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June 21, 2017

Mr. George Bower  
Oil Conservation Division - District 1  
1625 N. French Drive  
Hobbs, New Mexico 88240

HOBBS OCD  
JUN 23 2017  
RECEIVED

**Subject:** Western Refining Company, LP – State LPG Storage No. 3 MIT

Dear Mr. Bower,

Western Refining Company, LP has performed a nitrogen-brine MIT on one of their storage cavern wells, State LPG Storage No. 3 (API No. 30-025-35956), located in the Jal Station Field in Lea County, New Mexico.

Nitrogen was injected on May 8<sup>th</sup>, 2017. An hour liner test was performed successfully with the following parameters:

- Nitrogen-brine interface start depth: 1,552'
- Start Annulus Pressure: 891.71 psig
- Nitrogen-brine interface end depth: 1,552'
- End Annulus Pressure: 891.48 psig

The 60-minute liner test passed with the pressures following a stabilization trend throughout the liner test period. Nitrogen injection continued until the nitrogen-brine interface was measured at 1,643'. An hour casing test was performed successfully with the following parameters:

- Nitrogen-brine interface start depth: 1,643'
- Start Annulus Pressure: 944.64 psig
- Nitrogen-brine interface end depth: 1,643'
- End Annulus Pressure: 944.23 psig

The 60-minute casing test passed with the pressures following a stabilization trend throughout the casing test period. On May 10<sup>th</sup>, 2017, nitrogen was injected into the borehole until the nitrogen-brine interface was measured at 1,690'. The well was shut in and allowed to stabilize overnight. The MIT was initialized on May 11<sup>th</sup>, 2017 at 10:45 with the following parameters:

- Annular pressure: 1,203.38 psig
- Tubing pressure: 387.07 psig
- Nitrogen-brine interface: 1,690'

The pressure was monitored throughout a 24 hour period and finalized on May 12<sup>th</sup>, 2017 at 10:45 with the following parameters:

- Annular pressure: 1,199.40 psig
- Tubing pressure: 382.88 psig
- Nitrogen-brine interface: 1,690'
- Test Gradient at Casing Shoe: 0.77 psi/ft
- Calculated Leak Rate: 475.54 bbls/yr
- Minimum Detectable Leak Rate: 927.39 bbls/year

It was determined that State LPG Storage No. 3, at the time of this test, demonstrated the mechanical integrity required for the storage of hydrocarbons.

Included in this package are:

- MIT Report for State LPG Storage No. 3
- Test Density Log
- Test Temperature Log

Please contact me by phone (832-216-0785) or via email ([eric@lonquist.com](mailto:eric@lonquist.com)) if you have any questions.

Sincerely,



Eric Busch  
Senior Vice President

CC: Richard Lonquist – Lonquist Field Service, LLC