

6/20/2016 DATE IN	SUSPENSE	P.D.G. ENGINEER	6/21/2016 LOGGED IN	SWD TYPE	PMAM1617348962 APP NO.
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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



### 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.

Kay Havenor  
 Print or Type Name

See Application  
 For Authorization  
 Signature to inject

Agent  
 Title

6-20-2016  
 Date

e-mail Address

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	1		<b><u>Operator, Well, and Contact info:</u></b>
	2	II	Name of person submitting the application: Kay Havenor Other Contact? 2016 JUN 20 P 3: 26
	3	II	Did you Include a contact Email in the application? Yes and Mailing Address? Yes and Phone? Yes
	4	II	Operator Name: Mesquite SWD, Inc OGRID Num 161968
	5		RULE 5.9 Compliance..... Number of Inactive Wells vs Total Wells Operated 2 .... Is financial assurance required on any well? No Violation
	6		Is there any hearing order finding this operator out of compliance with Division Rule 19.15.5.9 NMAC? No
	7		Are all Rule 5.9 issues OK to allow the Division to issue Disposal Permits?
	8	III	Well Name: OXY Moutray SWD #1
	9	III	API Num: 30-015-not assigned Spud Date: new drill
	10		Have you included API numbers on all wellbore diagrams and well list(s) in this application? Yes
	11	III	Proposed well...Footages 140' FNL & 945' FEL Unit A Sec 28 Tsp 24S Rge 29E County Eddy
	12		General Location (i.e. Y miles NW of Z): 9-miles SE of Loving, NM, on north side of bend in Pecos River
	13		Current Well Status: To be new drill
	14	I	General Summary of Planned Work to Well: New drill through Siluro-Devonian (open-hole), complete for SWD.
	15		<b><u>INTERVAL TOP and BOTTOM:</u></b>
	16	IIIB.(2)	Proposed disposal Approx 15100'-15900' Formation Name Siluro-Devonian (include Member Names for Delaware or Mesaverde)
	17	IIIB.(2)	Proposed disposal Bottom Depth: 15900' Formation Name: Siluro-Devonian
	18	IIIB.(2)	Is the disposal interval OpenHole? Yes or Perfed?
	19	IIIB.(2)	What will be the disposal tubing size OD? 4-1/2" Packer Seat, Feet: approx 15100'
	20	VII	What max surf inj. psi are you proposing? 3020 If differing from 0.2 psi/ft surf. Grad., is supporting data attached such as a Step Rate Test?

Miss	Row	C-108	<b>C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.</b>
	21		<b><u>FRESH WATERS:</u></b>
	22	VIII	Depth to bottom of Fresh Waters: less than 200'      Formation Name(s)? Quaternary alluvium
	23	XI	Any Fresh Water Wells Within 1 Mile? No      If so, did you attach an analysis from these Wells?
	24		Are all "Fresh" waters isolated with Casing and Cement? Yes      ("Fresh" water is defined as less than 10,000 mg/l of TDS)
	25	XII	Included "Affirmative Statement" concerning any Connection from Disposal Depths to existing Fresh Waters? Yes      Item XII
	26		<b><u>WASTE WATERS:</u></b>
	27	XIV	Will this be a Lease Only disposal well? No      or only used for the Operator's own waste needs?      or Commercial Disposal? Yes
	28	VII	Which formations will supply the waste waters to be disposed into this well... List most common: Delaware/Bone Springs
	29	VII	Are Waste waters compatible with proposed disposal interval waters? Yes      Did you include waste water analysis? Yes, Delaware water
	30		<b><u>AT PROPOSED WELL....INSITU WATERS AND HYDROCARBON POTENTIAL:</u></b>
	31		Is a discussion included of the potential for future OIL/GAS recovery from the proposed disposal interval? Yes
	32		If your proposed well for disposal is a depleted producer (within the proposed interval); do you know what was the cumulative oil/gas/water?      and did you include a Rate-Time plot of this depleted interval?
	33	VII	Insitu water analysis Included? No      Is the salinity within the disposal interval more than 10,000 mg/l of TDS?      or how will you determine this insitu water salinity? Regional knowledge Siluro-Devonian.
	34	VIII	Does the application include a list of Formation tops down to and including the bottom of the target formation? Yes, on Page 11
	35		What is the top main salt 2500' +/-      and bottom 4155' +/-      of the Salado Salt (....If this well is in the Southeast and the Salt is present)
	36	X	Are all existing Logs (including any CBL over the disposal interval) are on the OCD Web Site?      If logs not there, please send      On completion
	37	IIIA.	Are the wellbore diagrams for this well included in the Application.....Before Conversion?      and After Conversion? Yes. New drill.
	38		Are the top and bottom footage of the proposed disposal interval marked on the "after" diagram? Yes
	39		<b><u>NOTICE:</u></b>

Miss	Row	C-108	<b>C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.</b>
	40	XIV	Date of the Newspaper Notice in the County: Eddy Co. Artesia Daily Press 06/10/2016
	41	V	Within 1/2 mile, did you clearly identify (either on a map or by legal description) all separately owned tracts of lands within the disposal interval? Yes
	42	XIII	Did you identify the owner(s) of each of these separately owned tracts? Yes, in Item XIII Were they all formally noticed? Yes
	43	XIII	If reentering a P&Aed well, are there depth divisions of ownership within that well .....If so, have you also noticed all the shallower interests of the intent to use the well for disposal?
	44	XIII	Is the proposed well within the R-111-P defined Potash Area or the BLM Secretaries Potash Area? No ... If so, did you send notice to the nearest Potash lessee?
	45	XIV	Who owns the surface lands at the disposal well site (BLM, SLO, or who)? Valley Land, LLC Was that party formally noticed? Yes
	46		<b><u>Area of Review:</u></b>
	47	V	Did you include a map identifying all wells within 2 miles? Yes
	48	VI	Did you include a list of all AOR wells? Yes Is the list available to be emailed (if requested) in spreadsheet format? Yes - Included in Item VI list
	50	VI	Did you include wellbore diagrams for all P&Aed wells that exist within the 1/2 mile AOR that penetrate the disposal interval? None present
	51	VI	How many wells exist within the 1/2 mile AOR that penetrate the disposal interval? 0 How many of these are Plugged/Dry and Abandoned?
	52	VI	Are details included on cement coverage of the proposed disposal interval for all wells penetrating the disposal interval within 1/2 mile of the proposed well? N/A
	53	VI	Do all reported cement tops describe how that "top" was determined? N/A If you calculated any tops, what fillup efficiency factor did you use?
	54	VI	Did you identify the presence and depth of all Cement Stage Tools (DV) in the subject well and in the AOR wells? Yes
	55	VIII	For the target formation, is there significant formation structural depth changes within the 1/2 mile AOR? No
	56	VIII	Is there any Karst or Massive Limestone in this target formation? No ...or in the formations directly above or below? No
	57		<b><u>Administrative or Hearing:</u></b>
	58	VI	How many wells within the 1/2 mile AOR currently are producing (or still have open perforations) within the disposal interval? 0 Is it "gas" or "oil"?

Miss	Row	C-108	<b>C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.</b>
	59		.... NOTE: If the proposed disposal interval is a "Gas" interval or if any AOR wells are producing or have open perforations within this interval then this application may not be properly classified as a "disposal". These types of applications must be processed at an examiner hearing.
	60		Any other Issues..? No

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage  
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Mesquite SWD, Inc  
ADDRESS: P.O. Box 1478 Carlsbad, NM 88220  
CONTACT PARTY: Kay Havenor PHONE: 575-626-4518
- 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.
- 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.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  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.).
- \*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.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*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.
- 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.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- 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: Kay Havenor TITLE: Agent  
SIGNATURE: Kay C Havenor DATE: 6/8/2016  
E-MAIL ADDRESS: Kay.Havenor@Gmail.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.

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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: Mesquite SWD, Inc. (OGRID 161968)WELL NAME & NUMBER: OXY Moutray SWD #1 30-025-NA (New Drill)

WELL LOCATION:	<u>140' FNL &amp; 945' FEL</u>	<u>A</u>	<u>28</u>	<u>24S</u>	<u>29E</u>
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

**WELLBORE SCHEMATIC**

See attached diagram

**PROPOSED WELL CONSTRUCTION DATA**Surface CasingHole Size: 26" Casing Size: 20" 133# K-55Cemented with: 600 sx. *or* \_\_\_\_\_ ft<sup>3</sup>Top of Cement: Surface Method Determined: OprIntermediate-1 CasingHole Size: 17-1/2" Casing Size: 13-3/8" 68# K-55Cemented with: 875 sx. *or* \_\_\_\_\_ ft<sup>3</sup>Top of Cement: Surface Method Determined: OprIntermediate-2 CasingHole Size: 12-1/4" Casing Size: 9 5/8" 43.5/47/53.5# N80Cemented with: 945 sx. *or* \_\_\_\_\_ ft<sup>3</sup>Top of Cement: Surface Method Determined: Opr



Liner

Hole Size 8-1/2" Casing Size 7" 29/32# P-110

Cemented with: 945 sx. or                                      ft<sup>3</sup>

Top of Cement              Top of liner              Method Determined Opr

Total Depth: Approx 15,900'

Injection Interval

Approximately 15,100' To Approximately 15,900'

(Perforated or Open Hole; indicate which) Open Hole

## INJECTION WELL DATA SHEET

Tubing Size: 4-1/2" P110/N-80 Lining Material: Fiberglass coated

Type of Packer: Lok-Set or equivalent

Packer Setting Depth: Approx 15,100' ft

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

### 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: Siluro-Devonian

3. Name of Field or Pool (if applicable): \_\_\_\_\_

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. New drill

\_\_\_\_\_

\_\_\_\_\_

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 horizons all above approximately 9,800'

\_\_\_\_\_

\_\_\_\_\_

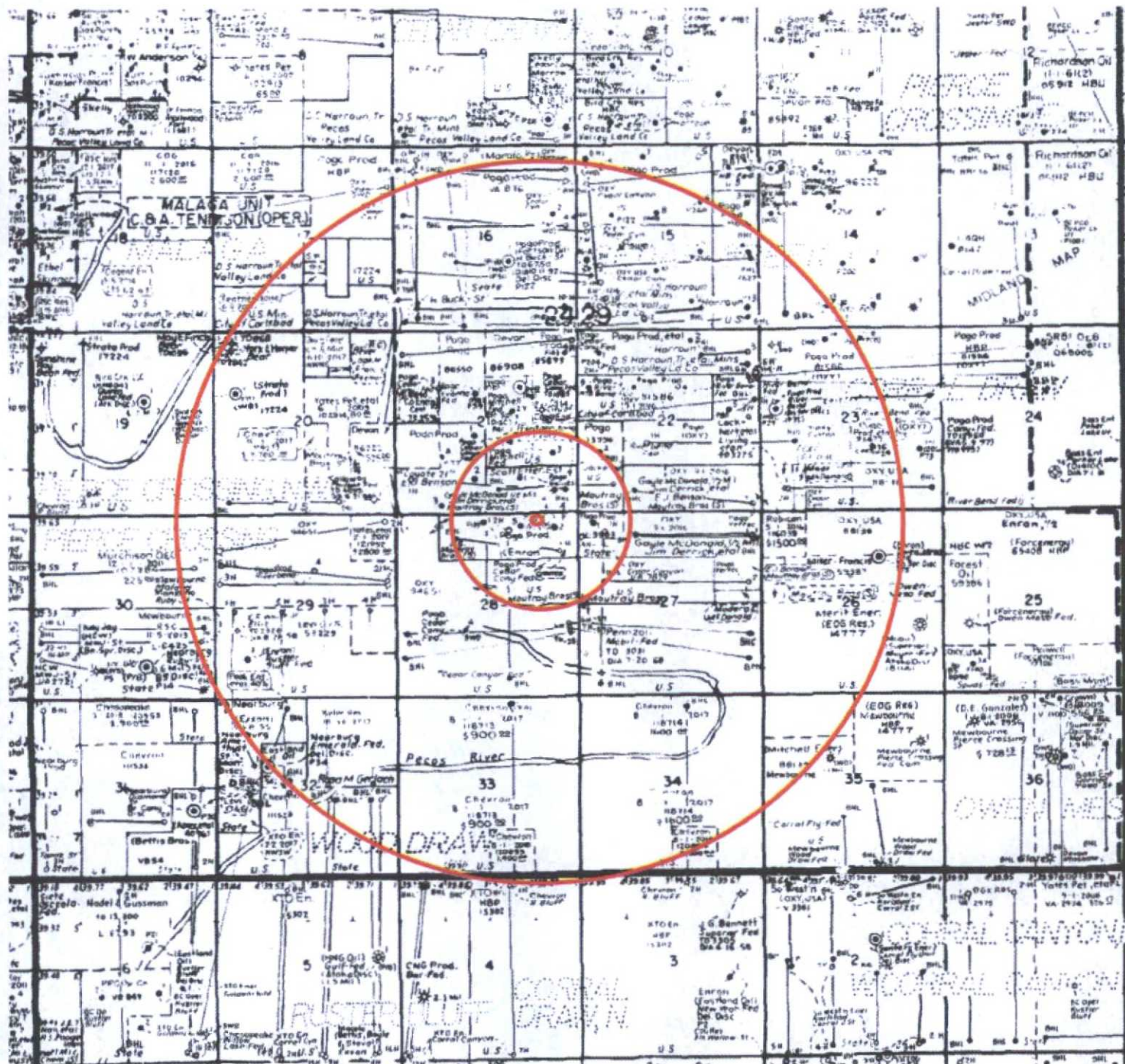
\_\_\_\_\_

Mesquite SWD, Inc.  
OXY Moutray SWD #1  
140' FNL & 945' FEL  
Sec. 28, T24S-R29E Eddy County, NM

API 30-015-NA

Item V:

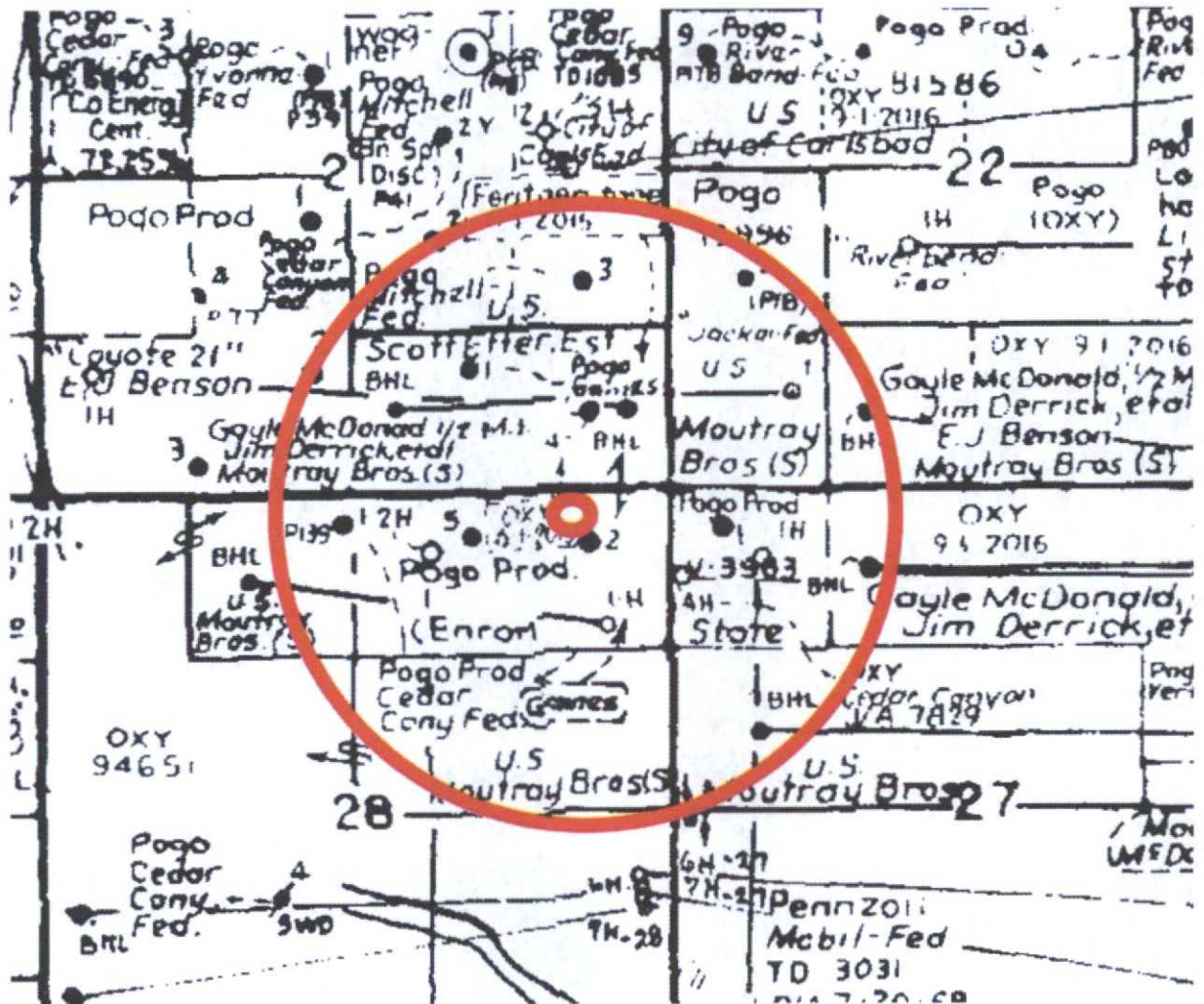
Area of Review  
½ Mile AOR and 2 Mile Radius





API 30-015-NA

### AOR Half - Mile



Mesquite SWD, Inc.  
 OXY Moutray SWD #1  
 140' FNL & 945' FEL  
 Sec. 28, T24S-R29E Eddy County, NM

API 30-015-NA

**Item VI:** Data on wells in AOR:

API	WELL_NAME	STATUS	SDIV	SEC	TWN	RANGE	FTG	NS	FTG	EW	OCD	OPERATOR	WELL	LAND	PLUG_DATE	SPUD	ELEVGL	TVD_DEPTH
3001528715	MITCHELL 21 FEDERAL 003	Active	I	21	24.0S	29E	1737	S	929	E	I	OXY USA INC	O	F		14-Sep-96	2945	5450
3001528710	MITCHELL 21 FEDERAL 002	Active	J	21	24.0S	29E	2110	S	1980	E	J	OXY USA INC	O	F		12-Jan-96	2947	7900
3001529930	COYOTE 21 001	Active	K	21	24.0S	29E	2310	S	2310	W	K	OXY USA INC	O	S		25-Apr-98	2948	5372
3001529864	COYOTE 21 002	Active	N	21	24.0S	29E	990	S	2310	W	N	OXY USA INC	O	S		28-Nov-97	2939	6800
3001528638	GAINES 21 001	Active	O	21	24.0S	29E	990	S	1650	E	O	OXY USA INC	O	S		01-Nov-95	2933	7850
3001528816	GAINES 21 004	Active	P	21	24.0S	29E	660	S	660	E	P	OXY USA INC	O	S		19-Feb-97	2936	5390
3001529324	JACKAL 22 FEDERAL 002	Active	L	22	24.0S	29E	1710	S	630	W	L	OXY USA INC	O	F		29-Jan-97	2967	5450
3001535186	GAINES 22 FEDERAL 001	Active	M	22	24.0S	29E	820	S	990	W	M	OXY USA INC	O	F		15-Nov-06	2931	10752
3001529374	STATE 27 001	Active	D	27	24.0S	29E	330	N	430	W	D	OXY USA INC	O	S		26-Mar-97	2918	5366
3001541095	001H	drilled or	D	27	24.0S	29E	595	N	845	W	D	OXY USA INC	O	F		28-Mar-13	2920	5256
3001542063	004H	drilled or	D	27	24.0S	29E	700	N	173	W	D	OXY USA INC	O	P		17-Jul-14	2923	8826
3001529420	GAINES 28 002	Active	A	28	24.0S	29E	330	N	660	E	A	OXY USA INC	O	P		07-Mar-97	2924	5350
3001535353	GAINES 28 COM 001	Active	A	28	24.0S	29E	1120	N	530	E	A	OXY USA INC	O	F		17-Mar-07	2922	10575
3001528819	GAINES 28 005	Active	B	28	24.0S	29E	330	N	1650	E	B	OXY USA INC	O	S		26-Nov-96	2025	5330
3001541073	002H	drilled or	B	28	24.0S	29E	458	N	1980	E	B	OXY USA INC	O	F		09-Mar-13	2921	6453
3001528723	CEDAR CANYON 28 FEDERAL 001	Active	C	28	24.0S	29E	230	N	2510	W	C	OXY USA INC	O	F		05-Dec-95	2919	7740

No known wells in the AOR penetrate pre-Permian formations. Note: 3001535186 & 3001535353 depth plus lateral reported as TVD.

Mesquite SWD, Inc.  
 OXY Moutray SWD #1  
 140' FNL & 945' FEL  
 Sec. 28, T24S-R29E Eddy County, NM

API 30-015-NA

**Item VII:**

1. The maximum injected volume anticipated is 25,000 BWPD. Average anticipated is 18,000 BWPD.
2. Injection will be through a closed system.
3. Maximum injection pressure is expected to be 3,020 psi, or as controlled by depth.
4. Sources will be produced water that is compatible with known waters in the disposal zones.
5. Water sample analyses from the Karlsbad Corral 11-ST #2-H Vanguard Operating, LLC J-11-T25S-R29E, Eddy Co. NM

## Pro-Kem, Inc. WATER ANALYSIS REPORT

**SAMPLE**

Oil Co.: Southwestern Energy Co.  
 Lease: Karlsbad Corral 11-ST.  
 Well No.: 2-H  
 Location: Cherry Canyon 4  
 Attention:

Date Sampled: 30-November-2006  
 Date Analyzed: 01-December-2006  
 Lab ID Number: Dec0106.001- 3  
 Salesperson:  
 Requested By: Pro-Kem, Inc.\*  
 File Name: Dec0106.001

**ANALYSIS**

1. Ph 6.320
2. Specific Gravity 60/60 F. 1.206
3. CaCO3 Saturation Index @ 80F 3.353 Severe  
 @ 140F 3.353 Severe

**Dissolved Gases**

4. Hydrogen Sulfide 0
5. Carbon Dioxide Not Determined
6. Dissolved Oxygen Not Determined

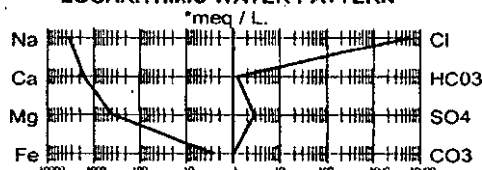
**Cations**

7. Calcium (Ca++) 31,864 / 20.1 = 1,585.27
8. Magnesium (Mg++) 4,559 / 12.2 = 373.69
9. Sodium (Na+) (Calculated) 74,853 / 23.0 = 3,254.48
10. Barium (Ba++) Below 10

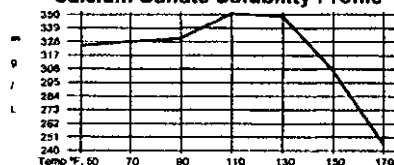
**Anions**

11. Hydroxyl (OH+) 0 / 17.0 = 0.00
12. Carbonate (CO3=) 0 / 30.0 = 0.00
13. Bicarbonate (HCO3-) 73 / 61.1 = 1.19
14. Sulfate (SO4=) 135 / 48.8 = 2.77
15. Chloride (Cl-) 184,958 / 35.5 = 5,210.08
16. Total Dissolved Solids 296,442
17. Total Iron (Fe) 46.00 / 18.2 = 2.53
18. Manganese (Mn++) Not Determined
19. Total Hardness as CaCO3 98,338
20. Resistivity @ 75 F. (Calculated) 0.001 Ohm - meters

**LOGARITHMIC WATER PATTERN**



**Calcium Sulfate Solubility Profile**



**PROBABLE MINERAL COMPOSITION**

COMPOUND	*meq/L	X	EQ. WT.	=	mg/L
Ca(HCO3)2	1.19		81.04		97
CaSO4	2.77		68.07		188
CaCl2	1,581.31		55.50		87,763
Mg(HCO3)2	0.00		73.17		0
MgSO4	0.00		60.19		0
MgCl2	373.69		47.62		17,795
NaHCO3	0.00		84.00		0
NaSO4	0.00		71.03		0
NaCl	3,255.08		58.46		190,292

\* milliequivalents per Liter

*Rebecca A. Rodriguez*  
 Rebecca Rodriguez, Analyst

Mesquite SWD, Inc.  
 OXY Moutray SWD #1  
 140' FNL & 945' FEL  
 Sec. 28, T24S-R29E Eddy County, NM

API 30-015-NA

**Item VIII:**

Disposal will be into the Siluro-Devonian formations above the Montoya Formation.

There are no known fresh, potable water wells within a 2-mile radius of the proposed Mesquite SWD disposal well at depths as great as the proposed surface casing (581') according to records of the New Mexico Office of the State Engineer on June 6, 2016.



## New Mexico Office of the State Engineer Wells with Well Log Information

(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 Sub-Code	basin	County	Source	q q q	Sec	Twp	Rng	X	Y	Distance	Start Date	Finish Date	Log File	Depth Well	Depth Water	Driller	License Number
C 00483	C	ED	Shallow	4 4 4	17	24S	29E		594332	3564282	2456	09/10/1953	11/07/1953	11/18/1953	280		4 DONOWHO, JOE	75
C 00883		ED	Shallow	3 3 1	16	24S	29E		594524	3565061	3054	07/31/1962	08/01/1962	04/22/1963	220		D.W. FALLS	
C 00883 CLW189500	O	ED	Shallow	3 3 1	16	24S	29E		594524	3565001	3054	07/31/1962	08/01/1962	12/17/1958	220		D.W. FALLS	

Record Count: 3

UTM NAD83 Radius Search (in meters):

Easting (X): 595810

Northing (Y): 3562320

Radius: 3200

\*UTM location was derived from PLSS - see Help

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

6/6/16 9:50 PM

Page 1 of 1

WELLS WITH WELL LOG INFORMATION

The surface geology of the greater area, including the 2-mile radius as shown in Item V above, is Quaternary eolian Holocene underlain or upon the Permian Rustler Formation and evaporites. Based upon surface geology and available shallow data the depth to potential potable water (not hole depth), if present, is estimated to be less than 200'.

Mesquite SWD, Inc.  
OXY Moutray SWD #1  
140' FNL & 945' FEL  
Sec. 28, T24S-R29E Eddy County, NM

API 30-015-NA

**Item IX:**

Some acid may be applied after completion. No other formation stimulation is currently planned.

**Item X:**

Logs will be filed with the OCD upon completion of the well. Density-Neutron is planned.

**Item XI:**

No water wells are reported in the 2-mile radius of the proposed SWD. Please note Item VIII discussion above.

**Item XII:**

There is no geological evidence of open faults or hydrologic connection between the disposal zone and any possible underground sources of protectable water.



Mesquite SWD, Inc.  
 OXY Moutray SWD #1  
 140' FNL & 945' FEL  
 Sec. 28, T24S-R29E Eddy County, NM

API 30-015-NA

# PROPOSED NEW WELL DIAGRAM

API: 30015xxxx  
 Operator: Mesquite SWD, Inc  
 Lease: OXY Moutray SWD  
 Location: Sec 28, T24S-R29E Eddy Co., NM  
 Footage: 140 FNL, 945 FEL

Well No: 1

KB: 2960 est  
 GL: 2940  
 MSL of TD: -12940 est

## Surface Csg

Size: 20" 133# K-55 BTC  
 Set @: 581  
 Sxs cmt: 600  
 Circ: Yes  
 TOC: Surf  
 Hole Size: 26"

## Intermediate Csg

Size: 13-3/8" 68# K-55 LTC  
 Set @: 2,750  
 Sxs cmt: 875  
 Circ: Yes  
 TOC: Surf  
 Hole Size: 17-1/2"

## Intermediate-2 Csg

Size: 9-5/8" 43.5# 4753.5 N80 LTC  
 Set @: 11600  
 Sxs cmt: 4000  
 Circ: Yes  
 Hole Size: 12-1/4"

## Liner

Size: 7" 2932 P-110 LTC  
 Interval: 10065'-15100'  
 Sx cmt: 945  
 Circ: Yes  
 Hole Size: 8-1/2"

## Open Hole

Interval: approx 15100'-15900'  
 Hole Size: 6-1/4"

**Note:** Formation depths are best estimates

Tubular requirements (made-up):  
 14,800' 4-1/2" w/0-1700' 13.5# P-110 LTC, 1700'-  
 4300' 11.6# P-110 LTC, 4300'-9990' 11.6# N-80 LTC,  
 9990'-13000' 11.6# P-110 LTC, 13000'-14800'  
 13.5# N-80 LTC, all Fiberglass coated.  
 Lok-Set or equivalent approx 15,100'

Open hole acid if required.  
 Tubing annulus w/corrosion inhibitor.  
 Complete surface head for disposal.



Mesquite SWD, Inc.  
OXY Moutray SWD #1  
140' FNL & 945' FEL  
Sec. 28, T24S-R29E Eddy County, NM

API 30-015-NA



Delorme XMap6

OXY Moutray SWD on north side Pecos River in Quaternary alluvium overlying Permian Rustler Formation.

Mesquite SWD, Inc.  
OXY Moutray SWD #1  
140' FNL & 945' FEL  
Sec. 28, T24S-R29E Eddy County, NM

API 30-015-NA

**Item XIII: Proof of Notice**

**Minerals Owner:**

Bureau of Land Management  
620 E. Greene St.  
Carlsbad, NM 88220

**Surface Owner:**

Valley Land, LLC  
P.O. Box 579  
Loving, NM 88256

**Operators:**

OXY USA, Inc  
P.O. Box 27570  
Houston, TX 77277-7570

100%



Mesquite SWD, Inc.  
Moutray SWD #1  
140' FNL & 945' FEL  
Sec. 28, T24S-R29E Eddy County, NM

API 30-015-NA

**Item XIII: Legal Publication**

**Affidavit of Publication**

No. 23953

State of New Mexico

County of Eddy:

**Danny Scott** *Danny Scott*  
being duly sworn says that she is the **Publisher**

of the Artesia Daily Press, a daily newspaper of General  
circulation, published in English at Artesia, said county  
and state, and that the hereto attached

**Legal Ad**

was published in a regular and entire issue of the said  
Artesia Daily Press, a daily newspaper duly qualified  
for that purpose within the meaning of Chapter 167 of  
the 1937 Session Laws of the state of New Mexico for  
1 Consecutive weeks/day on the same

day as follows:

First Publication June 10, 2016

Second Publication

Third Publication

Fourth Publication

Fifth Publication

Sixth Publication

Subscribed and sworn before me this

13th day of June 2016



OFFICIAL SEAL  
Latisha Romine  
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 5/12/2019

*Latisha Romine*

Latisha Romine

Notary Public, Eddy County, New Mexico

**Copy of Publication:**

**LEGAL NOTICE**

Mesquite SWD, Inc., c/o Kay Havenor, 904 Moore Ave., Roswell, NM, (575) 626-4518, is seeking approval from the New Mexico Oil Conservation Division to drill and complete the OXY Moutray SWD #1 well API: not assigned, located 140' FNL & 945' FEL Sec. 28, T24S-R29E Eddy County, NM, 9 miles southeast of Loving, NM and complete for commercial produced water disposal as the Mesquite SWD, Inc. OXY Moutray SWD #1. The proposed disposal interval is the Siluro-Devonian Formation in open-hole approximately 15,100' to 15,900' at a maximum of 2,300 psi to dispose a maximum of 25,000 BWPD.

Parties with questions regarding this proposal may contact Kay Havenor at the address or phone number above.

Interested parties must file objections or requests for hearing within 15 days of this publication to the Oil Conservation Division: 1220 So. St. Francis Dr., Santa Fe, NM 87505.

Published in the Artesia Daily Press, Artesia, N.M., June 10, 2016 Legal No. 23953.

Mesquite SWD, Inc.  
Moutray SWD #1  
140' FNL & 945' FEL  
Sec. 28, T24S-R29E Eddy County, NM

API 30-015-NA

Item XIII:

Certified Mail Receipts

7014 2120 0001 6413 6828

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at <a href="http://www.usps.com">www.usps.com</a> ®.	
HOUSTON, TX 77227	
<b>OFFICIAL USE</b>	
Postage	\$3.39
Certified Fee	\$2.70
Return Receipt Fee (Endorsement Required)	\$0.00
Restricted Delivery Fee (Endorsement Required)	\$0.00
Total Postage & Fees	\$6.09
06/10/2016	
Sent To: OXY USA, Inc.	
Street & Apt. No.: P.O. Box 27570	
City, State, ZIP+4: Houston, TX 77227-7570	
PS Form 3800, July 2014 See Reverse for Instructions	

7014 2120 0001 6413 6110

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CARLSBAD, NM 88220	
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Postage	\$3.39
Certified Fee	\$2.70
Return Receipt Fee (Endorsement Required)	\$0.00
Restricted Delivery Fee (Endorsement Required)	\$0.00
Total Postage & Fees	\$6.09
06/10/2016	
Sent To: Bureau of Land Management	
Street & Apt. No.: 620 E. Greene St.	
City, State, ZIP+4: Carlsbad, NM 88220	
PS Form 3800, July 2014 See Reverse for Instructions	

7014 2120 0001 6413 6835

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
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LOVING, NM 88256	
<b>OFFICIAL USE</b>	
Postage	\$3.39
Certified Fee	\$2.70
Return Receipt Fee (Endorsement Required)	\$0.00
Restricted Delivery Fee (Endorsement Required)	\$0.00
Total Postage & Fees	\$6.09
06/10/2016	
Sent To: Valley Land, LLC	
Street & Apt. No.: P.O. Box 597	
City, State, ZIP+4: Loving, NM 88256	
PS Form 3800, July 2014 See Reverse for Instructions	

Scott 8 produced water samples

wellname	api	section	township	range	unit	ftgns	ftgew	formation	chloride_mgl
GUY A REED #001	3001510872	24	24S	28E	E	1980N	660W	DELAWARE	78600
FED #001	3001502504	24	24S	28E	A	330N	990E		78580
H B 11 FEDERAL #0	3001529248	11	24S	29E	L	1650S	400W		109207
H B 11 FEDERAL #0	3001532606	11	24S	29E	K	2550S	1600W		103070
H B 11 FEDERAL #0	3001529249	11	24S	29E	N	850S	2100W		118370
H B 11 FEDERAL #0	3001537900	11	24S	29E	B	330N	1650E	AVALON UPPER	114114
H B 11 FEDERAL #0	3001529248	11	24S	29E	L	1650S	400W		112725
H B 11 FEDERAL #0	3001532741	11	24S	29E	C	330N	1750W		59222
H B 11 FEDERAL #0	3001537900	11	24S	29E	B	330N	1650E	AVALON UPPER	104800



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

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No records found.

**PLSS Search:**

Section(s): 20-23, 26-29      Township: 24S      Range: 29E

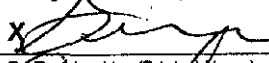

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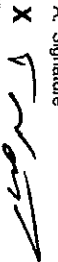
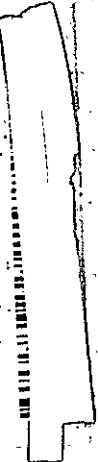
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<p>■ Complete items 1, 2, and 3.</p> <p>■ Print your name and address on the reverse so that we can return the card to you.</p> <p>■ Attach this card to the back of the mailpiece, or on the front if space permits.</p>		<p>A. Signature </p> <p><input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p>	
<p>1. Article Addressed to:</p> <p>OXY USA, Inc P.O. Box 27570 Houston, TX 77277-7570</p> <p></p> <p>9590 9403 0765 5196 5557 82</p>		<p>B. Received by (Printed Name) <u>Greene</u> C. Date of Delivery <u>6-20-16</u></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>7014 2120 0001 6412 9110</p>		<p>3. Service Type</p> <p><input type="checkbox"/> Adult Signature <input type="checkbox"/> Adult Signature Restricted Delivery <input checked="" type="checkbox"/> Certified Mail® <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Insured Mail <input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</p> <p><input type="checkbox"/> Priority Mail Express® <input type="checkbox"/> Registered Mail™ <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Signature Confirmation Restricted Delivery</p>	
PS Form 3811, April 2015 PSN 7530-02-000-9053		Domestic Return Receipt	

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<p>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</p> <p>■ Print your name and address on the reverse so that we can return the card to you.</p> <p>■ Attach this card to the back of the mailpiece, or on the front if space permits.</p>		<p>A. Signature </p> <p><input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p>	
<p>1. Article Addressed to:</p> <p>Bureau of Land Management 620 E. Greene St. Carlsbad, NM 88220</p> <p></p>		<p>B. Received by (Printed Name) <u>Greene</u> C. Date of Delivery <u>6/13/16</u></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. Service Type</p> <p><input type="checkbox"/> Certified Mail® <input type="checkbox"/> Priority Mail Express™ <input checked="" type="checkbox"/> Registered Mail <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Insured Mail <input type="checkbox"/> Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>		<p>3. Article Number (Transfer from service label)</p> <p>7014 2120 0001 6412 9110</p>	
PS Form 3811, July 2013		Domestic Return Receipt	

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<b>OFFICIAL USE</b>	
<p>Postage \$3.30</p> <p>Certified Fee \$2.70</p> <p>Return Receipt Fee (Endorsement Required) \$0.00</p> <p>Restricted Delivery Fee (Endorsement Required) \$0.00</p> <p>Total Postage &amp; Fees \$7.57</p>	<p>0602</p> <p>ROSWELL, NM</p> <p>Postmark JUN 10 2016</p> <p>06/10/2016</p>
<p>Sent To: OXY USA, Inc.</p> <p>Street &amp; Apt. No., or PO Box No. P.O. Box 27570</p> <p>City, State, ZIP+4 Houston, TX 77277-7570</p>	
PS Form 3800, July 2014 See Reverse for Instructions	

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<p>Postage \$3.30</p> <p>Certified Fee \$2.70</p> <p>Return Receipt Fee (Endorsement Required) \$0.00</p> <p>Restricted Delivery Fee (Endorsement Required) \$0.00</p> <p>Total Postage &amp; Fees \$7.57</p>	<p>0602</p> <p>ROSWELL, NM</p> <p>Postmark JUN 10 2016</p> <p>88201</p> <p>06/10/2016</p>
<p>Sent To: Bureau of Land Management</p> <p>Street &amp; Apt. No., or PO Box No. 620 E. Greene St.</p> <p>City, State, ZIP+4 Carlsbad, NM 88220</p>	
PS Form 3800, July 2014 See Reverse for Instructions	

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LOVING, NM 88256

Postage	\$2.70
Certified Fee	\$0.00
Return Receipt Fee (Domestic Mail Restricted)	\$0.00
Endorsement Required	\$0.00
Total Postage & Fees	\$2.70

0603 07

Valley Land, LLC  
 P.O. Box 597  
 Loving, NM 88256

PS Form 3811, July 2014

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<p>■ Complete items 1, 2, and 3.</p> <p>■ Print your name and address on the reverse so that we can return the card to you.</p> <p>■ Attach this card to the back of the mailpiece, or on the front if space permits.</p> <p>1. Article Addressed to:</p> <p>Valley Land, LLC            P.O. Box 597            Loving, NM 88256</p> <p>2. Article Number (transfer from service label)</p> <p>7014 2120 0001 6413 6835</p>	<p>A. Signature</p> <p>X <i>[Signature]</i> Agent</p> <p>B. Received by (Printed Name)</p> <p><i>[Signature]</i></p> <p>C. Date of Delivery</p> <p><i>10/1/14</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No          If YES, enter delivery address below:</p> <p>3. Service Type</p> <p><input type="checkbox"/> Adult Signature Restricted Delivery</p> <p><input checked="" type="checkbox"/> Certified Mail</p> <p><input type="checkbox"/> Collect on Delivery</p> <p><input type="checkbox"/> Collect on Delivery Restricted Delivery</p> <p><input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</p> <p><input type="checkbox"/> Priority Mail Express®</p> <p><input type="checkbox"/> Registered Mail™</p> <p><input type="checkbox"/> Registered Mail Restricted Delivery</p> <p><input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Signature Confirmation</p> <p><input type="checkbox"/> Restricted Delivery</p>

PS Form 3811, April 2015 PSN 7530-02-000-0053

Domestic Return Receipt