other: