

Submit 1 Copy To Appropriate District Office

District I - (575) 393-6161
1625 N French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S St. Francis Dr., Santa Fe, NM 87505

State of New Mexico

Energy, Minerals and Natural Resources

CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103

Revised August 1, 2011

HOBBS OGD

SEP 10 2012

RECEIVED

WELL API NO.

30-025-35957

5. Indicate Type of Lease

STATE ☒ FEE ☐

6 State Oil & Gas Lease No.

7 Lease Name or Unit Agreement Name

State LPG Storage Well

8 Well Number

4

9. OGRID Number

248440

10 Pool name or Wildcat

Langlie Mattix

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)

1. Type of Well: Oil Well ☐ Gas Well ☐ Other LPG Storage

2. Name of Operator

Western Refining Company, L.P.

3 Address of Operator

6500 Townbridge Drive El Paso, Tx 79905

4. Well Location

Unit Letter M 1000 feet from the South line and 1230 feet from the West line

Section 32 Township 23S Range 37E NMPM County Lea

11 Elevation (Show whether DR, RKB, RT, GR, etc.)

3310 ft GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

OTHER

☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER:

☐

13 Describe proposed or completed operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 19.15 7 14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

See attached documents

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief

SIGNATURE

on behalf of Western Refining Company, L.P.

Type or print name Paul T. Hughes, JR., P.E.

For State Use Only

TITLE Drilling Manager

DATE 9/7/2012

E-mail address phughes@geostockus.com PHONE. (832) 715-9060

APPROVED BY: Carl J. Cherry

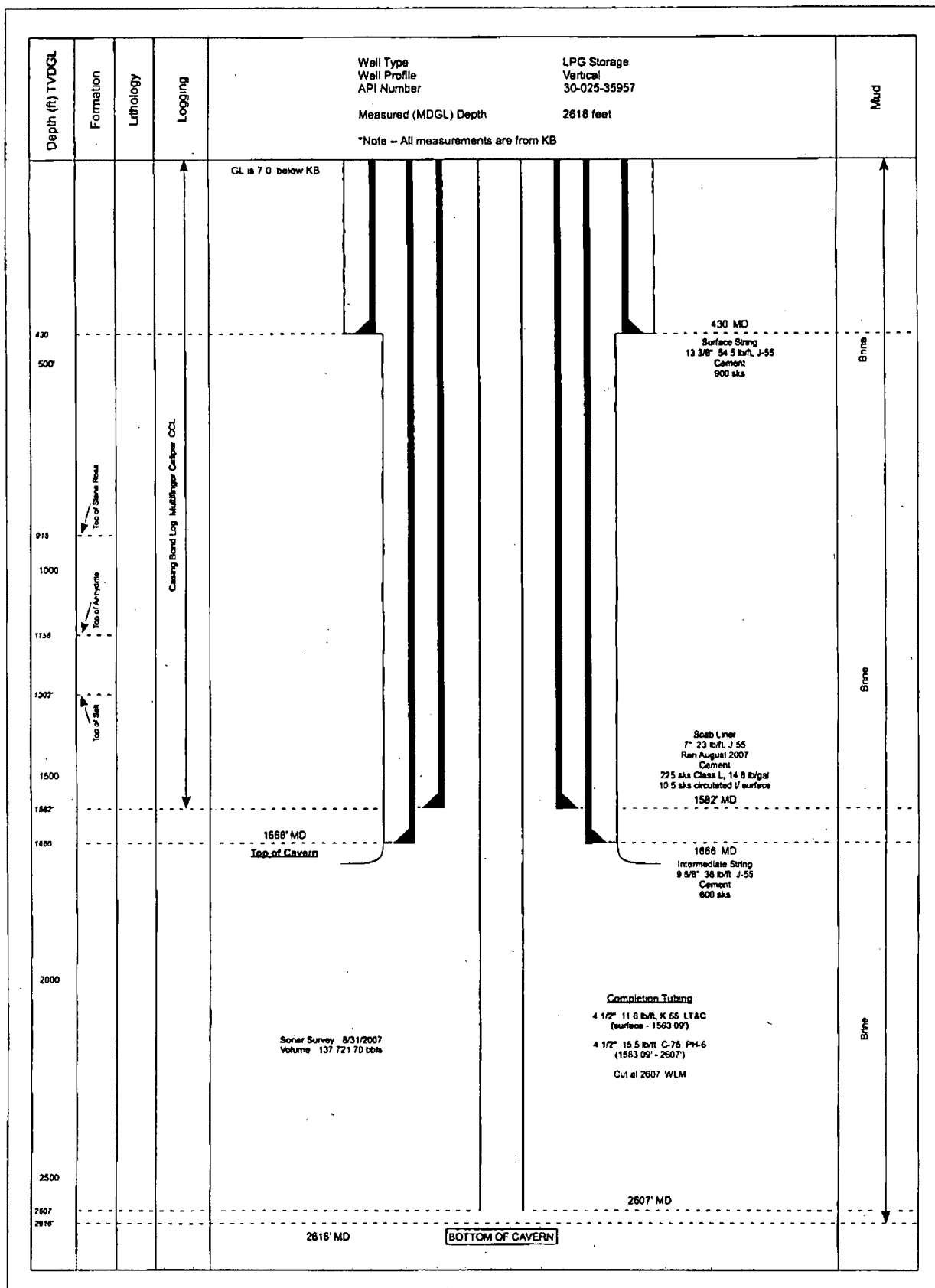
TITLE Environmental Engineer

DATE 9/21/2012

Conditions of Approval (if any).

ELG 9-11-2012

* See attached conditions of approval



16420 PARK TEN PLACE S450 HOUSTON TX 77064		Jal Storage, State LPG Well #4	
DRAWN BY J A Powers		DATE 8/30/12	
CHECKED BY P Hughes		DATE 8/30/12	
APPROVED BY R Kignenber		DATE 8/30/12	
CLIENT Western Refining Company, L P		DRAWING REF / No	
THIS DRAWING CONTAINS CONFIDENTIAL INFORMATION AND IS PROTECTED BY COPYRIGHT. IT MAY NOT BE REPRODUCED, TRANSFERRED, OR USED WITHOUT PRIOR WRITTEN CONSENT FROM GEOSTOCK U.S. INC.			
Project Name	Type	Discipline	Task
JA	3	3	00
Year	12	004	D
Chrono Log	P	P	O
Activity Code	Type of doc	Revision Index	



16420 Park Ten Place Drive
Suite 450
Houston, TX, 77084
Phone: 281 944 3000
Fax: 281 944 3042

UNDERGROUND STORAGE CONSULTING ENGINEERS

Jal Storage - State LPG Well No. 4
MIT Workover Procedure
Friday, September 21, 2012

Chrono: JA3300/12 006/O/Z/O

Subject: Jal Storage Abridged Procedure – State LPG Well No. 4 – MIT Workover

Dear Mark,

Geostock US has put together the technical and commercial components for the below mentioned operations. Please find in this document all pertinent action items and steps planned during the intervention of these wells. The objective is to remove the 4 1/2" tubing, inspect/test the 7" scab liner, inspect/test the 4 1/2" casing, re-run the tubing, and perform a Mechanical Integrity Test on the cavern. Geostock US and Western Refining take the stance that safety is of the highest priority throughout these operations.

Please note all site operations will be during daylight hours only and the following procedure may be altered to accommodate this schedule.

Any questions, concerns, or you require greater detail; please contact Paul Hughes, (832) 715-9060, or Austin Powers, (281) 216-0911.

Well Information:

Well Name: State LPG Well No. 4
API Number: 30-025-35957
County: Lea
TVD: 2471'
KB: 7' above GL

Procedure:

Workover Operations Begin

1. Move rig to location
2. HSE Site Works
3. R/U and check equipment
4. Ensure pressure on wellhead is null
5. M/U to tree and circulate well and ensure well is static
6. Safety meeting and JSA to be conducted
7. De-stud tree and lay aside, send for re-fab / maintenance
8. N/U manifold, BOP, gas buster, mud cross, etc and test both high/low



9. Prep rig floor to pull tubing, P/U spear, and stab into tubing
10. Visually inspect, rabbit joints, and lay down, call bad joints
11. Close hydril and R/U wireline unit and prep for logging
12. R/U wireline lubricator and perform downhole logging with CBL and multi-finger caliper t/ 1582'
13. R/D wireline unit and demob from location
14. P/U packer and RIH w/ 4 1/2" tubing string or work string, set packer at 7" shoe
15. Install TIW valve on tubing
16. Close same, close hydril
17. Test backside of 4 1/2", 350 psi for 30 minutes on a 60 minute chart; ensure all casing valves are open during test
18. Bleed pressure off packer and POOH w/ 4 1/2" tubing/work string and lay down packer
19. RIH w/ 4 1/2" tubing, hydrostatic test joints below rotary while RIH, R/D testers
20. Land tubing in wellhead and install backpressure valve, test valve is holding
21. N/D mud cross, BOP, gas buster and N/U tree, test high/low
22. Rig down unit and move off of location

MIT Operations Begin

The cavern will be subjected to an external mechanical integrity test via the brine-nitrogen interface test method as described by the Kansas Department of Health and Environment Brine-Nitrogen Interface "Cavern Test" Guidelines

23. Conduct safety meeting and JSA with site personnel before commencement of MIT operations
24. Install all necessary surface equipment
25. Install pressure and temperature recorders on the 4 1/2" tubing and the annulus of the 4 1/2" tubing (ID of 7")
26. Pressure test monitors and recording equipment
27. N/U manifold, frac tanks, vac trucks, all to wellhead
28. Prime pump and prep for brine injection
29. Begin injecting brine and fill well
30. Once static condition is reached ensure all valves are closed, except for injection line
31. Start brine injection into the 4 1/2" tubing, pressure increase not to exceed 150 psi/hr
32. Inject brine until the annulus, between the 7" and 4 1/2", reaches 364 psig
33. Isolate wellhead using a double valve combination and shut in at surface
34. Monitor the wellhead pressure for 24 hours or until pressure has stabilized (decrease of less than 10 psi/day), pressure to be maintained via brine injection when required
35. Conduct safety meeting and JSA with site personnel before commencement of cavern pressurization via nitrogen



36. Begin R/U of nitrogen supply company, wireline density logging
37. N/U nitrogen line to the wellhead, test same
38. Take note of current brine surface pressure on 4 1/2" tubing and annulus
39. Ensure nitrogen pressure of greater than current brine pressure in surface system
40. Open wellhead valve to allow injection of nitrogen into the annulus of 4 1/2"
41. During nitrogen injection, bleed off brine from 4 1/2" tubing as needed to keep casing shoe at or below test pressure, and monitor interface level with wireline density log
42. Inject nitrogen until nitrogen interface is below casing seat (surface annulus pressure approx. 1,184 psig.)
43. Allow cavern to stabilize overnight, monitor pressure as required
44. Conduct safety meeting and JSA with site personnel
45. Once confirmation of cavern stabilization begin prep for logging
46. R/U wireline unit and required equipment
47. M/U lubricator to wellhead and test same
48. RIH with sinker bar and gauge ring to approximately 1700' to confirm 4 1/2" tubing clearance, may depend on final EOT depth
49. POOH and lay down logging tools
50. Run a nitrogen-brine interface measurement log (pulsed-neutron) in the 4 1/2" tubing to verify the brine-nitrogen interface depth and pressure/temperature log.
51. Monitor the wellhead pressures for 240 hours
52. Repeat the nitrogen-brine interface measurement and pressure/temperature logs
53. Pass/Fail of test to be in accordance with the Kansas Brine-Nitrogen Interface "Cavern Test" Guidelines. Minimum detectable leak rate (MDLR) must be less than 1000 bbl/yr. Calculated nitrogen leak rate (CNLR) must be less than MDLR.

V	Unit volume of borehole, bbl/ft	27
R	Resolution of interface tool, ft	1
T	Duration of test, days	10
MDLR	Min. Detectable leak Rate, bbl/yr	985.5

54. Data to be analyzed and reported to Western Refining Company, L.P
55. Submit 'Form C-103' per requirements upon successful completion of site operations

END OF OPERATIONS

**Western Refining Company, L.P.
Jal LPG Storage Facility (GW-007)
LPG Storage Wells No. 3 and 4**

**C-103 Form
OCD Santa Fe Office
Conditions of Approval
(9/21/2012)**

- 1) The operator shall submit a final C-103 Sundry Notice for each well with all applicable well testing information attached to the notice within 30 days of well testing completion. Information consistent with the State of Kansas "Nitrogen Brine Interface" Cavern Test Form shall be provided with the final C-103 Notice information.

Please be advised that OCD's approval does not relieve Western Refining, L.P. from responsibility if their operations pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve Western Refining, L.P. of responsibility for compliance with any other federal, state, or local laws and/or regulations.