

RECEIVED <u>5-1-2017</u>	REVIEWER <u>LRL</u>	TYPE <u>NSL</u>	APP NO <u>PKSC 1712240807</u>
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & 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

NSL-7549

Applicant: OX4 USA Inc. **OGRID Number:** 16696
Well Name: Palladium MDP1 7-6 Federal Court #5H **API:** 30-015-Pending
Pool: Cotton Draw Bone Spring **Pool Code:** 13367

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION
 INDICATED BELOW**

1) TYPE OF APPLICATION: Check those which apply for [A]

A Location - Spacing Unit - Simultaneous Dedication

☒ NSL☐ NSP (PROJECT AREA)☐ NSP (PRORATION UNIT)☐ SD

B Check one only for [I] or [II]

[I] Commingling - Storage - Measurement

☐ DHC☐ CTB☐ PLC☐ PC☐ OLS☐ OLM

[II] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX☐ PMX☐ SWD☐ IPI☐ EOR☐ PPR**2) NOTIFICATION REQUIRED TO:** Check those which apply.A ☒ Offset operators or lease holders, WFOB ☐ Royalty, overriding royalty owners, revenue ownersC ☐ Application requires published noticeD ☐ Notification and/or concurrent approval by SLOE ☒ Notification and/or concurrent approval by BLMF ☐ Surface ownerG ☐ For all of the above, proof of notification or publication is attached, and/or,H ☐ No notice required**FOR OCD ONLY**☐ Notice Complete
☐ Application
 Content
 Complete

- 3) CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

~~Note: Statement must be completed by an individual with managerial and/or supervisory capacity.~~

David Stewart

Print or Type Name

Date

4/26/17432-685-5717

Phone Number

david_stewart@ox4.com
 e-mail Address

Signature



Occidental Oil and Gas Corporation
ATTN: Kacie Cruz
5 Greenway Plaza, Suite 110
Houston, TX 77046
713-350-4889
kacie_cruz@oxy.com

June 22, 2017

Mr. Leonard Lowe
New Mexico Oil Conservation Division
1220 South Francis Drive
Santa Fe, New Mexico 87505

RE: Application for Administrative Approval of Nonstandard Location—Engineering Justification
OXY USA Inc.
Palladium MDP1 7-6 Federal Com #5H – Cotton Draw Bone Spring
Surface – 293 FSL 592 FEL Unit P Sec 7 T24S R31E
Top Perforation – 340 FSL 1260 FEL Unit P Sec 7 T24S R31E
Bottom Perforation – 340 FNL 1260 FEL Lot 1 (A) Sec 6 T24S R31E
Bottom Hole – 180 FNL 1260 FEL Lot 1 (A) Sec 6 T24 R31E
Eddy County, New Mexico

Dear Mr. Lowe:

Oxy USA Inc. respectfully seeks approval for non-standard locations, increasing horizontal well spacing from 4 wells per section ("wps") to 6 wps to effectively develop the Bone Spring and Wolfcamp formations. It is Oxy's responsibility as a prudent operator to optimize well spacing for horizontal development and minimize reserves left in the ground. Increasing horizontal well spacing from 4 wps to 6 wps will optimize recoverable reserves. Any reduction in well spacing will result in untapped reserves being left in the reservoir resulting in waste of a resource that will not be developed otherwise.

Sincerely,

A handwritten signature in black ink, appearing to read "Kacie Cruz".

Kacie Cruz
Development Production Engineer
Oxy USA Inc.

Application Non-Standard Location - Service List - Amended

OXY USA Inc.

Palladium MDP1 7-6 Federal #5H

New Mexico Oil Conservation Division

811 S First St

Artesia, NM 88210

7015-0640-0005-1003-4062

New Mexico Oil Conservation Division

1220 South St Francis Dr

Santa Fe, NM 87505

7015-0640-0005-1003-4079

United States Dept of Interior

Bureau of Land Management

620 E. Greene Street

Carlsbad, NM 88220

7015-0640-0005-1003-4086

T235 R31E

Section 31 - Unit O, P

ConocoPhillips Co

3401 30th St

Farmington, NM 87402

7015-0640-0005-1003-4109

Sec 32 - Unit M

OXY USA Inc - 10%

P O Box 50250

Midland, TX 79710

EOG A Resources, Inc. - 10%

P O Box 900

Artesia, NM 88211

7015-0640-0005-1003-4147

EOG M Resources, Inc - 10%

P O Box 840

Artesia, NM 88211

7015-0640-0005-1003-4154

EOG Y Resources, Inc - 70%

105 S 4th St

Artesia, NM 88210

7015-0640-0005-1003-4161

T245 R31E

Section 5 - Units D, E, L

OXY USA Inc - 98.5%

P O Box 50250

Midland, TX 79710

Hayes Properties, Inc - 1.5%

500 W Texas Ave

Midland, TX 79701

7015-0640-0005-1003-4123

T245 R31E

Section 5 - Units M

OXY USA Inc - 32%

P O Box 50250

Midland, TX 79710

EOG A Resources, Inc. - 32%

P O Box 900

Artesia, NM 88211

7015-0640-0005-1003-4147

EOG M Resources, Inc. - 32%

P O Box 840

Artesia, NM 88211

7015-0640-0005-1003-4154

EOG Y Resources, Inc. - 4%

105 S 4th St

Artesia, NM 88210

7015-0640-0005-1003-4161

Section 6 - Units 1 (A), 2 (B), G, H, I, J, O, P

OXY USA Inc - 32%

P O Box 50250

Midland, TX 79710

EOG A Resources, Inc - 32%

P O Box 900

Artesia, NM 88211

7015-0640-0005-1003-4147

EOG M Resources, Inc - 32%

P O Box 840

Artesia, NM 88211

7015-0640-0005-1003-4154

EOG Y Resources, Inc - 4%

105 S 4th St

Artesia, NM 88210

7015-0640-0005-1003-4161

Section 7 - Units A, B, G, H, I, J, O, P

OXY USA Inc - 100%

P O Box 50250

Midland, TX 79710

Section 8 - Units D, E, L, M

Chevron USA, Inc.

6301 Deauville

Midland, TX 79708

7015-0640-0005-1003-4118

Section 17 - Unit D

OXY USA Inc - 60%

P O Box 50250

Midland, TX 79710

EOG Resources, Inc - 40%

P O Box 2267

Midland, TX 79702

7015-0640-0005-1003-4130

Section 18 - Units A, B

OXY USA Inc - 60%

P O Box 50250

Midland, TX 79710

EOG Resources, Inc - 20%

P O Box 2267

Midland, TX 79702

7015-0640-0005-1003-4130

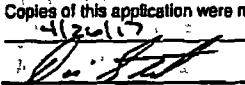
McCombs Energy, Ltd - 20%

750 E Mulberry Ave, Ste 403

San Antonio, TX 78212

7015-0640-0005-1003-4185

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


David Stewart - OXY USA Inc

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY		SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY					
■ 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.		A. Signature: <u>[Signature]</u> ☐ Agent ☐ Addressee B. Received by (Printed Name): <u>[Name]</u> C. Date of Delivery: <u>4/25/17</u> D. Is delivery address different from Item 1? ☐ Yes ☐ No If YES, enter delivery address below: 3. Service Type: ☐ Certified Mail® ☐ Priority Mail Express® ☐ Registered® ☐ Return Receipt for Merchandise ☐ Insured Mail® ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes		■ 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.		A. Signature: <u>[Signature]</u> ☐ Agent ☐ Addressee B. Received by (Printed Name): <u>NICHOLAS</u> C. Date of Delivery: <u>APR 28 2017</u> D. Is delivery address different from Item 1? ☐ Yes ☐ No If YES, enter delivery address below: 3. Service Type: ☐ Certified Mail® ☐ Priority Mail Express® ☐ Registered® ☐ Return Receipt for Merchandise ☐ Insured Mail® ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes		■ 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.		A. Signature: <u>[Signature]</u> ☐ Agent ☐ Addressee B. Received by (Printed Name): <u>Amalab...</u> C. Date of Delivery: <u>4/25/17</u> D. Is delivery address different from Item 1? ☐ Yes ☐ No If YES, enter delivery address below: 3. Service Type: ☐ Certified Mail® ☐ Priority Mail Express® ☐ Registered® ☐ Return Receipt for Merchandise ☐ Insured Mail® ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes	
1. Article Addressed to: BLM 620 E. Greene St. Carmichael, NM 88270		1. Article Addressed to: NMCO 1220 South St Francis Dr Santa Fe, NM 87505		1. Article Addressed to: NMCO 811 S. First St. Artesia, NM 88210		1. Article Addressed to: NMCO 811 S. First St. Artesia, NM 88210					
2. Article Number (Transfer from service label): 7015 0640 0005 1003 4086 PS Form 3811, July 2013 Domestic Return Receipt		2. Article Number (Transfer from service label): 7015 0640 0005 1003 4079 PS Form 3811, July 2013 Domestic Return Receipt		2. Article Number (Transfer from service label): 7015 0640 0005 1003 4062 PS Form 3811, July 2013 Domestic Return Receipt		2. Article Number (Transfer from service label): 7015 0640 0005 1003 4062 PS Form 3811, July 2013 Domestic Return Receipt					

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY		SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY					
■ 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.		A. Signature: <u>[Signature]</u> ☐ Agent ☐ Addressee B. Received by (Printed Name): <u>[Name]</u> C. Date of Delivery: <u>5/1/17</u> D. Is delivery address different from Item 1? ☐ Yes ☐ No If YES, enter delivery address below: 3. Service Type: ☐ Certified Mail® ☐ Priority Mail Express® ☐ Registered® ☐ Return Receipt for Merchandise ☐ Insured Mail® ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes		■ 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.		A. Signature: <u>[Signature]</u> ☐ Agent ☐ Addressee B. Received by (Printed Name): <u>[Name]</u> C. Date of Delivery: <u>5/1/17</u> D. Is delivery address different from Item 1? ☐ Yes ☐ No If YES, enter delivery address below: 3. Service Type: ☐ Certified Mail® ☐ Priority Mail Express® ☐ Registered® ☐ Return Receipt for Merchandise ☐ Insured Mail® ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes		■ 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.		A. Signature: <u>[Signature]</u> ☐ Agent ☐ Addressee B. Received by (Printed Name): <u>[Name]</u> C. Date of Delivery: <u>5/1/17</u> D. Is delivery address different from Item 1? ☐ Yes ☐ No If YES, enter delivery address below: 3. Service Type: ☐ Certified Mail® ☐ Priority Mail Express® ☐ Registered® ☐ Return Receipt for Merchandise ☐ Insured Mail® ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes	
1. Article Addressed to: Deva Energy Prod. Co. LP 333 W. Sheridan Ave. Oklahoma City, OK 73102		1. Article Addressed to: Conoco Phillips Co. 3401 30th St. Farmingdale, NM 87402		1. Article Addressed to: UT O&G NM LLC Main St., Ste. 2700 Worth, TX 76102		1. Article Addressed to: UT O&G NM LLC Main St., Ste. 2700 Worth, TX 76102					
2. Article Number (Transfer from service label): 7015 0640 0005 1003 4178 PS Form 3811, July 2013 Domestic Return Receipt		2. Article Number (Transfer from service label): 7015 0640 0005 1003 4109 PS Form 3811, July 2013 Domestic Return Receipt		2. Article Number (Transfer from service label): 7015 0640 0005 1003 4093 PS Form 3811, July 2013 Domestic Return Receipt		2. Article Number (Transfer from service label): 7015 0640 0005 1003 4093 PS Form 3811, July 2013 Domestic Return Receipt					

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY		SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY					
■ 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.		A. Signature: <u>[Signature]</u> ☐ Agent ☐ Addressee B. Received by (Printed Name): <u>[Name]</u> C. Date of Delivery: <u>4-28-17</u> D. Is delivery address different from Item 1? ☐ Yes ☐ No If YES, enter delivery address below: 3. Service Type: ☐ Certified Mail® ☐ Priority Mail Express® ☐ Registered® ☐ Return Receipt for Merchandise ☐ Insured Mail® ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes		■ 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.		A. Signature: <u>[Signature]</u> ☐ Agent ☐ Addressee B. Received by (Printed Name): <u>[Name]</u> C. Date of Delivery: <u>4-28-17</u> D. Is delivery address different from Item 1? ☐ Yes ☐ No If YES, enter delivery address below: 3. Service Type: ☐ Certified Mail® ☐ Priority Mail Express® ☐ Registered® ☐ Return Receipt for Merchandise ☐ Insured Mail® ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes		■ 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.		A. Signature: <u>[Signature]</u> ☐ Agent ☐ Addressee B. Received by (Printed Name): <u>[Name]</u> C. Date of Delivery: <u>4-28-17</u> D. Is delivery address different from Item 1? ☐ Yes ☐ No If YES, enter delivery address below: 3. Service Type: ☐ Certified Mail® ☐ Priority Mail Express® ☐ Registered® ☐ Return Receipt for Merchandise ☐ Insured Mail® ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes	
1. Article Addressed to: EOG Resources Inc. P.O. Box 840 Artesia, NM 88211		1. Article Addressed to: EOG Resources Inc. P.O. Box 700 Artesia, NM 88211		1. Article Addressed to: EOG Resources Inc. P.O. Box 2267 Midland, TX 79702		1. Article Addressed to: EOG Resources Inc. P.O. Box 2267 Midland, TX 79702					
2. Article Number (Transfer from service label): 7015 0640 0005 1003 4154 PS Form 3811, July 2013 Domestic Return Receipt		2. Article Number (Transfer from service label): 7015 0640 0005 1003 4147 PS Form 3811, July 2013 Domestic Return Receipt		2. Article Number (Transfer from service label): 7015 0640 0005 1003 4130 PS Form 3811, July 2013 Domestic Return Receipt		2. Article Number (Transfer from service label): 7015 0640 0005 1003 4130 PS Form 3811, July 2013 Domestic Return Receipt					

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
■ 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: McCombs Energy Ltd. 750 E. Mulberry Ave., Ste. 403 San Antonio, TX 78212	A. Signature X <i>[Signature]</i> ☐ Agent ☐ Addressee B. Received by (Printed Name) <i>[Signature]</i> C. Date of Delivery <i>12/17</i> D. Is delivery address different from Item 1? ☐ Yes ☐ No If YES, enter delivery address below: ☐ No 3. Service Type ☒ Certified Mail ☐ Priority Mail Express ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes ☐ No	■ 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: EOG Resources Inc. 105 S. 4th St. Arlene, NM 88210	A. Signature X <i>[Signature]</i> ☐ Agent ☐ Addressee B. Received by (Printed Name) <i>[Signature]</i> C. Date of Delivery <i>12/17</i> D. Is delivery address different from Item 1? ☐ Yes ☐ No If YES, enter delivery address below: ☐ No 3. Service Type ☒ Certified Mail ☐ Priority Mail Express ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes ☐ No
2. Article Number (Transfer from service label) 7015 0640 0005 1003 4185		2. Article Number (Transfer from service label) 7015 0640 0005 1003 4161	
PS Form 3811, July 2013 Domestic Return Receipt		PS Form 3811, July 2013 Domestic Return Receipt	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
■ 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: Chevron-USA Inc. 6301 Deauville Midland, TX 79706	A. Signature X <i>[Signature]</i> ☐ Agent ☐ Addressee B. Received by (Printed Name) <i>[Signature]</i> C. Date of Delivery <i>11/27/17</i> D. Is delivery address different from Item 1? ☐ Yes ☐ No If YES, enter delivery address below: ☐ No 3. Service Type ☒ Certified Mail ☐ Priority Mail Express ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes ☐ No	■ 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: Hynes Properties Inc. 500 W. Texas Ave. Midland, TX 79701	A. Signature X <i>[Signature]</i> ☐ Agent ☐ Addressee B. Received by (Printed Name) <i>[Signature]</i> C. Date of Delivery <i>11/28</i> D. Is delivery address different from Item 1? ☐ Yes ☐ No If YES, enter delivery address below: ☐ No 3. Service Type ☒ Certified Mail ☐ Priority Mail Express ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes ☐ No
2. Article Number (Transfer from service label) 7015 0640 0005 1003 4116		2. Article Number (Transfer from service label) 7015 0640 0005 1003 4123	
PS Form 3811, July 2013 Domestic Return Receipt		PS Form 3811, July 2013 Domestic Return Receipt	

Lowe, Leonard, EMNRD

From: David_Stewart@oxy.com
Sent: Tuesday, June 27, 2017 8 28 AM
To: Lowe, Leonard, EMNRD
Cc: McMillan, Michael, EMNRD, Jones, William V, EMNRD, Kelley_Montgomery@oxy.com
Subject: RE NSL APPLICATION FOR Palladium MDP1 7-6 Federal Com No 2H - 5H
Attachments: PalladiumMDP1-7-6Fd2H-NSLEngrJustification pdf, PalladiumMDP1-7-6Fd5H-NSLEngrJustification pdf, PalladiumMDP1-7-6Fd2H-NSLSLAmCRR pdf, PalladiumMDP1-7-6Fd5H-NSLSLAmCRR pdf

Mr. Lowe, please see attached for the requested information, this includes an amended service list with the working interest percentages listed, the certified return receipts and the engineering justification letter. If you need anything else, 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

From: Stewart, David R
Sent: Wednesday, May 24, 2017 12 53 PM
To: 'Lowe, Leonard, EMNRD' <Leonard.Lowe@state.nm.us>
Cc: McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>, Jones, William V, EMNRD <WilliamV.Jones@state.nm.us>, Montgomery, Kelley A <Kelley_Montgomery@oxy.com>, Mitchell, Sarah H <Sarah_Mitchell@oxy.com>
Subject: RE NSL APPLICATION FOR Palladium MDP1 7-6 Federal Com No 2H

Mr. Lowe, we'll start working on the additional information and will get it sent to you ASAP on the current applications. We will also start adding this information to future applications. Thank You and we appreciate your time and all 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: Wednesday, May 24, 2017 12 36 PM
To: Stewart, David R <David_Stewart@oxy.com>
Cc: McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>, Jones, William V, EMNRD <WilliamV.Jones@state.nm.us>, Montgomery, Kelley A <Kelley_Montgomery@oxy.com>, Mitchell, Sarah H <Sarah_Mitchell@oxy.com>

Lowe, Leonard, EMNRD

From: David_Stewart@oxy.com
Sent: Wednesday, May 24, 2017 11:53 AM
To: Lowe, Leonard, EMNRD
Cc: McMillan, Michael, EMNRD, Jones, William V, EMNRD, Kelley_Montgomery@oxy.com, Sarah_Mitchell@oxy.com
Subject: RE: NSL APPLICATION FOR Palladium MDP1 7-6 Federal Com No 2H

Mr. Lowe, we'll start working on the additional information and will get it sent to you ASAP on the current applications. We will also start adding this information to future applications. Thank You and we appreciate your time and all 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: Wednesday, May 24, 2017 12:36 PM
To: Stewart, David R <David_Stewart@oxy.com>
Cc: McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>, Jones, William V, EMNRD <WilliamV.Jones@state.nm.us>, Montgomery, Kelley A <Kelley_Montgomery@oxy.com>, Mitchell, Sarah H <Sarah_Mitchell@oxy.com>
Subject: [EXTERNAL] RE: NSL APPLICATION FOR Palladium MDP1 7-6 Federal Com No 2H
Importance: High

Mr. David Stewart,

See reply below

1. Are there new guidelines that we should be following? We want to make sure that everything is in the application (less the signed certified return receipts) when we file it? The Director will not approve an NSL application with encroachment area of less than 100 feet until detail information is received and reviewed at the administrative level for OCD review.
2. Do we need to start providing a letter/description from our engineer with the engineering reason for each application? Only for the areas that are encroaching areas that are less than 100 feet. Do you want more detail/explanation than what we have been putting in the cover letter? *"Approval of the unorthodox producing interval will allow for efficient spacing of horizontal wells and thereby prevent waste"* An Engineering reason from your engineer.
3. OXY is the affected offset operator in the E/2 E/2 of Section 6 & 7. I didn't show the working interest owners on the service list since they were the same, do we need to start notifying all the working interests even when the interest are the same? This needs to be stated within your application explicitly.
4. I will start having our land group provide us the working interest percentage for the affected areas that we operate, but not sure if they can get that information if we don't operate one of the affected areas (Section 1)
1) Only in the area that you are encroaching that are less than 100 feet.

Lowe, Leonard, EMNRD

From: Lowe, Leonard, EMNRD
Sent: Wednesday, May 24, 2017 11:36 AM
To: 'David_Stewart@oxy.com'
Cc: McMillan, Michael, EMNRD, Jones, William V, EMNRD, Kelley_Montgomery@oxy.com, Sarah_Mitchell@oxy.com
Subject: RE: NSL APPLICATION FOR Palladium MDP1 7-6 Federal Com No 2H
Importance: High

Mr. David Stewart,

See reply below

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3. OXY is the affected offset operator in the E/2 E/2 of Section 6 & 7. I didn't show the working interest owners on the service list since they were the same, do we need to start notifying all the working interests even when the interest are the same? This needs to be stated within your application explicitly.
4. I will start having our land group provide us the working interest percentage for the affected areas that we operate, but not sure if they can get that information if we don't operate one of the affected areas (Section 1). Only in the area that you are encroaching that are less than 100 feet.
5. Are you working on the Palladium MDP1 7-6 Federal Com #5H, it was filed at the same time as the #2H? If so do we need to provide the same information as this application? Yes, I am working on that application. The same information is needed for that application. Please provide.
6. On the return receipts, do you want a scanned copy or the original? Yes, a scanned copy is fine. **PLEASE INDICATE WHEN SUBMITTING ADDITIONAL INFORMATION, THAT IT PERTAINS TO A PENDING APPLICATION IN WORK. DO NOT SEND THE ENTIRE APPLICATION AGAIN ALONG WITH THE ADDITIONAL INFORMATION. THIS WILL SLOW DOWN YOUR APPLICATION PROCESS.**

The Engineering Bureau needs explicit information within applications in order to defend exception request's presented to the OCD Director

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

[Wells](#)[Operators](#)[Operator Data](#)[OCD Only](#)[Administration](#)

OCD Permitting

[Home](#) [Land Searches](#) [Land Details](#)

Section : 07-24S-31E

Type: Normal

Total Acres: 647.16

County: Eddy (15)

D (1) Federal ¹ Federal ² (15) 41.75	C (C) Federal ¹ Federal ² (15) 40	B (B) ✓ Federal ¹ Fee ² (15) 40	A (A) Federal ¹ Federal ² (15) 40
E (2) Federal ¹ Federal ² (15) 41.78	F (F) Federal ¹ Federal ² (15) 40	G (G) ✓ Federal ¹ Federal ² (15) 40	H (H) Federal ¹ Federal ² (15) 40
L (3) Federal ¹ Federal ² (15) 41.8	K (K) Federal ¹ Federal ² (15) 40	J (J) ✓ Federal ¹ Federal ² (15) 40	I (I) Federal ¹ Federal ² (15) 40
M (4) Federal ¹ Federal ² (15) 41.83	N (N) Federal ¹ Federal ² (15) 40	O (O) ✓ Federal ¹ Federal ² (15) 40	P (P) Federal ¹ Federal ² (15) 40

Note¹ = Surface Owner RightsNote² = Sub-Surface Mineral Rights

Land Restrictions

No land restrictions found for this section.

[Return to Search](#)



OXY USA Inc

PO Box 50250
Midland, TX 79710-0250

April 26, 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 –
Palladium MDP1 7-6 Federal Com #5H – Cotton Draw Bone Spring
Surface – 293 FSL 592 FEL Unit P Sec 7 T24S R31E
Top Perforation – 340 FSL 1260 FEL Unit P Sec 7 T24S R31E
Bottom Perforation – 340 FNL 1260 FEL Lot 1 (A) Sec 6 T24S R31E
Bottom Hole –180 FNL 1260 FEL Lot 1 (A) Sec 6 T24 R31E
Eddy County, New Mexico***

Dear Mr Lowe

OXY USA Inc respectfully requests administrative approval of a non-standard location on the Palladium MDP1 7-6 Federal #5H well, API Number-30-015-Pending, Property Code Pending The #5H 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 – 293 FSL 592 FEL Unit P Sec 7 T24S R31E
Top Perforation – 340 FSL 1260 FEL Unit P Sec 7 T24S R31E
Bottom Perforation – 340 FNL 1260 FEL Lot 1 (A) Sec 6 T24S R31E
Bottom Hole –180 FNL 1260 FEL Lot 1 (A) Sec 6 T24 R31E

The adjoining spacing units are located in T23S R31E, Section 31-Units O, P, T23S R32E, Section 32-Unit M, T24S R31E, Section 5-Units D, E, L, M, Section 6-Units 1(A), 2(B), G, H, I, J, O, P, Section 7-Units A, B, G, H, I, J, O, P, Section 8-Units D, E, L, M, Section 17-Unit D, Section 18-Units A, B

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

April 26, 2017

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Re *Application for Administrative Approval of Non-Standard Location –
Palladium MDP1 7-6 Federal Com #5H – Cotton Draw Bone Spring
Surface – 293 FSL 592 FEL Unit P Sec 7 T24S R31E
Top Perforation – 340 FSL 1260 FEL Unit P Sec 7 T24S R31E
Bottom Perforation – 340 FNL 1260 FEL Lot 1 (A) Sec 6 T24S R31E
Bottom Hole – 180 FNL 1260 FEL Lot 1 (A) Sec 6 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 – 293 FSL 592 FEL Unit P Sec 7 T24S R31E
Top Perforation – 340 FSL 1260 FEL Unit P Sec 7 T24S R31E
Bottom Perforation – 340 FNL 1260 FEL Lot 1 (A) Sec 6 T24S R31E
Bottom Hole – 180 FNL 1260 FEL Lot 1 (A) Sec 6 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

5 Lease Serial No
NMNM57273

6 If Indian, Allottee or Tribe Name

7 If Unit or CA Agreement, Name and No

8 Lease Name and Well No
PALLADIUM MDP1-7-6 FEDERAL 5H

9 API Well No

1a Type of work ☒ DRILL ☐ REENTER

1b Type of Well ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2 Name of Operator
OXY USA INC

3a Address
5 Greenway Plaza, Suite 110 Houston TX 770

3b Phone No (include area code)
(713)366-5716

10 Field and Pool, or Exploratory
COTTON DRAW BONE SPRING / 2ND I

4 Location of Well (Report location clearly and in accordance with any State requirements *)
At surface SESE / 293 FSL / 592 FEL / LAT 32 2253982 / LONG -103 8103042
At proposed prod zone LOT 1 / 180 FNL / 1260 FEL / LAT 32 2531616 / LONG -103 8124211

11 Sec, T R M or Blk and Survey or Area
SEC 7 / T24S / R31E / NMP

14 Distance in miles and direction from nearest town or post office*
15 miles

12 County or Parish
EDDY

13 State
NM

15 Distance from proposed*
location to nearest 50 feet
property or lease line, ft
(Also to nearest drg unit line, if any)

16 No of acres in lease
607 16

17 Spacing Unit dedicated to this well
320

18 Distance from proposed location*
to nearest well, drilling, completed, 30 feet
applied for, on this lease, ft

19 Proposed Depth
10042 feet / 20180 feet

20 BLM/BIA Bond No on file
FED ESB000226

21 Elevations (Show whether DF, KDB, RT, GL, etc)
3525 feet

22 Approximate date work will start*
02/11/2018

23 Estimated duration
25 days

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

2 A Drilling Plan

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)

4 Bond to cover the operations unless covered by an existing bond on file (see
Item 20 above)

5 Operator certification

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
02/07/2017

Title

Sr Regulatory Advisor

Approved by (Signature)

Name (Printed/Typed)

Date

Title

Office
CARLSBAD

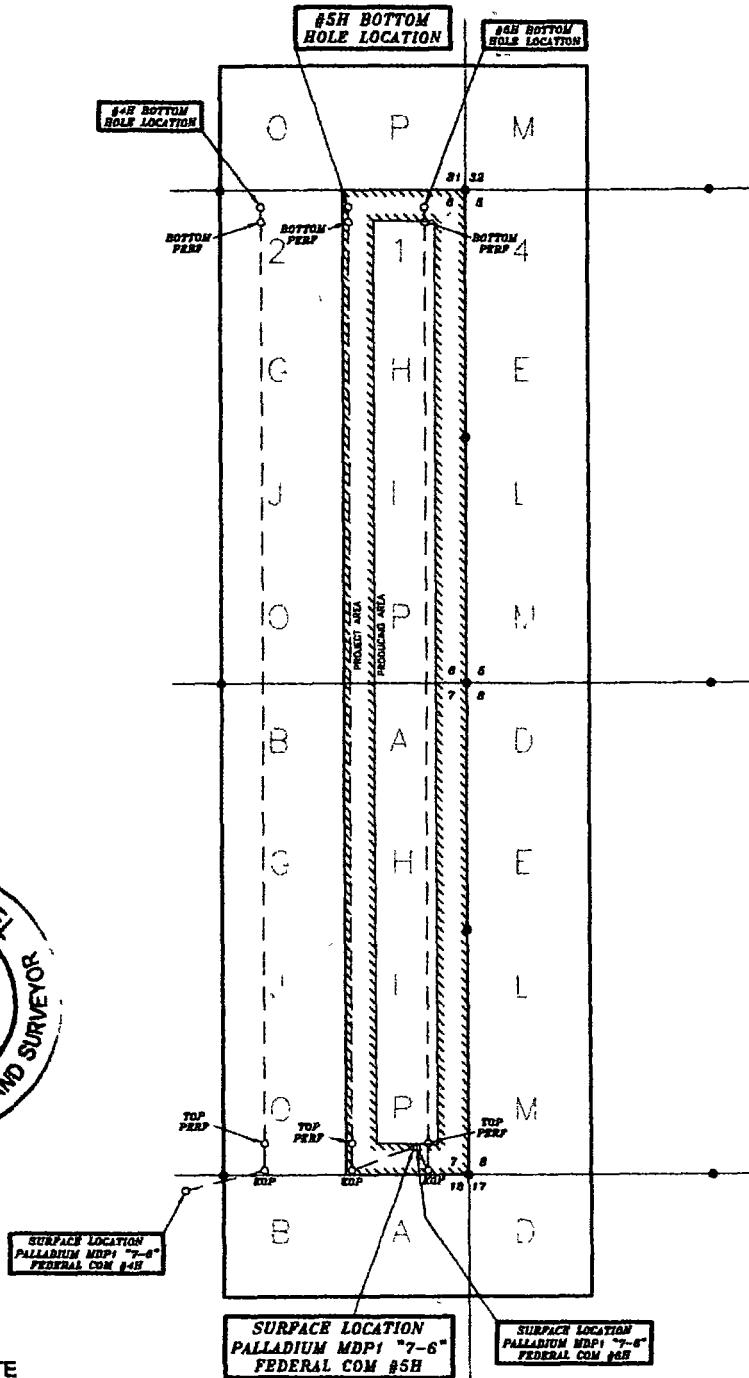
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to
conduct operations thereon
Conditions of approval, if any, are attached

Title 18 USC Section 1001 and Title 43 USC 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.
 PALLADIUM MDP1 "7-6" FEDERAL COM #5H
 SECTION 31, T23S, R31E,
 SECTIONS 5, 6, 7, 8, 17 & 18, T24S, R31E,
 N.M.P.M., EDDY COUNTY, NEW MEXICO



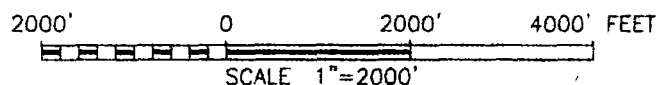
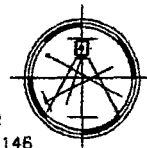
SURVEYORS CERTIFICATE

I, TERRY J. ASEL, NEW MEXICO PROFESSIONAL SURVEYOR NO. 15079, DO HEREBY CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND MEETS THE "MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO" AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS

Terry J. Asel 4/25/2017
 Terry J. Asel N.M.P.L.S. No. 15079

Asel Surveying

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



District I
 1623 N. French Dr., Hobbs, NM 88240
 Phone: (575) 393-6161 Fax: (575) 393-0720
 District II
 3111 S. First St., Artesia, NM 88210
 Phone: (575) 744-1281 Fax: (575) 744-9720
 District III
 1000 Rio Brazos Road, Artesia, NM 87410
 Phone: (505) 334-6178 Fax: (505) 334-6170
 District IV
 1220 E. St. Francis Dr., Santa Fe, NM 87501
 Phone: (505) 476-3460 Fax: (505) 476-3463

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 30-015-	Pool Code 13367	Pool Name Cotton Draw Bone Springs
Property Code	Property Name PALLADIUM MDP1 "7-6" FEDERAL COM	Well Number 5H
OGRID No 16696	Operator Name OXY USA INC.	Elevation 3525.4'

Surface Location

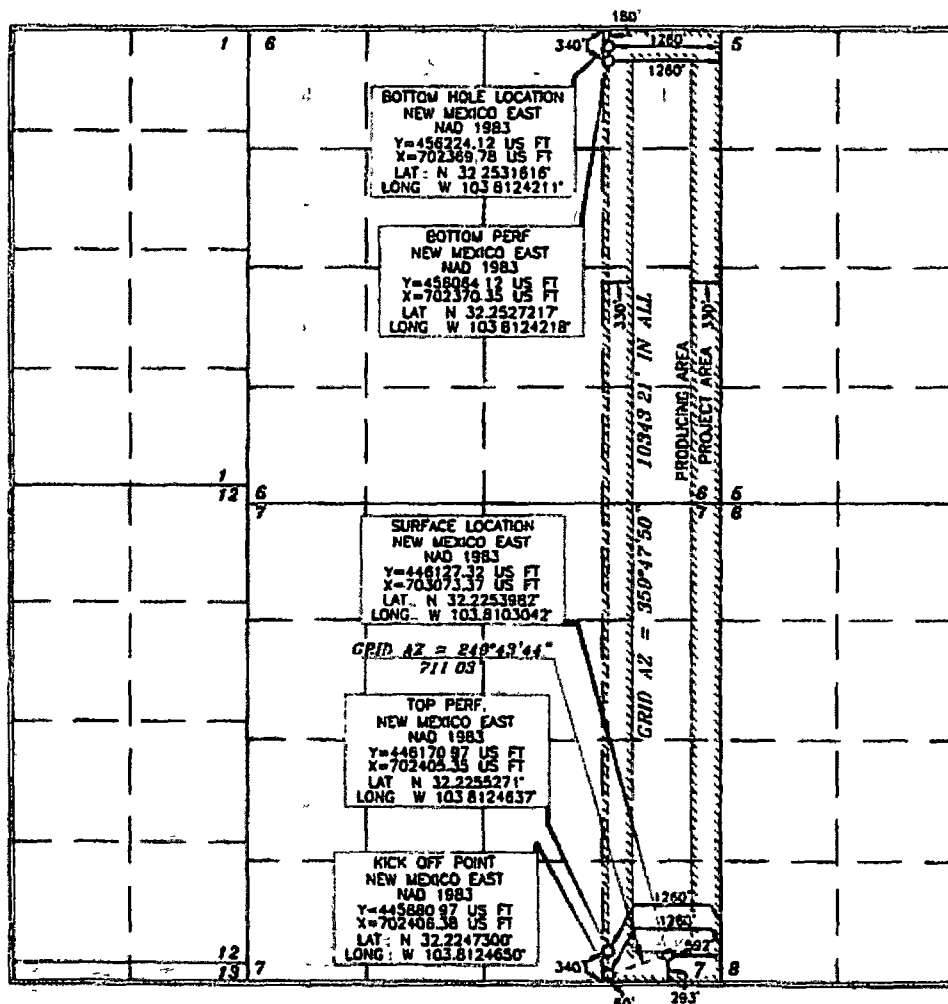
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North-South line	Feet from the	East-West line	County
P	7	24 SOUTH	31 EAST, N M P.M		293'	SOUTH	592'	EAST	EDDY

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
1	6	24 SOUTH	31 EAST, N M P.M		180'	NORTH	1260'	EAST	EDDY

Dedicated Acres 320	Joint or Infill Y	Consolidation Code	Order No. NSL will be filed
-------------------------------	-----------------------------	--------------------	---------------------------------------

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 furnished herein is true and
 complete to the best of my knowledge and belief, and that the
 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.

Signature of the Operator

David Stewart 2/6/17

David Stewart Sr. Reg. A.U.

Project Name

David Stewart@oxy.com

E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this
 plat was plotted from the latest official surveys
 made by me or by a duly licensed surveyor and that the
 same is true and correct to the best of my belief.

Date of Survey
 JUNE 7, 2016

Signature and Seal of Professional Land Surveyor
 JERRY J. AS

Certificate Number
 15079

Application Non-Standard Location - Service List

1

OXY USA Inc

Palladium MDP1 7-6 Federal #5H

New Mexico Oil Conservation Division
811 S First St
Artesia, NM 88210
7015-0640-0005-1003-4062

New Mexico Oil Conservation Division
1220 South St Francis Dr
Santa Fe, NM 87505
7015-0640-0005-1003-4079

United States Dept of Interior
Bureau of Land Management
620 E Greene Street
Carlsbad, NM 88220
7015-0640-0005-1003-4086

T23S R31E

Section 31 - Unit O, P

ConocoPhillips Co
3401 30th St
Farmington, NM 87402
7015-0640-0005-1003-4109

Sec 32 - Unit M

OXY USA Inc
P O Box 50250
Midland, TX 79710

EOG A Resources, Inc
P O Box 900
Artesia, NM 88211
7015-0640-0005-1003-4147

EOG M Resources, Inc
P O Box 840
Artesia, NM 88211
7015-0640-0005-1003-4154

EOG Y Resources, Inc
105 S 4th St
Artesia, NM 88210
7015-0640-0005-1003-4161

T24S R31E

Section 5 - Units D, E, L, M

OXY USA Inc
P O Box 50250
Midland, TX 79710

Hayes Properties, Inc
500 W Texas Ave
Midland, TX 79701
7015-0640-0005-1003-4123

EOG A Resources, Inc
P O Box 900
Artesia, NM 88211
7015-0640-0005-1003-4147

EOG M Resources, Inc
P O Box 840
Artesia, NM 88211
7015-0640-0005-1003-4154

EOG Y Resources, Inc
105 S 4th St
Artesia, NM 88210
7015-0640-0005-1003-4161

Section 6 - Units 1 (A), 2 (B), G, H, I, J, O, P

OXY USA Inc
P O Box 50250
Midland, TX 79710

Section 7 - Units A, B, G, H, I, J, O, P

OXY USA Inc
P O Box 50250
Midland, TX 79710

Section 8 - Units D, E, L, M

Chevron USA, Inc
6301 Deauville
Midland, TX 79706
7015-0640-0005-1003-4116

Section 17 - Unit D

OXY USA Inc
P O Box 50250
Midland, TX 79710

EOG Resources, Inc
P O Box 2267
Midland, TX 79702
7015-0640-0005-1003-4130

Section 18 - Units A, B

OXY USA Inc
P O Box 50250
Midland, TX 79710

EOG Resources, Inc
P O Box 2267
Midland, TX 79702
7015-0640-0005-1003-4130

McCombs Energy, Ltd
750 E Mulberry Ave, Ste 403
San Antonio, TX 78212
7015-0640-0005-1003-4185

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

4/26/17

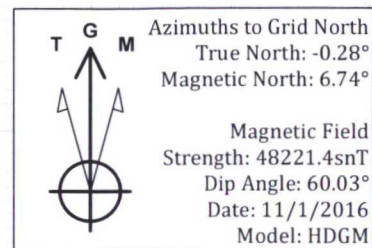
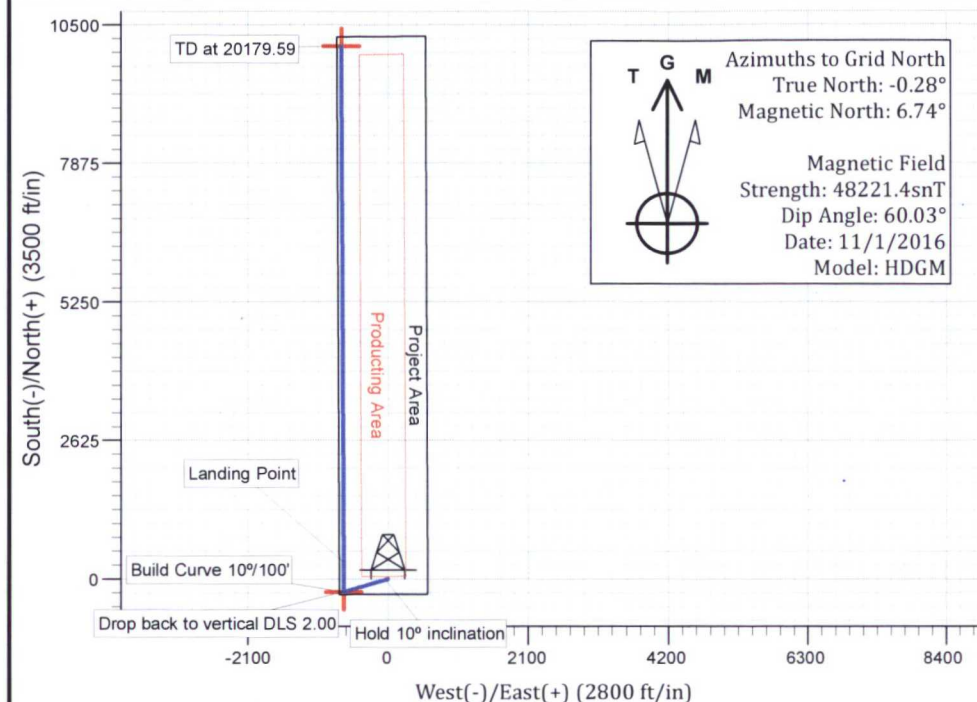
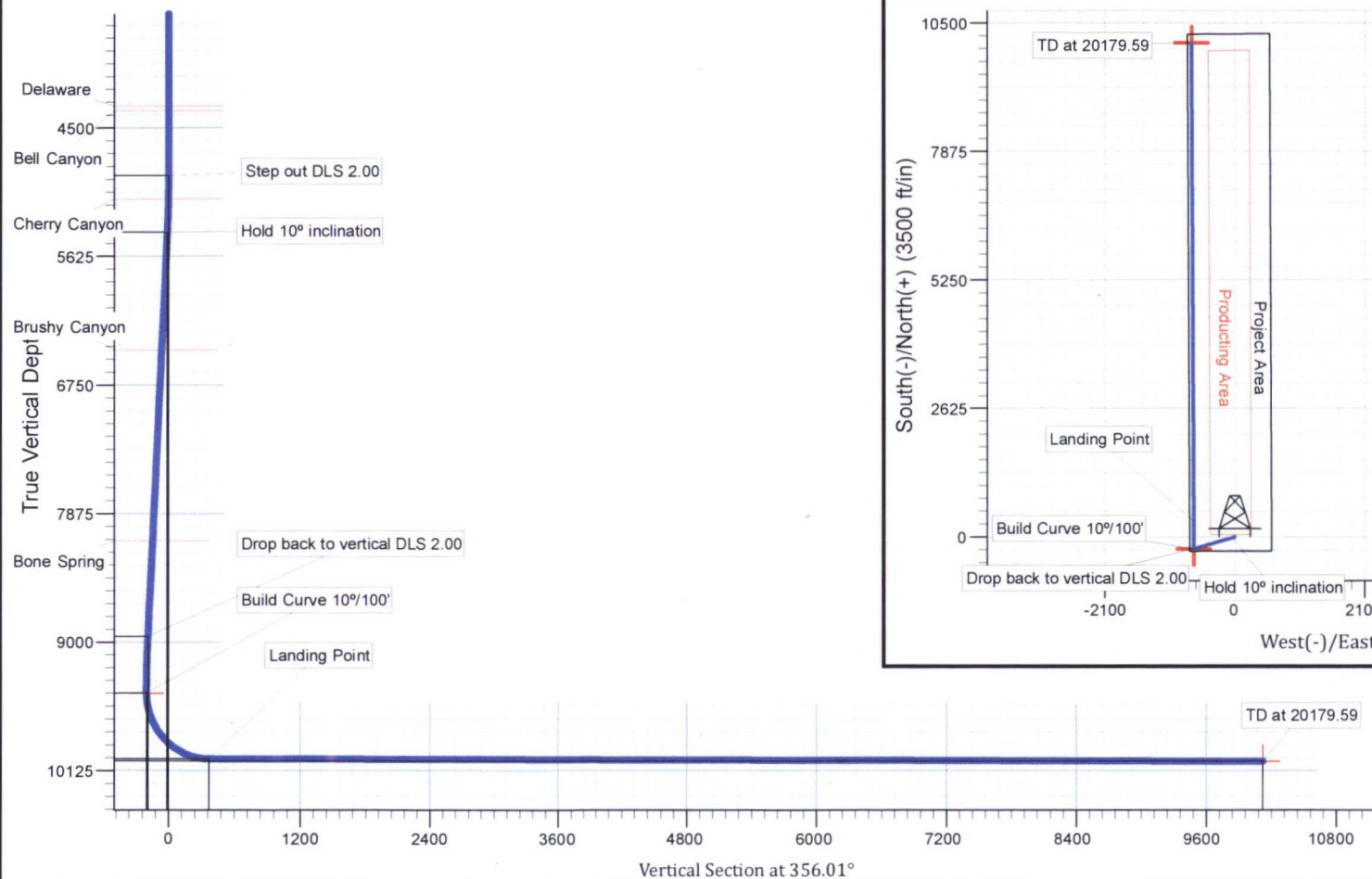
David Stewart
OXY USA Inc



Project: NM DIRECTIONAL PLANS (NAD 1983)
Site: Palladium 7/6
Well: Palladium MDP1 7/6 Federal Com 5H
Wellbore: WB00
Design: Permitting Plan

WELL DETAILS: Palladium MDP1 7/6 Federal Com 5H

Ground Level: 3525.40 WELL @ 3551.90ft (Original Well Elev)
+N/-S +E/-W Northing Easting Latitude Longitude
0.00 0.00 446127.32 703073.37 32° 13' 31.433548 N 103° 48' 37.095228 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
4915.00	4915.00	0.00	0.00	0.00	0.00	0.00	0.00	Step out DLS 2.00
5412.46	5415.00	10.00	249.73	-15.08	-40.83	-12.20	43.52	Hold 10° inclination
8951.54	9008.67	10.00	249.73	-231.29	-626.21	-187.20	667.55	Drop back to vertical DLS 2.00
9449.00	9508.66	0.00	359.80	-246.37	-667.03	-199.40	711.07	Build Curve 10°/100'
10021.96	10407.46	89.88	359.80	325.39	-669.06	371.11	1282.83	Landing Point
10042.00	20179.59	89.88	359.80	10097.44	-703.63	10121.92	11054.94	TD at 20179.59

Oxy Planning Report

Database	HOPSP	Local Co-ordinate Reference	Well Palladium MDP1 7/6 Federal Com 5H
Company	OXY	TVD Reference	WELL @ 3551 90ft (Original Well Elev)
Project	NM DIRECTIONAL PLANS (NAD 1983)	MD Reference	WELL @ 3551 90ft (Original Well Elev)
Site	Palladium 7/6	North Reference	Grd
Well	Palladium MDP1 7/6 Federal Com 5H	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	Palladium 7/6		
Site Position		Northing	445,653 44 usft
From	Map	Easting	700,610 02 usft
Position Uncertainty	0 00 ft	Slot Radius	13 200 in
		Latitude	32° 13' 26 861951 N
		Longitude	103° 49' 5 798622 W
		Grid Convergence	0 27 °

Well	Palladium MDP1 7/6 Federal Com 5H		
Well Position	+N/-S	473 91 ft	Northing
	+E/-W	2,463 51 ft	Easting
Position Uncertainty	0 00 ft	Wellhead Elevation	3,525 40 ft
		Latitude	32° 13' 31 433548 N
		Longitude	103° 48' 37 095228 W
		Ground Level	3,525 40 ft

Wellbore	WB00		
Magnetics	Model Name	Sample Date	Declination
			(°)
	HDGM	11/1/2016	7 02
			Dip Angle
			(°)
			60 03
			Field Strength
			(nT)
			48,221

Design	Permitting Plan		
Audit Notes			
Version	Phase	PROTOTYPE	Tie On Depth
			0 00
Vertical Section	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0 00	0 00	0 00
			Direction
			(°)
			356 01

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	
4,915 00	0 00	0 00	4,915 00	0 00	0 00	0 00	0 00	0 00	0 00	
5,415 00	10 00	249 73	5,412 46	-15 08	-40 83	2 00	2 00	0 00	249 73	
9,008 67	10 00	249 73	8,951 54	-231 29	-626 21	0 00	0 00	0 00	0 00	
9,508 66	0 00	359 80	9,449 00	-246 37	-667 03	2 00	-2 00	0 00	180 00	Pal_7-6_5H_KOP
10,407 46	89 88	359 80	10,021 96	325 39	-669 06	10 00	10 00	0 00	-0 20	
20,179 59	89 88	359 80	10,042 00	10,097 44	-703 63	0 00	0 00	0 00	0 00	Pal_7-6_5H_BHL

Oxy Planning Report

Database	HOPSPP	Local Co-ordinate Reference	Well Palladium MDP1 7/6 Federal Com 5H
Company	OXY	TVD Reference	WELL @ 3551-90ft (Original Well Elev)
Project	NM DIRECTIONAL PLANS (NAD 1983)	MD Reference	WELL @ 3551 90ft (Original Well Elev)
Site	Palladium 7/6	North Reference	Gnd
Well	Palladium MDP1 7/6 Federal Com 5H	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
622 00	0 00	0 00	622 00	0 00	0 00	0 00	0 00	0 00	0 00
Rustler									
970 00	0 00	0 00	970 00	0 00	0 00	0 00	0 00	0 00	0 00
Salado									
3,002 00	0 00	0 00	3,002 00	0 00	0 00	0 00	0 00	0 00	0 00
Castile									
4,306 00	0 00	0 00	4,306 00	0 00	0 00	0 00	0 00	0 00	0 00
Delaware									
4,350 00	0 00	0 00	4,350 00	0 00	0 00	0 00	0 00	0 00	0 00
Bell Canyon									
4,915 00	0 00	0 00	4,915 00	0 00	0 00	0 00	0 00	0 00	0 00
Step out DLS 2 00									
5,000 00	1 70	249 73	4,999 99	-0 44	-1 18	-0 35	2 00	2 00	0 00
5,100 00	3 70	249 73	5,099 87	-2 07	-5 60	-1 67	2 00	2 00	0 00
5,122 18	4 14	249 73	5,122 00	-2 59	-7 02	-2 10	2 00	2 00	0 00
Cherry Canyon									
5,200 00	5 70	249 73	5,199 53	-4 91	-13 29	-3 97	2 00	2 00	0 00
5,300 00	7 70	249 73	5,298 84	-8 95	-24 23	-7 24	2 00	2 00	0 00
5,400 00	9 70	249 73	5,397 69	-14 19	-38 42	-11 49	2 00	2 00	0 00
5,415 00	10 00	249 73	5,412 46	-15 08	-40 83	-12 20	2 00	2 00	0 00
Hold 10° inclination									
5,500 00	10 00	249 73	5,496 17	-20 19	-54 67	-16 34	0 00	0 00	0 00
5,600 00	10 00	249 73	5,594 65	-26 21	-70 96	-21 21	0 00	0 00	0 00
5,700 00	10 00	249 73	5,693 14	-32 23	-87 25	-26 08	0 00	0 00	0 00
5,800 00	10 00	249 73	5,791 62	-38 24	-103 54	-30 95	0 00	0 00	0 00
5,900 00	10 00	249 73	5,890 10	-44 26	-119 83	-35 82	0 00	0 00	0 00
6,000 00	10 00	249 73	5,988 58	-50 27	-136 12	-40 69	0 00	0 00	0 00
6,100 00	10 00	249 73	6,087 06	-56 29	-152 41	-45 56	0 00	0 00	0 00
6,200 00	10 00	249 73	6,185 54	-62 31	-168 70	-50 43	0 00	0 00	0 00
6,300 00	10 00	249 73	6,284 02	-68 32	-184 99	-55 30	0 00	0 00	0 00
6,400 00	10 00	249 73	6,382 50	-74 34	-201 28	-60 17	0 00	0 00	0 00
6,460 42	10 00	249 73	6,442 00	-77 98	-211 12	-63 11	0 00	0 00	0 00
Brushy Canyon									
6,500 00	10 00	249 73	6,480 98	-80 36	-217 56	-65 04	0 00	0 00	0 00
6,600 00	10 00	249 73	6,579 46	-86 37	-233 85	-69 91	0 00	0 00	0 00
6,700 00	10 00	249 73	6,677 94	-92 39	-250 14	-74 78	0 00	0 00	0 00
6,800 00	10 00	249 73	6,776 42	-98 41	-266 43	-79 65	0 00	0 00	0 00
6,900 00	10 00	249 73	6,874 91	-104 42	-282 72	-84 52	0 00	0 00	0 00
7,000 00	10 00	249 73	6,973 39	-110 44	-299 01	-89 39	0 00	0 00	0 00
7,100 00	10 00	249 73	7,071 87	-116 45	-315 30	-94 25	0 00	0 00	0 00
7,200 00	10 00	249 73	7,170 35	-122 47	-331 59	-99 12	0 00	0 00	0 00
7,300 00	10 00	249 73	7,268 83	-128 49	-347 88	-103 99	0 00	0 00	0 00
7,400 00	10 00	249 73	7,367 31	-134 50	-364 17	-108 86	0 00	0 00	0 00
7,500 00	10 00	249 73	7,465 79	-140 52	-380 46	-113 73	0 00	0 00	0 00
7,600 00	10 00	249 73	7,564 27	-146 54	-396 75	-118 60	0 00	0 00	0 00
7,700 00	10 00	249 73	7,662 75	-152 55	-413 03	-123 47	0 00	0 00	0 00
7,800 00	10 00	249 73	7,761 23	-158 57	-429 32	-128 34	0 00	0 00	0 00
7,900 00	10 00	249 73	7,859 71	-164 59	-445 61	-133 21	0 00	0 00	0 00
8,000 00	10 00	249 73	7,958 19	-170 60	-461 90	-138 08	0 00	0 00	0 00
8,100 00	10 00	249 73	8,056 67	-176 62	-478 19	-142 95	0 00	0 00	0 00
8,159 23	10 00	249 73	8,115 00	-180 18	-487 84	-145 83	0 00	0 00	0 00
Bone Spring									

Oxy Planning Report

Database	HOPSP	Local Co-ordinate Reference	Well Palladium MDP1 7/6 Federal Com 5H
Company	OXY	TVD Reference	WELL @ 3551 90ft (Original Well Elev)
Project	NM DIRECTIONAL PLANS (NAD 1983)	MD Reference	WELL @ 3551 90ft (Original Well Elev)
Site	Palladium 7/6	North Reference	Grid
Well	Palladium MDP1 7/6 Federal Com 5H	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)
8,200 00	10 00	249 73	8,155 16	-182 63	-494 48	-147 82	0 00	0 00	0 00
8,300 00	10 00	249 73	8,253 64	-188 65	-510 77	-152 69	0 00	0 00	0 00
8,400 00	10 00	249 73	8,352 12	-194 67	-527 06	-157 56	0 00	0 00	0 00
8,500 00	10 00	249 73	8,450 60	-200 68	-543 35	-162 43	0 00	0 00	0 00
8,600 00	10 00	249 73	8,549 08	-206 70	-559 64	-167 30	0 00	0 00	0 00
8,700 00	10 00	249 73	8,647 56	-212 72	-575 93	-172 17	0 00	0 00	0 00
8,800 00	10 00	249 73	8,746 04	-218 73	-592 22	-177 03	0 00	0 00	0 00
8,900 00	10 00	249 73	8,844 52	-224 75	-608 50	-181 90	0 00	0 00	0 00
9,000 00	10 00	249 73	8,943 00	-230 77	-624 79	-186 77	0 00	0 00	0 00
9,008 67	10 00	249 73	8,951 54	-231 29	-626 21	-187 20	0 00	0 00	0 00
Drop back to vertical DLS 2 00									
9,100 00	8 17	249 73	9,041 72	-236 28	-639 74	-191 24	2 00	-2 00	0 00
9,200 00	6 17	249 73	9,140 93	-240 61	-651 45	-194 74	2 00	-2 00	0 00
9,300 00	4 17	249 73	9,240 52	-243 73	-659 91	-197 27	2 00	-2 00	0 00
9,400 00	2 17	249 73	9,340 36	-245 65	-665 10	-198 82	2 00	-2 00	0 00
9,500 00	0 17	249 73	9,440 34	-246 36	-667 02	-199 40	2 00	-2 00	0 00
9,508 66	0 00	359 80	9,449 00	-246 37	-667 03	-199 40	2 00	-2 00	0 00
Build Curve 10°/100' - Pal 7-6 5H KOP									
9,600 00	9 13	359 80	9,539 95	-239 10	-667 06	-192 15	10 00	10 00	0 00
9,700 00	19 13	359 80	9,636 80	-214 71	-667 14	-167 82	10 00	10 00	0 00
9,800 00	29 13	359 80	9,727 94	-173 88	-667 29	-127 07	10 00	10 00	0 00
9,900 00	39 13	359 80	9,810 61	-117 84	-667 49	-71 15	10 00	10 00	0 00
10,000 00	49 13	359 80	9,882 29	-48 29	-667 73	-1 76	10 00	10 00	0 00
10,100 00	59 13	359 80	9,940 81	32 64	-668 02	79 00	10 00	10 00	0 00
10,200 00	69 13	359 80	9,984 38	122 51	-668 34	168 67	10 00	10 00	0 00
10,300 00	79 13	359 80	10,011 68	218 58	-668 68	264 53	10 00	10 00	0 00
10,400 00	89 13	359 80	10,021 89	317 92	-669 03	363 66	10 00	10 00	0 00
10,407 46	89 88	359 80	10,021 96	325 39	-669 06	371 11	10 00	10 00	0 00
Landing Point									
10,500 00	89 88	359 80	10,022 15	417 92	-669 38	463 45	0 00	0 00	0 00
10,600 00	89 88	359 80	10,022 36	517 92	-669 74	563 23	0 00	0 00	0 00
10,700 00	89 88	359 80	10,022 57	617 92	-670 09	663 01	0 00	0 00	0 00
10,800 00	89 88	359 80	10,022 78	717 92	-670 44	762 79	0 00	0 00	0 00
10,900 00	89 88	359 80	10,022 99	817 92	-670 80	862 57	0 00	0 00	0 00
11,000 00	89 88	359 80	10,023 20	917 92	-671 15	962 35	0 00	0 00	0 00
11,100 00	89 88	359 80	10,023 41	1,017 92	-671 51	1,062 14	0 00	0 00	0 00
11,200 00	89 88	359 80	10,023 61	1,117 92	-671 86	1,161 92	0 00	0 00	0 00
11,300 00	89 88	359 80	10,023 82	1,217 92	-672 21	1,261 70	0 00	0 00	0 00
11,400 00	89 88	359 80	10,024 03	1,317 92	-672 57	1,361 48	0 00	0 00	0 00
11,500 00	89 88	359 80	10,024 24	1,417 92	-672 92	1,461 26	0 00	0 00	0 00
11,600 00	89 88	359 80	10,024 45	1,517 91	-673 28	1,561 05	0 00	0 00	0 00
11,700 00	89 88	359 80	10,024 66	1,617 91	-673 63	1,660 83	0 00	0 00	0 00
11,800 00	89 88	359 80	10,024 86	1,717 91	-673 98	1,760 61	0 00	0 00	0 00
11,900 00	89 88	359 80	10,025 07	1,817 91	-674 34	1,860 39	0 00	0 00	0 00
12,000 00	89 88	359 80	10,025 28	1,917 91	-674 69	1,960 17	0 00	0 00	0 00
12,100 00	89 88	359 80	10,025 49	2,017 91	-675 04	2,059 95	0 00	0 00	0 00
12,200 00	89 88	359 80	10,025 70	2,117 91	-675 40	2,159 74	0 00	0 00	0 00
12,300 00	89 88	359 80	10,025 90	2,217 91	-675 75	2,259 52	0 00	0 00	0 00
12,400 00	89 88	359 80	10,026 11	2,317 91	-676 11	2,359 30	0 00	0 00	0 00
12,500 00	89 88	359 80	10,026 32	2,417 91	-676 46	2,459 08	0 00	0 00	0 00
12,600 00	89 88	359 80	10,026 53	2,517 91	-676 81	2,558 86	0 00	0 00	0 00
12,700 00	89 88	359 80	10,026 73	2,617 90	-677 17	2,658 65	0 00	0 00	0 00
12,800 00	89 88	359 80	10,026 94	2,717 90	-677 52	2,758 43	0 00	0 00	0 00

Oxy Planning Report

Database	HOPSPP	Local Co-ordinate Reference	Well Palladium MDP1 7/6 Federal Com 5H
Company	OXY	TVD Reference	WELL @ 3551 90ft (Original Well Elev)
Project	NM DIRECTIONAL PLANS (NAD 1983)	MD Reference	WELL @ 3551 90ft (Original Well Elev)
Site	Palladium 7/6	North Reference	Grd
Well	Palladium MDP1 7/6 Federal Com 5H	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)
12,900 00	89 88	359 80	10,027 15	2,817 90	-677 88	2,858 21	0 00	0 00	0 00
13,000 00	89 88	359 80	10,027 36	2,917 90	-678 23	2,957 99	0 00	0 00	0 00
13,100 00	89 88	359 80	10,027 56	3,017 90	-678 58	3,057 77	0 00	0 00	0 00
13,200 00	89 88	359 80	10,027 77	3,117 90	-678 94	3,157 55	0 00	0 00	0 00
13,300 00	89 88	359 80	10,027 98	3,217 90	-679 29	3,257 34	0 00	0 00	0 00
13,400 00	89 88	359 80	10,028 18	3,317 90	-679 64	3,357 12	0 00	0 00	0 00
13,500 00	89 88	359 80	10,028 39	3,417 90	-680 00	3,456 90	0 00	0 00	0 00
13,600 00	89 88	359 80	10,028 60	3,517 90	-680 35	3,556 68	0 00	0 00	0 00
13,700 00	89 88	359 80	10,028 80	3,617 90	-680 71	3,656 46	0 00	0 00	0 00
13,800 00	89 88	359 80	10,029 01	3,717 90	-681 06	3,756 25	0 00	0 00	0 00
13,900 00	89 88	359 80	10,029 22	3,817 89	-681 41	3,856 03	0 00	0 00	0 00
14,000 00	89 88	359 80	10,029 42	3,917 89	-681 77	3,955 81	0 00	0 00	0 00
14,100 00	89 88	359 80	10,029 63	4,017 89	-682 12	4,055 59	0 00	0 00	0 00
14,200 00	89 88	359 80	10,029 84	4,117 89	-682 48	4,155 37	0 00	0 00	0 00
14,300 00	89 88	359 80	10,030 04	4,217 89	-682 83	4,255 16	0 00	0 00	0 00
14,400 00	89 88	359 80	10,030 25	4,317 89	-683 18	4,354 94	0 00	0 00	0 00
14,500 00	89 88	359 80	10,030 45	4,417 89	-683 54	4,454 72	0 00	0 00	0 00
14,600 00	89 88	359 80	10,030 66	4,517 89	-683 89	4,554 50	0 00	0 00	0 00
14,700 00	89 88	359 80	10,030 87	4,617 89	-684 24	4,654 28	0 00	0 00	0 00
14,800 00	89 88	359 80	10,031 07	4,717 89	-684 60	4,754 06	0 00	0 00	0 00
14,900 00	89 88	359 80	10,031 28	4,817 89	-684 95	4,853 85	0 00	0 00	0 00
15,000 00	89 88	359 80	10,031 48	4,917 89	-685 31	4,953 63	0 00	0 00	0 00
15,100 00	89 88	359 80	10,031 69	5,017 88	-685 66	5,053 41	0 00	0 00	0 00
15,200 00	89 88	359 80	10,031 89	5,117 88	-686 01	5,153 19	0 00	0 00	0 00
15,300 00	89 88	359 80	10,032 10	5,217 88	-686 37	5,252 97	0 00	0 00	0 00
15,400 00	89 88	359 80	10,032 30	5,317 88	-686 72	5,352 76	0 00	0 00	0 00
15,500 00	89 88	359 80	10,032 51	5,417 88	-687 08	5,452 54	0 00	0 00	0 00
15,600 00	89 88	359 80	10,032 71	5,517 88	-687 43	5,552 32	0 00	0 00	0 00
15,700 00	89 88	359 80	10,032 92	5,617 88	-687 78	5,652 10	0 00	0 00	0 00
15,800 00	89 88	359 80	10,033 12	5,717 88	-688 14	5,751 88	0 00	0 00	0 00
15,900 00	89 88	359 80	10,033 33	5,817 88	-688 49	5,851 66	0 00	0 00	0 00
16,000 00	89 88	359 80	10,033 53	5,917 88	-688 84	5,951 45	0 00	0 00	0 00
16,100 00	89 88	359 80	10,033 74	6,017 88	-689 20	6,051 23	0 00	0 00	0 00
16,200 00	89 88	359 80	10,033 94	6,117 88	-689 55	6,151 01	0 00	0 00	0 00
16,300 00	89 88	359 80	10,034 14	6,217 87	-689 91	6,250 79	0 00	0 00	0 00
16,400 00	89 88	359 80	10,034 35	6,317 87	-690 26	6,350 57	0 00	0 00	0 00
16,500 00	89 88	359 80	10,034 55	6,417 87	-690 61	6,450 36	0 00	0 00	0 00
16,600 00	89 88	359 80	10,034 76	6,517 87	-690 97	6,550 14	0 00	0 00	0 00
16,700 00	89 88	359 80	10,034 96	6,617 87	-691 32	6,649 92	0 00	0 00	0 00
16,800 00	89 88	359 80	10,035 16	6,717 87	-691 68	6,749 70	0 00	0 00	0 00
16,900 00	89 88	359 80	10,035 37	6,817 87	-692 03	6,849 48	0 00	0 00	0 00
17,000 00	89 88	359 80	10,035 57	6,917 87	-692 38	6,949 27	0 00	0 00	0 00
17,100 00	89 88	359 80	10,035 78	7,017 87	-692 74	7,049 05	0 00	0 00	0 00
17,200 00	89 88	359 80	10,035 98	7,117 87	-693 09	7,148 83	0 00	0 00	0 00
17,300 00	89 88	359 80	10,036 18	7,217 87	-693 44	7,248 61	0 00	0 00	0 00
17,400 00	89 88	359 80	10,036 39	7,317 87	-693 80	7,348 39	0 00	0 00	0 00
17,500 00	89 88	359 80	10,036 59	7,417 86	-694 15	7,448 17	0 00	0 00	0 00
17,600 00	89 88	359 80	10,036 79	7,517 86	-694 51	7,547 96	0 00	0 00	0 00
17,700 00	89 88	359 80	10,036 99	7,617 86	-694 86	7,647 74	0 00	0 00	0 00
17,800 00	89 88	359 80	10,037 20	7,717 86	-695 21	7,747 52	0 00	0 00	0 00
17,900 00	89 88	359 80	10,037 40	7,817 86	-695 57	7,847 30	0 00	0 00	0 00
18,000 00	89 88	359 80	10,037 60	7,917 86	-695 92	7,947 08	0 00	0 00	0 00
18,100 00	89 88	359 80	10,037 81	8,017 86	-696 28	8,046 87	0 00	0 00	0 00
18,200 00	89 88	359 80	10,038 01	8,117 86	-696 63	8,146 65	0 00	0 00	0 00

Oxy Planning Report

Database	HOPSP	Local Co-ordinate Reference	Well Palladium MDP1 7/6 Federal Com 5H
Company	OXY	TVD Reference	WELL @ 3551 90ft (Original Well Elev)
Project	NM DIRECTIONAL PLANS (NAD 1983)	MD Reference	WELL @ 3551 90ft (Original Well Elev)
Site	Palladium 7/6	North Reference	Grid
Well	Palladium MDP1 7/6 Federal Com 5H	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)
18,300 00	89 88	359 80	10,038 21	8,217 86	-696 98	8,246 43	0 00	0 00	0 00
18,400 00	89 88	359 80	10,038 41	8,317 86	-697 34	8,346 21	0 00	0 00	0 00
18,500 00	89 88	359 80	10,038 62	8,417 86	-697 69	8,445 99	0 00	0 00	0 00
18,600 00	89 88	359 80	10,038 82	8,517 86	-698 04	8,545 77	0 00	0 00	0 00
18,700 00	89 88	359 80	10,039 02	8,617 85	-698 40	8,645 56	0 00	0 00	0 00
18,800 00	89 88	359 80	10,039 22	8,717 85	-698 75	8,745 34	0 00	0 00	0 00
18,900 00	89 88	359 80	10,039 42	8,817 85	-699 11	8,845 12	0 00	0 00	0 00
19,000 00	89 88	359 80	10,039 63	8,917 85	-699 46	8,944 90	0 00	0 00	0 00
19,100 00	89 88	359 80	10,039 83	9,017 85	-699 81	9,044 68	0 00	0 00	0 00
19,200 00	89 88	359 80	10,040 03	9,117 85	-700 17	9,144 47	0 00	0 00	0 00
19,300 00	89 88	359 80	10,040 23	9,217 85	-700 52	9,244 25	0 00	0 00	0 00
19,400 00	89 88	359 80	10,040 43	9,317 85	-700 88	9,344 03	0 00	0 00	0 00
19,500 00	89 88	359 80	10,040 63	9,417 85	-701 23	9,443 81	0 00	0 00	0 00
19,600 00	89 88	359 80	10,040 84	9,517 85	-701 58	9,543 59	0 00	0 00	0 00
19,700 00	89 88	359 80	10,041 04	9,617 85	-701 94	9,643 38	0 00	0 00	0 00
19,800 00	89 88	359 80	10,041 24	9,717 85	-702 29	9,743 16	0 00	0 00	0 00
19,900 00	89 88	359 80	10,041 44	9,817 85	-702 64	9,842 94	0 00	0 00	0 00
20,000 00	89 88	359 80	10,041 64	9,917 84	-703 00	9,942 72	0 00	0 00	0 00
20,100 00	89 88	359 80	10,041 84	10,017 84	-703 35	10,042 50	0 00	0 00	0 00
20,179 59	89 88	359 80	10,042 00	10,097 44	-703 63	10,121 92	0 00	0 00	0 00
TD at 20179 59 - Pal 7-6 5H-BHL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Pal_7-6_5H_KOP - hit/miss target - Shape - Point	0 00	0 00	9,449 00	-246 37	-667 03	445,880 97	702,406 38	32° 13' 29	103° 48' 44
Pal_7-6_5H_BHL - plan hits target center - Point	0 00	0 00	10,042 00	10,097 44	-703 63	456,224 12	702,369 78	32° 15' 11	103° 48' 44

Formations									
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)				
622 00	622 00	Rustier							
970 00	970 00	Salado							
3,002 00	3,002 00	Castile							
4,306 00	4,306 00	Delaware							
4,350 00	4,350 00	Bell Canyon							
5,122 18	5,122 00	Cherry Canyon							
6,460 42	6,442 00	Brushy Canyon							
8,159 23	8,115 00	Bone Spring							

Oxy Planning Report

Database	HOPSP	Local Co-ordinate Reference	Well Palladium MDP1 7/6 Federal Com 5H
Company	OXY	TVD Reference	WELL @ 3551 90ft (Original Well Elev)
Project	NM DIRECTIONAL PLANS (NAD 1983)	MD Reference	WELL @ 3551 90ft (Original Well Elev)
Site	Palladium 7/6	North Reference	Gnd.
Well	Palladium MDP1 7/6 Federal Com 5H	Survey Calculation Method	Minimum Curvature
Wellbore	WB00		
Design	Permitting Plan		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,915 00	4,915 00	0 00	0 00	Step out DLS 2 00
5,415 00	5,412 46	-15 08	-40 83	Hold 10° inclination
9,008 67	8,951 54	-231 29	-626 21	Drop back to vertical DLS 2 00
9,508 66	9,449 00	-246 37	-667 03	Build Curve 10°/100'
10,407 46	10,021 96	325 39	-669 06	Landing Point
20,179 59	10,042 00	10,097 44	-703 63	TD at 20179 59