DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
11/18/2014		PRG	11/18/2014	SWD	pMAM1432260282

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]

- SWD
- Oxy USA, Inc
16696
well
- Cedar Canyon 15 SWD #1 30-015-42797

[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 _____

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[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

Pool
- SWD; Devonian
96101

[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		Sr. Regulatory Advisor	11/10/14
Print or Type Name	Signature	Title	Date

david_stewart@oxy.com
e-mail Address

Oxy USA Inc.
Cedar Canyon 15 SWD #1

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

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_____ Cedar Canyon 15 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 ____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; Avg-10000BWPD – Max-20000BWPD
2. Whether the system is open or closed; Closed
3. Proposed average and maximum injection pressure; Avg- 1500 psi – Max-2975 psi
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, Delaware, Bone Spring from OXY operated leases, see 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. Acid stimulation

*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. 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 Advisor_____

SIGNATURE: _____ DATE: 11/10/14

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: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

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.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: OXY USA Inc

WELL NAME & NUMBER: Cedar Canyon 15 SWD #1

WELL LOCATION:	2500 FSL 1400 FWL	K	15	24S	29E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

PROPOSED WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 26" Casing Size: 20" @ 370'

Cemented with: 1000 sx. *or* 1340 ft^3

Top of Cement: Surface Method Determined: To Be Circ

Intermediate Casing

Hole Size: 17-1/2" Casing Size: 13-3/8" @ 3100'

Cemented with: 2870 sx. *or* 4584 ft^3

Top of Cement: Surface Method Determined: To Be Circ

Production Casing

Hole Size: 12-1/4" Casing Size: 9-5/8" @ 10165'

Cemented with: 1150 sx. *or* 3458 ft^3

Top of Cement: 2100' Method Determined: Calc-Lift psi

Production Liner Casing

Hole Size: 8-1/2" Casing Size: 7" @ 9865-14887'

Cemented with: 800 sx. *or* 960 ft^3

Top of Cement: 9865' Method Determined: CBL

Total Depth: 15937'

Injection Interval

14887 feet to 15937 feet

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 4-1/2" 11.6# L80 Lining Material: Polylined

Type of Packer: Nickel Plated Arrow Set

Packer Setting Depth: 14837'

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? _____

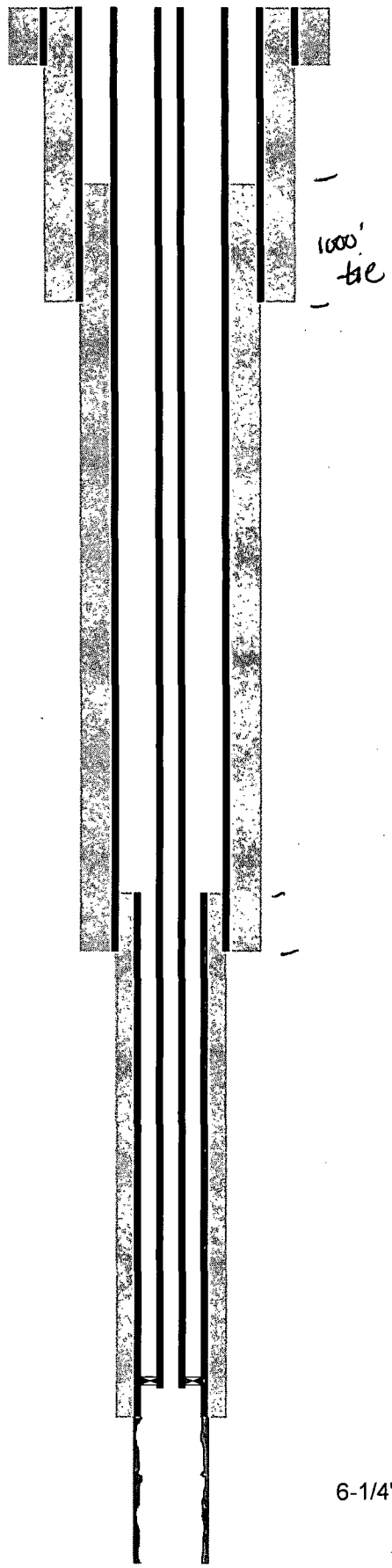
2. Name of the Injection Formation: Silurian-Devonian

3. Name of Field or Pool (if applicable): SWD Silurian-Devonian

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/Wolfcamp/Morrow

OXY USA Inc
CedarCanyon 15 SWD #1
API No. 30-015-



26" hole @ 370'
20" csg @ 370'
w/ 1000sx-TOC-Surf-Circ

17-1/2" hole @ 3100'
13-3/8" csg @ 3100'
w/ 2870sx-TOC-Surf-Circ

12-1/4" hole @ 10165'
9-5/8" csg @ 10165'
w/ 1150sx-TOC-2100'-Calc

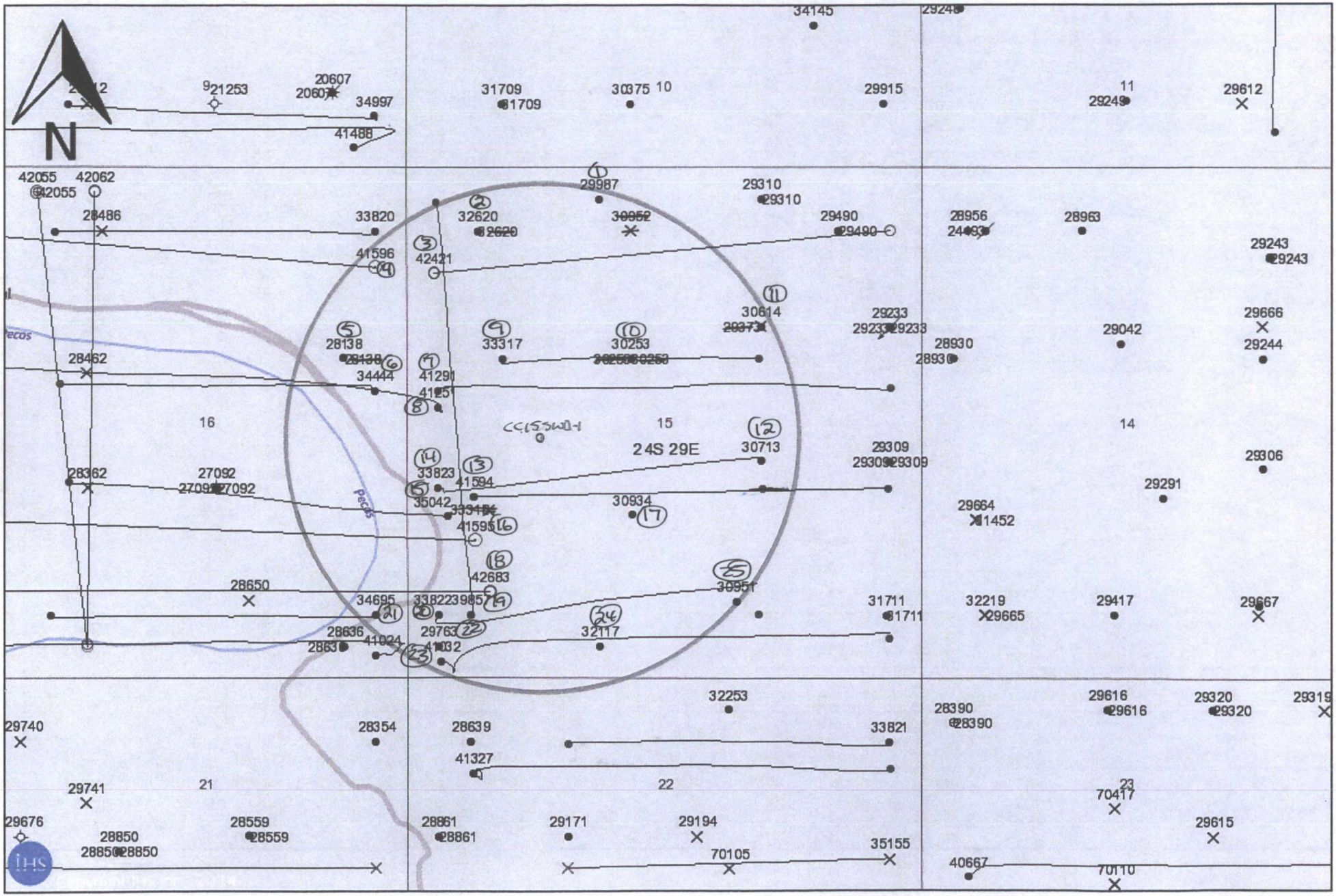
CBL(s)

8-1/2" hole @ 14907'
7" liner @ 9865-14887'
w/ 800sx-TOC-9865'-Circ

4-1/2" PL tbg & AS pkr @ 14837'

6-1/4" OH @ 14887-15937'

Cedar Canyon 15 SWD #1 - 1/2 Mile AOR



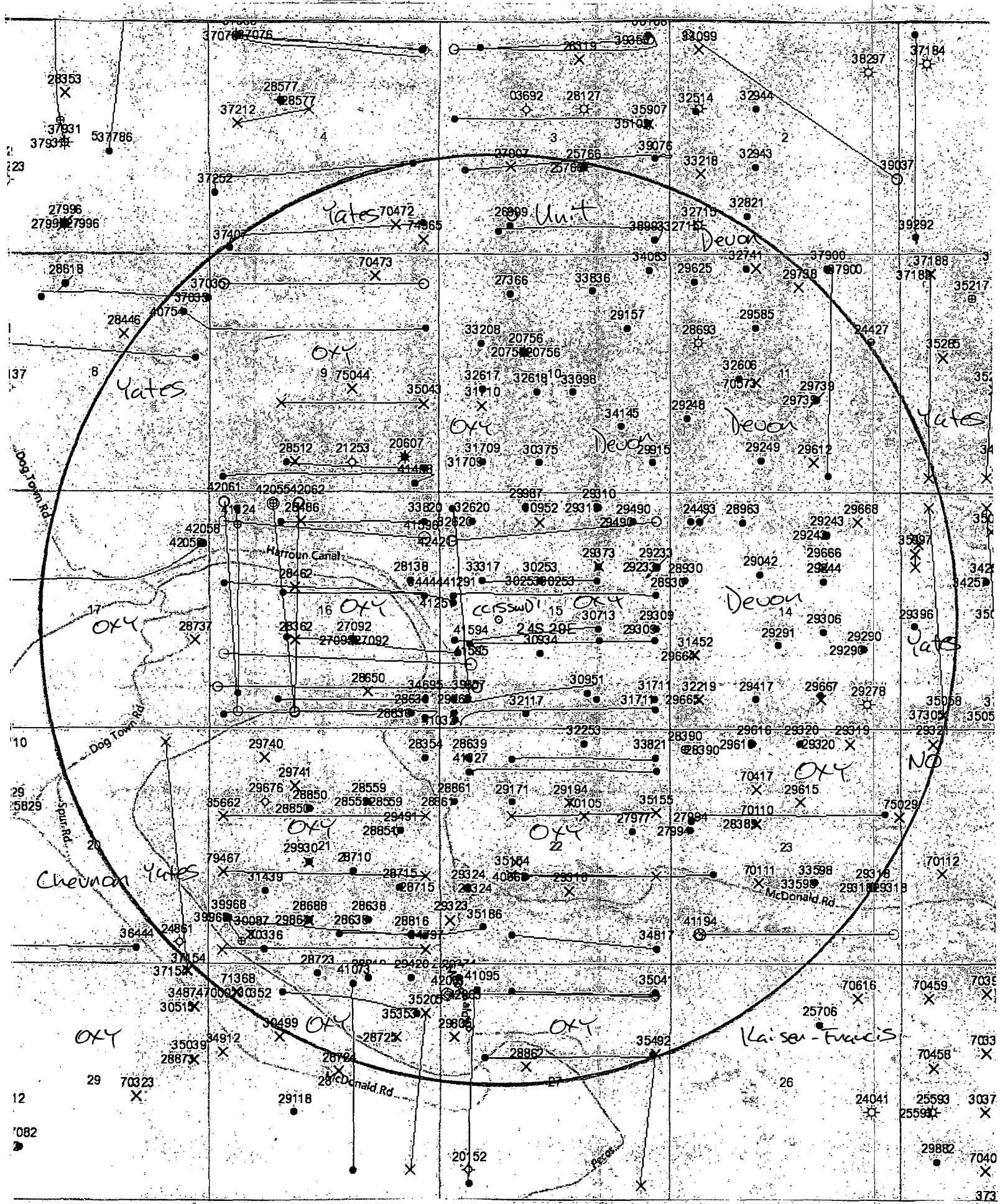
C-108 - Item VI
Cedar Canyon 15 SWD #1
AREA OF REVIEW

OPERATOR	LEASE	WELL NO.	API NO. 30-015	PLAT	LOCATION-24S 29E	DATE DRILLED	TD	PERFS	CASING-CEMENT	STATUS
OXY USA Inc.	Harroun 15	7	29987	1	330 FNL 1980 FWL-15	2/1998	6900'	4909-6704'	10-3/4" @ 513' w/ 500sx - TOC Surf Circ	Active Oil
									7-5/8" @ 2850' w/ 950sx - TOC Surf Circ	Cedar Canyon
									4-1/2" @ 6900' w/ 930sx - TOC 1650' CBL	Delaware
OXY USA Inc.	Harroun 15	14	32620	2	660 FNL 750 FWL-15	2/2003	8000'	5246-7762'	13-3/8" @ 577' w/ 670sx - TOC Surf Circ	Active Oil
									8-5/8" @ 2878' w/ 950sx - TOC Surf Circ	Cedar Canyon
									5-1/2" @ 8000' w/ 1615sx - TOC 1300' CBL	Delaware
OXY USA Inc.	Cedar Canyon 15 Fd Com	5H	42421	3	S-1095 FNL 290 FWL-15	TBD	Proposed	NA	Proposed-11-3/4" @ 370' w/ 340sx - TOC-Surf	To Be Drilled
					BH-660 FNL 330 FEL-15		13404'M		8-5/8" @ 2900' w/ 780sx - TOC Surf	Pierce Crossing E.
							8811'V		5-1/2" @ 13404' w/ 1380sx - TOC 2500'	Bone Spring
OXY USA Inc.	Cedar Canyon 16 St	8H	41596	4	S-1040 FNL 330 FEL-16	6/2014	13560'M	TBC	11-3/4" @ 364' w/ 599sx - TOC Surf Circ	To Be Completed
					BH-660 FNL 330 FWL-16		8618'V		8-5/8" @ 3118' w/ 890sx - TOC Surf Circ	Pierce Crossing E.
									5-1/2" @ 13544' w/ 1350sx - TOC Surf Circ	Bone Spring
OXY USA Inc.	H. Buck ST	2	28138	5	1980 FNL 660 FEL-16	11/1994	7950'	5216-6600'	13-3/8" @ 535' w/ 1400sx - TOC Surf Circ	Active Oil
									8-5/8" @ 2805' w/ 1200sx - TOC Surf Circ	Cedar Canyon
									5-1/2" @ 7950' w/ 1325sx - TOC 2440' CBL	Delaware
OXY USA Inc.	H. Buck St	4H	34444	6	S-2310 FNL 330 FEL-16	11/2005	10686'M	7879-10326'	13-3/8" @ 254' w/ 350sx - TOC Surf Circ	Active Oil
					BH-2262 FNL 1701 FWL-16		7689'V		9-5/8" @ 2104' w/ 900sx - TOC Surf Circ	Pierce Crossing E.
									5-1/2" @ 10686' w/ 2050sx - TOC 1920' CBL	Bone Spring
OXY USA Inc.	Cedar Canyon 15	4H	41291	7	S-2310 FNL 330 FWL-15	5/2013	13111'M	9000-12900'	11-3/4" @ 357' w/ 950sx - TOC Surf Circ	Active Oil
					BH-2292 FNL 307 FEL-15		8783'V		8-5/8" @ 3091' w/ 960sx - TOC 240' Calc	Pierce Crossing E.
									5-1/2" @ 13106' W/ 1420sx - TOC 2930' CBL	Bone Spring
OXY USA Inc.	Cedar Canyon 16 St	7H	41251	8	S-2485 FSL 330 FWL-15	4/2013	13762'M	9200-13680'	11-3/4" @ 335' w/ 680sx - TOC Surf Circ	Active Oil
					BH-1980 FNL 330 FWL-16		8644'V		8-5/8" @ 3095' w/ 1000sx - TOC Surf Circ	Pierce Crossing E.
									5-1/2" @ 13725' w/ 1570sx - TOC Surf Circ	Bone Spring
OXY USA Inc.	Harroun 15	15	33317	9	S-1980 FNL 990 FWL-15	8/2004	10192'M	8249-10100'	13-3/8" @ 545' w/ 1000sx - TOC Surf Circ	Active Oil
					BH-1979 FNL 1658 FEL-15		7808'V		9-5/8" @ 2865' w/ 800sx - TOC Surf Circ	Pierce Crossing E.
									5-1/2" @ 10192' w/ 890sx - TOC 3782' CBL	Bone Spring
OXY USA Inc.	Harroun 15	8	30253	10	1980 FNL 2310 GWL-15	11/1998	6885'	4660-6688'	10-3/4" @ 535' w/ 500sx - TOC Surf Circ	Active Oil
									7-5/8" @ 2880' w/ 950sx - TOC Surf Circ	Cedar Canyon
									4-1/2" @ 6885' w/ 1105sx - TOC 3100' CBL	Delaware
OXY USA Inc.	Harroun 15	6	30614	11	1650 FNL 1650 FEL-15	4/1999	6890'	5252-6303'	10-3/4" @ 539' w/ 486sx - TOC Surf Circ	Active Oil
									7-5/8" @ 2883' w/ 1050sx - TOC Surf Circ	Cedar Canyon
									4-1/2" @ 6890' w/ 1195sx - TOC 3242' CBL	Delaware
OXY USA Inc.	Harroun 15	9	30713	12	2260 FSL 1650 FEL-15	8/1999	6890'	5064-6652'	10-3/4" @ 545' w/ 540sx - TOC Surf Circ	Active Oil
									7-5/8" @ 2892' w/ 900sx - TOC Surf Circ	Cedar Canyon
									4-1/2" @ 6890' w/ 1070sx - TOC 2000' CBL	Delaware

C-108 - Item VI
Cedar Canyon 15 SWD #1
AREA OF REVIEW

OPERATOR	LEASE	WELL NO.	API NO. 30-015	PLAT	LOCATION-24S 29E	DATE DRILLED	TD	PERFS	CASING-CEMENT	STATUS
OXY USA Inc.	Cedar Canyon 15	3H	41594	13	S-1888 FSL 700 FWL-15	6/2014	13180'M	9152-13041'	11-3/4" @ 390' w/ 550sx - TOC Surf Circ	Active Oil
					BH-2007 FSL 230 FEL-15		8810'V		8-5/8" @ 3125' w/ 890sx - TOC Surf Circ	Pierce Crossing E.
									5-1/2" @ 13177' W/ 1300sx - TOC 478' CBL	Bone Spring
OXY USA Inc.	Harroun 15	16A	33823	14	S-1980 FSL 330 FWL-15	2/2005	10800'M	8053-10750'	13-3/8" @ 514' w/ 900sx - TOC Surf Circ	Active Oil
					BH-1965 FSL 1627 FEL-15		7775'V		9-5/8" @ 2870' w/ 1100sx - TOC Surf Circ	Pierce Crossing E.
									5-1/2" @ 10800' w/ 2340sx - TOC 1091' Calc	Bone Spring
OXY USA Inc.	H. Buck St	5	35042	15	S-1680 FSL 430 FWL-15	9/2006	10792'M	8244-10600'	13-3/8" @ 522' w/ 450sx - TOC Surf Circ	Active Oil
					BH-2011 FSL 1776 FWL-15		7630'V		9-5/8" @ 2884' w/ 900sx - TOC Surf Circ	Pierce Crossing E.
									5-1/2" @ 10792' w/ 450sx? - TOC Surf Circ ?	Bone Spring
OXY USA Inc.	Cedar Canyon 16 St	6H	41595	16	S-1430 FSL 710 FWL-15	6/2014	13786'M	9115-13625'	11-3/4" @ 364' w/ 550sx - TOC Surf Circ	Active Oil
					BH-1710 FSL 165 FWL-16		8620'V		8-5/8" @ 3144' w/ 890sx - TOC Surf Circ	Pierce Crossing E.
									5-1/2" @ 13786' W/ 1410sx - TOC Surf Circ	Bone Spring
OXY USA Inc.	Harrounn 15	10	30934	17	1700 FSL 2310 FWL-15	1/2000	6880'	5252-6477'	10-3/4" @ 593' w/ 540sx - TOC Surf Circ	Active Oil
									7-5/8" @ 2875' w/ 900sx - TOC Surf Circ	Cedar Canyon
									4-1/2" @ 6880' w/ 1115sx - TOC 2300' CBL	Delaware
OXY USA Inc.	Cedar Canyon 16 St	12H	42683	18	S-900 FSL 860 FWL-15	TBD	Proposed	NA	Proposed-11-3/4" @ 440' w/ 350sx - TOC-Surf	To Be Drilled
					BH-910 FSL 180 FWL-16		14370'M		8-5/8" @ 2975' w/ 850sx - TOC Surf	Corral Draw
							8631'V		5-1/2" @ 14370' w/ 1520sx - TOC 1975'	Bone Spring
OXY USA Inc.	Cedar Canyon 15	1H	39857	19	S-660 FSL 660 FWL-15	6/2012	10389'M	6900-10201'	13-3/8" @ 633' w/ 770sx - TOC Surf Circ	Active Oil
					BH-382 FNL 322 FWL-15		6394'V		9-5/8" @ 3021' w/ 1100sx - TOC Surf Circ	Cedar Canyon
									5-1/2" @ 10389' w/ 1430sx - TOC Surf Circ	Delaware
OXY USA Inc.	Harroun 15	17	33822	20	S-660 FSL 330 FWL-15	7/2006	10887'M	8405-10740'	13-3/8" @ 315' w/ 580sx - TOC Surf Circ	Active Oil
					BH-661 FSL 1679 FEL-15		7752'V		9-5/8" @ 2880' w/ 1000sx - TOC Surf Circ	Pierce Crossing E.
									5-1/2" @ 10887' w/ 2005sx - TOC 3940' CBL	Bone Spring
OXY USA Inc.	H. Buck St	10	34695	21	S-660 FSL 330 FEL-16	3/2006	10865'M	8396-10710'	13-3/8" @ 288' w/ 1030sx - TOC Surf Circ	Active Oil
					BH-637 FSL 645 FWL-16		7695'V		9-5/8" @ 2910' w/ 1300sx - TOC Surf Circ	Pierce Crossing E.
									5-1/2" @ 10792' w/ 2150sx - TOC 4870' CBL	Bone Spring
OXY USA Inc.	Harroun 15	2	29763	22	330 FSL 330 FWL-15	9/1997	5480'	4974-5268'	10-3/4" @ 571' w/ 600sx - TOC Surf Circ	Active Oil
									5-1/2" @ 5480' w/ 475sx - TOC 3000' CBL	Cedar Canyon
										Delaware
OXY USA Inc.	Cedar Canyon 15	2H	41032	23	S-170 FSL 360 FWL-15	2/2013	12960'M	8900-12800'	11-3/4" @ 334' w/ 280sx - TOC Surf Circ	Active Oil
					BH-409 FSL 327 FEL-15		8795'V		8-5/8" @ 3101' w/ 840sx - TOC Surf Circ	Pierce Crossing E.
									5-1/2" @ 12960' W/ 1450sx - TOC 2960' CBL	Bone Spring
OXY USA Inc.	Harroun 15	12	32117	24	330 FSL 1980 FWL-15	1/2002	5700'	5202-5272'	8-5/8" @ 582' w/ 500sx - TOC Surf Circ	Active Oil
									5-1/2" @ 5700' w/ 1800sx - TOC 3234' CBL	Cedar Canyon
										Delaware
OXY USA Inc.	Harroun 15	11	30951	25	800 FSL 1900 FEL-15	8/2000	6890'	5246-5264'	10-3/4" @ 563' w/ 545sx - TOC Surf Circ	Active Oil
									7-5/8" @ 2930' w/ 800sx - TOC Surf Circ	Cedar Canyon
									4-1/2" @ 6890' w/ 1115sx - TOC 3234' CBL	Delaware

Cedar Canyon 15 SWD #1 - 2 Mile AOR



*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.

Injection zone
Lithologic description :Devonian- Silurian – Ordovician Naturally Fractured limestone and dolomite
Porosity: 7-14%
Sw: 26%- 50%

Injection interval: 14887'- 15937'

After reviewing offset geological data, there was no existing evidence of open faults near the proposed location.
Offset wildcat well Cedar Canyon #1 (API: 30-015-20607) had a Drill Stem Test in the proposed interval which concluded that there are no producible hydrocarbons in the formation with little or no gas, too small to measure.

*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

Per our field personnel no fresh water wells or windmills were found within one mile of this well. The only wells found were brine water wells.
C00863 and 00463 have been converted to brine wells. 02713 could find no indication this well was even drilled.

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 Cedar Canyon 15 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.

Cyd Ruidiaz, Geologist

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	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 00863			ED	3	3	1	16	24S	29E	594524	3565091*	220		
C 00863 CLW199506	O		ED	3	3	1	16	24S	29E	594524	3565091*	220		
C 02713		C	ED	4	4	1	16	24S	29E	591633	3565944	230	18	212

Average Depth to Water: **18 feet**

Minimum Depth: **18 feet**

Maximum Depth: **18 feet**

Record Count: 3

PLSS Search:

Section(s): 9, 10, 11, 14, 15, 16, 21, 22, 23 **Township:** 24S **Range:** 29E

***UTM location was derived from PLSS - see Help**

MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Company: ***Nalco Company***

Well Number:	Cedar Canyon 15-1 - Delaware - Bush Canyon	Sample Temp:	70
Lease:	OXY	Date Sampled:	4/25/2013
Location:		Sampled by:	Leo Sandmann
Date Run:	5/1/2013	Employee #:	
Lab Ref #:	13-may-n69843	Analyzed by:	GR

Resistivity = 0.0424 ohm meter @ 76°F

			Mg/L	Eq. Wt.	MEq/L
		Dissolved Gases			
Hydrogen Sulfide	(H2S)		.00	16.00	.00
Carbon Dioxide	(CO2)	**NOT ANALYZED**			
Dissolved Oxygen	(O2)	**NOT ANALYZED**			
		Cations			
Calcium	(Ca++)		26,934.00	20.10	1,340.00
Magnesium	(Mg++)		3,835.68	12.20	314.40
Sodium	(Na+)		64,344.03	23.00	2,797.57
Barium	(Ba++)	**NOT ANALYZED**			
Manganese	(Mn+)		4.22	27.50	.15
Strontium	(Sr++)	**NOT ANALYZED**			
		Anions			
Hydroxyl	(OH-)		.00	17.00	.00
Carbonate	(CO3=)		.00	30.00	.00
BiCarbonate	(HCO3-)		.00	61.10	.00
Sulfate	(SO4=)		62.00	48.80	1.27
Chloride	(Cl-)		158,073.69	35.50	4,452.78
Total Iron	(Fe)		35.91	18.60	1.93
Total Dissolved Solids			253,289.53		
Total Hardness as CaCO3			83,061.29		
Conductivity MICROMHOS/CM			236,000		

pH 5.830 Specific Gravity 60/60 F. 1.176

CaSO4 Solubility @ 80 F. 6.27MEq/L, CaSO4 scale is unlikely

CaCO3 Scale Index

70.0	-2.960	100.0	-2.040	130.0	-2.040
80.0	-2.710	110.0	-2.040	140.0	-2.040
90.0	-2.040	120.0	-2.040	150.0	-2.040

MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Company: ***Nalco Company***

Well Number:	Cedar Canyon 16-1 - 1st Bone Spring	Sample Temp:	70
Lease:	OXY	Date Sampled:	4/25/2013
Location:		Sampled by:	Leo Sandmann
Date Run:	5/1/2013	Employee #:	
Lab Ref #:	13-may-n69846	Analyzed by:	GR

Resistivity = 0.0450 ohm meter @ 76°F

Dissolved Gases

			Mg/L	Eq. Wt.	MEq/L
Hydrogen Sulfide	(H2S)		.00	16.00	.00
Carbon Dioxide	(CO2)	**NOT ANALYZED**			
Dissolved Oxygen	(O2)	**NOT ANALYZED**			

Cations

Calcium	(Ca++)		2,050.20	20.10	102.00
Magnesium	(Mg++)		248.88	12.20	20.40
Sodium	(Na+)		61,774.60	23.00	2,685.85
Barium	(Ba++)	**NOT ANALYZED**			
Manganese	(Mn+)		.90	27.50	.03
Strontium	(Sr++)	**NOT ANALYZED**			

Anions

Hydroxyl	(OH-)		.00	17.00	.00
Carbonate	(CO3=)		.00	30.00	.00
BiCarbonate	(HCO3-)		537.68	61.10	8.80
Sulfate	(SO4=)		380.00	48.80	7.79
Chloride	(Cl-)		99,108.90	35.50	2,791.80
Total Iron	(Fe)		1.9	18.60	.10
Total Dissolved Solids			164,103.06		
Total Hardness as CaCO3			6,145.91		
Conductivity MICROMHOS/CM			222,000		

pH 7.120 Specific Gravity 60/60 F. 1.114

CaSO4 Solubility @ 80 F. 73.35MEq/L, CaSO4 scale is unlikely

CaCO3 Scale Index

70.0	.795	100.0	1.135	130.0	1.725
80.0	.895	110.0	1.435	140.0	1.725
90.0	1.135	120.0	1.435	150.0	2.075

Nalco Company

MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Company: ***Nalco Company***

Well Number:	Mogan Fee #1H - 2ND Bone Spring	Sample Temp:	70
Lease:	OXY	Date Sampled:	4/25/2013
Location:		Sampled by:	Leo Sandmann
Date Run:	5/1/2013	Employee #:	
Lab Ref #:	13-may-n69844	Analyzed by:	GR

Resistivity = 0.0426 ohm meter @ 76°F

			Mg/L	Eq. Wt.	MEq/L
		Dissolved Gases			
Hydrogen Sulfide	(H2S)		.00	16.00	.00
Carbon Dioxide	(CO2)	**NOT ANALYZED**			
Dissolved Oxygen	(O2)	**NOT ANALYZED**			
		Cations			
Calcium	(Ca++)		1,294.44	20.10	64.40
Magnesium	(Mg++)		1,820.24	12.20	149.20
Sodium	(Na+)		80,389.50	23.00	3,495.20
Barium	(Ba++)	**NOT ANALYZED**			
Manganese	(Mn+)		3.34	27.50	.12
Strontium	(Sr++)	**NOT ANALYZED**			
		Anions			
Hydroxyl	(OH-)		.00	17.00	.00
Carbonate	(CO3=)		.00	30.00	.00
BiCarbonate	(HCO3-)		12.22	61.10	.20
Sulfate	(SO4=)		3,500.00	48.80	71.72
Chloride	(Cl-)		129,141.90	35.50	3,637.80
Total Iron	(Fe)		14.96	18.60	.80
Total Dissolved Solids			216,176.60		
Total Hardness as CaCO3			10,699.08		
Conductivity MICROMHOS/CM			235,000		

pH 6.300 Specific Gravity 60/60 F. 1.150

CaSO4 Solubility @ 80 F. 103.18MEq/L, CaSO4 scale is unlikely

CaCO3 Scale Index

70.0	-1.408	100.0	-.938	130.0	-.008
80.0	-1.288	110.0	-.588	140.0	-.008
90.0	-.938	120.0	-.588	150.0	.522

WATER SAMPLES

Delaware Brushy Canyon water

General Information About: Sample 5891			
BCR FEDERAL			
API	3001526891	Sample Number	
Unit/Section/ Township/Range	A / 03 / 23S / 28E	Field	LOVING EAST
County	Eddy	Formation	BRUSH CYN
State	NM	Depth	
Lat/Long	32.34019 , -104.06699	Sample Source	
TDS (mg/L)	228167	Water Type	
Sample Date (MM/DD/YYYY)	11/9/1999 12:00:00 AM	Analysis Date (MM/DD/YYYY)	11/10/1999 12:00:00 AM
Remarks/Description			
Cation Information (mg/L)		**Anion Information (mg/L)**	
Potassium (K)		Sulfate (SO)	149.375
Sodium (Na)	81631.6	Chloride (Cl)	167300
Calcium (Ca)	23469.8	Carbonate (CO_3)	
Magnesium (Mg)		Bicarbonate (HCO_3)	72.895
Barium (Ba)		Hydroxide (OH)	
Manganese (Mn)		Hydrogen Sulfide (H_2S)	0
Strontium (Sr)		Carbon Dioxide (CO_2)	
Iron (Fe)	35.85	Oxygen (O)	

Bone Spring Water

General Information About: Sample 6747			
CORRAL DRAW AQH FEDERAL			
API	3001529396	Sample Number	
Unit/Section/ Township/Range	L / 13 / 24S / 29E	Field	LIVINGSTON RIDGE
County	Eddy	Formation	B SPG
State	NM	Depth	
Lat/Long	32.21635 , -103.94508	Sample Source	
TDS (mg/L)		Water Type	
Sample Date (MM/DD/YYYY)	12/27/2000 12:00:00 AM	Analysis Date (MM/DD/YYYY)	
Remarks/Description			
Cation Information (mg/L)		**Anion Information (mg/L)**	
Potassium (K)		Sulfate (SO)	190
Sodium (Na)		Chloride (Cl)	164963
Calcium (Ca)	25552	Carbonate (CO_3)	
Magnesium (Mg)	4471	Bicarbonate (HCO_3)	73
Barium (Ba)	0	Hydroxide (OH)	
Manganese (Mn)		Hydrogen Sulfide (H_2S)	0
Strontium (Sr)		Carbon Dioxide (CO_2)	
Iron (Fe)	175	Oxygen (O)	

C-108 Service List
OXY USA Inc
Cedar Canyon 15 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

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

Surface Owner

John Drapper Brantley Jr.
706 W. Riverside Dr.
Carlsbad, NM 88220

Henry McDonald
P.O. Box 597
Loving, NM 88256

Offset Operators within 1/2 mile

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

Potash Lessee(s) within 1 mile

None

Copies of this application were mailed to the following individuals, companies and organiztions on or before 11/10/14.

David Stewart
OXY USA Inc.

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
Cedar Canyon 15 SWD #1
2500 FSL 1400 FWL NESW(K) Sec 15 T24S R29E
Eddy County, NM

Formation:
Silurian-Devonian
14887-15937'
Maximum Injection Rate – 20000 BWPD
Maximum Injection Pressure – 2975 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.

11/10/14
FYI, I have been waiting 2 weeks for the publication and affidavit. When I receive them from the Carlsbad Current Argus, I will send a copy. See attached for correspondance.

Thanks,
David Stewart
OXY Permian.

From: Stewart, David
Sent: Monday, November 10, 2014 11:26 AM
To: 'Amanda Garcia'
Subject: RE: OXY USA Inc. - Cedar Canyon 15 SWD #1 - Legal Notice

Amanda, I didn't receive the copy of the publication and notification in the mail today. Is there a problem I need to know about. I should have submitted the injection permit two weeks ago but can't until I receive the publication and affidavit. I would appreciate any and all help.

Thanks, David S.
Wk - 432-685-5717
Cell - 432-634-5688
Fax - 432-685-5742

From: Stewart, David
Sent: Friday, November 07, 2014 4:24 PM
To: Amanda Garcia
Subject: RE: OXY USA Inc. - Cedar Canyon 15 SWD #1 - Legal Notice

Thank You, I would really appreciate it.

From: Amanda Garcia [mailto:agarcia@currentargus.com]
Sent: Friday, November 07, 2014 4:22 PM
To: Stewart, David
Subject: Re: OXY USA Inc. - Cedar Canyon 15 SWD #1 - Legal Notice

I will get it sent to you asap.

On Fri, Nov 7, 2014 at 12:46 PM, <David_Stewart@oxy.com> wrote:

Amanda, is there any way you could scan and send me a copy of the publication and affidavit for this well, I didn't receive it in the mail today. I really appreciate all the help.

Thanks, David S.
Wk - 432-685-5717
Cell - 432-634-5688
Fax - 432-685-5742

From: Stewart, David
Sent: Tuesday, November 04, 2014 1:50 PM
To: Amanda Garcia
Subject: RE: OXY USA Inc. - Cedar Canyon 15 SWD #1 - Legal Notice

Thank You, I really appreciate it.

From: Amanda Garcia [mailto:agarcia@currentargus.com]
Sent: Tuesday, November 04, 2014 1:48 PM
To: Stewart, David
Subject: Re: OXY USA Inc. - Cedar Canyon 15 SWD #1 - Legal Notice

David,

I'm so sorry they will be mailed out by tomorrow. Please ignore the previous messgae.

On Tue, Nov 4, 2014 at 12:34 PM, <David_Stewart@oxy.com> wrote:

Amanda , sorry to bother you, but can you give me some idea when I might receive the notice and affidavit, this is all I am waiting on to file the permit. If it is possible, could you scan and send me a copy.

I really do appreciate the help.

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: Stewart, David
Sent: Thursday, October 30, 2014 3:36 PM
To: Amanda Garcia
Subject: RE: OXY USA Inc. - Cedar Canyon 15 SWD #1 - Legal Notice

I appreciate the reply and help and as soon as I receive it, I can file this permit.

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: agarcia@currentargus.com [mailto:agarcia@currentargus.com] **On Behalf Of** Kathy McCarroll
Sent: Thursday, October 30, 2014 3:21 PM
To: Stewart, David
Subject: Re: OXY USA Inc. - Cedar Canyon 15 SWD #1 - Legal Notice

David,

I'm sorry david Kathy no longer works I took over her position. I just got into her e-mail. i will send you the affidavit as soon as possible

Kathy McCarroll
Customer Service Supervisor
Carlsbad Current-Argus
620 S Main St
Carlsbad, NM 88210
Office: (575) 628-5522
Fax: 575-628-5553
www.currentargus.com

On Tue, Oct 28, 2014 at 10:38 AM, <David_Stewart@oxy.com> wrote:

Kathy have you had a chance to send a copy of the publication and affidavit for this notice. I appreciate the help.

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: Kathy McCarroll [mailto:kmccarroll@currentargus.com]
Sent: Wednesday, October 15, 2014 12:38 PM
To: Stewart, David
Subject: Re: OXY USA Inc. - Cedar Canyon 15 SWD #1 - Legal Notice

The cost will be $57.41 to run once.

Thanks

Kathy McCarroll
Customer Service Supervisor
Carlsbad Current-Argus
620 S Main St
Carlsbad, NM 88210
Office: (575) 628-5522
Fax: 575-628-5553
www.currentargus.com

On Tue, Oct 14, 2014 at 7:41 AM, <David_Stewart@oxy.com> wrote:

Kathy, when you get a chance please publish the attached legal notice one time on the Cedar Canyon 15 SWD #1. When you have the charges, let me know and I will pay with a credit card. If you have any questions or need any additional information, please let me know. I appreciate your help.

Thanks,
David Stewart
Sr. Regulatory Advisor
OXY Permian
P.O. Box 50250
Midland, TX 79710
Wk-432-685-5717
Cell-432-634-5688
Fax-432-685-5742
david_stewart@oxy.com

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.
Carlsbad, NM
88220

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

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

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 2093

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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:

John Dupper Brantley, JR.
706 W. Riverside
Carlsbad, NM
88220

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

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

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 2116

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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:

Henry McDonald
P.O. Box 597
Loving, NM
88256

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

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

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 2123

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☑ Agent
☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

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

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 2079

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☑ Agent
☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

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

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 2086

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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:

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

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☑ Agent
☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

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

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 2109

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 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-101
August 1, 2011

Permit 194440

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

1. Operator Name and Address	2. OGRID Number
OXY USA INC PO Box 4294 Houston, TX 77210	16696
	3. API Number

4. Property Code	5. Property Name	6. Well No.
	Cedar Canyon 15 SWD	001

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
K	15	24S	29E		2500	S	1400	W	EDDY

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
K	15	24S	29E	K	2500	S	1400	W	Eddy

9. Pool Information

SWD Silurian-Devonian	0

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	S	R	Private	2928
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	15937	Siluro-Devonian		12/19/2014
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	26	20	94	370	1000	0
Int1	17.5	13.375	61	3100	2870	0
Prod	12.25	9.625	53.5	10165	1150	2100
Liner1	8.5	7	29	14887	800	9865

Casing/Cement Program: Additional Comments

Proposed Mud Program: 0-370' Fresh Water/Spud Mud - 370-3100' Brine - 3100-10165' Cut Brine/Salt Gel-Starch - 10165-14887' Brine/Polymer Gel - 14887-15937' Cut Brine/Sweeps. BOP Program: Intermediate 370-3100' 21-1/4" 2M annular preventer 5M choke manifold - Intermediate/Production 3100-TD 13-5/8" 10M three ram stack, 5M annular, 5M choke manifold. A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins. Disposal of liquids, drilling fluids and cuttings will be disposed of at an approved facility. Additional information will be sent with the H2S Plan.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	2000	2000	
Double Ram	10000	10000	
Annular	5000	5000	

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 ☑ and/or 19.15.14.9 (B) NMAC ☐ if applicable.** Signature: David Stewart	**OIL CONSERVATION DIVISION**
Printed Name: David Stewart	Approved By:
Title: Sr. Regulatory Advisor	Title:
Email Address: david_stewart@oxy.com	Approved Date: / Expiration Date:
Date: 11/10/14 Phone: 432-685-5717	Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
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	Pool Code	Pool Name
30-015-		SWD-Silurian-Devonian

Property Code	Property Name	Well Number
	CEDAR CANYON "15" SWD	1

OGRID No.	Operator Name	Elevation
16696	OXY USA INC.	2927.8'

Surface Location

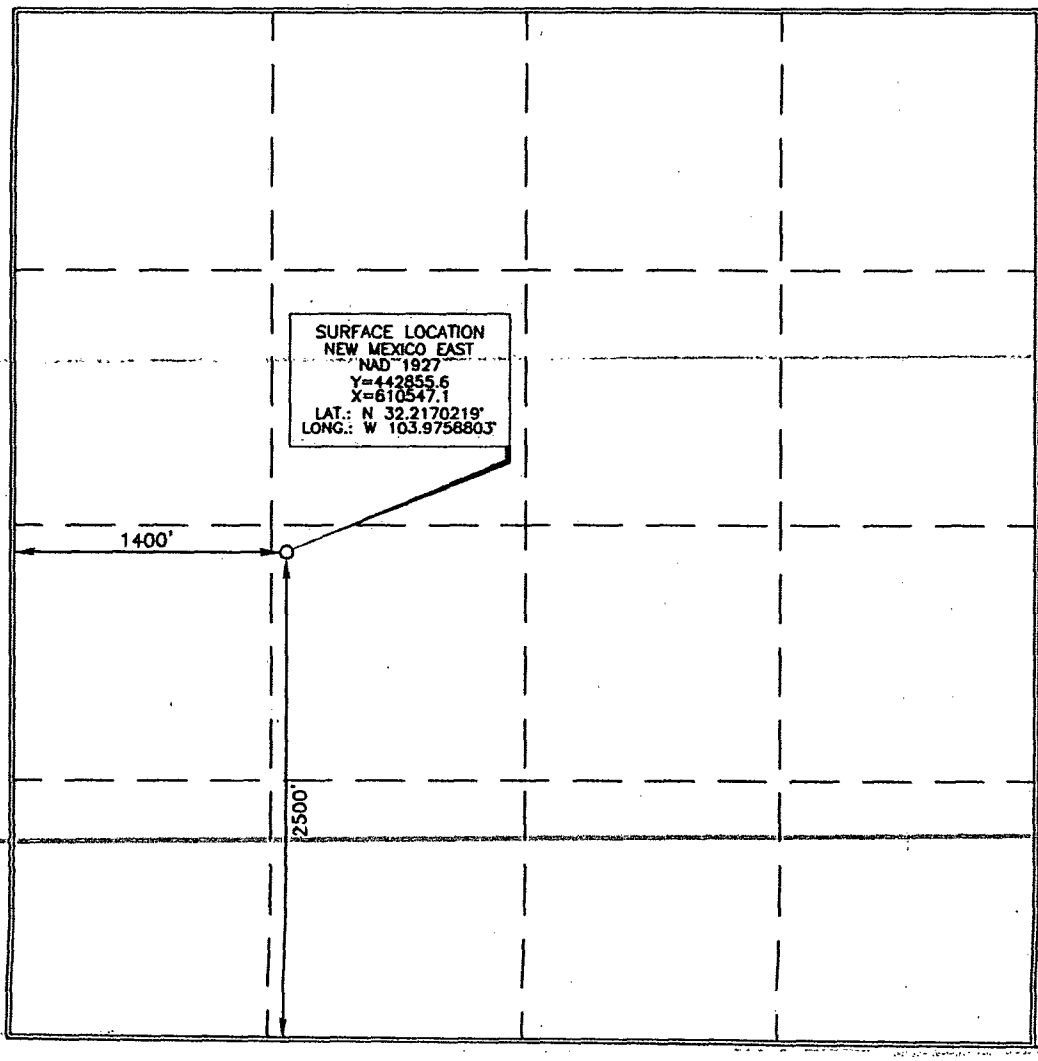
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	15	24 SOUTH	29 EAST, N.M.P.M.		2500'	SOUTH	1400'	WEST	EDDY

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	Joint or Infill	Consolidation Code	Order No.
N/A			

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.



OPERATOR CERTIFICATION

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.

Signature — Date: 11/14/14

David Stewart Sr. Reg. Adv.
Printed Name

david_stewart@oxy.com
E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location 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.

DECEMBER 2, 2013
Date of Survey

Signature and Seal of Professional Surveyor:

GERRY JASEK — NEW MEXICO — 15079 — PROFESSIONAL LAND SURVEYOR

Certificate Number 15079

12/19/2013

WO# 131202WL-d (KA)

Operator Name/Number: OXY USA Inc. 16696
Lease Name/Number: Cedar Canyon 15 SWD #1
Pool Name/Number: SWD Devonian
Surface Location: 2500 FSL 1400 FWL K Sec 15 T24S R29E

C-102 Plats: 12/2/13 12/19/13 9/10/14 **Elevation:** 2927.8' GL **Objective:** Devonian

Proposed TD: 15937' TVD

SL - Lat: 32.2170219 **Long:** 103.9758803 **X=**610547.1 **Y=**442855.6 **NAD - 1927**

Casing Program:

Hole Size	Interval	OD Csg	Weight	Collar	Grade	Condition	Collapse Design Factor	Burst Design Factor	Tension Design Factor
26"	0-370'	20"	94	LTC	J55	New	4.69	9.07	6.15
				Hole filled with 8.5# Mud			520#	2110#	
17-1/2"	0-3100'	13-3/8"	61	BTC	J55	New	1.13	1.36	3.69
				Hole filled with 10.2# Mud			1540#	3090#	
12-1/4"	0-10165'	9-5/8"	53.5	BTC	P110	New	1.66	1.01	3.03
				Hole filled with 9.6# Mud			7930#	10900#	
8-1/2"	9865-14887'	7"	29	P110	BTC	New	2.05	1.42	4.3
				Hole filled with 13.5# Mud			8510#	11220#	

Collapse and burst loads calculated using Stress Check with anticipated loads

Cement Program:

a. 20" Surface Circulate cement to surface w/ 1000sx PPC cmt w/ 1% CaCl2 + .125#/sx Poly-E-Flake, 14.8ppg 1.34 yield 1346# 24hr CS 125% Excess

b. 13-3/8" Intermediate Circulate cement to surface w/ 2130sx HES Light PPC cmt w/ 5% salt + .25% HR-800, 12.9ppg 1.69 yield 853# 24hr CS 125% Excess followed by 740sx PPC cmt, 14.8ppg 1.33 yield 1789# 24hr CS 125% Excess

c. 9-5/8" Production Cement w/ 870sx Tuned Light Cement w/ 1#/sx Cal-Seal 60 + 1.5#/sx salt + .2#/sx FWCA + .3#/sx CFR-3 + .8% HR-601 + 3#/sx Kol-Seal + .35#/sx Halad-9 + .125 Poly-E-Flake, 9.8ppg 3.45 yield, 551# 24hr CS 80% excess followed by 280sx Super H cmt w/ 3#/sx salt + .4% CFR-3 + .5% HR-344 + .2% HR-800, 13.2ppg 1.63 yield 1162# 24hr CS 40% excess Calc TOC-2100'

d. 7" Liner Cement w/ 800sx Halcem H w/ .5% Gas Stop + .45% HR-322 + .25#/sx D-Air 5000 + .15% HR-601, 15.6ppg 1.2 yield 1415# 24hr 45% Excess, Calc TOC-9765'

Description of Cement Additives: Calcium Chloride, Salt, Cal_seal 60 (Accelerator); CFR-3 (Dispersant); D Air 5000 (Defoamer); FWCA (Free Water Additive); GasStop; Kol-Seal, Poly-E-Flake (Lost Circulation Additive); Gas-Stop, Halad-9, HR-322, HR-344 (Low Fluid Loss Control); HR-601, HR-800 (Retarder)

The above cement volumes could be revised pending the caliper measurement.

Proposed Mud Circulation System:

Depth	Mud Wt. ppg	Visc sec	Fluid Loss	Type System
0 - 370'	8.4-8.6	32-34	NC	Fresh Water/Spud Mud
370 - 3100'	9.8-10.0	28-29	NC	Brine
3100 - 10165'	9.2-9.6	28-29	NC	Cut Brine/Salt Gel-Starch
10165 - 14887'	13.0-13.5	38-40	<10cc	Brine/Polymer Gel
14887 - 15937'	9.2-9.5	28-29	NC	Cut Brine/Sweeps

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. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

BOP Program:

Surface None
Intermediate 370-3100' 21-1/4" 2M annular preventer, 5M Choke Manifold
Intermediate/Production 13-5/8" 10M three ram stack w/ 5M annular preventer, 5M Choke Manifold

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

Geological Marker	Depth	Type
a. Rustler	345'	Formation
b. Top Salt	581'	Formation
c. B. Anhydrite	2770'	Formation
d. Delaware/Lamar	2970'	Oil/Gas
e. Bell Canyon	2990'	Oil/Gas
f. Cherry Canyon	3680'	Oil/Gas
g. Brushy Canyon	5060'	Oil/Gas
h. Bone Spring	6660'	Oil/Gas
i. 2nd Bone Spring	7927'	Oil/Gas
j. 3rd Bone Spring	8794'	Oil/Gas
k. Wolfcamp	10015'	Oil/Gas
l. Strawn	12130'	Oil/Gas
m. Atoka	12363'	Oil/Gas
n. Morrow	12959'	Oil/Gas
o. Miss. Lime	14500'	Oil/Gas
p. Woodford	14790'	Oil/Gas
q. Devonian	14887'	Oil/Gas
r. Silurian	14907'	Oil/Gas

Fresh water may be present above the Rustler formation. Surface casing will be set below the top of the Rustler, which will cover potential fresh water sources.

A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins. Disposal of liquids, drilling fluids and cuttings will be disposed of at an approved facility.

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Have questions? We're here to help.

Tracking Number: 70113500000249882079

NMOCD-Artesia

Product & Tracking Information

Postal Product:

Features:
Certified Mail™

DATE & TIME	STATUS OF ITEM	LOCATION
November 14, 2014, 10:53 am	Delivered	ARTESIA, NM 88210

Your item was delivered at 10:53 am on November 14, 2014 in ARTESIA, NM 88210.

Available Actions

Text Updates

Email Updates

Return Receipt After Mailing

Tracking Number: 70113500000249882086

NMOCD - Santa Fe

Product & Tracking Information

Postal Product:

Features:
Certified Mail™

DATE & TIME	STATUS OF ITEM	LOCATION
November 17, 2014, 1:57 pm	Delivered	SANTA FE, NM 87505

Your item was delivered at 1:57 pm on November 17, 2014 in SANTA FE, NM 87505.

Available Actions

Text Updates

Email Updates

Return Receipt After Mailing

Tracking Number: 70113500000249882093

BLM - Carlsbad

Updated Delivery Day: Friday, November 14, 2014

Product & Tracking Information

Postal Product:

Features:
Certified Mail™

DATE & TIME	STATUS OF ITEM	LOCATION
November 14, 2014, 1:37 pm	Delivered	CARLSBAD, NM 88220

Your item was delivered at 1:37 pm on November 14, 2014 in CARLSBAD, NM 88220.

Available Actions

Text Updates

Email Updates

Return Receipt After Mailing

Tracking Number: 70113500000249882109

SLO - Santa Fe

Updated Delivery Day: Monday, November 17, 2014

Product & Tracking Information

Postal Product:

Features:
Certified Mail™

DATE & TIME	STATUS OF ITEM	LOCATION
November 17, 2014, 7:53 am	Delivered	SANTA FE, NM 87504

Your item was delivered at 7:53 am on November 17, 2014 in SANTA FE, NM 87504.

Available Actions

Text Updates

Email Updates

Return Receipt After Mailing

Tracking Number: 70113500000249882116

JD Brantley

Updated Delivery Day: Friday, November 14, 2014

Product & Tracking Information

Postal Product:

Features:
Certified Mail™

DATE & TIME	STATUS OF ITEM	LOCATION
November 19, 2014, 11:28 am	Delivered	CARLSBAD, NM 88220

Your item was delivered at 11:28 am on November 19, 2014 in CARLSBAD, NM 88220.

Available Actions

Text Updates

Email Updates

Return Receipt After Mailing

Tracking Number: 70113500000249882123

H. McDonald

Updated Delivery Day: Friday, November 14, 2014

Product & Tracking Information

Postal Product:

Features:
Certified Mail™

DATE & TIME	STATUS OF ITEM	LOCATION
November 17, 2014, 2:01 pm	Delivered	LOVING, NM 88256

Your item was delivered at 2:01 pm on November 17, 2014 in LOVING, NM 88256.

Available Actions

Text Updates

Email Updates

Return Receipt After Mailing

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

Amanda Garcia, 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:

October 17 2014

That the cost of publication is $57.41 and that payment thereof has been made and will be assessed as court costs.

Amanda

Subscribed and sworn to before me this 22 day of October, 2014

Cynthia Arredondo

My commission Expires 2/13/17

Notary Public

OFFICIAL SEAL
Cynthia Arredondo
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 2/13/17

October 17, 2014

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
Cedar Canyon 15 SWD #1
2500 FSL 1400 FWL NESW(K) Sec 15 T24S R29E
Eddy County, NM

Formation:
Silurian-Devonian 14887-15937'
Maximum Injection Rate - 20000 BWPD.
Maximum Injection Pressure - 2975 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 Review Checklist: Received 11/18/2014 Add. Request: 12/2 - 5.9 issue Reply Date: ____ Suspended: ____ [Ver 15]

ORDER TYPE: WFX / PMX / SWD Number: 1510 Order Date: 12/11/14 Legacy Permits/Orders: None

Well No. 1 Well Name(s): Cedar Canyon 15 SWD

API: 30-015-42797 Spud Date: TBD / Dec-14 - requested accelerated review for rig New or Old: New (UIC Class II Primacy 03/07/1982)

Footages 2500 FSL / 1400 FWL Lot — or Unit K Sec 15 Tsp 24S Rge 29E County Eddy

General Location: 45mi east of Malaga / north of Pecos R. Pool: SWD; Devonian-Silurian Pool No.: 97869

BLM 100K Map: Jal Operator: OXY USA, Inc. OGRID: 16696 Contact: David Stewart

COMPLIANCE RULE 5.9: Total Wells: 1865 Inactive: 1865/13 on Dec-2 - notified OXY of inactive / non-compliance Fincl Assur: Yes Compl. Order? No **IS 5.9 OK?** Yes Date: 12/11/14

WELL FILE REVIEWED ✓ Current Status: APD submitted and approved

WELL DIAGRAMS: NEW: Proposed ✓ or **RE-ENTER:** Before Conv. ○ After Conv. ○ Logs in Imaging: TBD

Planned Rehab Work to Well: None

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned ✓ or Existing — Surface	26 / 20	0 to 370		1000	Circulate to surf.
Planned ✓ or Existing — Interm / Prod	17½ / 13⅜	0 to 3100	No	2870	Circulate to surf.
Planned ✓ or Existing — Interm / Prod	12¼ / 9⅝	0 to 10165	No	1150	Calc 3 No CBL
Planned ✓ or Existing — Prod / Liner	8½ / 7	9865 to	No	800	Calc 3
Planned — or Existing — Liner	—	—	—	—	
Planned ✓ or Existing — OH / PERF	— / 16½	14887 to 15937	Inj Length 1050		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.		Morrow / Prodrver	12959
Confining Unit: Litho. Struc. Por.	∅	Mississippian	14500
Proposed Inj Interval TOP:	14887	Devonian	14887
Proposed Inj Interval BOTTOM:	15937	Silurian	14707
Confining Unit: Litho. Struc. Por.	?	Ordovician / Simpson	
Adjacent Unit: Litho. Struc. Por.		GW / pe	

Completion/Operation Details:

Drilled TD 15937 PBTD NA

NEW TD — NEW PBTD —

NEW Open Hole ✓ or NEW Perfs ○

Tubing Size 4½ in. Inter Coated? Yes

Proposed Packer Depth 14837 ft

Min. Packer Depth 14787 (100-ft limit)

Proposed Max. Surface Press. 2975 psi

Admin. Inj. Press. 2977 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P No Noticed? NA BLM Sec Ord No WIPP No Noticed? NA Salt/Salado T: 581' B: 2770 **NW:** Cliff House fm NA

FRESH WATER: Aquifer Shallow alluvial / Pecos River Max Depth ~ 250 **HYDRO AFFIRM STATEMENT By Qualified Person** ✓

NMOSE Basin: Carlsbad **CAPITAN REEF:** thru ○ adj ○ NA ✓ **No. Wells within 1-Mile Radius?** ∅ Lone USGS observation well at 5100 FW Analysis NA

Disposal Fluid: Formation Source(s) Bone Spring / Brushy / All oxy wells Analysis? Yes On Lease ○ Operator Only ✓ or Commercial ○

Disposal Int: Inject Rate (Avg/Max BWPD): 10000 / 20000 Protectable Waters? Low pres Source: - Request calc. System: Closed ✓ or Open ○

HC Potential: Producing Interval? No Formerly Producing? No Method: Logs/DST/P&A/Other Undetermined 2-Mile Radius Pool Map ○

AOR Wells: 1/2-M Radius Map? Yes Well List? Yes Total No. Wells Penetrating Interval: ∅ Horizontals? ∅

Penetrating Wells: No. Active Wells ∅ Num Repairs? — on which well(s)? NA Diagrams? NA

Penetrating Wells: No. P&A Wells ∅ Num Repairs? — on which well(s)? NA Diagrams? NA

NOTICE: Newspaper Date 10/17/14 Mineral Owner Fee Surface Owner Brantley / McDonald N. Date 11/10/14

RULE 26.7(A): Identified Tracts? Yes Affected Persons: OXY - [BLM & SLO sent copies of C-108] N. Date 11/10/14

Order Conditions: Issues: Formation info - new drill; formation water quality; HC potential; formation limits

Add Order Cond: Mudlog; salinity calculation; no Ellenburger; CBL's for 7" & 9⅝ casing; injection survey take cement for 9⅝ to surface.