

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505



30-015-40890
Lost Tank 35 state
SWD #1
Oxy USA

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] TYPE OF APPLICATION - Check Those Which Apply for [A]
 [A] Location - Spacing Unit - Simultaneous Dedication
 NSL NSP SD
 Check One Only for [B] or [C]
 [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM
 [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR
 [D] Other: Specify _____

Potash Leases/Notified
 Unit J; Sec 35; T21S; R31E
 in R-111P
 RECEIVED OOD
 APR 9 2 25

- [2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply
 [A] Working, Royalty or Overriding Royalty Interest Owners
 [B] Offset Operators, Leaseholders or Surface Owner
 [C] Application is One Which Requires Published Legal Notice
 [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
 [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
 [F] Waivers are Attached

Note:
 API: Well Previously
 Submitted with Location
 Unit J/35/T21S/R31E
 Protested by Yates
 1/3/13
 SWD Application Withdrawn

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

David Stewart
 Print or Type Name

David Stewart
 Signature

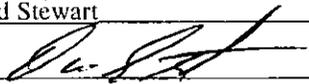
Regulatory Advisor
 Title

4/4/13
 Date

david_stewart@oxy.com
 e-mail Address

OXY USA Inc.
 Lost Tank 35 State SWD #1

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? Yes No
- II. OPERATOR: OXY USA Inc Lost Tank 35 State SWD #1
ADDRESS: P.O. Box 50250 Midland, TX 79710
CONTACT PARTY: David Stewart PHONE: 432-685-5717
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review. Attached
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail. Attached
- VII. Attach data on the proposed operation, including:
- Proposed average and maximum daily rate and volume of fluids to be injected; Avg-3500BWPD – Max-4000BWPD
 - Whether the system is open or closed; Closed
 - Proposed average and maximum injection pressure; Avg-800psi – Max-871 psi
 - Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, Delaware and Bone Spring from OXY operated leases, see attached.
 - If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.). Attached
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval. Attached
- IX. Describe the proposed stimulation program, if any. To Be Determined
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
Logs to be filed after well has been drilled and completed.
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. None within one mile per the NMSEO.
Per the field production tech, no windmills were found within one mile of this well.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water. Attached
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. Attached
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: David Stewart TITLE: Regulatory Advisor
SIGNATURE:  DATE: 4/14/13
E-MAIL ADDRESS: david_stewart@oxy.com
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

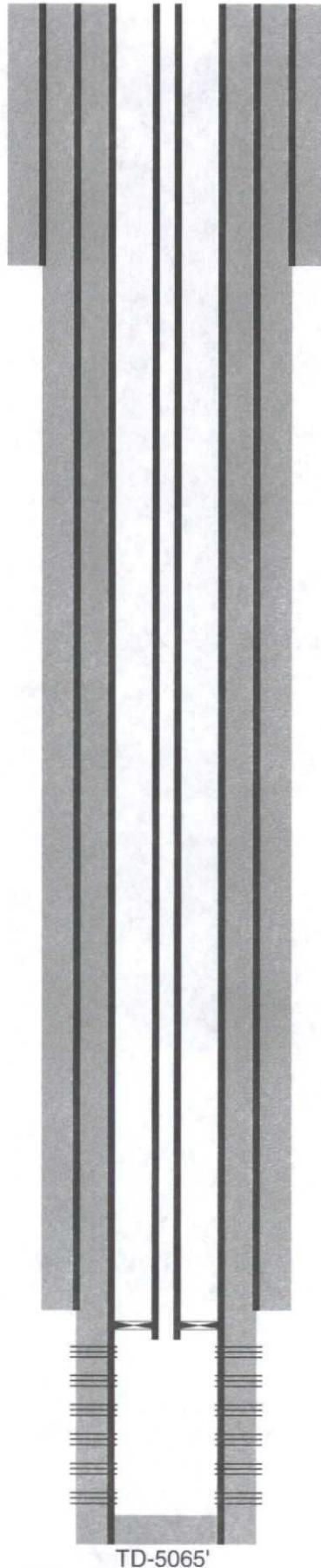
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR: OXY USA Inc.WELL NAME & NUMBER: Lost Tank 35 State SWD #1WELL LOCATION: 2630 FSL 2630 FWL NESW(K) 35 21S 31E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGEWELLBORE SCHEMATICPROPOSED WELL CONSTRUCTION DATASurface CasingHole Size: 14-3/4" Casing Size: 11-3/4" @ 825'Cemented with: 690 sx. *or* 932 ft³Top of Cement: Surface Method Determined: To Be CircIntermediate CasingHole Size: 10-5/8" Casing Size: 8-5/8" @ 4340'Cemented with: 1170 sx. *or* 2082 ft³Top of Cement: Surface Method Determined: To Be CircProduction CasingHole Size: 7-7/8" Casing Size: 5-1/2" @ 5065'Cemented with: 830 sx. *or* 1396 ft³Top of Cement: Surf Method Determined: To Be CircTotal Depth: 5065'Injection Interval4355 feet to 4965 feet

(Perforated or Open Hole; indicate which)

OXY USA Inc. - Proposed
Lost Tank 35 State SWD #1
API No. 30-015-40890



14-3/4" hole @ 825'
11-3/4" csg @ 825'
w/ 690sx-TOC-Surf

2-7/8" PL tbg w/ pkr @ 4305'

10-5/8" hole @ 4340'
8-5/8" csg @ 4340'
w/ 1170sx-TOC-Surf

Perfs @ 4355-4965'

7-7/8" hole @ 5065'
5-1/2" csg @ 5065'
w/ 830sx-TOC-Surf

TD-5065'

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" 6.5# J55 Lining Material: polylined

Type of Packer: Guiberson GVI PC

Packer Setting Depth: 4305'

Other Type of Tubing/Casing Seal (if applicable): N/A

Additional Data

1. Is this a new well drilled for injection? X Yes No
If no, for what purpose was the well originally drilled? _____

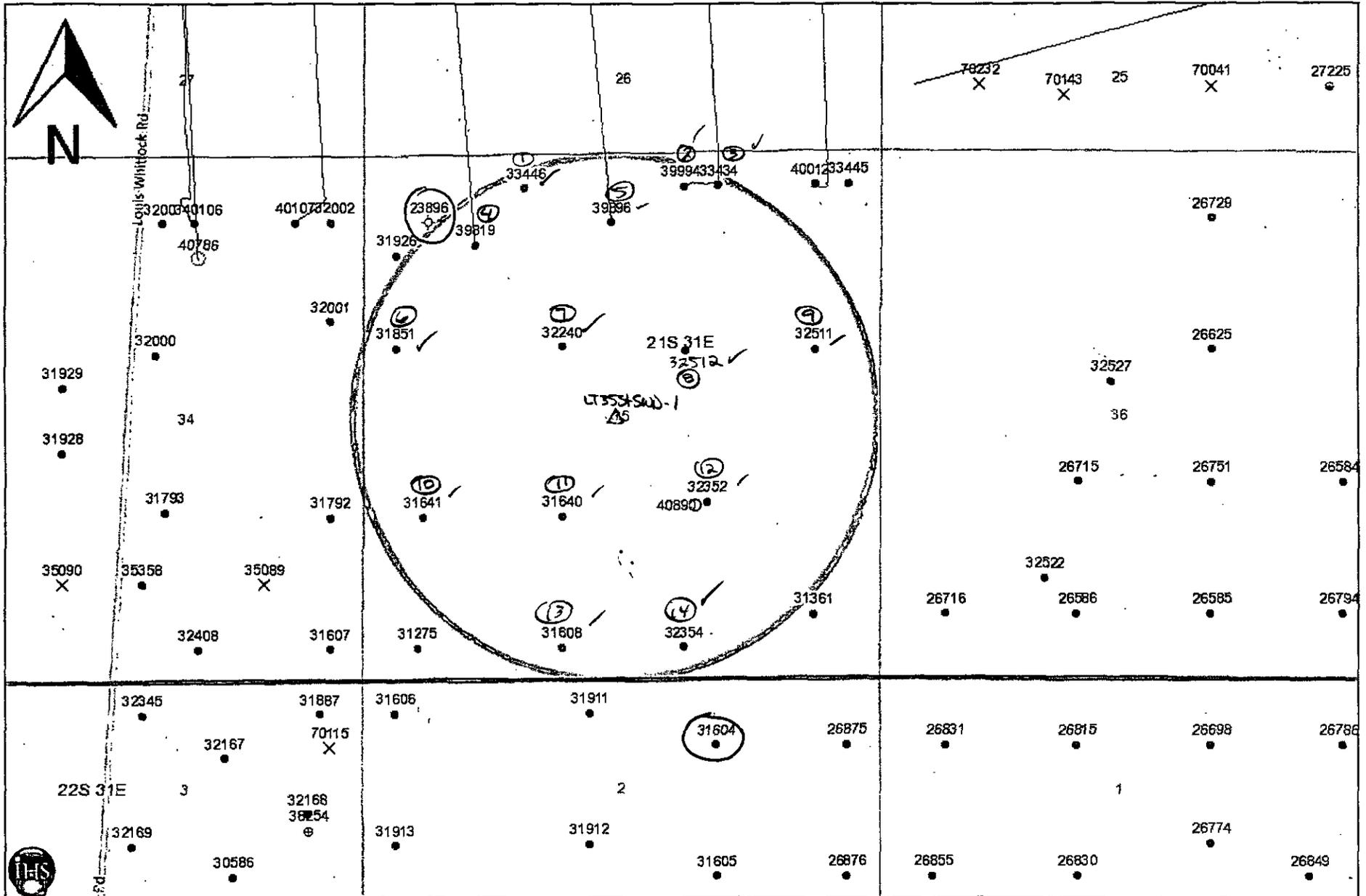
2. Name of the Injection Formation: Delaware – Bell Canyon

3. Name of Field or Pool (if applicable): Lost Tank Delaware

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Delaware/Bone Springs ?

Lost Tank 35 State SWD #1 - 1/2 Mile AOR



C-108 - Item VI
 Lost Tank 35 State SWD #1
 AREA OF REVIEW

OPERATOR	LEASE	WELL NO.	API NO. 30-	PLAT	LOCATION	DATE DRILLED	TD	PERFS	CASING-CEMENT	STATUS
OXY USA Inc.	Lost Tank 35 St	15	015-33446	1	330 FNL 1650 FWL (E) 35-21S-31E	5/28/04	8300'	7926-8072'	13-3/8" @ 864' w/ 660sx - TOC-Surf-Circ ✓ 8-5/8" @ 4116' w/ 1700sx - TOC-Surf-Circ ✓ 5-1/2" @ 8300' w/ 1925sx - TOC-Surf-Circ ✓	Lost Tank Delaware Act Oil
Devon Energy Prod. Co.	Shaqtas 26 St Com	3H	015-39994	2	S-330 FNL 2000 FEL (B) 35-21S-31E B-401 FNL 1956 FEL (B) 26-21S-31E	4/28/12	13042'M 7997'V	8430-13024'	13-3/8" @ 598' w/ 605sx - TOC-Surf-Circ ✓ 9-5/8" @ 4246' w/ 1100sx - TOC-Surf-Circ ✓ 5-1/2" @ 13042' w/ 1875sx - TOC-Surf-Circ ✓	Lost Tank Delaware Act Oil
OXY USA Inc.	Lost Tank 35 St	14	015-33434	3	330 FNL 1650 FEL (B) 35-21S-31E	7/15/04	8423'	7744-8154'	13-3/8" @ 820' w/ 750sx - TOC-Surf-Circ ✓ 8-5/8" @ 4100' w/ 1050sx - TOC-Surf-Circ ✓ 5-1/2" @ 8423' w/ 1710sx - TOC-Surf-Circ ✓	Lost Tank Delaware Act Oil
Devon Energy Prod. Co.	Shaqtas 26 St Com	1H	015-39819	4	S-990 FNL 1140 FWL (D) 35-21S-31E B-329 FNL 1140 FWL (D) 26-21S-31E	2/6/12	13386'M 7941'V	8734-13376'	13-3/8" @ 603' w/ 640sx - TOC-Surf-Circ ✓ 9-5/8" @ 4116' w/ 1445sx - TOC-Surf-Circ ✓ 5-1/2" @ 13386' w/ 1985sx - TOC-Surf-Circ ✓	Lost Tank Delaware Act Oil
Devon Energy Prod. Co.	Shaqtas 26 St Com	2H	015-39896	5	S-685 FNL 2522 FWL (C) 35-21S-31E B-394 FNL 2033 FWL (C) 26-21S-31E	4/24/12	13210'M 7951'V	8551-13200'	13-3/8" @ 600' w/ 650sx - TOC-Surf-Circ ✓ 9-5/8" @ 4236' w/ 1295sx - TOC-Surf-Circ ✓ 5-1/2" @ 13210' w/ 1775sx - TOC-Surf-Circ ✓	Lost Tank Delaware Act Oil
OXY USA Inc.	Lost Tank 35 St	12	015-31851	6	1930 FNL 330 FWL (N) 35-21S-31E	8/2/01	8305'	7934-7959'	13-3/8" @ 805' w/ 950sx - TOC-Surf-Circ ✓ 8-5/8" @ 4060' w/ 1575sx - TOC-Surf-Circ ✓ 5-1/2" @ 8305' w/ 1750sx - TOC-Surf-Circ ✓	Lost Tank Delaware Act Oil
OXY USA Inc.	Lost Tank 35 St	11	015-32240	7	1930 FNL 2030 FWL (P) 35-21S-31E	9/12/02	8350'	6916-6928'	13-3/8" @ 829' w/ 900sx - TOC-Surf-Circ ✓ 8-5/8" @ 4100' w/ 3140sx - TOC-Surf-Circ ✓ 5-1/2" @ 8350' w/ 1820sx - TOC-Surf-Circ ✓	Lost Tank Delaware Act Oil
OXY USA Inc.	Lost Tank 35 St	10	015-32512	8	1980 FNL 1980 FEL (G) 35-21S-31E	12/28/04	8380'	7982-8146' 6736-7274' CIBP @ 7900'	13-3/8" @ 885' w/ 575sx - TOC-Surf-Circ ✓ 8-5/8" @ 4140' w/ 4700sx - TOC-Surf-Circ ✓ 5-1/2" @ 8380' w/ 1800sx - TOC-Surf-Circ ✓	Lost Tank Delaware Act Oil
OXY USA Inc.	Lost Tank 35 St	9	015-32511	9	1980 FNL 660 FEL (H) 35-21S-31E	1/27/05	8410'	8186-8214'	13-3/8" @ 1022' w/ 900sx - TOC-Surf-Circ ✓ 8-5/8" @ 4125' w/ 1600sx - TOC-Surf-Circ ✓ 5-1/2" @ 8410' w/ 1900sx - TOC-Surf-Circ ✓	Lost Tank Delaware Act Oil
OXY USA Inc.	Lost Tank 35 St	8	015-31641	10	1650 FSL 1980 FEL (G) 35-21S-31E	12/28/04	8380'	6736-8146'	13-3/8" @ 885' w/ 575sx - TOC-Surf-Circ ✓ 8-5/8" @ 4140' w/ 4700sx - TOC-Surf-Circ ✓ 5-1/2" @ 8380' w/ 1800sx - TOC-Surf-Circ ✓	Lost Tank Delaware Act Oil
OXY USA Inc.	Lost Tank 35 St	7	015-31640	11	1650 FSL 2030 FWL (K) 35-21S-31E	3/15/01	8340'	6904-8132'	13-3/8" @ 800' w/ 950sx - TOC-Surf-Circ ✓ 8-5/8" @ 4200' w/ 1300sx - TOC-Surf-Circ ✓ 5-1/2" @ 8340' w/ 1720sx - TOC-64'-CBL ✓	Lost Tank Delaware Act Oil
OXY USA Inc.	Lost Tank 35 St	6	015-32352	12	1780 FSL 1750 FEL (J) 35-21S-31E	10/4/02	8350'	6961-8210'	13-3/8" @ 813' w/ 900sx - TOC-Surf-Circ ✓ 8-5/8" @ 4107' w/ 1200sx - TOC-Surf-Circ ✓ 5-1/2" @ 8350' w/ 2035sx - TOC-Surf-Circ ✓	Lost Tank Delaware Act Oil
OXY USA Inc.	Lost Tank 35 St	3	015-31608	13	330 FSL 2030 FWL (N) 35-21S-31E	5/30/02	8250'	6932-6966'	13-3/8" @ 812' w/ 900sx - TOC-Surf-Circ ✓ 8-5/8" @ 4300' w/ 1175sx - TOC-Surf-Circ ✓ 5-1/2" @ 8250' w/ 1675sx - TOC-Surf-Circ ✓	Lost Tank Delaware Act Oil
OXY USA Inc.	Lost Tank 35 St	2	015-32354	14	330 FSL 1980 FEL (O) 35-21S-31E	7/12/02	8300'	6957-6992'	13-3/8" @ 808' w/ 900sx - TOC-Surf-Circ ✓ 8-5/8" @ 4100' w/ 1050sx - TOC-Surf-Circ ✓ 5-1/2" @ 8300' w/ 1675sx - TOC-Surf-Circ ✓	Lost Tank Delaware Act Oil



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Code	Subbasin	County	Q	Q	Q	Sec	Tws	Rng	X	Y	Depth Well	Depth Water Column
C 02949 EXPL			ED	1	1	4	34	21S	31E	616140	3589231*	970	
												Average Depth to Water:	--
												Minimum Depth:	--
												Maximum Depth:	--

Record Count: 1

PLSS Search:

Section(s): 25, 26, 27, 34, 35, 36 Township: 21S Range: 31E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

PLSS Search:

Section(s): 1, 2, 3 Township: 22S Range: 31E

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
 Light gray to gray-green, clean, very fine-grained, massive-bedded, sub-angular, quartz sandstone, containing some layers of interlaminated shaly siltstone, and black shale up to one inch thick. Porosity ranges from 10 to 30 percent, averaging 22 percent with permeability ranging from 10 to 150 md.
 Injection zone: 4370-4580 ft

Formation	ft (MD)
Rustler	800
Salado Top	850
Potash Top	1180
Potash Bottom	2120
Salado Bottom	2280
Delaware Top	4240
Bell Canyon	4315
Cherry Canyon	5140
Brushy Canyon	6520

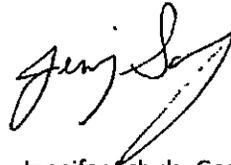
No oil or gas shows in offset mudlog.

Offset NuTech (Advanced Petrophysical) evaluation flags injection zone as "Free Water" with no "Free Hydrocarbon".

Calculated water saturation (Archie) between 60-70%.

- IX. Describe the proposed stimulation program, if any.
 Sand fracture treatment
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

I have examined the available geologic and engineering data for the Lost Tank 35#1 SWD well and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.



Jennifer Schulz, Geologist

MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Company: **Nalco Company**

Well Number:	Federal 12-4 - Delaware	Sample Temp:	70
Lease:	OXY	Date Sampled:	10/4/2012
Location:		Sampled by:	Leo Sandmann
Date Run:	10/4/2012	Employee #:	
Lab Ref #:	12-oct-n67084	Analyzed by:	GR

Dissolved Gases

		Mg/L	Eq. Wt.	MEq/L
Hydrogen Sulfide (H ₂ S)		.00	16.00	.00
Carbon Dioxide (CO ₂)	NOT ANALYZED			
Dissolved Oxygen (O ₂)	NOT ANALYZED			

Cations

Calcium (Ca ⁺⁺)		27,834.48	20.10	1,384.80
Magnesium (Mg ⁺⁺)		2,830.40	12.20	232.00
Sodium (Na ⁺)		63,394.97	23.00	2,756.30
Barium (Ba ⁺⁺)	NOT ANALYZED			
Manganese (Mn ⁺)		6.33	27.50	.23

Anions

Hydroxyl (OH ⁻)		.00	17.00	.00
Carbonate (CO ₃ ⁼)		.00	30.00	.00
BiCarbonate (HCO ₃ ⁻)		12.22	61.10	.20
Sulfate (SO ₄ ⁼)		128.00	48.80	2.62
Chloride (Cl ⁻)		155,170.50	35.50	4,371.00
Total Iron (Fe)		9.11	18.60	.49
Total Dissolved Solids		249,386.01		
Total Hardness as CaCO ₃		81,190.84		
Conductivity MICROMHOS/CM		236,000		

pH	6.050	Specific Gravity 60/60 F.	1.173
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CaSO₄ Solubility @ 80 F. 6.08MEq/L, CaSO₄ scale is unlikely

CaCO₃ Scale Index

70.0	1.274	100.0	2.194	130.0	2.194
80.0	1.524	110.0	2.194	140.0	2.194
90.0	2.194	120.0	2.194	150.0	2.194

Nalco Company

MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Company: **Nalco Company**

Well Number:	Cypress 28-1 – Bone Spring	Sample Temp:	70
Lease:	OXY	Date Sampled:	4/29/2011
Location:		Sampled by:	Casey Summers
Date Run:	5/3/2011	Employee #:	
Lab Ref #:	11-may-n59280	Analyzed by:	GR

Dissolved Gases

		Mg/L	Eq. Wt.	MEq/L
Hydrogen Sulfide (H ₂ S)		.00	16.00	.00
Carbon Dioxide (CO ₂)	NOT ANALYZED			
Dissolved Oxygen (O ₂)	NOT ANALYZED			

Cations

Calcium (Ca ⁺⁺)		1,390.92	20.10	69.20
Magnesium (Mg ⁺⁺)		697.84	12.20	57.20
Sodium (Na ⁺)		62,308.23	23.00	2,709.05
Barium (Ba ⁺⁺)	NOT ANALYZED			
Manganese (Mn ⁺)		1.66	27.50	.06

Anions

Hydroxyl (OH ⁻)		.00	17.00	.00
Carbonate (CO ₃ ⁼)		.00	30.00	.00
BiCarbonate (HCO ₃ ⁻)		391.04	61.10	6.40
Sulfate (SO ₄ ⁼)		450.00	48.80	9.22
Chloride (Cl ⁻)		100,110.00	35.50	2,820.00
Total Iron (Fe)		2	18.60	.11
Total Dissolved Solids		165,351.69		
Total Hardness as CaCO ₃		6,338.44		
Conductivity MICROMHOS/CM		216,200		

pH	6.480	Specific Gravity 60/60 F.	1.115
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CaSO₄ Solubility @ 80 F. 84.91MEq/L, CaSO₄ scale is unlikely

CaCO₃ Scale Index

70.0	-.152	100.0	.188	130.0	.778
80.0	-.052	110.0	.488	140.0	.778
90.0	.188	120.0	.488	150.0	1.128

Nalco Company

Endura Products C

P.O. Box 3394, Midland,
Phone (432) 684-4233 Fax

WATER ANAL

Date **10/10/2006** Endura Rep **Norman Small**
Sampling Point/Date **Wellhead 10/4/2006**
Company **Pogo Producing Co.**
Formation **Op. Delaware** Lease **COYOTE 21**

**FORM C-108
ITEM VII(5)**

**ANALYSIS - Injection Zone
Produced Water**

**POGO PRODUCING COMPANY
Cedar Canyon "21" Federal No. 3
Section 21, T-24S, R-29E
Eddy County, New Mexico**

**State New Mexico
County Eddy
Well #1**

DISSOLVED SOLIDS

<u>CATIONS</u>	mg/l	me/l
Sodium, Na+ (Calc.)	45,011	1,957
Total Hardness as Ca++	12,992	0
Calcium Ca++	10,856	543
Magnesium, Mg+	1,302	109
Barium, Ba++	0	0
Iron (Total) Fe+++*	0	0

ANIONS

Chlorides, Cl-	92,500	2,606
Sulfate, SO4-	100	2
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	73	1
Sulfide, S-*	0	0
Total Dissolved Solid	149,842	

OTHER PROPERTIES

pH*	6.490
Specific Gravity, 60/60 F.	1.109
Turbidity	35

SCALING INDICES

<u>TEMP. F</u>	<u>CA CO3</u>	<u>CASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	-0.0677	-1.0097	-1.2523	-29.2957
120	0.2990	-1.0209	-1.0831	-29.4961
160	0.8653	-1.0396	-0.9292	-29.7255

PERFORATIONS

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

Kathy McCarroll, being first duly sworn,
on oath says:

That she is the Classified Supervisor of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

March 22 _____ 2013

That the cost of publication is **\$50.08** and that payment thereof has been made and will be assessed as court costs.

Kathy McCarroll

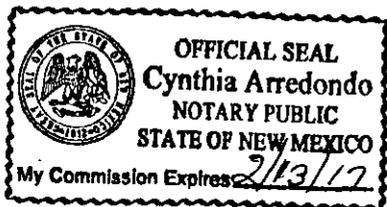
Subscribed and sworn to before me this

28 day of March, 2013

Cynthia Arredondo

My commission Expires on 2/13/17

Notary Public



March 22, 2013
Notice Of Application For Fluid Disposal
Applicant:
OXY USA Inc.
P.O. Box 50250
Midland, TX 79710
ATTN: David Stewart
432-685-5717
Purpose - Well:
Disposal of Produced Water Into A Zone Non Productive of Oil & Gas
Lost Tank 35 State SWD #1
2630 FSL 2630 FWL
NESW(K) Sec 35 T215
R31E
Eddy County, NM
Formation:
Delaware - Bell Canyon
4355-4965'
Maximum Injection Rate - 4000 BWPD
Maximum Injection Pressure - 870 psi
Interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505 within 15 days of this application.

**C-108 Service List
OXY USA Inc
Lost Tank 35 State SWD #1**

New Mexico Oil Conservation Division
811 S. First St.
Artesia, NM 88210

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

United States Dept of Interior
Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220

Surface Owner

State Land Office
P.O. Box 1148
Santa Fe, NM 87504

Offset Operators within 1/2 mile

Devon Energy Production Co.
20 N. Broadway
Oklahoma City, OK 73102

OXY USA Inc.
P.O. Box 50250
Midland, TX 79710

Potash Lessee(s) within 1 mile

Intrepid Potash
707 17th St.
Denver, CO 80202

Western Ag-Minerals Co.
P.O. Box 71
Carlsbad, NM 88221

Copies of this application were mailed to the following individuals, companies and organizations on or before 4/4/13.



David Stewart
OXY USA Inc.

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
 Deuch Energy Prod. Co.
 20 N. Broadway
 Oklahoma City, Ok.
 73102

COMPLETE THIS SECTION ON DELIVERY

A. Signature
 X *William Carter* Agent Addressee

B. Received by (Printed Name) *IL* C. Date of Delivery *2013*

D. Is delivery address different from item 1? Yes No
 If YES, enter delivery address below:

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

2. Article Number (Transfer from service label) **7011 0110 0002 1214 6122**

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
 Intrepid Potash
 707 17th St.
 Denver, CO 80202

COMPLETE THIS SECTION ON DELIVERY

A. Signature
 X *KAY GALINET* Agent Addressee

B. Received by (Printed Name) *KAY GALINET* C. Date of Delivery

D. Is delivery address different from item 1? Yes No
 If YES, enter delivery address below:

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

2. Article Number (Transfer from service label) **7011 3500 0002 4988 3755**

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
 Western Ag-Minerals Co.
 P.O. Box 71
 Cawlsbad, NM 88221

COMPLETE THIS SECTION ON DELIVERY

A. Signature
 X *Rick Bailey* Agent Addressee

B. Received by (Printed Name) *Rand K Bailey* C. Date of Delivery

D. Is delivery address different from item 1? Yes No
 If YES, enter delivery address below:

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

2. Article Number (Transfer from service label) **7011 3500 0002 4988 3762**



Home | Help | Sign In

Track & Confirm FAQs

Track & Confirm

Search Results

Label/Receipt Number: 7011 0110 0002 1214 6153
Service(s): Certified Mail™
Status: Delivered

Track & Confirm
Enter Label/Receipt Number.

Your item was delivered at 1:13 pm on April 08, 2013 in SANTA FE, NM 87504.

Go >

Detailed Results:

- Delivered, April 08, 2013, 1:13 pm, SANTA FE, NM 87504
- Arrival at Unit, April 08, 2013, 7:25 am, SANTA FE, NM 87501
- Depart USPS Sort Facility, April 08, 2013, ALBUQUERQUE, NM 87101
- Processed through USPS Sort Facility, April 06, 2013, 2:16 am, ALBUQUERQUE, NM 87101

Site Map Customer Service Forms Gov't Services Careers Privacy Policy Terms of Use Business Customer Gateway

Copyright © 2010 USPS. All Rights Reserved. No FEAR Act EEO Data FOIA

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<p> <input checked="" type="checkbox"/> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. <input checked="" type="checkbox"/> Print your name and address on the reverse so that we can return the card to you. <input checked="" type="checkbox"/> Attach this card to the back of the mailpiece, or on the front if space permits. </p> <p>1. Article Addressed to:</p> <p>State Land Office P.O. Box 1148 Santa Fe, NM 87504</p>	<p>A. Signature X <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
	<p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D. </p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label) 7011 0110 0002 1214 6153</p>	
<p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

SENDER: COMPLETE THIS SECTION

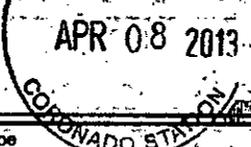
- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
 NMOCD
 1220 South St. Francis Dr.
 Santa Fe, NM
 87505

2. Article Number (Transfer from service label) 7011 0110 0002 1214 6085

COMPLETE THIS SECTION ON DELIVERY

A. Signature: *[Signature]* Agent Addressee
 B. Received by (Printed Name): *[Signature]* C. Date of Delivery: 4/8/13
 D. Is delivery address different from item 1? Yes No
 If YES, enter delivery address below:



3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.
 4. Restricted Delivery? (Extra Fee) Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
 NMOCD
 811 S. First St.
 Artesia, NM 88210

2. Article Number (Transfer from service label) 7011 0110 0002 1214 6092

COMPLETE THIS SECTION ON DELIVERY

A. Signature: *[Signature]* Agent Addressee
 B. Received by (Printed Name): *[Signature]* C. Date of Delivery: 4-8-12
 D. Is delivery address different from item 1? Yes No
 If YES, enter delivery address below:

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.
 4. Restricted Delivery? (Extra Fee) Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

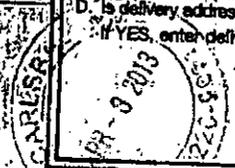
1. Article Addressed to:
 BLM
 620 E. Greene St.
 Causalbad, NM 88220

2. Article Number (Transfer from service label) 7011 0110 0002 1214 6108

COMPLETE THIS SECTION ON DELIVERY

A. Signature: *[Signature]* Agent Addressee
 B. Received by (Printed Name): *[Signature]* C. Date of Delivery: 4/8/13
 D. Is delivery address different from item 1? Yes No
 If YES, enter delivery address below:

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.
 4. Restricted Delivery? (Extra Fee) Yes



•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

Form C-103
 Revised August 1, 2011

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

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 <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <u>SWD</u>		WELL API NO. <u>30-015-40890</u>
2. Name of Operator <u>OXY USA WTP Limited Partnership</u>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
3. Address of Operator <u>P.O. Box 50250 Midland, TX 79710</u>		6. State Oil & Gas Lease No. <u>VO-3604-0002</u>
4. Well Location Unit Letter <u>K</u> : <u>2630</u> feet from the <u>South</u> line and <u>2630</u> feet from the <u>West</u> line Section <u>35</u> Township <u>T15</u> Range <u>R31E</u> NMPM County <u>Eddy</u>		7. Lease Name or Unit Agreement Name <u>Lost Tank 35 State SWD</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <u>3521.6' GL</u>		8. Well Number <u>1</u>
12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data		9. OGRID Number <u>192463</u>
NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/> DOWNHOLE COMMINGLE <input type="checkbox"/>		10. Pool name or Wildcat <u>Lost Tank Delaware</u>
OTHER: <u>Amend APD</u> <input checked="" type="checkbox"/>		11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/> DOWNHOLE COMMINGLE <input type="checkbox"/>	SUBSEQUENT REPORT OF: REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input type="checkbox"/> CASING/CEMENT JOB <input type="checkbox"/>
OTHER: <u>Amend APD</u> <input checked="" type="checkbox"/>	OTHER: <input type="checkbox"/>

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.

OXY USA Inc. respectfully requests to amend the APD for the Lost Tank 35 State SWD #1, API No. 30-015-40890.

1. Move the surface location, see attached for amended C-102 plat.
 Proposed - 2630 FSL 2630 FWL - K Sec 35 T21S R31E
 Original - 1753 FSL 1875 FEL - J Sec 35 T21S R31E
2. Amend the proposed TD to 5065'.
3. See attached for the amended intermediate/production casing program.
4. See attached for the amended cementing program.

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 David Stewart TITLE Regulatory Advisor DATE 3/28/13

Type or print name David Stewart E-mail address: david_stewart@oxy.com PHONE: 432-685-5717

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-6720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-40290	Pool Code 40299	Pool Name Lost Tank Delaware
Property Code 39587	Property Name LOST TANK "35" STATE SWD	Well Number 1
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3521.6'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	35	21 SOUTH	31 EAST, N.M.P.M.		2630'	SOUTH	2630'	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 0	Joint or Infill N	Consolidation Code	Order No.
----------------------	----------------------	--------------------	-----------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>David Stewart</i> 3/20/13 Signature Date</p> <p>David Stewart Reg. Ado. Printed Name david.stewart@oxy.com E-mail Address</p>
	<p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the information shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>JANUARY 22, 2013 Date of Survey</p> <p><i>Jerry Jase</i> Signature and Seal Professional Land Surveyor</p> <p><i>Jerry Jase</i> 1/20/2013 Certificate Number 15079</p>

Amend APD

Operator Name/Number:	OXY USA Inc.	16696
Lease Name/Number:	Lost Tank 35 State SWD #1	39587 State Lease No. VO-3604-0002
API Number	30-015-40890	
Pool Name/Number:	Lost Tank Delaware	40299
Surface Location:	2630 FSL 2630 FWL K Sec 35 T21S R31E	

C-102 Plats: 1/22/13 1/30/13 3/15/13 Elevation: 3521.6' GL

Proposed TD: 5065' TVD
 Lat: 32.4349062 Long: 103.7481430 X= 680545.8 Y= 522427.2 NAD - 1927

Casing Program:

Hole Size	Interval	OD Csg	Weight	Collar	Grade	Condition	Collapse Design Factor	Burst Design Factor	Tension Design Factor
14-3/4"	0-825'	11-3/4"	42	ST&C	H-40	New	3.85	1.35	10.17
				Hole filled with 8.4# Mud			1070#	1980#	
10-5/8"	0-4340'	8-5/8"	32	LT&C	J-55	New	1.61	2.14	3.48
				Hole filled with 10.0# Mud			2530#	3930#	
7-7/8"	0-5065'	5-1/2"	17	LT&C	J-55	New	2.09	2.9	3.32
				Hole filled with 8.9# Mud			4910#	5320#	

Collapse and burst loads calculated using Stress Check with anticipated loads

Cement Program:

- a. 11-3/4" Surface Circulate cement to surface w/ 690sx PPC cmt w/ 2% CaCl₂, 14.8ppg 1.35 yield 2500# 24hr CS 150% Excess
- b. 8-5/8" Intermediate Circulate cement to surface w/ 970sx HES light PP cmt w/ 5% Salt + 3#/sx Kol-Seal + .125#/sx Poly-E-Flake, 12.9ppg 1.87 yield 650# 24hr CS 150% Excess followed by 200sx PP cmt w/ 1% CaCl₂, 14.8ppg 1.34 yield 1343# 24hr CS 150% Excess
- c. 5-1/2" Production Cement w/ 580sx HES light PPC cmt, 12.7ppg 1.85 yield 560# 24hr CS 200% Excess followed by 250sx PPC cmt w/ 0.5% Halad 344 + 0.4% CFR 3 + 3#/sx Kol Seal + 1#/sx Salt, 14.2ppg 1.29 yield 1817# 24hr CS 35% Excess

Description of Cement Additives: Calcium Chloride, Salt (Accelerator), CFR-3 (Dispersant), Kol-Seal, Poly-E-Flake (Lost Circulation Additive), Halad-344 (Low Fluid Loss Control)

Proposed Mud Circulation System:

Depth	Mud Wt. ppg	Visc sec	Fluid Loss	Type System
0 - 825'	8.4-8.8	32-38	NC	Fresh Water/Spud Mud
825 - 4340'	9.8-10.0	28-29	NC	Brine Water
4340 - 5065'	8.4-8.9	26-28	NC	Fresh Water

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times.

BOP Program (1):

Surface None
 Production 11" X 3M two ram stack, 11" X 3M Annular, 3M Choke Manifold

Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

Geological Marker	Depth
a. Rustler	800'
b. Top Salt	855'
c. Bottom Salt	3995'
d. Delaware	4240'
e. Bell Canyon	4315'

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-6720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Arma, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1226 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-161
August 1, 2011
Permit 159181

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address OXY USA INC PO Box 4294 Houston, TX 77210		2. OGRID Number 16696
		3. API Number 30-015-40890
4. Property Code 39587	5. Property Name LOST TANK 35 STATE SWD	6. Well No. 001

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
J	35	21S	31E	J	1753	S	1875	E	EDDY

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A	35	21S	31E	J	1753	S	1875	E	Eddy

9. Pool Information

SWD:DELAWARE	96100
--------------	-------

Additional Well Information

11. Well Type New Well	12. Well Type OIL	13. Casing Rotary	14. Lease Type State	15. Ground Level Elevation 3534
16. Multiple N	17. Proposed Depth 4815	18. Formation Delaware	19. Contractor	20. Spud Date 1/1/2013
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Type	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	14.75	11.75	42	825	680	0
Int1	10.625	8.625	32	4100	980	0
Prod	7.875	5.5	17	4815	710	0

Casing/Cement Program: Additional Comments

Additional Information will be sent with the C-144 CLEZ.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	3000	3000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable.		OIL CONSERVATION DIVISION	
Signature:		Approved By: Randy Dade	
Printed Name: Electronically filed by KAREN M. SINARD		Title: District Supervisor	
Title:		Approved Date: 12/12/2012	Expiration Date: 12/12/2014
Email Address: karen_sinard@oxy.com			
Date: 12/11/2012	Phone: 713-366-5485	Conditions of Approval Attached	

Amend APD

Operator Name/Number:	OXY USA Inc.	16696
Lease Name/Number:	Lost Tank 35 State SWD #1	39587 State Lease No. VO-3604-0002
API Number	30-015-40890	
Pool Name/Number:	Lost Tank Delaware	40299
Surface Location:	2630 FSL 2630 FWL K Sec 35 T21S R31E	

C-102 Plats: 1/22/13 1/30/13 3/15/13 Elevation: 3521.6' GL

Proposed TD: 5065' TVD

Lat: 32.4349062 Long: 103.7481430 X= 680545.8 Y= 522427.2 NAD - 1927

Casing Program:

Hole Size	Interval	OD Csg	Weight	Collar	Grade	Condition	Collapse Design Factor	Burst Design Factor	Tension Design Factor
14-3/4"	0-825'	11-3/4"	42	ST&C	H-40	New	3.85	1.35	10.17
				Hole filled with 8.4# Mud			1070#	1980#	
10-5/8"	0-4340'	8-5/8"	32	LT&C	J-55	New	1.61	2.14	3.48
				Hole filled with 10.0# Mud			2530#	3930#	
7-7/8"	0-5065'	5-1/2"	17	LT&C	J-55	New	2.09	2.9	3.32
				Hole filled with 8.9# Mud			4910#	5320#	

Collapse and burst loads calculated using Stress Check with anticipated loads

Cement Program:

- a. 11-3/4" Surface Circulate cement to surface w/ 690sx PPC cmt w/ 2% CaCl₂, 14.8ppg 1.35 yield 2500# 24hr CS 150% Excess
- b. 8-5/8" Intermediate Circulate cement to surface w/ 970sx HES light PP cmt w/ 5% Salt + 3#/sx Kol-Seal + .125#/sx Poly-E-Flake, 12.9ppg 1.87 yield 650# 24hr CS 150% Excess followed by 200sx PP cmt w/ 1% CaCl₂, 14.8ppg 1.34 yield 1343# 24hr CS 150% Excess
- c. 5-1/2" Production Cement w/ 580sx HES light PPC cmt, 12.7ppg 1.85 yield 560# 24hr CS 200% Excess followed by 250sx PPC cmt w/ 0.5% Halad 344 + 0.4% CFR 3 + 3#/sx Kol Seal + 1#/sx Salt, 14.2ppg 1.29 yield 1817# 24hr CS 35% Excess

Description of Cement Additives: Calcium Chloride, Salt (Accelerator), CFR-3 (Dispersant), Kol-Seal, Poly-E-Flake (Lost Circulation Additive), Halad-344 (Low Fluid Loss Control)

Proposed Mud Circulation System:

Depth	Mud Wt. ppg	Visc sec	Fluid Loss	Type System
0 - 825'	8.4-8.8	32-38	NC	Fresh Water/Spud Mud
825 - 4340'	9.8-10.0	28-29	NC	Brine Water
4340 - 5065'	8.4-8.9	26-28	NC	Fresh Water

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times.

BOP Program (1):

Surface None
 Production 11" X 3M two ram stack, 11" X 3M Annular, 3M Choke Manifold

Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

Geological Marker	Depth		
a. Rustler	800'	Cherry Canyon	5140'
b. Top Salt	855'	Brushy Canyon	6520'
c. Bottom Salt	3995'	Bone Springs	8159'
d. Delaware	4240'		
e. Bell Canyon	4315'		

Goetze, Phillip, EMNRD

From: David_Stewart@oxy.com
Sent: Friday, May 10, 2013 8:58 AM
To: Goetze, Phillip, EMNRD
Subject: RE: Request for Additional Information - Lost Tank 35 State SWD #1
Attachments: img-510082756-0001.pdf

Phillip, please see below and attached for the estimated formation tops, if you need any additional information, please let me know. I appreciate the help.

Rustler – 800'
Top Salt – 855'
Bottom Salt – 3995'
Delaware – 4240'
Bell Canyon – 4315'
Cherry Canyon – 5140'
Brushy Canyon – 6520'
Bone Spring 8159'

Thanks,
David Stewart
Sr. Regulatory Advisor
OXY Permian
Wk-432-685-5717
Cell-432-634-5688
Fax-432-685-5742
david_stewart@oxy.com

From: Goetze, Phillip, EMNRD [<mailto:Phillip.Goetze@state.nm.us>]
Sent: Friday, May 10, 2013 9:36 AM
To: Stewart, David
Subject: Request for Additional Information - Lost Tank 35 State SWD #1

David:

Richard was reviewing your C-108 application. He would like you to provide depths for Item 5 (Names and depth of underlying or overlying oil/gas zone) of the [Injection Well Data Sheet](#). You have the Delaware and Bone Spring listed. Please provide the depths. This should be the last item. Thanks. PRG

Phillip R. Goetze, P.G.
Engineering Bureau, Oil Conservation Division
1220 South St. Francis Dr., Santa Fe, NM 87505
O: 505.476.3466 F: 505.476.3462

Injection Permit Checklist: Received 04/10/13 First Email Date: — Final Reply Date: — Final Notice Date: 05/09/13

Issued Permit: Type: WFX / PMX / SWD Number: 1417 Permit Date: 05/9/13 Legacy Permits or Orders: NA

Well No. 1 Well Name(s): Lost Tank 35 State 05/10/13 FRA

API: 30-015-40890 Spud Date: NA New/Old: (UIC CI II Primacy March 7, 1982)

Footages 2630 FSL / 2630 FWL Lot — Unit K Sec 35 Tsp 213 Rge 31E County Eddy

General Location: 29 miles East of Carlsbad / north Pool: Lost Tank - Delaware sub Pool No.: —

Operator: Oxy USA Inc. of WIPP site OGRID: 16696 Contact: David Stewart

COMPLIANCE RULE 5.9: Inactive Wells: 3 Total Wells: 1836 Fincl Assur: Yes Compl. Order? No IS 5.9 OK? Yes

Well File Reviewed: NA Current Status: Proposed well - similar construction to production wells in the Lost Tank field

Planned Rehab Work to Well: None - New Well; sand free when completed

Well Diagrams: Proposed Before Conversion — After Conversion — Are Elogs in Imaging?: NA

Well Construction Details:	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement (Sx of Cf)	Cement Top and Determination Method
Planned <input type="checkbox"/> or Existing <input type="checkbox"/> Cond	—	—	—	—	—
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Surface	14 3/4 11 3/4	0-825	—	690	Cir. to surface
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Interm	10 5/8 8 5/8	0-4340	—	1170	Cir. to surface
Planned <input type="checkbox"/> or Existing <input type="checkbox"/> LongSt	—	—	—	—	—
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Liner	7 7/8" 5 1/2	0-5065	—	830	Cir. to surface
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> OH / PERE	7 7/8 5 1/2	4335-4965	—	—	—

Injection Formation(s):	Depths (ft)	Formation	Tops?	Completion/Ops Details:
Above Top of Inject Formation	—	Brush Bottom	2120	Drilled TD <u>5065</u> PBDT <u>—</u>
Above Top of Inject Formation	+1960 to 2075	Salado Bottom	2280	Open Hole <u>—</u> or Perfs <input checked="" type="checkbox"/>
Proposed Interval TOP:	4355	Delaware / Bell	4240 (S)	Tubing Size <u>2 7/8</u> Inter Coated? <u>Yes</u>
Proposed Interval BOTTOM:	4965	Canyon	4315 (S)	Proposed Packer Depth <u>4305</u>
Below Bottom of Inject Formation	-175	Cherry Canyon	5140	Max Packer Depth <u>4235</u> (100-ft limit)
Below Bottom of Inject Formation	-1535	Brush Canyon	6520	Proposed Max. Surface Press <u>871</u>
				Calc. Injt Press <u>871</u> (0.2 psi per ft)
				Calc. FPP <u>2818</u> (0.65 psi per ft)

AOR Hydrologic and Geologic Information

CAPITAN REEF: NO POTASH Yes Noticed? Yes WIPP No Noticed? No SALADO Top 850 Bot 2280 CLIFF HOUSE NA

Fresh Water: Max Depth — FW Formation Salado Wells? 1 Analysis? No Hydrologic Affirm Statement Yes

Disposal Fluid: Formation Source(s) Delaware & Bone Spring [Analysis included] On Lease — Only from Operator or Commercial —

Disposal Interval: Protectable Waters? No HVC Potential: Log — Mudlog DST — / Tested — / Depleted — / Other Advanced Petro/phys Noted

AOR Wells: 1/2-M Radius Map? Yes Well List? Yes Producing in Interval? No Formerly Produced in Interval? No

Penetrating Wells: No. Active Wells 14 Num Repairs? — on which well(s)? 30-015-23896 Diagrams? No - but summary last

Penetrating Wells: No. P&A Wells 0 Num Repairs? — on which well(s)? Check 23896 OK Diagrams? —

NOTICE: Newspaper Date 03/22/13 Mineral Owner State / BLM Surface Owner State N. Date 4/4/13

RULE 26.7(A): Identified Tracts? Y Affected Persons: Oxy & Devon N. Date 4/4/13

Permit Conditions: New Well - surface casing / interm / prod. all new with prod TB to surface - all wells cement cir to surface

Issues: * Drilling in Pool has been consistent / all three strings & cement to surface