

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



State of New Mexico
Energy Minerals and Natural Resources

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

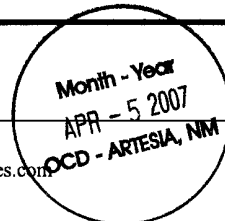
Form C-144
June 1, 2004

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

Pit or Below-Grade Tank Registration or Closure

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

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



Operator: COG Operating LLC Telephone: 432-685-4340 e-mail address: pedwards@conchoresources.com
Address: Fasken Center Tower II, 550 W. Texas Ave., Suite 1300, Midland, TX 79701
Facility or well name: USP Fee #2 API #: 30-015-34438 U/L or Qtr/Qtr: D Sec: 16 T: 23S R: 29E
County: Eddy Latitude: N 32° 18' 42" Longitude: W 103° 59' 43" NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal ☐ State ☐ Private ☒ Indian ☐

Pit	Below-grade tank	
Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness: 12 mil Clay <input type="checkbox"/> Pit Volume: 10,715 bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. _____	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) 65 feet	Less than 50 feet	(20 points)
	50 feet or more, but less than 100 feet-X	(10 points) 10
	100 feet or more	(0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes	(20 points)
	No - X	(0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet (Salt Lake)	(20 points) 20
	200 feet or more, but less than 1000 feet	(10 points)
	1000 feet or more	(0 points)
Ranking Score (Total Points)		30 points *

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

Additional Comments: Pit Closure Plan is attached. *This well is located in a salt lake with pre-existing chloride condition in Section 16. A copy of an water analysis submitted by Devon Energy Production Co, L.P. for their pit closure on Spud 16 State #6 well (API No. 30-015-34575, located in Unit D, Section 16, T23S, T29E) is attached. The USP #2 well is an off-set well to Devon Energy's Spud 16 State #6, see attached topographic map.

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

Date: 4-3-07

REGULATORY

Printed Name/Title PHYLLIS A. EDWARDS - ANALYST Signature

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

Approval:

Printed Name/Title

Jim W. Green
District II Supervisor

Date: 4/6/07

Pit Closure Plan – Drilling Pit

Operator: COG Operating LLC

Well Name: USP Fee #2

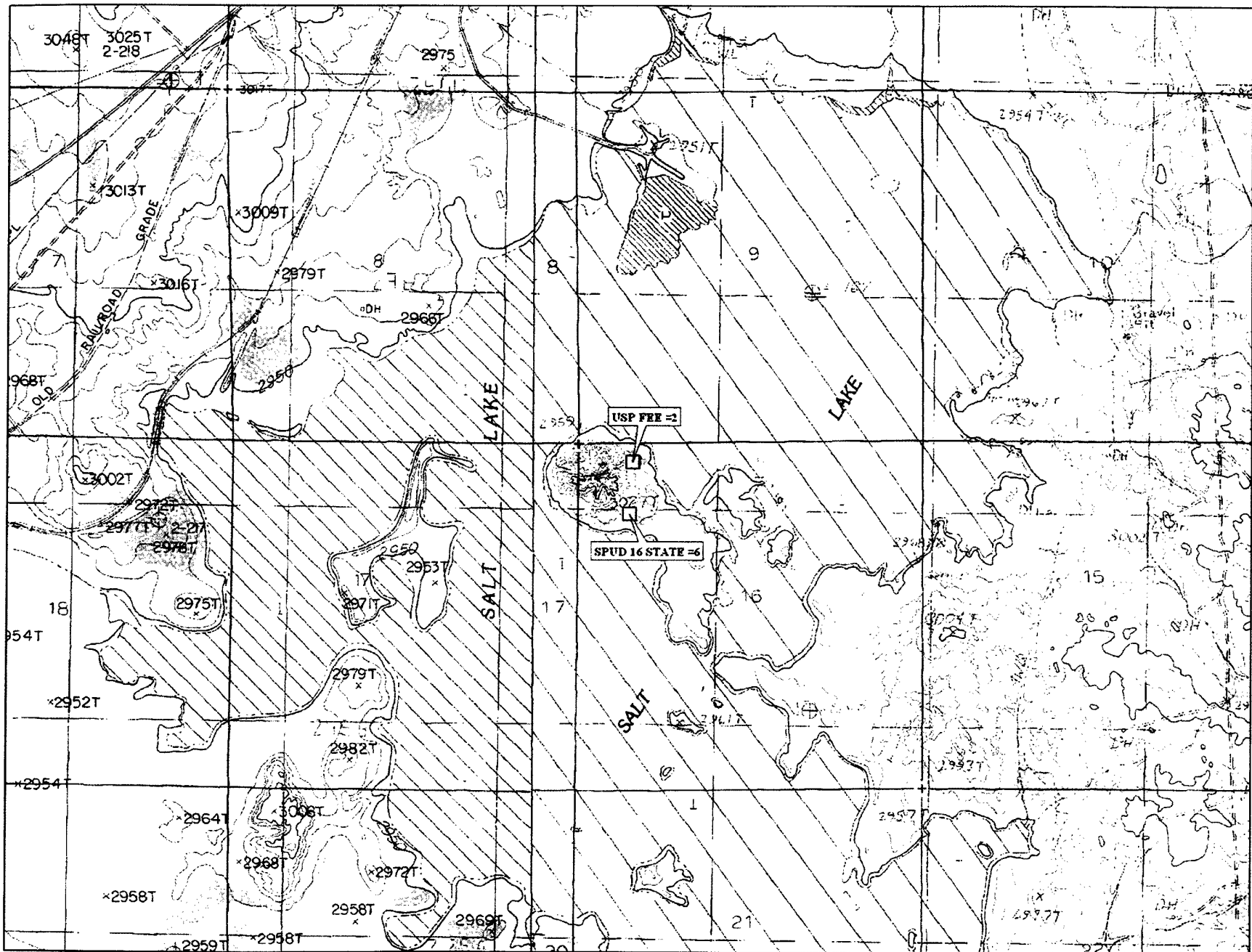
Location: Unit D, Section 16, Township 23 S, Range 29 E, Eddy County, NM

The drilling pit associated with this well will be closed as per New Mexico OCD "Pit and Below-Grade Tank Guidelines" dated November 1, 2004. The visual inspection of the pit indicated that the pit liner has maintained its integrity.

1. Any remaining liquids will be removed from the pit.
2. Remaining solid wastes (i.e. buckets, cans, miscellaneous trash, debris, contaminated solids, etc.) will be removed from the pit, except for dried mud and cuttings, cement, and frac materials in drilling and reserve pits which have been approved by the OCD for encapsulation.
3. **This well did penetrate a salt section, and 9.5 lb/gal brine or greater was used during drilling. Therefore, the pit will be closed by capping and encapsulation:**

Capping and encapsulation will be accomplished by mixing earthen materials with the pit contents, as necessary to stiffen the pit contents sufficiently to provide physical stability and support for the pit cover; folding the edges of the liner over the stiffened mud and cuttings; capping with a 20 mil minimum thickness impervious, reinforced, synthetic or fabricated liner meeting ASTM standards that is designed to be resistant to the material encapsulated; the liner will overlap the underling pit by at least 3 feet on all directions; and covering the liner cap with minimum of 3 feet of clean soil that is capable of supporting native plant growth.

4. Upon closure of the pit, the surface where the pit was located will be contoured to prevent erosion and ponding of rainwater over the site.



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 Scale: 1 : 24,000 Map Rotation: 0° Magnetic Declination: 9.0°E

1,000 ft



BJ SERVICES

Water Analysis

Date: 3/7/2005

2401 Sivley, Artesia NM 88210

Phone (505) 746-3140 Fax (505) 746-2293

Analyzed For

Company	Well Name	County	State
Devon	Spud 18 Federal 2		New Mexico

Sample Source

16 Fed # 2

Sample #

1

Formation

Depth

Specific Gravity	1.200	SG @ 60 °F	1.201
pH	7.33	Sulfides	
Temperature (°F)	65	Reducing Agents	

Cations

Sodium (Calc)	in Mg/L	99,713	in PPM	83,025
Calcium	in Mg/L	4,800	in PPM	3,997
Magnesium	in Mg/L	4,320	in PPM	3,597
Soluble Iron (FE2)	in Mg/L	0.0	in PPM	0

Anions

Chlorides	in Mg/L	174,000	in PPM	144,879
Sulfates	in Mg/L	200	in PPM	167
Bicarbonates	in Mg/L	122	in PPM	102
Total Hardness (as CaCO3)	in Mg/L	30,000	in PPM	24,979
Total Dissolved Solids (Calc)	in Mg/L	283,155	in PPM	235,766
Equivalent NaCl Concentration	in Mg/L	239,006	in PPM	199,006

Scaling Tendencies

*Calcium Carbonate Index 585,600

Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable

*Calcium Sulfate (Gyp) Index 960,000

Below 500,000 Remote / 500,000 - 10,000,000 Possible / Above 10,000,000 Probable

*This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.

Remarks

Report # 1739

Water Well Data
Average Depth to Groundwater (ft)
COG - USP Fee #2, Lea County, New Mexico

22 South			28 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

22 South			29 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

22 South			30 East		
6	5	4	3	2	1
7	65	8	9	10	11
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

23 South			28 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

23 South			29 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

23 South			30 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

24 South			28 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

24 South			29 East		
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7	8	9	10	11	12
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24 South			30 East		
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30	29	28	27	26	25
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- 88 New Mexico State Engineers Well Reports
- 105 USGS Well Reports
- 90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)
- Geology and Groundwater Resources of Eddy County, NM (Report 3)
- 34 NMOCD - Groundwater Data

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 23S Range: 29E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic
☒ All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

Help

AVERAGE DEPTH OF WATER REPORT 12/20/2006

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
C	23S	29E	17				1	65	65	65
C	23S	29E	18				1	10	10	10
C	23S	29E	19				1	28	28	28
C	23S	29E	30				3	30	38	35

Record Count: 6