

Lowe, Leonard, EMNRD

From: David_Stewart@oxy.com
Sent: Thursday, April 27, 2017 11:13 AM
To: Lowe, Leonard, EMNRD
Subject: RE: Patton MDP1 18 Federal Well No. 3H

Mr. Lowe,

Per our land group:

The affected units in Section 17, Units 4(M), N, O, is operated by OXY and OXY is the only working interest owner @ 100%.

The affected units in Section 18, Units B, C, 1(D), 2(E), F, G, J, K, 3(L), 4(M), N, O, is operated by OXY and the working interest owners are the same.

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

From: Lowe, Leonard, EMNRD [mailto:Leonard.Lowe@state.nm.us]
Sent: Thursday, April 27, 2017 11:43 AM
To: Stewart, David R <David_Stewart@oxy.com>
Subject: [EXTERNAL] Patton MDP1 18 Federal Well No. 3H
Importance: High

Mr. Stewart,

In reference to your NSL application.

Is the working interest common between the proposed unit and affected units operated by OXY?

Leonard Lowe
Engineering Bureau
Oil Conservation Division
Energy Minerals and Natural Resources Department
1220 South St. Frances
Santa Fe, New Mexico 87004
Office: 505-476-3492
Cell: 505-930-6717
Fax: 505-476-3462
E-mail: leonard.lowe@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/>

DATE IN 3/17/17	SUSPENSE	ENGINEER LRL	LOGGED IN 3/17/17	TYPE NSL	APP NO. PKSC1707657890
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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



NSL-7523

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] *Oxy USA, Inc. (16696)*
 [A] Location - Spacing Unit - Simultaneous Dedication *Patton MDP1 18 Federal #3H*
☒ NSL ☐ NSP ☐ SD *30-015-*
Cotton Draw Bone Spring
(13307)
- 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.~~

<u>David Stewart</u>	<u><i>[Signature]</i></u>	<u>SR. Regulatory Advisor</u>	<u>3/15/17</u>
Print or Type Name	Signature	Title	Date

Oxy USA Inc.
 Patton MDP1 18 Federal #3H

david_stewart@oxy.com
 e-mail Address



OXY USA Inc

PO Box 50250
Midland, TX 79710-0250

March 15, 2017

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

Attention: Leonard Lowe

Re: ***Application for Administrative Approval of Non-Standard Location –
Patton MDP1 18 Federal #3H – Cotton Draw Bone Spring
Surface – 170 FNL 1928 FWL Ut C Sec 18 T24S R31E
Top Perforation – 340 FNL 2505 FWL Ut C Sec 18 T24S R31E
Bottom Perforation – 340 FSL 2505 FWL Ut N Sec 18 T24S R31E
Bottom Hole – 180 FSL 2505 FWL Ut N Sec 18 T24 R31E
Eddy County, New Mexico***

Dear Mr. Lowe:

OXY USA Inc. respectfully requests administrative approval of a non-standard location on the Patton MDP1 18 Federal #3H well, API Number-30-015-Pending, Property Code Pending. The #3H well is proposed to be completed in the Cotton Draw Bone Spring, Pool Code 13367. This will be a horizontal well in a pool with no special rules for setback, so the setback requirements under Rule 19.15.15.9 (A) and 19.15.16.15 (B) would apply. The proposed producing interval is outside of the proposed Producing Area but within the proposed Project Area and will be drilled as follows:

Surface – 170 FNL 1928 FWL Ut C Sec 18 T24S R31E
Top Perforation – 340 FNL 2505 FWL Ut C Sec 18 T24S R31E
Bottom Perforation – 340 FSL 2505 FWL Ut N Sec 18 T24S R31E
Bottom Hole – 180 FSL 2505 FWL Ut N Sec 18 T24 R31E

The adjoining spacing units are located in T24S R31E, Section 7–Units 4(M), N, O; Section 18–Units B, C, 1(D), 2(E), F, G, J, K, 3(L), 4(M), N, O; Section 19–Units B, C, 1(D).

Approval of the unorthodox producing interval will allow for efficient spacing of horizontal wells and thereby prevent waste.

To support this request, the following information has been submitted for your review:

1. Application for Permit to Drill.
2. C-102 Plat for the proposed well and additional plats with offsetting well and affected spacing units.
3. List of affected offset parties that adjoin the non-standard, copies of the signed certified return receipts will be furnished upon request.
4. Proposed Directional Survey

If you need any additional information, please call me at 432-685-5717.

Sincerely,

David Stewart
Sr. Regulatory Advisor
OXY USA Inc.

Attachments

CC: NMOCD-Artesia, BLM-Carlsbad, Service List



OXY USA Inc.

PO Box 50250
Midland, TX 79710-0250

March 15, 2017

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Re: ***Application for Administrative Approval of Non-Standard Location –
Patton MDP1 18 Federal #3H – Cotton Draw Bone Spring
Surface – 170 FNL 1928 FWL Ut C Sec 18 T24S R31E
Top Perforation – 340 FNL 2505 FWL Ut C Sec 18 T24S R31E
Bottom Perforation – 340 FSL 2505 FWL Ut N Sec 18 T24S R31E
Bottom Hole – 180 FSL 2505 FWL Ut N Sec 18 T24 R31E
Eddy County, New Mexico***

Ladies and Gentlemen:

Enclosed is a copy of an application, filed with the New Mexico Oil Conservation Division by OXY USA Inc., requesting administrative approval for a non-standard location. As an affected party, notice is being provided to you pursuant to Rule 19.15.15.9 (A) and 19.15.16.15 (B). The well is located as follows:

Surface – 170 FNL 1928 FWL Ut C Sec 18 T24S R31E
Top Perforation – 340 FNL 2505 FWL Ut C Sec 18 T24S R31E
Bottom Perforation – 340 FSL 2505 FWL Ut N Sec 18 T24S R31E
Bottom Hole – 180 FSL 2505 FWL Ut N Sec 18 T24 R31E

If you object to the well's location, you must notify the Division in writing no later than 20 days from the date the application is received by the NMOCD (1220 South St. Francis Drive, Santa Fe, NM 87505; Attention: Leonard Lowe).

If you need any additional information, you can contact John Schneider, CPL at 713-366-5330 or myself at 432-685-5717.

Sincerely,

David Stewart
Sr. Regulatory Advisor
OXY USA Inc.

Attachments

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM89819
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator OXY USA INC		7. If Unit or CA Agreement, Name and No.
3a. Address 5 Greenway Plaza, Suite 110 Houston TX 770	3b. Phone No. (include area code) (713)366-5716	8. Lease Name and Well No. PATTON MDP1-18 FEDERAL 3H
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface NENW / 170 FNL / 1928 FWL / LAT 32.2241246 / LONG -103.8194326 At proposed prod. zone SESW / 180 FSL / 2505 FWL / LAT 32.2105623 / LONG -103.81758		9. API Well No.
14. Distance in miles and direction from nearest town or post office* 15 miles		10. Field and Pool, or Exploratory COTTON DRAW BONE SPRING / 2ND I
15. Distance from proposed* location to nearest property or lease line, ft. 50 feet (Also to nearest drig. unit line, if any)		11. Sec., T. R. M. or Blk. and Survey or Area SEC 18 / T24S / R31E / NMP
16. No. of acres in lease 647.88		12. County or Parish EDDY
17. Spacing Unit dedicated to this well 160		13. State NM
18. Distance from proposed location* to nearest well, drilling, completed, 30 feet applied for, on this lease, ft.		20. BLM/BIA Bond No. on file FED: ESB000226
19. Proposed Depth 10021 feet / 14865 feet		21. Estimated duration 25 days
22. Approximate date work will start* 09/17/2017		23. Estimated duration 25 days
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3534 feet		

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature (Electronic Submission)	Name (Printed/Typed) David Stewart / Ph: (713)366-5716	Date 12/02/2016
Title Sr. Regulatory Advisor		
Approved by (Signature)	Name (Printed/Typed)	Date
Title Office CARLSBAD		

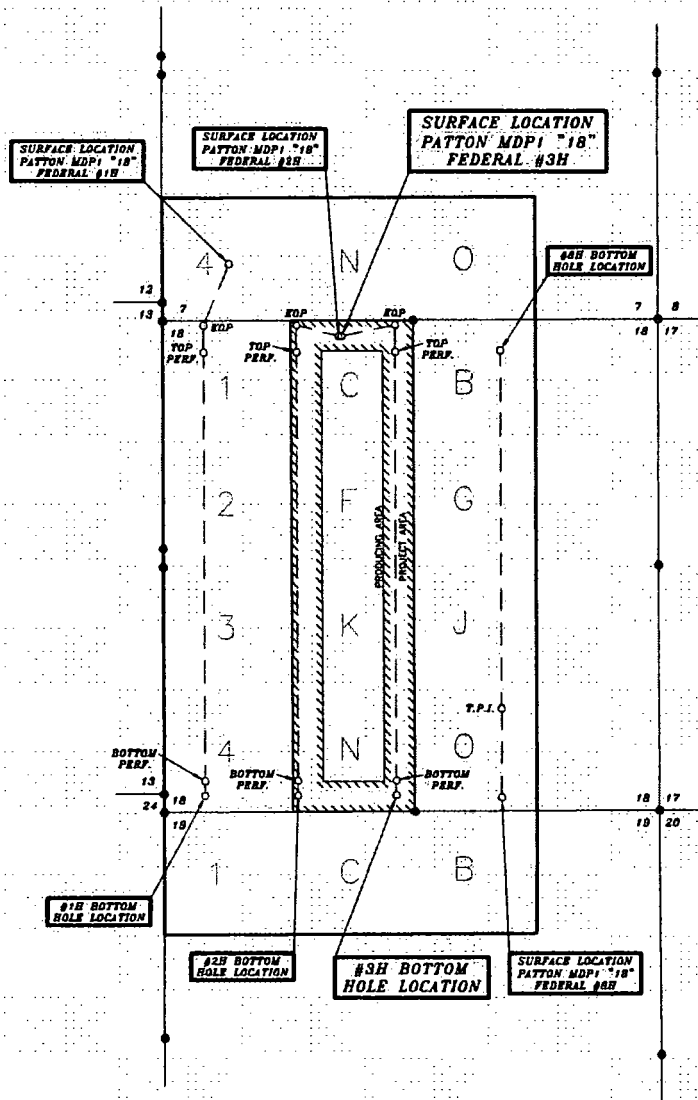
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

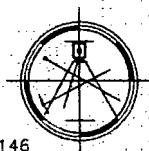
*(Instructions on page 2)

OXY USA INC.
 PATTON MDP1 "18" FEDERAL #3H
 SECTIONS 7, 18 & 19, TOWNSHIP 24 SOUTH,
 RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO



Asel Surveying

P.O. BOX 393 - 310 W. TAYLOR
 HOBBS, NEW MEXICO - 575-393-9146



2000' 0 2000' 4000' FEET



SCALE: 1"=2000'

District I
1623 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-8161 Fax: (575) 393-0720
District II
911 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-0720
District III
1000 Rio Brazos Road, Amar, NM 87413
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-05-	Pool Code 13367	Pool Name Cotton Draw Bone Spring
Property Code	Property Name PATTON MDP1 "18" FEDERAL	Well Number 3H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3534.0'

Surface Location

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
C	18	24 SOUTH	31 EAST, N.M.P.M.		170'	NORTH	1928'	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
N	18	24 SOUTH	31 EAST, N.M.P.M.		180'	SOUTH	2505'	WEST	EDDY

Dedicated Acres 160	Joint or Infill Y	Consolidation Code	Order No. NSL will be filed
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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.

	KICK OFF POINT NEW MEXICO EAST NAD 1983 Y=445773.12 US FT X=700829.36 US FT LAT.: N 32.2244564° LONG.: W 103.8175663°	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 undivided 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: <i>David Stewart</i> Date: 12/2/16 Printed Name: David Stewart Sr. Eng. Adv. E-mail Address: david.stewart@oxy.com
	TOP PERF. NEW MEXICO EAST NAD 1983 Y=445483.12 US FT X=700830.36 US FT LAT.: N 32.2238572° LONG.: W 103.8175671°	
	SURFACE LOCATION NEW MEXICO EAST NAD 1983 Y=445450.36 US FT X=700825.81 US FT LAT.: N 32.2241246° LONG.: W 103.8194326°	
	BOTTOM PERF. NEW MEXICO EAST NAD 1983 Y=440879.33 US FT X=700848.72 US FT LAT.: N 32.2110021° LONG.: W 103.8175796°	
	BOTTOM HOLE LOCATION NEW MEXICO EAST NAD 1983 Y=440719.34 US FT X=700848.36 US FT LAT.: N 32.2105823° LONG.: W 103.8175800°	
SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from the results of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief. Date of Survey: DECEMBER 22, 2015 Signature and Seal: <i>ERRY J. AS</i> Professional Surveyor: 15079 Certificate Number: 15079		

Application Non-Standard Location - Service List

1

OXY USA Inc.

Patton MDP1 18 Federal #3H

New Mexico Oil Conservation Division
811 S. First St.
Artesia, NM 88210
7015-0640-0005-1003-3874

New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505
7015-0640-0005-1003-3881

United States Dept of Interior
Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220
7015-0640-0005-1003-3898

T24S R31E

Section 7 - Units 4(M), N, O

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

Section 18 - Unit B, C, 1(D), 2(E), F, G, J, K, 3(L), 4(M), N, O

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

Section 19 - Units B, C, 1(D)

BOPCO, LP
P.O. Box 2760
Midland, TX 79702
7015-0640-0005-1003-3904

CTV OG NM LLC
201 Main St., Ste. 2700
Fort Worth, TX 76102
7015-0640-0005-1003-3263

Keystone OG NM LLC
201 Main St., Ste. 2700
Fort Worth, TX 76102
7015-0640-0005-1003-3270

LMBBI OG NM LLC
201 Main St., Ste. 2700
Fort Worth, TX 76102
7015-0640-0005-1003-3287

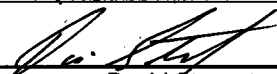
SRBI OG NM LLC
201 Main St., Ste. 2700
Fort Worth, TX 76102
7015-0640-0005-1003-3294

Thru Line OG NM LLC
201 Main St., Ste. 2700
Fort Worth, TX 76102
7015-0640-0005-1003-3300

XTO Energy
810 Houston ST.
Fort Worth, TX 76102
7015-0640-0005-1003-3317

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

3/15/17

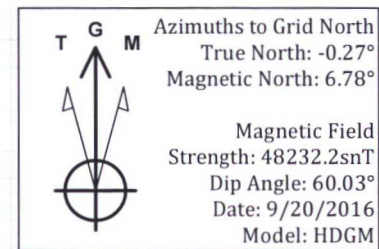
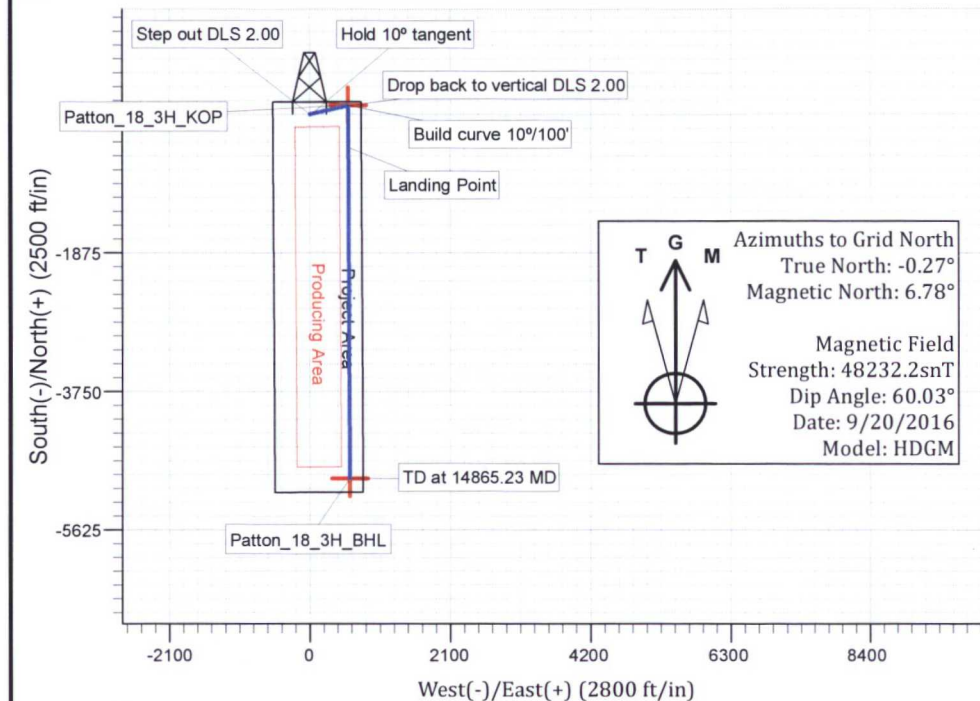
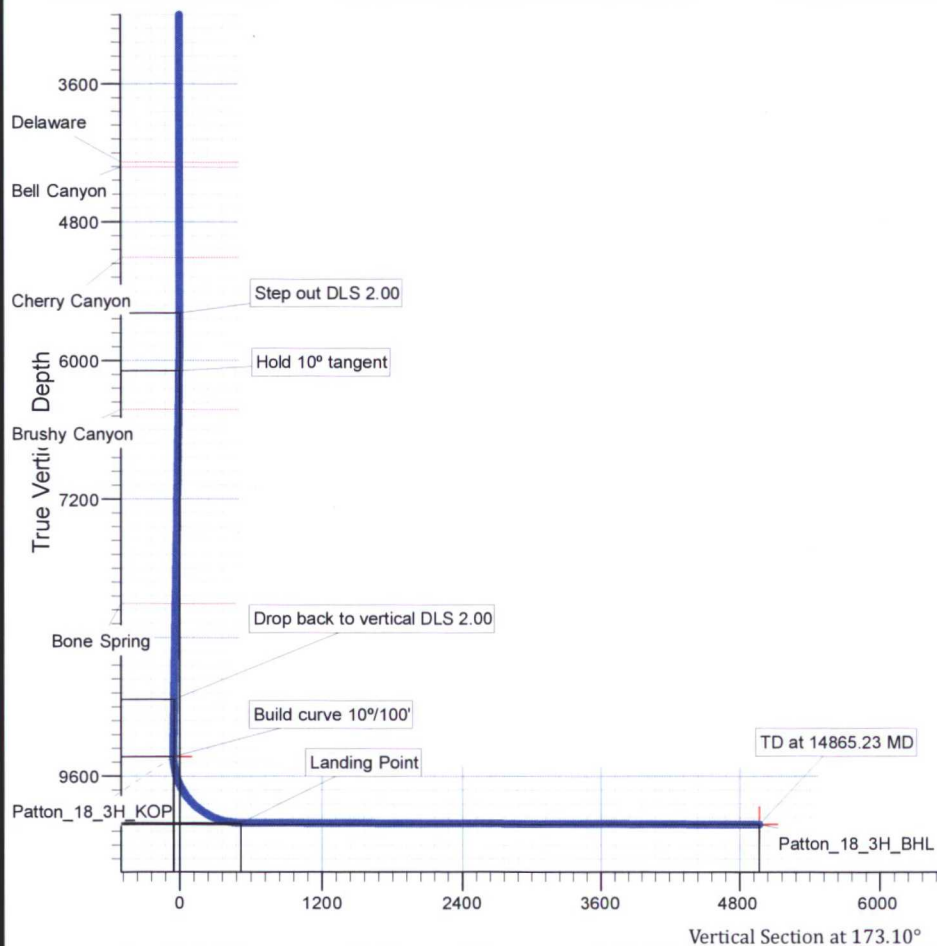

David Stewart
OXY USA Inc.



Project: NM DIRECTIONAL PLANS (NAD 1983)
Site: Patton MDP1 18 Federal
Well: Patton MDP1 18 Federal 3H
Wellbore: WB00
Design: Permitting Plan

WELL DETAILS: Patton MDP1 18 Federal 3H

Ground Level: 3534.00		WELL @ 3560.50ft (Original Well Elev)			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	445650.36	700252.81	32° 13' 26.848398 N	103° 49' 9.957178 W



PROJECT DETAILS: NM DIRECTIONAL PLANS (NAD 1983)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
5590.00	5590.00	0.00	0.00	0.00	0.00	0.00	0.00	Step out DLS 2.00
6087.39	6089.92	10.00	77.98	9.06	42.55	-3.88	43.51	Hold 10° tangent
8937.61	8984.10	10.00	77.98	113.71	534.03	-48.74	546.00	Drop back to vertical DLS 2.00
9435.00	9484.02	0.00	0.00	122.77	576.59	-52.63	589.51	Build curve 10°/100'
10007.96	10382.42	89.84	179.77	-448.58	578.85	514.86	1160.87	Landing Point
10021.00	14865.23	89.83	179.77	-4931.34	596.59	4967.29	5643.65	TD at 14865.23 MD

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Patton MDP1 18 Federal 3H
Company:	OXY	TVD Reference:	WELL @ 3560.50ft (Original Well Elev)
Project:	NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	WELL @ 3560.50ft (Original Well Elev)
Site:	Patton MDP1 18 Federal	North Reference:	Grid
Well:	Patton MDP1 18 Federal 3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Project	NM DIRECTIONAL PLANS (NAD 1983)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site	Patton MDP1 18 Federal		
Site Position:		Northing:	446,423.55 usft
From:	Map	Easting:	699,033.75 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	32° 13' 34.557107 N
		Longitude:	103° 49' 24.105891 W
		Grid Convergence:	0.27 °

Well	Patton MDP1 18 Federal 3H		
Well Position	+N/-S	-773.24 ft	Northing: 445,650.36 usft
	+E/-W	1,219.14 ft	Easting: 700,252.81 usft
Position Uncertainty		0.00 ft	Wellhead Elevation: 3,534.00 ft
			Latitude: 32° 13' 26.848398 N
			Longitude: 103° 49' 9.957178 W
			Ground Level: 3,534.00 ft

Wellbore	WB00				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	9/20/2016	7.05	60.03	48,232

Design	Permitting Plan			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	173.10

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,590.00	0.00	0.00	5,590.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,089.92	10.00	77.98	6,087.39	9.06	42.56	2.00	2.00	0.00	77.98	
8,984.10	10.00	77.98	8,937.61	113.71	534.03	0.00	0.00	0.00	0.00	
9,484.02	0.00	179.77	9,435.00	122.77	576.59	2.00	-2.00	0.00	180.00	Patton_18_3H_KOP
10,382.42	89.84	179.77	10,007.96	-448.59	578.85	10.00	10.00	0.00	179.77	
14,865.23	89.83	179.77	10,021.00	-4,931.34	596.59	0.00	0.00	0.00	-180.00	Patton_18_3H_BHL

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Patton MDP1 18 Federal 3H
Company:	OXY	TVD Reference:	WELL @ 3560.50ft (Original Well Elev)
Project:	NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	WELL @ 3560.50ft (Original Well Elev)
Site:	Patton MDP1 18 Federal	North Reference:	Grid
Well:	Patton-MDP1 18 Federal 3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL									
591.00	0.00	0.00	591.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
951.00	0.00	0.00	951.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado									
2,861.00	0.00	0.00	2,861.00	0.00	0.00	0.00	0.00	0.00	0.00
Castille									
4,281.00	0.00	0.00	4,281.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware									
4,326.00	0.00	0.00	4,326.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon									
5,108.00	0.00	0.00	5,108.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyon									
5,590.00	0.00	0.00	5,590.00	0.00	0.00	0.00	0.00	0.00	0.00
Step out DLS 2.00									
5,600.00	0.20	77.98	5,600.00	0.00	0.02	0.00	2.00	2.00	0.00
5,700.00	2.20	77.98	5,699.97	0.44	2.07	-0.19	2.00	2.00	0.00
5,800.00	4.20	77.98	5,799.81	1.60	7.52	-0.69	2.00	2.00	0.00
5,900.00	6.20	77.98	5,899.40	3.49	16.39	-1.50	2.00	2.00	0.00
6,000.00	8.20	77.98	5,998.60	6.10	28.65	-2.61	2.00	2.00	0.00
6,089.92	10.00	77.98	6,087.39	9.06	42.55	-3.88	2.00	2.00	0.00
Hold 10° tangent									
6,100.00	10.00	77.98	6,097.31	9.43	44.27	-4.04	0.00	0.00	0.00
6,200.00	10.00	77.98	6,195.79	13.04	61.25	-5.59	0.00	0.00	0.00
6,300.00	10.00	77.98	6,294.28	16.66	78.23	-7.14	0.00	0.00	0.00
6,400.00	10.00	77.98	6,392.76	20.27	95.21	-8.69	0.00	0.00	0.00
6,430.71	10.00	77.98	6,423.00	21.38	100.43	-9.17	0.00	0.00	0.00
Brushy Canyon									
6,500.00	10.00	77.98	6,491.24	23.89	112.19	-10.24	0.00	0.00	0.00
6,600.00	10.00	77.98	6,589.72	27.50	129.17	-11.79	0.00	0.00	0.00
6,700.00	10.00	77.98	6,688.20	31.12	146.16	-13.34	0.00	0.00	0.00
6,800.00	10.00	77.98	6,786.68	34.74	163.14	-14.89	0.00	0.00	0.00
6,900.00	10.00	77.98	6,885.16	38.35	180.12	-16.44	0.00	0.00	0.00
7,000.00	10.00	77.98	6,983.64	41.97	197.10	-17.99	0.00	0.00	0.00
7,100.00	10.00	77.98	7,082.13	45.58	214.08	-19.54	0.00	0.00	0.00
7,200.00	10.00	77.98	7,180.61	49.20	231.06	-21.09	0.00	0.00	0.00
7,300.00	10.00	77.98	7,279.09	52.81	248.05	-22.64	0.00	0.00	0.00
7,400.00	10.00	77.98	7,377.57	56.43	265.03	-24.19	0.00	0.00	0.00
7,500.00	10.00	77.98	7,476.05	60.05	282.01	-25.74	0.00	0.00	0.00
7,600.00	10.00	77.98	7,574.53	63.66	298.99	-27.29	0.00	0.00	0.00
7,700.00	10.00	77.98	7,673.01	67.28	315.97	-28.84	0.00	0.00	0.00
7,800.00	10.00	77.98	7,771.49	70.89	332.95	-30.39	0.00	0.00	0.00
7,900.00	10.00	77.98	7,869.98	74.51	349.93	-31.94	0.00	0.00	0.00
8,000.00	10.00	77.98	7,968.46	78.12	366.92	-33.49	0.00	0.00	0.00
8,100.00	10.00	77.98	8,066.94	81.74	383.90	-35.04	0.00	0.00	0.00
8,138.65	10.00	77.98	8,105.00	83.14	390.46	-35.64	0.00	0.00	0.00
Bone Spring									
8,200.00	10.00	77.98	8,165.42	85.36	400.88	-36.59	0.00	0.00	0.00
8,300.00	10.00	77.98	8,263.90	88.97	417.86	-38.14	0.00	0.00	0.00
8,400.00	10.00	77.98	8,362.38	92.59	434.84	-39.69	0.00	0.00	0.00
8,500.00	10.00	77.98	8,460.86	96.20	451.82	-41.24	0.00	0.00	0.00
8,600.00	10.00	77.98	8,559.34	99.82	468.81	-42.79	0.00	0.00	0.00

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well: Patton MDP1 18 Federal 3H
Company:	OXY	TVD Reference:	WELL @ 3560.50ft (Original Well Elev)
Project:	NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	WELL @ 3560.50ft (Original Well Elev)
Site:	Patton MDP1 18 Federal	North Reference:	Grid
Well:	Patton MDP1 18 Federal 3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,700.00	10.00	77.98	8,657.83	103.43	485.79	-44.34	0.00	0.00	0.00	
8,800.00	10.00	77.98	8,756.31	107.05	502.77	-45.89	0.00	0.00	0.00	
8,900.00	10.00	77.98	8,854.79	110.67	519.75	-47.44	0.00	0.00	0.00	
8,984.10	10.00	77.98	8,937.61	113.71	534.03	-48.74	0.00	0.00	0.00	
Drop back to vertical DLS 2.00										
9,000.00	9.68	77.98	8,953.28	114.27	536.69	-48.99	2.00	-2.00	0.00	
9,100.00	7.68	77.98	9,052.13	117.42	551.45	-50.33	2.00	-2.00	0.00	
9,200.00	5.68	77.98	9,151.44	119.84	562.83	-51.37	2.00	-2.00	0.00	
9,300.00	3.68	77.98	9,251.10	121.54	570.81	-52.10	2.00	-2.00	0.00	
9,400.00	1.68	77.98	9,350.99	122.51	575.38	-52.52	2.00	-2.00	0.00	
9,484.02	0.00	0.00	9,435.00	122.77	576.59	-52.63	2.00	-2.00	-92.81	
Build curve 10°/100'										
9,500.00	1.60	179.77	9,450.98	122.55	576.59	-52.41	10.00	10.00	1,124.99	
9,600.00	11.60	179.77	9,550.19	111.07	576.63	-41.01	10.00	10.00	0.00	
9,700.00	21.60	179.77	9,645.90	82.54	576.75	-12.67	10.00	10.00	0.00	
9,800.00	31.60	179.77	9,735.20	37.83	576.92	31.74	10.00	10.00	0.00	
9,900.00	41.60	179.77	9,815.38	-21.72	577.16	90.88	10.00	10.00	0.00	
10,000.00	51.60	179.77	9,884.01	-94.28	577.45	162.95	10.00	10.00	0.00	
10,100.00	61.60	179.77	9,938.99	-177.65	577.78	245.76	10.00	10.00	0.00	
10,200.00	71.60	179.77	9,978.66	-269.31	578.14	336.80	10.00	10.00	0.00	
10,300.00	81.60	179.77	10,001.81	-366.46	578.52	433.29	10.00	10.00	0.00	
10,382.42	89.84	179.77	10,007.96	-448.58	578.85	514.86	10.00	10.00	0.00	
Landing Point										
10,400.00	89.84	179.77	10,008.00	-466.16	578.92	532.32	0.00	0.00	0.00	
10,500.00	89.84	179.77	10,008.28	-566.16	579.31	631.64	0.00	0.00	0.00	
10,600.00	89.84	179.77	10,008.56	-666.16	579.71	730.96	0.00	0.00	0.00	
10,700.00	89.84	179.77	10,008.85	-766.16	580.10	830.29	0.00	0.00	0.00	
10,800.00	89.84	179.77	10,009.13	-866.16	580.50	929.61	0.00	0.00	0.00	
10,900.00	89.84	179.77	10,009.41	-966.16	580.90	1,028.93	0.00	0.00	0.00	
11,000.00	89.84	179.77	10,009.69	-1,066.16	581.29	1,128.25	0.00	0.00	0.00	
11,100.00	89.84	179.77	10,009.97	-1,166.15	581.69	1,227.58	0.00	0.00	0.00	
11,200.00	89.84	179.77	10,010.26	-1,266.15	582.08	1,326.90	0.00	0.00	0.00	
11,300.00	89.84	179.77	10,010.54	-1,366.15	582.48	1,426.22	0.00	0.00	0.00	
11,400.00	89.84	179.77	10,010.82	-1,466.15	582.87	1,525.54	0.00	0.00	0.00	
11,500.00	89.84	179.77	10,011.11	-1,566.15	583.27	1,624.87	0.00	0.00	0.00	
11,600.00	89.84	179.77	10,011.39	-1,666.15	583.67	1,724.19	0.00	0.00	0.00	
11,700.00	89.84	179.77	10,011.68	-1,766.15	584.06	1,823.51	0.00	0.00	0.00	
11,800.00	89.84	179.77	10,011.97	-1,866.15	584.46	1,922.83	0.00	0.00	0.00	
11,900.00	89.84	179.77	10,012.25	-1,966.14	584.85	2,022.16	0.00	0.00	0.00	
12,000.00	89.84	179.77	10,012.54	-2,066.14	585.25	2,121.48	0.00	0.00	0.00	
12,100.00	89.83	179.77	10,012.83	-2,166.14	585.65	2,220.80	0.00	0.00	0.00	
12,200.00	89.83	179.77	10,013.12	-2,266.14	586.04	2,320.12	0.00	0.00	0.00	
12,300.00	89.83	179.77	10,013.41	-2,366.14	586.44	2,419.45	0.00	0.00	0.00	
12,400.00	89.83	179.77	10,013.70	-2,466.14	586.83	2,518.77	0.00	0.00	0.00	
12,500.00	89.83	179.77	10,013.99	-2,566.14	587.23	2,618.09	0.00	0.00	0.00	
12,600.00	89.83	179.77	10,014.28	-2,666.14	587.62	2,717.41	0.00	0.00	0.00	
12,700.00	89.83	179.77	10,014.57	-2,766.14	588.02	2,816.74	0.00	0.00	0.00	
12,800.00	89.83	179.77	10,014.86	-2,866.13	588.42	2,916.06	0.00	0.00	0.00	
12,900.00	89.83	179.77	10,015.15	-2,966.13	588.81	3,015.38	0.00	0.00	0.00	
13,000.00	89.83	179.77	10,015.44	-3,066.13	589.21	3,114.70	0.00	0.00	0.00	
13,100.00	89.83	179.77	10,015.74	-3,166.13	589.60	3,214.03	0.00	0.00	0.00	
13,200.00	89.83	179.77	10,016.03	-3,266.13	590.00	3,313.35	0.00	0.00	0.00	
13,300.00	89.83	179.77	10,016.33	-3,366.13	590.39	3,412.67	0.00	0.00	0.00	

Oxy Planning Report

Database:	HOPSP	Local Co-ordinate Reference:	Well Patton MDP1 18 Federal 3H
Company:	OXY	TVD Reference:	WELL @ 3560.50ft (Original Well Elev)
Project:	NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	WELL @ 3560.50ft (Original Well Elev)
Site:	Patton MDP1 18 Federal	North Reference:	Grid
Well:	Patton MDP1 18 Federal 3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
13,400.00	89.83	179.77	10,016.62	-3,466.13	590.79	3,511.99	0.00	0.00	0.00
13,500.00	89.83	179.77	10,016.92	-3,566.13	591.19	3,611.32	0.00	0.00	0.00
13,600.00	89.83	179.77	10,017.21	-3,666.12	591.58	3,710.64	0.00	0.00	0.00
13,700.00	89.83	179.77	10,017.51	-3,766.12	591.98	3,809.96	0.00	0.00	0.00
13,800.00	89.83	179.77	10,017.81	-3,866.12	592.37	3,909.28	0.00	0.00	0.00
13,900.00	89.83	179.77	10,018.10	-3,966.12	592.77	4,008.60	0.00	0.00	0.00
14,000.00	89.83	179.77	10,018.40	-4,066.12	593.16	4,107.93	0.00	0.00	0.00
14,100.00	89.83	179.77	10,018.70	-4,166.12	593.56	4,207.25	0.00	0.00	0.00
14,200.00	89.83	179.77	10,019.00	-4,266.12	593.96	4,306.57	0.00	0.00	0.00
14,300.00	89.83	179.77	10,019.30	-4,366.12	594.35	4,405.89	0.00	0.00	0.00
14,400.00	89.83	179.77	10,019.60	-4,466.11	594.75	4,505.22	0.00	0.00	0.00
14,500.00	89.83	179.77	10,019.90	-4,566.11	595.14	4,604.54	0.00	0.00	0.00
14,600.00	89.83	179.77	10,020.20	-4,666.11	595.54	4,703.86	0.00	0.00	0.00
14,700.00	89.83	179.77	10,020.50	-4,766.11	595.93	4,803.18	0.00	0.00	0.00
14,800.00	89.83	179.77	10,020.80	-4,866.11	596.33	4,902.51	0.00	0.00	0.00
14,865.23	89.83	179.77	10,021.00	-4,931.34	596.59	4,967.29	0.00	0.00	0.00
TD at 14865.23 MD									

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
591.00	581.10	Rustler			
951.00	941.10	Salado			
2,861.00	2,851.10	Castille			
4,281.00	4,271.10	Delaware			
4,326.00	4,316.10	Bell Canyon			
5,108.00	5,098.10	Cherry Canyon			
6,430.71	6,413.10	Brushy Canyon			
8,138.65	8,095.10	Bone Spring			

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
0.00	0.00	0.00	0.00	SHL
5,590.00	5,590.00	0.00	0.00	Step out DLS 2.00
6,089.92	6,087.39	9.06	42.55	Hold 10° tangent
8,984.10	8,937.61	113.71	534.03	Drop back to vertical DLS 2.00
9,484.02	9,435.00	122.77	576.59	Build curve 10°/100'
10,382.42	10,007.96	-448.58	578.85	Landing Point
14,865.23	10,021.00	-4,931.34	596.59	TD at 14865.23 MD

Lowe, Leonard, EMNRD

From: Lowe, Leonard, EMNRD
Sent: Friday, April 28, 2017 9:01 AM
To: 'David_Stewart@oxy.com'
Cc: Sharp, Karen, EMNRD; Podany, Raymond, EMNRD; 'lisa@rwbyram.com'; 'jglover@blm.gov'; McMillan, Michael, EMNRD; Jones, William V, EMNRD; Goetze, Phillip, EMNRD
Subject: APPROVED NSL-7523, OXY USA INC_API # 30-015-PENDING_Patton MDP1 18 Federal Well No. 3H, Eddy County

Importance: High

Mr. David Stewart,

The following administrative order has been issued and will soon be available on the Division's web site: <http://ocdimage.emnrd.state.nm.us/Imaging/Default.aspx>

NSL-7523

Oxy USA, Inc.

API #: 30-015-PENDING

WELL: Patton MDP1 18 Federal Well No. 3H, Eddy County

Leonard Lowe

Engineering Bureau

Oil Conservation Division

Energy Minerals and Natural Resources Department

1220 South St. Frances

Santa Fe, New Mexico 87004

Office: 505-476-3492

Cell: 505-930-6717

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Website: <http://www.emnrd.state.nm.us/ocd/>