

**Goetze, Phillip, EMNRD**

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**From:** David\_Stewart@oxy.com  
**Sent:** Wednesday, July 13, 2016 12:16 PM  
**To:** Goetze, Phillip, EMNRD  
**Cc:** Jones, William V, EMNRD; Inge, Richard, EMNRD  
**Subject:** OXY USA Inc. - Cedar Canyon 15 SWD #1 - SWD-1510 - API No. 30-015-42797  
**Attachments:** SWD1510-CedarCanyon15SWD1.pdf; CedarCanyon15SWD1-SNTbgChg-Denied.pdf

Mr. Goetze, good afternoon. OXY is proposing to change the 4-1/2" tbg string on the Cedar Canyon 15 SWD #1, API No. 30-015-42797 that was approved in the SWD-1510 injection permit and replace it with a split 4-1/2" & 5-1/2" tbg string, please see attached for the filed sundry notice for the details. I am needing to find out what we need to do to amend the SWD permit. If you need any additional information, please let me know. I appreciate the help.

Thanks,  
David Stewart  
Sr. Regulatory Advisor  
OXY Permian  
Wk-432-685-5717  
Cell-432-634-5688  
david\_stewart@oxy.com

Submit 1 Copy To Appropriate District Office  
District I - (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II - (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV - (505) 476-3460  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Revised July 18, 2013

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

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-42797
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <u>SWD</u>		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
2. Name of Operator OXY USA Inc.		6. State Oil & Gas Lease No.
3. Address of Operator P.O. Box 50250 Midland, TX 79710		7. Lease Name or Unit Agreement Name <u>Cedar Canyon 15 SWD</u>
4. Well Location Unit Letter <u>K</u> : <u>2500</u> feet from the <u>South</u> line and <u>1400</u> feet from the <u>West</u> line Section <u>15</u> Township <u>24S</u> Range <u>29E</u> NMPM County <u>Eddy</u>		8. Well Number <u>1</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <u>2920'</u>		9. OGRID Number 16696
		10. Pool name or Wildcat <u>SWD Devonian-Silurian</u>

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

NOTICE OF INTENTION TO:  
PERFORM REMEDIAL WORK ☒ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
DOWNHOLE COMMINGLE ☐  
CLOSED-LOOP SYSTEM ☐  
OTHER: ☐

SUBSEQUENT REPORT OF:  
REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐  
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

**DENIED**

TUBING SIZE SPECIFIED IN SWD ORDER. YOU MUST

SUBMIT A CHANGE TO THE SWD ORDER TO  
ALLOW FOR INCREASED TUBING SIZE.

CONTACT ENGINEERING BUREAU  
IN SANTA FE.

NM OIL CONSERVATION  
ARTESIA DISTRICT

JUN 30 2016

RECEIVED

RE 7/12/16

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

TITLE Sr. Regulatory Advisor

DATE 6/25/16

Type or print name David Stewart

E-mail address: david.stewart@oxy.com

PHONE: 432-685-5717

For State Use Only

APPROVED BY:

TITLE

DATE

Conditions of Approval

Attachment C-103  
 OXY USA Inc  
 Cedar Canyon 15 SWD #1  
 API No. 30-015-42797

TD - 16014' PB - 15964' OH - 14842-15964' Pkr-14781'

OXY respectfully requests to change the injection tubing string as follows:

- a. Stop injection operations
- b. Pull existing 4-1/2" 11.6# L-80 tubing out of the hole
- c. Run new tubing string of 5-1/2" 20# L-80 BTC to 9655' (100' above top of 7" liner) X/O to 4-1/2" 15.1# L-80 BTC to 14,781'. Both tubing strings will be lined internally with Duoline anti-corrosion lining
- d. OXY will notify NMOCD 24hrs prior to running MIT

#### TUBING PROGRAM (ALL NEW)

5-1/2" 20# L-80 BTC Tubing ran inside existing 9-5/8" 53# L-80 BTC Casing

Interval (ft)	Length	Wt (ppf)	Grade	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0 - 9655'	9655'	20	L-80	BTC	8,830	9,190	466	4.778	4.653	1.5	1.36	1.38

4-1/2" 15.1# L-80 BTC Tubing inside 7" 32# HCP-110 BTC Liner

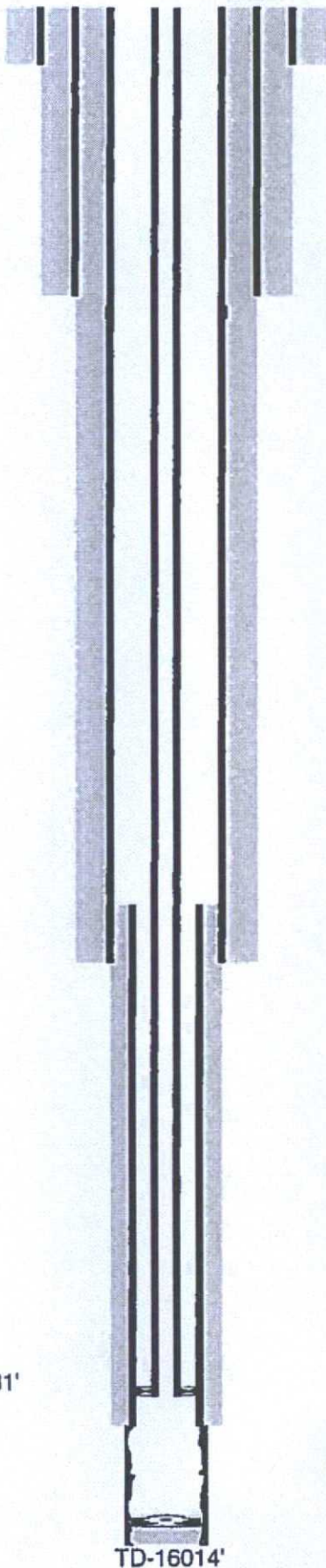
Interval (ft)	Length	Wt (ppf)	Grade	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
9655-14781'	5126'	15.1	L-80	BTC	11090	10480	353	3.826	3.701	1.28	3.38	2.06

Collapse and burst loads calculated using Stress Check with actual anticipated loads.

#### COMPANY PERSONNEL:

<u>Name</u>	<u>Title</u>	<u>Office Phone</u>	<u>Mobile Phone</u>
Ricardo Vitoria	Drilling Engineer	(713)366-5063	(832) 925-9269
Sebastian Millan	Production Operations Lead	(713)350-4950	(832) 528-3268
Chan Tysor	Reservoir Engineer	(713)513-6668	(713) 985-6343

OXY USA Inc.  
CedarCanyon 15 SWD #1  
API No. 30-015-42797



5-1/2" & 4-1/2" Duo-Line tbg & AS pkr @ 14781'

State of New Mexico  
Energy, Minerals and Natural Resources Department

Susana Martinez  
Governor

David Martin  
Cabinet Secretary

Brett F. Woods, Ph.D.  
Deputy Cabinet Secretary

Jami Bailey, Division Director  
Oil Conservation Division



Administrative Order SWD-1510  
December 11, 2014

**ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8B, NMAC, OXY USA, Incorporated (the "operator") seeks an administrative order for its proposed Cedar Canyon 15 SWD Well No. 1 with a location of 2500 feet from the South line and 1400 feet from the West line, Unit letter K of Section 15, Township 24 South, Range 29 East, NMPM, Eddy County, New Mexico, for produced water disposal purposes.

**THE DIVISION DIRECTOR FINDS THAT:**

The application has been duly filed under the provisions of Division Rule 19.15.26.8B, NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Rule 19.15.5.9 NMAC.

**IT IS THEREFORE ORDERED THAT:**

The applicant, OXY USA, Incorporated (OGRID 16696), is hereby authorized to utilize its Cedar Canyon 15 SWD Well No. 1 (API 30-015-42797) with a location of 2500 feet from the South line and 1400 feet from the West line, Unit letter K of Section 15, Township 24 South, Range 29 East, NMPM, Eddy County, for disposal of oil field produced water (UIC Class II only) through open hole into an interval consisting of the Devonian and Silurian formations from approximately 14887 feet to approximately 15937 feet. *If the upper contact of the Ordovician Ellenburger formation is encountered prior to the lower limit of the approved injection interval at 15937 feet, then the total depth of the well (and injection interval) shall be reduced to the depth of the upper contact of the Ellenburger formation.* Injection will occur through internally-coated, 4 1/2-inch or smaller tubing and a packer set within 100 feet of the top of the open-hole interval.

**IT IS FURTHER ORDERED THAT:**

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the well construction proposed and described in the application.

*The operator shall circulate the cement for the 9 5/8-inch casing string to surface.*

*The operator shall supply the Division with a copy of a mudlog over the permitted disposal interval and an estimated insitu water salinity based on open-hole logs. If significant hydrocarbon shows occur while drilling, the operator shall notify Division's District II and the operator shall be required to receive written permission prior to commencing injection.*

*The operator shall run cement bond log (or equivalent) showing final depth for the top of cement of the 7-inch casing.*

*The operator shall also provide a summary of depths (picks) for formation tops in the injection interval to the Division's District II office prior to commencing disposal. If the final determination of formation tops (based on geophysical logs) does not correlate to the approved disposal interval, then the operator shall apply to amend the Order for a corrected description.*

*The operator shall run an injection survey (tracer/temperature or equivalent) of the entire injection interval within two (2) years after commencing disposal into this well. The operator shall supply both the Division's District II office and Santa Fe Bureau office with a copy of the survey log.*

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 2977 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's District II office of the date and time of the installation of disposal equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's District office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's District II office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection permit after notice and hearing if the operator is in violation of Rule 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.

  
for JAMI BAILEY  
Director

JB/prg

cc: Oil Conservation Division – Artesia District Office

## Goetze, Phillip, EMNRD

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**From:** Goetze, Phillip, EMNRD  
**Sent:** Wednesday, August 03, 2016 4:17 PM  
**To:** Inge, Richard, EMNRD  
**Cc:** Bayliss, Randolph, EMNRD  
**Subject:** RE: OXY USA Inc. - Cedar Canyon 15 SWD #1 - SWD-1510 - API No. 30-015-42797

Richard:

I am recommending that the increase in tubing to utilize the 5 ½-inch tubing be approved with two conditions:

1. The 5 ½ inch tubing can only be used in 9 5/8-inch casing and that the reduction to the 4 ½-inch occur within the 9 5/8-inch casing prior to the top of the 7-inch liner and
2. Any SRT and resulting IPI order will be specific to the tubing set in place in the well at the time of test and for the period that that the same configuration is used for injection.

You can also state that Santa Fe will amend the order to show the tubing size change and the restrictions for use the tubing set. Since there is no current IPI for the well, there is no need to void an existing pressure increase. Is this OK with you? Thanks. PRG

Phillip R. Goetze, PG  
Engineering Bureau  
Oil Conservation Division  
New Mexico Energy, Minerals and Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, NM 87505  
Direct: 505.476.3466  
E-mail: [phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)



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**From:** David\_Stewart@oxy.com [mailto:David\_Stewart@oxy.com]  
**Sent:** Wednesday, August 03, 2016 1:49 PM  
**To:** Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>  
**Cc:** Inge, Richard, EMNRD <richard.inge@state.nm.us>  
**Subject:** FW: OXY USA Inc. - Cedar Canyon 15 SWD #1 - SWD-1510 - API No. 30-015-42797

Mr. Goetze, per our phone conversation, please see attached for a copy of the C-103 with attachments on changing the tubing string on the Cedar Canyon SWD #1, API No. 30-015-42797 from a 4-1/2" to a split 4-1/2' & 5-1/2" string. If you need any additional information, please let me know and I appreciate the help.

Thanks,  
David Stewart  
Sr. Regulatory Advisor  
OXY Permian  
Wk-432-685-5717



Cell-432-634-5688  
[david\\_stewart@oxy.com](mailto:david_stewart@oxy.com)

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**From:** Stewart, David R  
**Sent:** Wednesday, July 27, 2016 4:17 PM  
**To:** Goetze, Phillip <[Phillip.Goetze@state.nm.us](mailto:Phillip.Goetze@state.nm.us)>  
**Cc:** Jones, William <[WilliamV.Jones@state.nm.us](mailto:WilliamV.Jones@state.nm.us)>; Inge, Richard <[richard.inge@state.nm.us](mailto:richard.inge@state.nm.us)>  
**Subject:** RE: OXY USA Inc. - Cedar Canyon 15 SWD #1 - SWD-1510 - API No. 30-015-42797

Mr. Goetze, Good afternoon, I was needing to check and see if you have had any time to look at OXY's request to change the 4-1/2" tbg string that was listed in the permit to a split 4-1/2" & 5-1/2" tbg string.

I really appreciate the help and if you need any additional information, please let me know.

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

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**From:** Stewart, David R  
**Sent:** Wednesday, July 13, 2016 1:16 PM  
**To:** Goetze, Phillip <[Phillip.Goetze@state.nm.us](mailto:Phillip.Goetze@state.nm.us)>  
**Cc:** Jones, William <[WilliamV.Jones@state.nm.us](mailto:WilliamV.Jones@state.nm.us)>; Inge, Richard <[richard.inge@state.nm.us](mailto:richard.inge@state.nm.us)>  
**Subject:** OXY USA Inc. - Cedar Canyon 15 SWD #1 - SWD-1510 - API No. 30-015-42797

Mr. Goetze, good afternoon. OXY is proposing to change the 4-1/2" tbg string on the Cedar Canyon 15 SWD #1, API No. 30-015-42797 that was approved in the SWD-1510 injection permit and replace it with a split 4-1/2" & 5-1/2" tbg string, please see attached for the filed sundry notice for the details. I am needing to find out what we need to do to amend the SWD permit. If you need any additional information, please let me know. I appreciate the help.

Thanks,  
David Stewart  
Sr. Regulatory Advisor  
OXY Permian  
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