

DATE IN 8-6-10	SUSPENSE	ENGINEER WJ	LOGGED IN 8/6/10	TYPE SWD 1244	APP NO. 1021830183
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ABOVE THIS LINE FOR DIVISION USE ONLY

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



OXY USA IR

2010 AUG -5 P. 3:41

Lost Tank 3 Fed #25

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 _____
- [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
- [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


[Signature]
 Signature

Sp. Reg. Analyst **8/3/10**
 Title Date

david_stewart@oxy.com
 e-mail Address

Lost Tank 3 Federal #25

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance _____ X _____ Disposal _____ Storage
Application qualifies for administrative approval? _____ X _____ Yes _____ No
- II. OPERATOR: _____ OXY USA Inc. _____ Lost Tank 3 Federal #25 _____
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 _____ X _____ 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:
1. Proposed average and maximum daily rate and volume of fluids to be injected; 2000BWPD – 4000BWPD
 2. Whether the system is open or closed; Closed
 3. Proposed average and maximum injection pressure; 1070psi
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, Attached
 5. 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. Attached
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
Not available, well has not been drilled yet, logs will be furnished after they have been ran.
- *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. Attached
- 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: _____ Sr. Regulatory Analyst _____
- SIGNATURE: _____  _____ DATE: _____ 8/3/10 _____
- 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 3 Federal #25 _____

WELL LOCATION: _____ 1500 FNL 541 FEL _____ SENE(H) _____ 3 _____ 22S _____ 31E _____
FOOTAGE LOCATION _____ UNIT LETTER _____ SECTION _____ TOWNSHIP _____ RANGE _____WELLBORE SCHEMATICWELL CONSTRUCTION DATA
Surface Casing

Hole Size: _____ 14-3/4" _____ Casing Size: _____ 11-3/4" @ 665' _____

Cemented with: _____ 500 _____ sx. *or* _____ 767 _____ ft³

Top of Cement: _____ Surface _____ Method Determined: _____ Circulated _____

Intermediate Casing

Hole Size: _____ 10-5/8" _____ Casing Size: _____ 8-5/8" @ 4250' _____

Cemented with: _____ 1170 _____ sx. *or* _____ 2073 _____ ft³

Top of Cement: _____ Surface _____ Method Determined: _____ Circulated _____

Production Casing

Hole Size: _____ 7-7/8" _____ Casing Size: _____ 5-1/2" @ 6300' _____

Cemented with: _____ 1200 _____ sx. *or* _____ 2088 _____ ft³

Top of Cement: _____ Surface _____ Method Determined: _____ Circulated _____

Total Depth: _____ 6300' _____

Injection Interval

_____ 5355 _____ feet to _____ 6137 _____ feet

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2-7/8" 6.5# J55 Lining Material: polylined Type of Packer: Guiberson GVI PC Packer Setting Depth: 5255' 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?

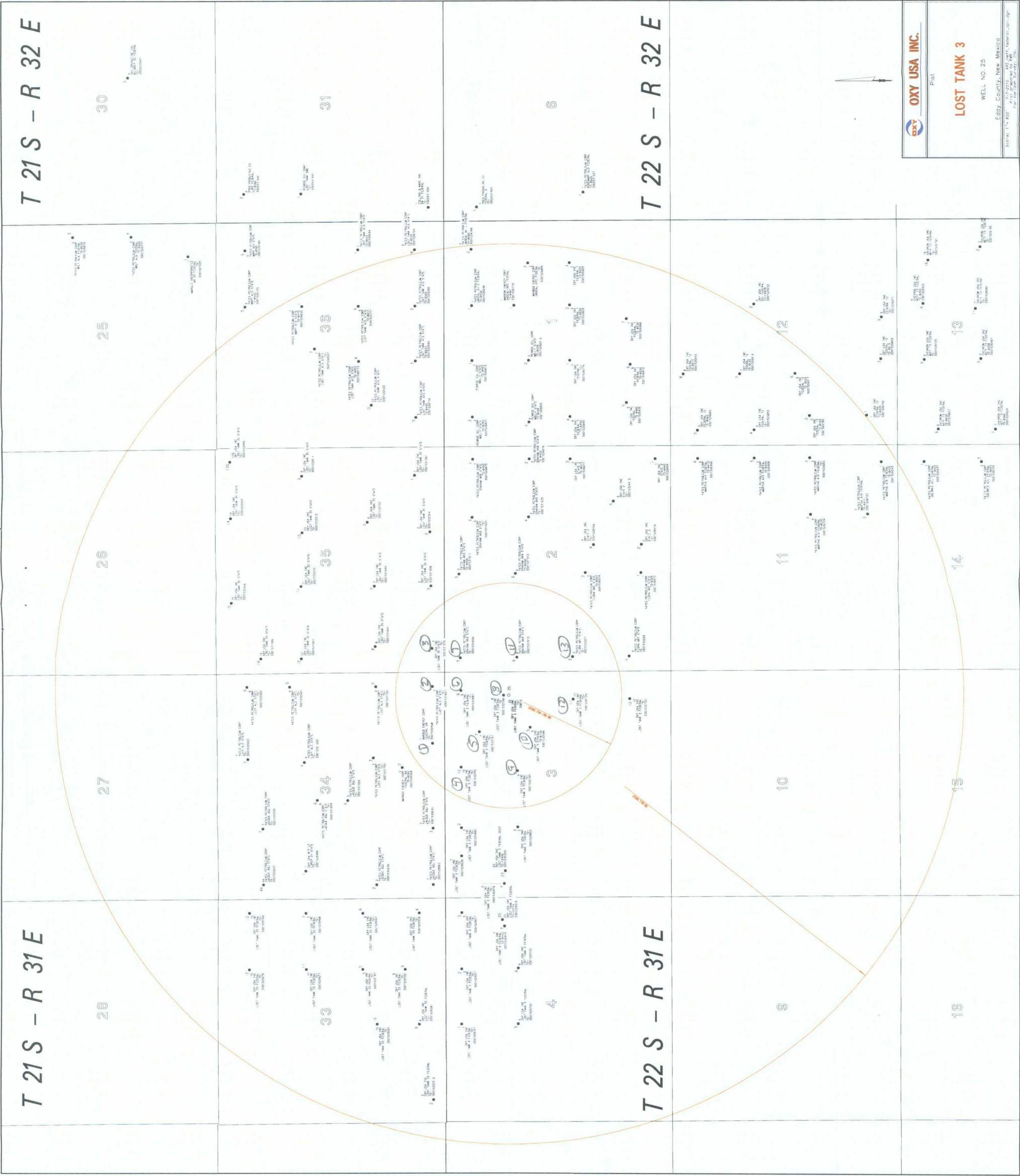
2. Name of the Injection Formation: Delaware – Cherry Canyon

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

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

TD-6300'



C-108 - ATTACHMENT B
Lost Tank 3 FED #25
AREA OF REVIEW

OPERATOR	LEASE	WELL NO.	API NO.	PLAT	LOCATION	DATE		TD	PERFS	CASING-CEMENT	STATUS
						DRILLED					
Marbob Energy Corp.	Federal BA	1	3001532408	1	330 FSL 1650 FEL O-34-21S-31E	9/3/02	8220'	6356-8051'	13-3/8" @ 850' w/ 725sx - TOC-Surf-Circ		Act Oil
									8-5/8" @ 4023' w/ 1400sx - TOC-Surf-Circ		Lost Tank
									5-1/2" @ 8220' w/ 1400sx - TOC-Surf-Circ		Delaware
Yates Petroleum Corp	Lucy ALC State	1	3001531607	2	330 FSL 330 FEL P-34-21S-31E	3/22/01	8200'	6854-7920'	13-3/8" @ 874' w/ 750sx - TOC-Surf-Circ		Act Oil
									8-5/8" @ 4010' w/ 1100sx - TOC-Surf-Circ		Lost Tank
									5-1/2" @ 8200' w/ 950sx - TOC-Surf-Circ		Delaware, West
OXY USA Inc.	Lost Tank 35 State	4	3001531275	3	330 FSL 560 FWL M-35-21S-31E	9/11/00	8363'	6876-7968'	13-3/8" @ 800' w/ 795sx - TOC-Surf-Circ		Act Oil
									8-5/8" @ 4200' w/ 1400sx - TOC-Surf-Circ		Lost Tank
									5-1/2" @ 8363' w/ 1795sx - TOC-Surf-Circ		Delaware
OXY USA Inc	Lost Tank 3 Federal	10	3001532345	4	330 FNL 2210 FEL B-3-22S-31E	6/24/02	8250'	6825-6850'	13-3/8" @ 840' w/ 1000sx - TOC-Surf-Circ		Act Oil
									8-5/8" @ 4050' w/ 1100sx - TOC-Surf-Circ		Lost Tank
									5-1/2" @ 8250' w/ 1850sx - TOC-Surf-Circ		Delaware, West
OXY USA Inc	Lost Tank 3 Federal	7	3001532167	5	760 FNL 1390 FEL 2-3-22S-31E	3/1/02	8250'	7916-7946'	13-3/8" @ 927' w/ 1000sx - TOC-Surf-Circ		Act Oil
									8-5/8" @ 4057' w/ 1130sx - TOC-Surf-Circ		Lost Tank
									5-1/2" @ 8250' w/ 1475sx - TOC-Surf-Circ		Delaware, West
OXY USA Inc	Lost Tank 3 Federal	6	3001531887	6	330 FNL 430 FEL A-3-22S-31E	7/13/01	8320'	6871-6889'	13-3/8" @ 835' w/ 985sx - TOC-Surf-Circ		Act Oil
									8-5/8" @ 4060' w/ 1600sx - TOC-Surf-Circ		Lost Tank
									5-1/2" @ 8320' w/ 2010sx - TOC-Surf-Circ		Delaware, West
Yates Petroleum Corp	Graham AKB State	9	3001531606	7	330 FNL 330 FWL D-2-22S-31E	6/28/01	8300'	6870-8094'	13-3/8" @ 852' w/ 680sx - TOC-Surf-Circ		Act Oil
									8-5/8" @ 4100' w/ 1050sx - TOC-Surf-Circ		Lost Tank
									5-1/2" @ 8299' w/ 875sx - TOC-Surf-Circ		Delaware
OXY USA Inc	Lost Tank 3 Federal	8	3001532168	8	1330 FNL 550 FEL H-3-22S-31E	1/17/02	8250'	6866-6890'	13-3/8" @ 927' w/ 1075sx - TOC-Surf-Circ		Act Oil
									8-5/8" @ 4205' w/ 1200sx - TOC-Surf-Circ		Lost Tank
									5-1/2" @ 8250' w/ 1950sx - TOC-Surf-Circ		Delaware, West
OXY USA Inc	Lost Tank 3 Federal	9	3001532169	9	1650 FNL 2310 FEL G-3-22S-31E	5/12/02	8250'	6830-6850'	13-3/8" @ 940' w/ 1080sx - TOC-Surf-Circ		Act Oil
									8-5/8" @ 4225' w/ 1200sx - TOC-Surf-Circ		Lost Tank
									5-1/2" @ 8250' w/ 1900sx - TOC-Surf-Circ		Delaware, West

C-108 - ATTACHMENT B
Lost Tank 3 FED #25
AREA OF REVIEW

[illegible]

Attachment C-108
OXY USA Inc.
Lost Tank 3 Federal #25

VIII.

Injection zones for the Lost Tank 3 Federal 25 well, Sect 3, T22S, R31E Eddy county, New Mexico.

The proposed injection for the Lost Tank 3 Federal 25 is over a 780' interval within the Cherry Canyon formation of the Delaware Mountain Group. The Delaware Mountain Group is a Guadalupian Permian interval comprised of three formations, the Bell Canyon, the Cherry Canyon and the Brushy Canyon. The shallowest formation, at the top of the Delaware Mountain Group, is the Bell Canyon. The Bell Canyon is approximately 1000 ft thick. It is found at 4585' MD at this location. The Cherry Canyon, the target formation for water injection lies below the Bell Canyon and above the Brushy Canyon. The Cherry Canyon is approximately 1200 ft thick and is encountered at 5220 feet measured depth. The formation is comprised of a series of interbedded sands, shales and carbonates. The majority of the interval is comprised of sands. The sands are characterized as basinal turbidites and debris flows. As such, they occur as thin tabular elongate units with long axis running roughly north to south. Porosity and permeability are good in the horizontal direction and poor in the vertical direction due to the interbedded shales. Water should remain in the interval into which it is injected and not to migrate vertically away from the interval. Sands that will serve as good SWD targets are expected over the following intervals, based on offset well penetrations.

SWD Intervals

5355-5404, 5438-5473, 5608-5646, 5661-5693, 5706-5748, 5971-6020, 6048-6081, 6086-6137'

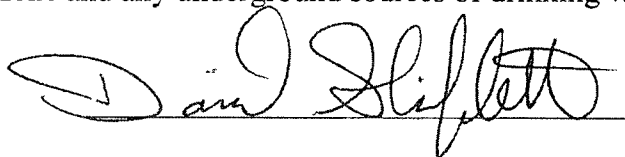
The Delaware Mountain group is overlain by the Late Permian Ochoan Salado and Castile formations. The Castile is banded Anhydrite and Calcite with occasional salt beds. The Salado is a salt formation. The combined thickness of the Salado and Castile at this location is approximately 3000'. This interval acts as a seal for the underlying reservoirs and is impermeable to the migration of fluids from the Delaware Mountain Group into shallower formations.

Above the Salado is the Rustler formation. It is made up of layers of Dolomite, Anhydrite, siltstone and salt. The Dolomites within the Rustler are recognized as the lowest occurring aquifers in the area.

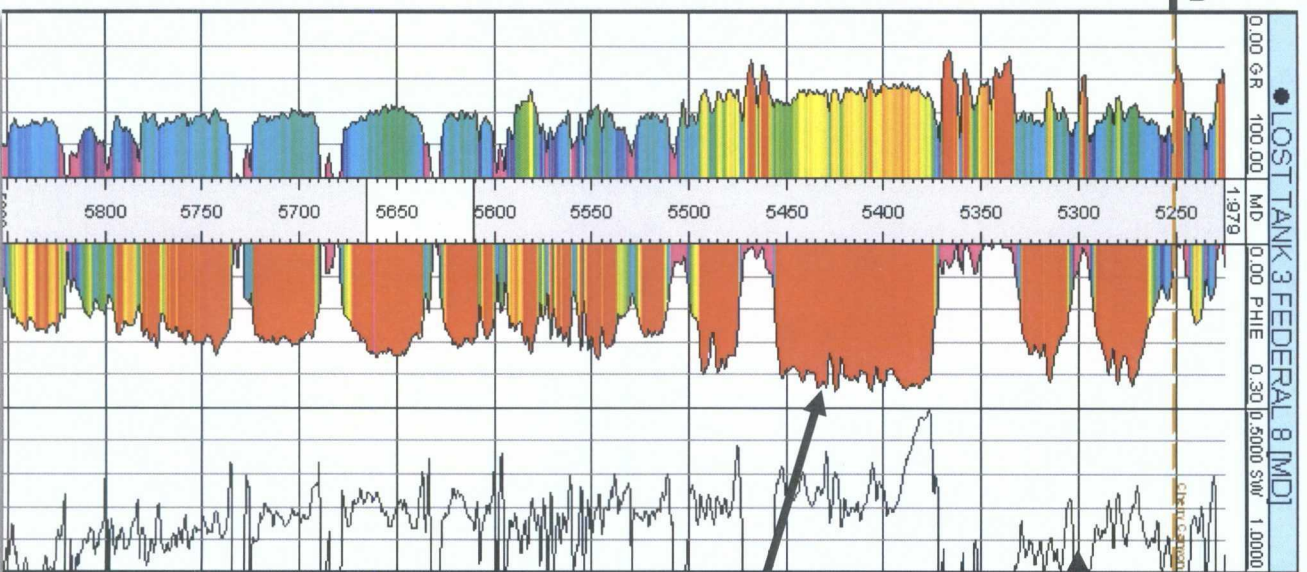
There are no productive zones in Cherry Canyon in Lost Tank area

XII.

I 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.

A handwritten signature in dark ink, appearing to read "Dan Sliflett", is written over a horizontal line. The signature is fluid and cursive.

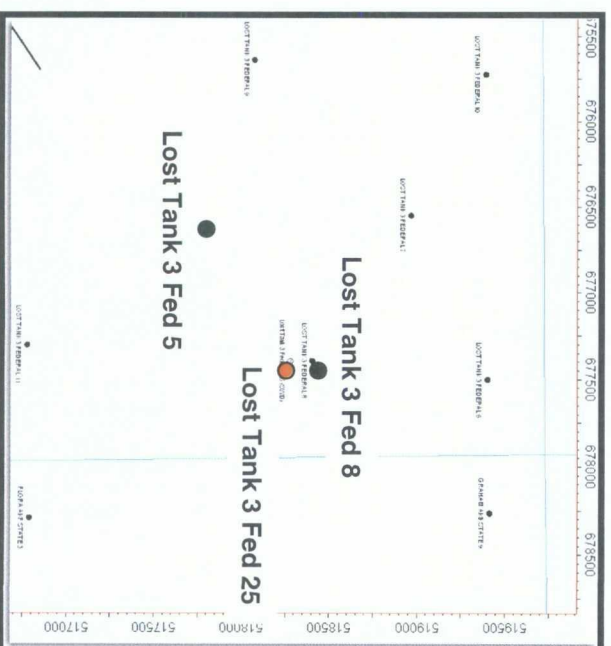
Cherry Canyon

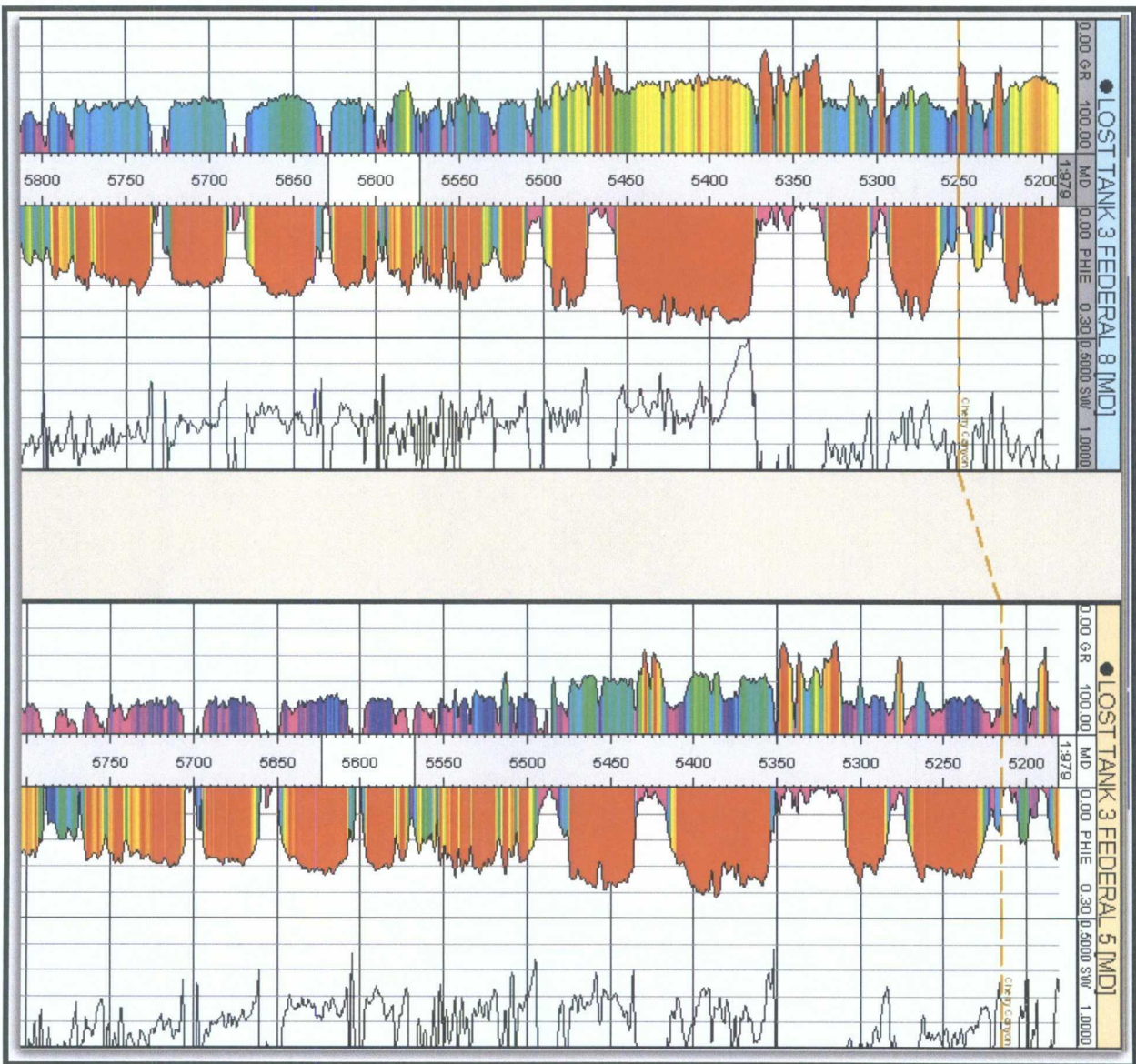


Potential Cherry Canyon
SWD Intervals

Calculated water saturation
75% to 100%

Porosity:
18% to 26%





MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Company: **Nalco Company**

Well Number: Well #C02958
Lease: OXY
Location: Fresh Water Well
Date Run: 4/22/2010
Lab Ref #: 10-apr-n53574

Sample Temp: 70
Date Sampled: 4/20/2010
Sampled by: Casey Summers
Employee #:
Analyzed by: DOM

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

		Mg/L	Eq. Wt.	MEq/L
Calcium	(Ca++)	577.92	20.10	28.75
Magnesium	(Mg++)	151.87	12.20	12.45
Sodium	(Na+)	60.70	23.00	2.64
Barium	(Ba++)	NOT ANALYZED		
Manganese	(Mn+)	.04	27.50	.00

Anions

		Mg/L	Eq. Wt.	MEq/L
Hydroxyl	(OH-)	.00	17.00	.00
Carbonate	(CO ₃ =)	.00	30.00	.00
BiCarbonate	(HCO ₃ -)	12.22	61.10	.20
Sulfate	(SO ₄ =)	1,520.00	48.80	31.15
Chloride	(Cl-)	256.28	35.50	7.22

Total Iron	(Fe)	0.08	18.60	.00
Total Dissolved Solids		2,579.10		
Total Hardness as CaCO ₃		2,067.47		
Conductivity MICROMHOS/CM		3,790		

pH 6.700 Specific Gravity 60/60 F. 1.002

CaSO₄ Solubility @ 80 F. 18.69MEq/L, CaSo₄ scale is likely

CaCO₃ Scale Index

70.0	-1.628	100.0	-1.278	130.0	-.768
80.0	-1.498	110.0	-1.038	140.0	-.768
90.0	-1.278	120.0	-1.038	150.0	-.538

Nalco Company

MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Company: **Nalco Company**

Well Number: Federal 23-9
Lease: OXY
Location:
Date Run: 4/22/2010
Lab Ref #: 10-apr-n53575

Sample Temp: 70
Date Sampled: 4/20/2010
Sampled by: Casey Summers
Employee #:
Analyzed by: DOM

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++)	20,638.68	20.10	1,026.80
Magnesium	(Mg++)	2,400.96	12.20	196.80
Sodium	(Na+)	65,752.11	23.00	2,858.79
Barium	(Ba++)	NOT ANALYZED		
Manganese	(Mn+)	6.05	27.50	.22

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 =)	144.00	48.80	2.95
Chloride	(Cl-)	144,859.17	35.50	4,080.54

Total Iron	(Fe)	20.15	18.60	1.08
Total Dissolved Solids		233,833.34		
Total Hardness as CaCO ₃		61,440.64		
Conductivity MICROMHOS/CM		229,900		

pH	6.350	Specific Gravity 60/60 F.	1.163
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CaSO₄ Solubility @ 80 F. 9.21MEq/L, CaSO₄ scale is unlikely

CaCO₃ Scale Index

70.0	.615	100.0	1.365	130.0	2.365
80.0	.765	110.0	1.985	140.0	2.365
90.0	1.365	120.0	1.985	150.0	2.365

Nalco Company

MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Company: **Nalco Company**

Well Number: Cotton Draw #15
Lease: OXY
Location:
Date Run: 4/22/2010
Lab Ref #: 10-apr-n53576

Sample Temp: 70
Date Sampled: 4/20/2010
Sampled by: Casey Summers
Employee #:
Analyzed by: DOM

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++)	13,844.88	20.10	688.80
Magnesium	(Mg++)	2,698.64	12.20	221.20
Sodium	(Na+)	43,480.44	23.00	1,890.45
Barium	(Ba++)	NOT ANALYZED		
Manganese	(Mn+)	14.87	27.50	.54

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 =)	450.00	48.80	9.22
Chloride	(Cl-)	99,108.90	35.50	2,791.80

Total Iron	(Fe)	4.22	18.60	.23
Total Dissolved Solids		159,614.17		
Total Hardness as CaCO ₃		45,676.62		
Conductivity MICROMHOS/CM		190,500		

pH	6.830	Specific Gravity 60/60 F.	1.111
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CaSO₄ Solubility @ 80 F. 17.59MEq/L, CaSO₄ scale is unlikely

CaCO₃ Scale Index

70.0	-.169	100.0	.231	130.0	.911
80.0	-.049	110.0	.531	140.0	.911
90.0	.231	120.0	.531	150.0	1.301

Nalco Company

MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Company: **Nalco Company**

Well Number:	50% Federal 23-9	Sample Temp:	70
Lease:	50% Cotton Draw #15	Date Sampled:	4/21/2010
Location:	OXY	Sampled by:	Casey Summers
Date Run:	4/22/2010	Employee #:	
Lab Ref #:	10-apr-n53588	Analyzed by:	DOM

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++)	17,245.80	20.10	858.00
Magnesium	(Mg++)	2,547.36	12.20	208.80
Sodium	(Na+)	54,648.70	23.00	2,376.03
Barium	(Ba++)	NOT ANALYZED		
Manganese	(Mn+)	10.46	27.50	.38

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 =)	297.00	48.80	6.09
Chloride	(Cl-)	122,034.09	35.50	3,437.58

Total Iron	(Fe)	12.19	18.60	.66
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Total Dissolved Solids

196,807.82

Total Hardness as CaCO₃

53,558.68

Conductivity MICROMHOS/CM

210,200

pH	6.590	Specific Gravity 60/60 F.	1.137
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CaSO₄ Solubility @ 80 F. 13.21MEq/L, CaSO₄ scale is unlikely

CaCO₃ Scale Index

70.0	.127	100.0	.627	130.0	1.727
80.0	.247	110.0	1.007	140.0	1.727
90.0	.627	120.0	1.007	150.0	2.387

Nalco Company

C-108 Service List
OXY USA Inc
Lost Tank 3 Federal #25

New Mexico Oil Conservation Division
1301 W. Grand Ave.
Artesia, NM 88210

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

Surface Owner - Mineral Lessee

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

Potash Lessees within 1/2 mile

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

Intrepid Potash-New Mexico
1996 Potash Mines Road
P.O. Box 101
Carlsbad, NM 88220

Offset Operators within 1/2 mile

Marbob Energy Corp
P.O. Box 227
Artesia, NM 88211

Yates Petroleum Corporation
105 S. 4th St.
Artesia, NM 88210

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

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:

July 23 2010

That the cost of publication is **\$45.42** and that
payment thereof has been made and will be
assessed as court costs.

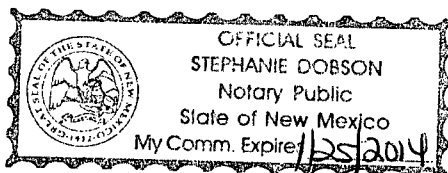
Kathy McCarroll

Subscribed and sworn to before me this

28th day of July, 2010
Stephanie Dobson

My commission Expires on 1/25/2014

Notary Public



July 23, 2010

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
Productive of Oil &
Gas
Lost Tank 3 Federal
#25
1500 FNL 541 FEL
SENE(H) Sec 3 T22S
R31E
Eddy County, NM

Formation:
Delaware - Cherry
Canyon
5355-6137
Maximum Injection
Rate - 4000 BWPD
Maximum Injection
Pressure - 1070 psi

Interested parties
must file objections
or requests for hear-
ing with the Oil Con-
servation Division,
1220 South St. Fran-
cis Dr., Santa Fe,
New Mexico 87505
within 15 days of this
application.

NOT

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<p>3. Service Type</p> <p> <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) 7005 0390 0002 9920 7719</p> <p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

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<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>	
<p>2. Article Number (Transfer from service label) 7005 0390 0002 9920 7726</p> <p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

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<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>	
<p>2. Article Number (Transfer from service label) 7005 0390 0002 9920 7733</p> <p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

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<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>	
<p>2. Article Number (Transfer from service label) 7005 0390 0002 9920 7771</p>	

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P.O. Box 50250
Midland, TX 79710

LT3F25-SD4F32

ATTN: David Stewart

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<p>1. Article Addressed to:</p> <p style="font-size: 1.2em;">Western AG Minerals Co. P.O. Box 71 Carrsbad, NM 88221</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>
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<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>	
<p>7005 0390 0002 9920 7740</p>	
<p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

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<p>1. Article Addressed to:</p> <p style="font-size: 1.2em;">Intrepid Potash New Mexico 1996 Potash Mines Rd. P.O. Box 101 Carrsbad, NM 88220</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>
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<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>	
<p>7005 0390 0002 9920 7757</p>	
<p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

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<p>1. Article Addressed to:</p> <p style="font-size: 1.2em;">Mau Bob Energy Corp. P.O. Box 227 Artesia, NM 88211</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>2. Article Number (Transfer from service label)</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>7005 0390 0002 9920 7764</p>	
<p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

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ATTN: David Stewart
P.O. Box 50250
Midland, TX 79710

LT3F25

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Friday, September 03, 2010 2:32 PM
To: 'David_Stewart@oxy.com'
Cc: Ezeanyim, Richard, EMNRD
Subject: Disposal applications from OXY USA: Sundance 4 Federal #32 and Lost Tank 3 Federal #25

Hello David:

Please send the dates you mailed the certified receipts for these two applications. The dates did not copy and are not legible on my copy of each application.

Please also send the API number to me by email for each of these wells as soon as you find out. Our database is keyed on API numbers...

Regards,

William V Jones, P.E.
Engineering, Oil Conservation Division
1220 South St. Francis Drive, Santa Fe, NM 87505
Tel 505.476.3448 ~ Fax 505.476.3462



Jones, William V., EMNRD

From: David_Stewart@oxy.com
Sent: Friday, September 03, 2010 3:09 PM
To: Jones, William V., EMNRD
Cc: Ezeanyim, Richard, EMNRD
Subject: RE: Disposal applications from OXY USA: Sundance 4 Federal #32 and Lost Tank 3 Federal #25
Attachments: img-903145729-0001.pdf

The SWD Applications were all mailed on 8/3/10 and the USPO show they were received as follows:

NMOCD-Santa Fe - 8/5/10 - 700050390000299207726 - Lost Tank 3 Fed #25 - Sundance 4 Fed #32
NMOCD-Artesia - 8/5/10 - 70050390000299207719 - Lost Tank 3 Fed #25 - Sundance 4 Fed #32
BLM-Carlsbad - 8/10/10 - 70050390000299207788 - Lost Tank 3 Fed #25 - Sundance 4 Fed #32
Intrepid Potash-NM - 8/4/10 - 70050390000299207757 - Lost Tank 3 Fed #25
Western AG Minerals Co. - 8/6/10 - 70050390000299207740 - Lost Tank 3 Fed #25
Marbob Energy Corp. - 8/4/10 - 70050390000299207740 - Lost Tank 3 Fed #25
Yates Petroleum Corp. - 8/4/10 - 70050390000299207771 - Lost Tank 3 Fed #25 - Sundance 4 Fed #32
As soon as the APD's are approved and the API Numbers assigned, I will send them to you. If you need anything else, please let me know and I appreciate all the help.

Thanks,
David Stewart
Sr. Regulatory Analyst
OXY Permian
432-685-5717
Fax-432-685-5742

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Friday, September 03, 2010 3:32 PM
To: Stewart, David
Cc: Ezeanyim, Richard, EMNRD
Subject: Disposal applications from OXY USA: Sundance 4 Federal #32 and Lost Tank 3 Federal #25

Hello David:

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Please also send the API number to me by email for each of these wells as soon as you find out. Our database is keyed on API numbers...

Regards,

William V Jones, P.E.
Engineering, Oil Conservation Division
1220 South St. Francis Drive, Santa Fe, NM 87505
Tel 505.476.3448 ~ Fax 505.476.3462



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Injection Permit Checklist (08/27/2010)

WFX PMX (SWD 1244) Permit Date 9/3/10 UIC Qtr (A/S/O)

Wells 1 Well Name(s): LOST TANK 3 Fld #25

API Num: 30-0 15- Spud Date: 10/1/10 New/Old: N (UIC primacy March 7, 1982)

Footages 1500 FNL/541 FEL Unit H Sec 3 Tsp 225 Rge 31E County EDDY

General Location: 1.5 mi N. of WIPP

Operator: OXY USA INC Contact DAVID STEWART

OGRID: 16696 RULE 5.9 Compliance (Wells) 6/1777 (Finan Assur) OK IS 5.9 OK? OK

Well File Reviewed Current Status: NOT Permitted or Drilled

Planned Work to Well: Drill, Equip, Inject

Diagrams: Before Conversion After Conversion ✓ Elogs in Imaging File: New well

Well Details:		Sizes	Setting	Stage	Cement	Determination
		Hole.....Pipe	Depths	Tool	Sx or Cf	Method
New <u>✓</u> Existing <u>Surface</u>		14 3/4 11 3/4	665		500 SX	CIRC
New <u>✓</u> Existing <u>Interm</u>		10 5/8 8 5/8	4250		1170 SX	CIRC
New <u>✓</u> Existing <u>LongSt</u>		7 7/8 5 1/2	6,300 T.D.	4,300'	1200 SX	CIRC/CIRC
New <u>Existing</u> <u>Liner</u>						
New <u>Existing</u> <u>OpenHole</u>						

Depths/Formations: Depths, Ft. Formation Tops?

Formation(s) Above	430702 4585 5220	Bell C. Cherry C.	✓
Injection TOP:	5355	Cherry C.	Max. PSI (1071) OpenHole Perfs ✓
Injection BOTTOM:	6137	" "	Tubing Size 27/8 Packer Depth 5255
Formation(s) Below	6480	Brushy	✓

Capitan Reef? (Potash? ✓ Noticed? ✓) [WIPP? ✓ Noticed? ✓] Salado Top/Bot (600-1032) Cliff House?

Fresh Water: Depths: ? Formation ? Wells? ✓ Analysis? ✓ Affirmative Statement ✓

Disposal Fluid Analysis? ✓ Sources: Lower Delaware

Disposal Interval: Analysis? ✓ Production Potential/Testing: NOT Productive in Cherry C. - See analysis

Notice: Newspaper Date 7/23/10 Surface Owner BLM Mineral Owner(s) BLM

RULE 26.7(A) Affected Persons: Water AG/Interpdt/Mobility/State/OXY

AOR: Maps? ✓ Well List? ✓ Producing in Interval? NO Wellbore Diagrams? —

.....Active Wells 13 Repairs? 0 Which Wells? —

.....P&A Wells 0 Repairs? — Which Wells? —

Questions: Date on Notices? (Run CBL on 5 1/2") Request Sent — Reply: —