

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		5. Lease Serial No. NMNM082896 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. NIMITZ MDP1 13 FEDERAL COM 171H 9. API Well No. 30-015-47513
2. Name of Operator OXY USA INCORPORATED 3a. Address 5 Greenway Plaza, Suite 110, Houston, TX 77046 3b. Phone No. (include area code) (713) 366-5716		10. Field and Pool, or Exploratory Purple Sage Wolfcamp COTTON-DRAW-BONE-SPRING/COTTO 11. Sec., T. R. M. or Blk. and Survey or Area SEC 12/T24S/R30E/NMP
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWSW / 275 FSL / 32 FWL / LAT 32.2259256 / LONG -103.8428114 At proposed prod. zone SWSW / 20 FSL / 380 FWL / LAT 32.2106945 / LONG -103.8417393		12. County or Parish EDDY 13. State NM
14. Distance in miles and direction from nearest town or post office* 27 miles		15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 20 feet 16. No of acres in lease 880 17. Spacing Unit dedicated to this well 320.0
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 35 feet 19. Proposed Depth 11571 feet / 17121 feet 20. BLM/BIA Bond No. in file FED: ESB000226		21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3495 feet 22. Approximate date work will start* 12/30/2019 23. Estimated duration 45 days
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- | | |
|---|---|
| 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 requested by the BLM. |
|---|---|

25. Signature (Electronic Submission) Title Regulatory Specialist	Name (Printed/Typed) SARAH CHAPMAN / Ph: (713) 366-5716	Date 08/14/2019
Approved by (Signature) (Electronic Submission) Title Assistant Field Manager Lands & Minerals	Name (Printed/Typed) Cody Layton / Ph: (575) 234-5959 Office Carlsbad Field Office	Date 08/28/2020

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.

Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string

- Will require a directional survey with the C-104
- Will require a administrative order for non-standard location prior to placing the well on production.

Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.

KP 9/21/2020 GEO Rev

*(Instructions on page 2)

Entered 9/30/2020 - JAG

(Continued on page 2)

APPROVED WITH CONDITIONS

Approval Date: 08/28/2020

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Branos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-47513	Pool Code 90220	Pool Name Purple Sage Wolfcamp
Property Code 319776	Property Name NIMITZ MDP1 "13" FEDERAL COM	Well Number 171H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3494.7'

Surface Location

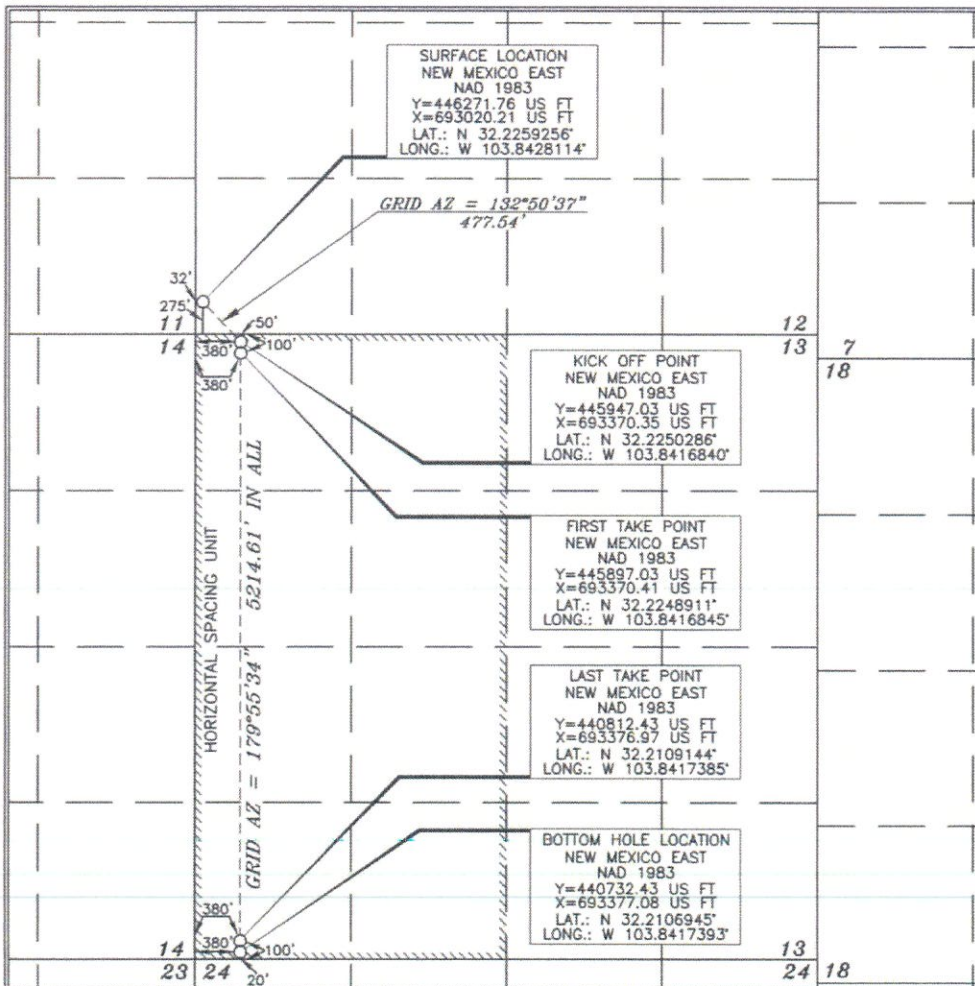
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	12	24 SOUTH	30 EAST, N.M.P.M.		275'	SOUTH	32'	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	13	24 SOUTH	30 EAST, N.M.P.M.		20'	SOUTH	380'	WEST	EDDY

Dedicated Acres 32.0	Joint or Infill	Consolidation Code	Order No.
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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.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Sarah Chapman 7/29/19
Signature Date

Sarah Chapman
Printed Name
sarah_chapman@oxy.com
E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from the well location of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JERRY J. ASH
15079
FEBRUARY 5, 2019
Date of Survey

Jerry J. Ash
Signature and Seal of Professional Surveyor

Jerry J. Ash 5/22/2019
Certificate Number 15079

WO# 190205WL-d (KA)

Intent ☒ As Drilled ☐

API #

Operator Name: <i>Oxy USA Inc.</i>	Property Name: <i>NIMITZ MDPI 13 Federal com</i>	Well Number <i>171H</i>
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Kick Off Point (KOP)

UL <i>D</i>	Section <i>13</i>	Township <i>24S</i>	Range <i>30E</i>	Lot	Feet <i>50</i>	From N/S <i>NORTH</i>	Feet <i>380</i>	From E/W <i>WEST</i>	County <i>EDDY</i>
Latitude <i>32.2250286</i>					Longitude <i>-103.8416840</i>				NAD <i>NAD83</i>

First Take Point (FTP)

UL <i>D</i>	Section <i>13</i>	Township <i>24S</i>	Range <i>30E</i>	Lot	Feet <i>100</i>	From N/S <i>NORTH</i>	Feet <i>380</i>	From E/W <i>WEST</i>	County <i>EDDY</i>
Latitude <i>32.2248911</i>					Longitude <i>-103.8416845</i>				NAD <i>NAD83</i>

Last Take Point (LTP)

UL <i>M</i>	Section <i>13</i>	Township <i>24S</i>	Range <i>30E</i>	Lot	Feet <i>100</i>	From N/S <i>South</i>	Feet <i>380</i>	From E/W <i>WEST</i>	County <i>EDDY</i>
Latitude <i>32.2109144</i>					Longitude <i>-103.8417385</i>				NAD <i>NAD83</i>

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number
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Additional Operator Remarks

Location of Well

0. SHL: SWSW / 275 FSL / 32 FWL / TWSP: 24S / RANGE: 30E / SECTION: 12 / LAT: 32.2259256 / LONG: -103.8428114 (TVD: 0 feet, MD: 0 feet)

PPP: SWNW / 1327 FNL / 380 FWL / TWSP: 24S / RANGE: 30E / SECTION: 13 / LAT: 32.22152 / LONG: -103.841697 (TVD: 11586 feet, MD: 13200 feet)

PPP: NWNW / 100 FNL / 380 FWL / TWSP: 24S / RANGE: 30E / SECTION: 12 / LAT: 32.2248911 / LONG: -103.8416845 (TVD: 11591 feet, MD: 11956 feet)

BHL: SWSW / 20 FSL / 380 FWL / TWSP: 24S / RANGE: 30E / SECTION: 13 / LAT: 32.2106945 / LONG: -103.8417393 (TVD: 11571 feet, MD: 17121 feet)

BLM Point of Contact

Name: Tenille Ortiz

Title: Legal Instruments Examiner

Phone: (575) 234-2224

Email: tortiz@blm.gov

CONFIDENTIAL

PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

Proposed Well Name	Surface Hole Location	Legal Location*	Surface Ownership
		Section 12, Township 24 South, Range 30 East	BLM
Nimitz MDP1 12-1 Federal Com 12H	615 FSL 1703 FWL		
Nimitz MDP1 12-1 Federal Com 14H	830 FSL 795 FEL		
Nimitz MDP1 12-1 Federal Com 23H	644 FSL 1766 FWL		
Nimitz MDP1 12-1 Federal Com 25H	830 FSL 830 FEL		
Nimitz MDP1 12-1 Federal Com 26H	830 FSL 730 FEL		
Nimitz MDP1 12-1 Federal Com 43H	674 FSL 1830 FWL		
Nimitz MDP1 12-1 Federal Com 44H	716 FSL 1921 FWL		
Nimitz MDP1 12-1 Federal Com 45H	439 FSL 1138 FEL		
Nimitz MDP1 12-1 Federal Com 46H	115 FSL 140 <u>FEL</u>		
Nimitz MDP1 12-1 Federal Com 171H	275 FSL 667 FWL		
Nimitz MDP1 12-1 Federal Com 172H	585 FSL 1639 FWL		
Nimitz MDP1 12-1 Federal Com 175H	439 FSL 1068 FEL		
Nimitz MDP1 12-1 Federal Com 176H	439 FSL 968 FEL		
Nimitz MDP1 13 Federal Com 12H	630 FSL 1734 FWL		
Nimitz MDP1 13 Federal Com 14H	830 FSL 660 FEL		
Nimitz MDP1 13 Federal Com 23H	659 FSL 1798 FWL		
Nimitz MDP1 13 Federal Com 25H	830 FSL 760 FEL		
Nimitz MDP1 13 Federal Com 26H	830 FSL 695 FEL		
Nimitz MDP1 13 Federal Com 43H	689 FSL 1862 FWL		
Nimitz MDP1 13 Federal Com 44H	704 FSL 1893 FWL		
Nimitz MDP1 13 Federal Com 45H	439 FSL 1103 FEL		
Nimitz MDP1 13 Federal Com 46H	80 FSL 140 FEL		
Nimitz MDP1 13 Federal Com 171H	275 FSL 32 FWL		
Nimitz MDP1 13 Federal Com 172H	600 FSL 1671 FWL		
Nimitz MDP1 13 Federal Com 175H	439 FSL 1033 FEL		
Nimitz MDP1 13 Federal Com 176H	439 FSL 998 FEL		
Nimitz MDP1 12-1 Federal Com 11H	826 FNL 287 FWL	Section 13, Township 24 South, Range 30 East	
Nimitz MDP1 13 Federal Com 11H	953 FNL 333 FWL		
Nimitz MDP1 12-1 Federal Com 13H	498 FNL 2405 FWL		

Proposed Well Name	Surface Hole Location	Legal Location*	Surface Ownership
Nimitz MDP1 13 Federal Com 13H	533 FNL 2405 FWL		
Nimitz MDP1 12-1 Federal Com 21H	798 FNL 276 FWL		
Nimitz MDP1 13 Federal Com 21H	859 FNL 299 FWL		
Nimitz MDP1 12-1 Federal Com 22H	892 FNL 311 FWL		
Nimitz MDP1 13 Federal Com 22H	925 FNL 323 FWL		
Nimitz MDP1 12-1 Federal Com 24H	428 FNL 2405 FWL		
Nimitz MDP1 13 Federal Com 24H	463 FNL 2405 FWL		
Nimitz MDP1 12-1 Federal Com 41H	986 FNL 345 FWL		
Nimitz MDP1 13 Federal Com 41H	1014 FNL 356 FWL		
Nimitz MDP1 13 Federal Com 42H	1080 FNL 380 FWL		
Nimitz MDP1 12-1 Federal Com 42H	1047 FNL 368 FWL		
Nimitz MDP1 12-1 Federal Com 173H	363 FNL 2405 FWL		
Nimitz MDP1 13 Federal Com 173H	328 FNL 2405 FWL		
Nimitz MDP1 12-1 Federal Com 174H	293 FNL 2405 FWL		
Nimitz MDP1 13 Federal Com 174H	393 FNL 2405 FWL		

FSL = feet from south line; FEL = feet from east line; FWL = feet from west line; FNL = feet from north line

*NMPM

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Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

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PECOS DISTRICT

DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA INC.
WELL NAME & NO.:	NIMITZ MDP1 13 FEDERAL COM 171H
SURFACE HOLE FOOTAGE:	275'/S & 32'/W
BOTTOM HOLE FOOTAGE:	20'/S & 380'/W
LOCATION:	Section 12, T.24 S., R.30 E., NMP
COUNTY:	Eddy County, New Mexico

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input type="radio"/> None	<input checked="" type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input type="radio"/> Multibowl	<input checked="" type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Fluid Filled	<input checked="" type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

Casing Design:

1. The **10-3/4** inch surface casing shall be set at approximately **669** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

- 2. The 7-5/8 inch intermediate casing shall be set at approximately **12096** feet. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Option 2:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
- ❖ In **Secretary Potash Areas** if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Operator has proposed to pump down 10-3/4" X 7-5/8" annulus. Operator must run a CBL or ECHO-METER from TD of the 7-5/8" casing to surface. Submit results to BLM.

3. The minimum required fill of cement behind the **5 x 4-1/2** inch production casing is:

Option 1 (Single Stage):

- Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.

Option 2:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
 - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2.

Option 1:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **5000 (5M)** psi.

Option 2:

1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including

lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

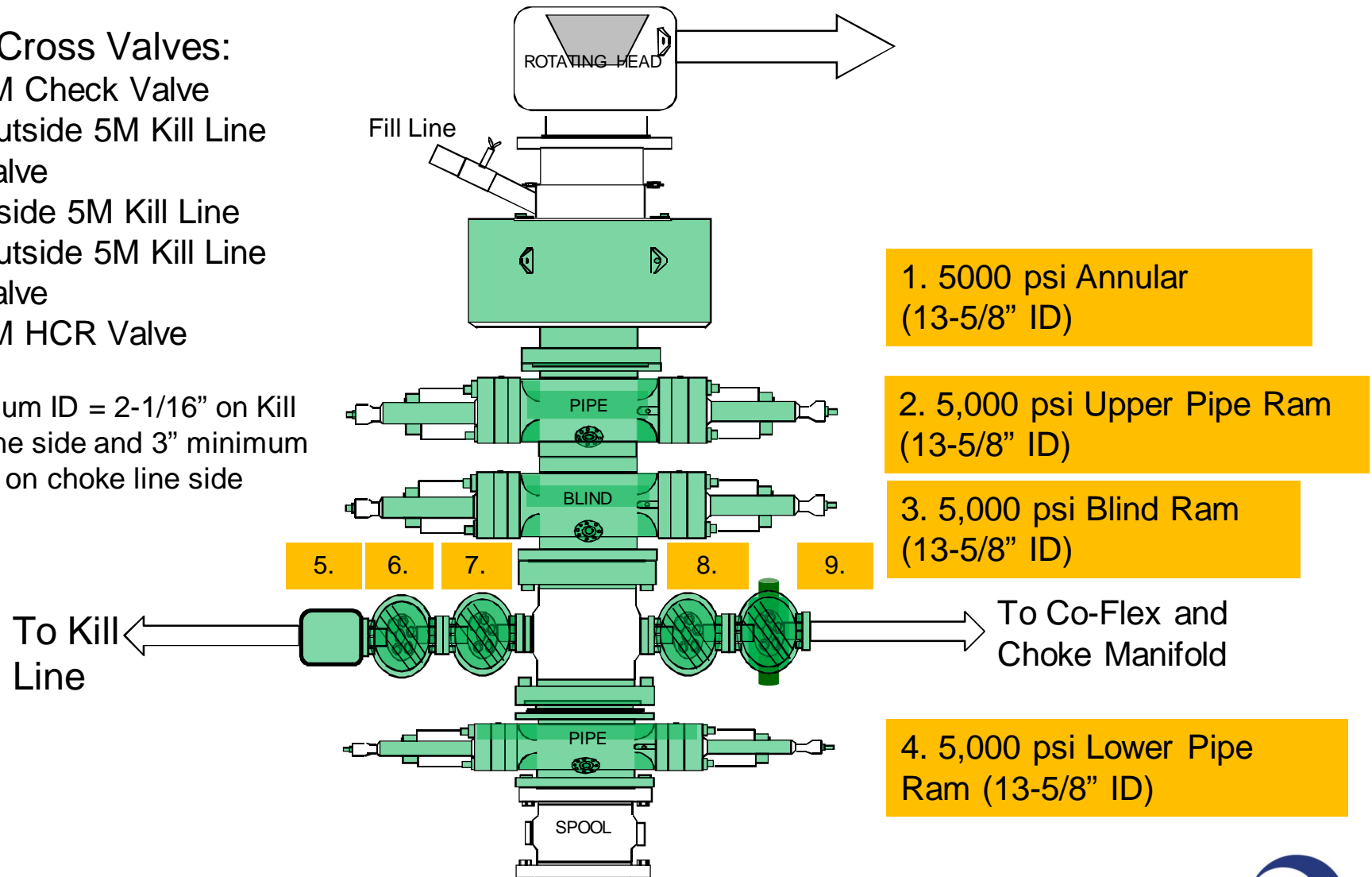
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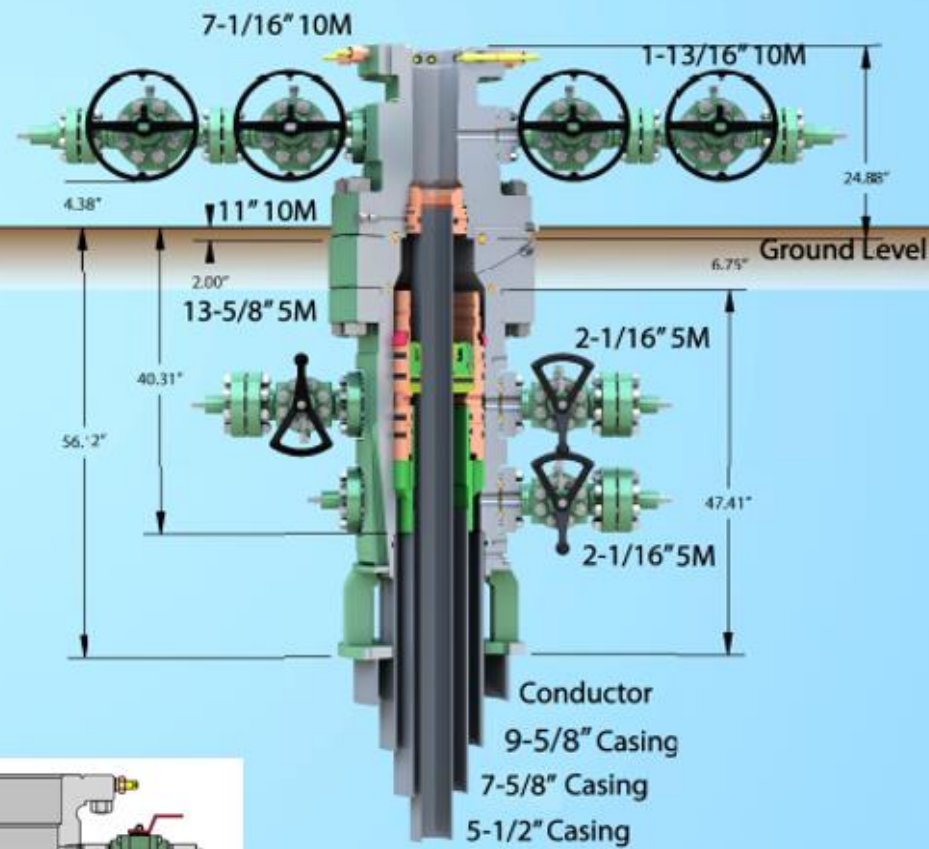
5M BOP Stack

Mud Cross Valves:

5. 5M Check Valve
6. Outside 5M Kill Line Valve
7. Inside 5M Kill Line Valve
8. Outside 5M Kill Line Valve
9. 5M HCR Valve

*Minimum ID = 2-1/16" on Kill Line side and 3" minimum ID on choke line side





TE: All dimensions on this drawing are estimated measurements determined by master quote and may vary by components used in the field.





Project: PRD NM DIRECTIONAL PLANS (NAD 1983)
Site: Nimitz MDP1 13
Well: Nimitz MDP1 13 Federal Com 171H
Wellbore: Wellbore #1
Design: Permitting Plan

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

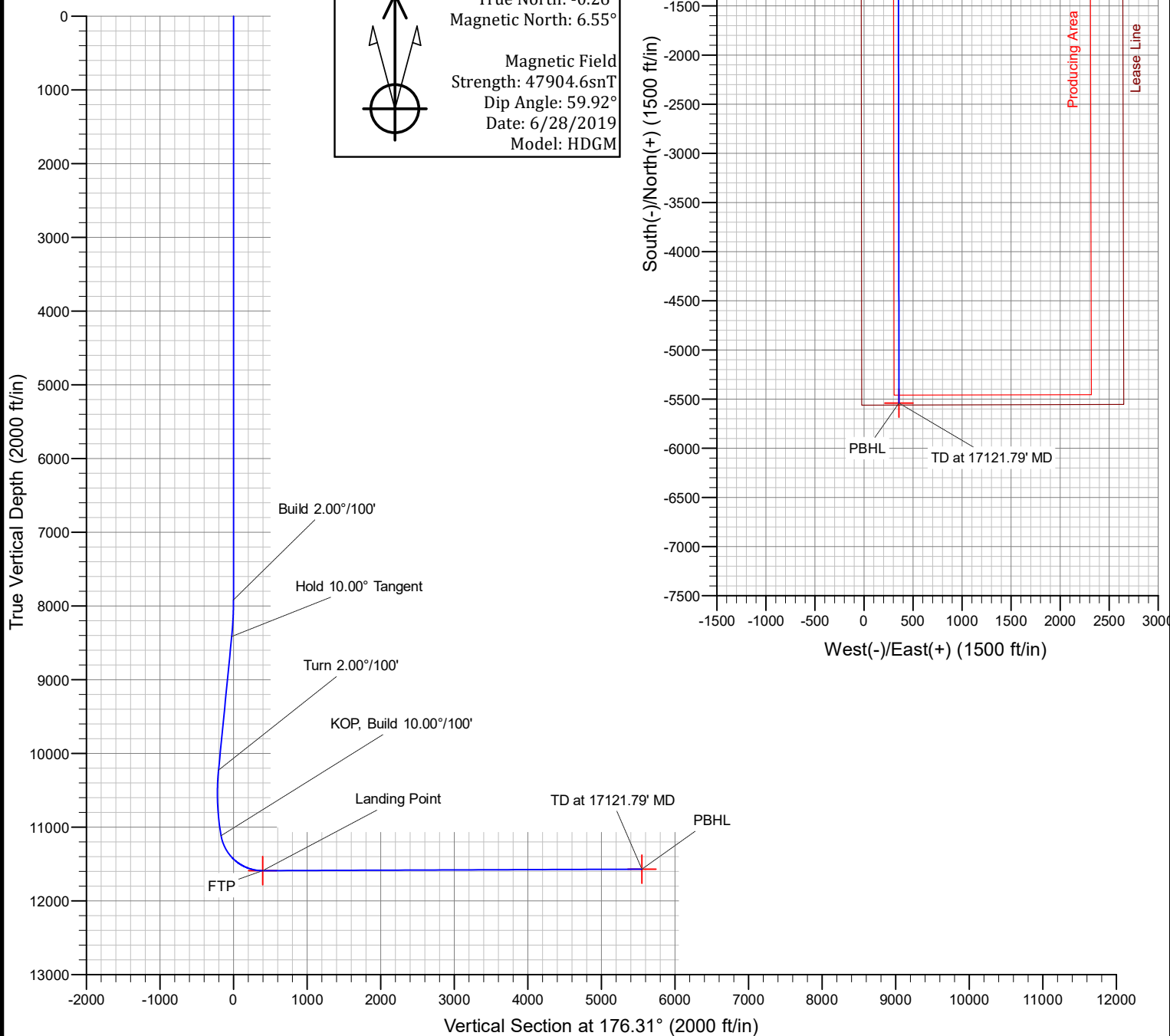
System Datum: Mean Sea Level

WELL DETAILS: Nimitz MDP1 13 Federal Com 171H

Ground Level: 3494.70
+N/-S 0.00 +E/-W 0.00 Northing 446271.76 Easting 693020.21 Latitude 32° 13' 33.332111 N Longitude 103° 50' 34.121130 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7917.00	0.00	0.00	7917.00	0.00	0.00	0.00	0.00	0.00	Build 2.00°/100'
8416.97	10.00	52.28	8414.43	26.62	34.42	2.00	52.28	-24.35	Hold 10.00° Tangent
10258.09	10.00	52.28	10227.59	222.19	287.31	0.00	0.00	-203.26	Turn 2.00°/100'
11154.58	10.00	179.93	11117.74	191.72	349.49	2.00	153.47	-168.85	KOP, Build 10.00°/100'
11956.80	90.22	179.93	11591.20	-374.75	350.22	10.00	0.00	396.50	Landing Point
17121.79	90.22	179.93	11571.20	-5539.70	356.89	0.00	0.00	5551.18	TD at 17121.79' MD



OXY

PRD NM DIRECTIONAL PLANS (NAD 1983)

Nimitz MDP1 13

Nimitz MDP1 13 Federal Com 171H

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

28 June, 2019

Oxy

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Nimitz MDP1 13 Federal Com 171H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3521.20ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3521.20ft
Site:	Nimitz MDP1 13	North Reference:	Grid
Well:	Nimitz MDP1 13 Federal Com 171H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Project	PRD 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		Nimitz MDP1 13			
Site Position:		Northing:	445,742.28 usft	Latitude:	32° 13' 27.984385 N
From:	Map	Easting:	695,395.61 usft	Longitude:	103° 50' 6.496371 W
Position Uncertainty:	50.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.27 °

Well	Nimitz MDP1 13 Federal Com 171H					
Well Position	+N/-S	529.51 ft	Northing:	446,271.76 usft	Latitude:	32° 13' 33.332111 N
	+E/-W	-2,375.56 ft	Easting:	693,020.21 usft	Longitude:	103° 50' 34.121130 W
Position Uncertainty		2.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	3,494.70 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/28/2019	6.82	59.92	47,905

Design	Permitting Plan			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	176.31

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	
7,917.00	0.00	0.00	7,917.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,416.97	10.00	52.28	8,414.43	26.62	34.42	2.00	2.00	0.00	52.28	
10,258.09	10.00	52.28	10,227.59	222.19	287.31	0.00	0.00	0.00	0.00	
11,154.58	10.00	179.93	11,117.74	191.72	349.49	2.00	0.00	14.24	153.47	
11,956.80	90.22	179.93	11,591.20	-374.75	350.22	10.00	10.00	0.00	0.00	FTP (Nimitz MDP1
17,121.79	90.22	179.93	11,571.20	-5,539.70	356.89	0.00	0.00	0.00	0.00	PBHL (Nimitz MDP1

Oxy

Planning Report

Database:	HOPSP	Local Co-ordinate Reference:	Well Nimitz MDP1 13 Federal Com 171H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3521.20ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3521.20ft
Site:	Nimitz MDP1 13	North Reference:	Grid
Well:	Nimitz MDP1 13 Federal Com 171H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00

Oxy

Planning Report

Database:	HOPSP	Local Co-ordinate Reference:	Well Nimitz MDP1 13 Federal Com 171H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3521.20ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3521.20ft
Site:	Nimitz MDP1 13	North Reference:	Grid
Well:	Nimitz MDP1 13 Federal Com 171H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,917.00	0.00	0.00	7,917.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	1.66	52.28	7,999.99	0.74	0.95	-0.67	2.00	2.00	0.00
8,100.00	3.66	52.28	8,099.88	3.57	4.62	-3.27	2.00	2.00	0.00
8,200.00	5.66	52.28	8,199.54	8.54	11.05	-7.82	2.00	2.00	0.00
8,300.00	7.66	52.28	8,298.86	15.64	20.22	-14.31	2.00	2.00	0.00
8,400.00	9.66	52.28	8,397.72	24.85	32.13	-22.73	2.00	2.00	0.00
8,416.97	10.00	52.28	8,414.43	26.62	34.42	-24.35	2.00	2.00	0.00
8,500.00	10.00	52.28	8,496.20	35.44	45.83	-32.42	0.00	0.00	0.00
8,600.00	10.00	52.28	8,594.69	46.06	59.56	-42.14	0.00	0.00	0.00
8,700.00	10.00	52.28	8,693.17	56.69	73.30	-51.86	0.00	0.00	0.00
8,800.00	10.00	52.28	8,791.65	67.31	87.04	-61.57	0.00	0.00	0.00
8,900.00	10.00	52.28	8,890.13	77.93	100.77	-71.29	0.00	0.00	0.00
9,000.00	10.00	52.28	8,988.61	88.55	114.51	-81.01	0.00	0.00	0.00
9,100.00	10.00	52.28	9,087.09	99.17	128.24	-90.72	0.00	0.00	0.00
9,200.00	10.00	52.28	9,185.57	109.80	141.98	-100.44	0.00	0.00	0.00
9,300.00	10.00	52.28	9,284.05	120.42	155.71	-110.16	0.00	0.00	0.00
9,400.00	10.00	52.28	9,382.53	131.04	169.45	-119.88	0.00	0.00	0.00
9,500.00	10.00	52.28	9,481.01	141.66	183.19	-129.59	0.00	0.00	0.00
9,600.00	10.00	52.28	9,579.50	152.29	196.92	-139.31	0.00	0.00	0.00
9,700.00	10.00	52.28	9,677.98	162.91	210.66	-149.03	0.00	0.00	0.00
9,800.00	10.00	52.28	9,776.46	173.53	224.39	-158.74	0.00	0.00	0.00
9,900.00	10.00	52.28	9,874.94	184.15	238.13	-168.46	0.00	0.00	0.00
10,000.00	10.00	52.28	9,973.42	194.77	251.86	-178.18	0.00	0.00	0.00
10,100.00	10.00	52.28	10,071.90	205.40	265.60	-187.90	0.00	0.00	0.00
10,200.00	10.00	52.28	10,170.38	216.02	279.33	-197.61	0.00	0.00	0.00
10,258.09	10.00	52.28	10,227.59	222.19	287.31	-203.26	0.00	0.00	0.00
10,300.00	9.26	54.61	10,268.91	226.37	292.94	-207.07	2.00	-1.77	5.55
10,400.00	7.57	61.95	10,367.83	234.12	305.31	-214.01	2.00	-1.69	7.34

Oxy

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Nimitz MDP1 13 Federal Com 171H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3521.20ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3521.20ft
Site:	Nimitz MDP1 13	North Reference:	Grid
Well:	Nimitz MDP1 13 Federal Com 171H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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)
10,500.00	6.06	73.17	10,467.13	238.75	316.18	-217.92	2.00	-1.50	11.22
10,600.00	4.93	90.52	10,566.67	240.24	325.53	-218.81	2.00	-1.14	17.35
10,700.00	4.45	114.48	10,666.35	238.59	333.36	-216.66	2.00	-0.48	23.95
10,800.00	4.83	138.97	10,766.03	233.81	339.65	-211.49	2.00	0.38	24.50
10,900.00	5.90	157.23	10,865.60	225.90	344.40	-203.29	2.00	1.07	18.25
11,000.00	7.36	169.09	10,964.93	214.87	347.60	-192.08	2.00	1.47	11.86
11,100.00	9.04	176.82	11,063.91	200.74	349.25	-177.87	2.00	1.67	7.73
11,154.58	10.00	179.93	11,117.74	191.72	349.49	-168.85	2.00	1.77	5.69
11,200.00	14.54	179.93	11,162.11	182.07	349.50	-159.22	10.00	10.00	0.00
11,300.00	24.54	179.93	11,256.23	148.66	349.55	-125.88	10.00	10.00	0.00
11,400.00	34.54	179.93	11,343.12	99.42	349.61	-76.73	10.00	10.00	0.00
11,500.00	44.54	179.93	11,420.14	35.83	349.69	-13.28	10.00	10.00	0.00
11,600.00	54.54	179.93	11,484.94	-40.16	349.79	62.56	10.00	10.00	0.00
11,700.00	64.54	179.93	11,535.57	-126.25	349.90	148.48	10.00	10.00	0.00
11,800.00	74.54	179.93	11,570.48	-219.82	350.02	241.87	10.00	10.00	0.00
11,900.00	84.54	179.93	11,588.61	-318.04	350.15	339.89	10.00	10.00	0.00
11,956.80	90.22	179.93	11,591.20	-374.75	350.22	396.50	10.00	10.00	0.00
12,000.00	90.22	179.93	11,591.03	-417.95	350.28	439.61	0.00	0.00	0.00
12,100.00	90.22	179.93	11,590.65	-517.95	350.41	539.41	0.00	0.00	0.00
12,200.00	90.22	179.93	11,590.26	-617.95	350.54	639.21	0.00	0.00	0.00
12,300.00	90.22	179.93	11,589.87	-717.95	350.67	739.01	0.00	0.00	0.00
12,400.00	90.22	179.93	11,589.48	-817.95	350.80	838.81	0.00	0.00	0.00
12,500.00	90.22	179.93	11,589.10	-917.95	350.92	938.61	0.00	0.00	0.00
12,600.00	90.22	179.93	11,588.71	-1,017.95	351.05	1,038.41	0.00	0.00	0.00
12,700.00	90.22	179.93	11,588.32	-1,117.95	351.18	1,138.21	0.00	0.00	0.00
12,800.00	90.22	179.93	11,587.94	-1,217.95	351.31	1,238.01	0.00	0.00	0.00
12,900.00	90.22	179.93	11,587.55	-1,317.94	351.44	1,337.81	0.00	0.00	0.00
13,000.00	90.22	179.93	11,587.16	-1,417.94	351.57	1,437.61	0.00	0.00	0.00
13,100.00	90.22	179.93	11,586.77	-1,517.94	351.70	1,537.41	0.00	0.00	0.00
13,200.00	90.22	179.93	11,586.39	-1,617.94	351.83	1,637.21	0.00	0.00	0.00
13,300.00	90.22	179.93	11,586.00	-1,717.94	351.96	1,737.02	0.00	0.00	0.00
13,400.00	90.22	179.93	11,585.61	-1,817.94	352.09	1,836.82	0.00	0.00	0.00
13,500.00	90.22	179.93	11,585.22	-1,917.94	352.22	1,936.62	0.00	0.00	0.00
13,600.00	90.22	179.93	11,584.84	-2,017.94	352.35	2,036.42	0.00	0.00	0.00
13,700.00	90.22	179.93	11,584.45	-2,117.94	352.47	2,136.22	0.00	0.00	0.00
13,800.00	90.22	179.93	11,584.06	-2,217.94	352.60	2,236.02	0.00	0.00	0.00
13,900.00	90.22	179.93	11,583.68	-2,317.94	352.73	2,335.82	0.00	0.00	0.00
14,000.00	90.22	179.93	11,583.29	-2,417.94	352.86	2,435.62	0.00	0.00	0.00
14,100.00	90.22	179.93	11,582.90	-2,517.93	352.99	2,535.42	0.00	0.00	0.00
14,200.00	90.22	179.93	11,582.51	-2,617.93	353.12	2,635.22	0.00	0.00	0.00
14,300.00	90.22	179.93	11,582.13	-2,717.93	353.25	2,735.02	0.00	0.00	0.00
14,400.00	90.22	179.93	11,581.74	-2,817.93	353.38	2,834.82	0.00	0.00	0.00
14,500.00	90.22	179.93	11,581.35	-2,917.93	353.51	2,934.62	0.00	0.00	0.00
14,600.00	90.22	179.93	11,580.97	-3,017.93	353.64	3,034.42	0.00	0.00	0.00
14,700.00	90.22	179.93	11,580.58	-3,117.93	353.77	3,134.22	0.00	0.00	0.00
14,800.00	90.22	179.93	11,580.19	-3,217.93	353.90	3,234.02	0.00	0.00	0.00
14,900.00	90.22	179.93	11,579.80	-3,317.93	354.02	3,333.82	0.00	0.00	0.00
15,000.00	90.22	179.93	11,579.42	-3,417.93	354.15	3,433.63	0.00	0.00	0.00
15,100.00	90.22	179.93	11,579.03	-3,517.93	354.28	3,533.43	0.00	0.00	0.00
15,200.00	90.22	179.93	11,578.64	-3,617.93	354.41	3,633.23	0.00	0.00	0.00
15,300.00	90.22	179.93	11,578.25	-3,717.92	354.54	3,733.03	0.00	0.00	0.00
15,400.00	90.22	179.93	11,577.87	-3,817.92	354.67	3,832.83	0.00	0.00	0.00
15,500.00	90.22	179.93	11,577.48	-3,917.92	354.80	3,932.63	0.00	0.00	0.00
15,600.00	90.22	179.93	11,577.09	-4,017.92	354.93	4,032.43	0.00	0.00	0.00

Oxy

Planning Report

Database:	HOPSP	Local Co-ordinate Reference:	Well Nimitz MDP1 13 Federal Com 171H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3521.20ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3521.20ft
Site:	Nimitz MDP1 13	North Reference:	Grid
Well:	Nimitz MDP1 13 Federal Com 171H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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)	
15,700.00	90.22	179.93	11,576.71	-4,117.92	355.06	4,132.23	0.00	0.00	0.00	
15,800.00	90.22	179.93	11,576.32	-4,217.92	355.19	4,232.03	0.00	0.00	0.00	
15,900.00	90.22	179.93	11,575.93	-4,317.92	355.32	4,331.83	0.00	0.00	0.00	
16,000.00	90.22	179.93	11,575.54	-4,417.92	355.45	4,431.63	0.00	0.00	0.00	
16,100.00	90.22	179.93	11,575.16	-4,517.92	355.57	4,531.43	0.00	0.00	0.00	
16,200.00	90.22	179.93	11,574.77	-4,617.92	355.70	4,631.23	0.00	0.00	0.00	
16,300.00	90.22	179.93	11,574.38	-4,717.92	355.83	4,731.03	0.00	0.00	0.00	
16,400.00	90.22	179.93	11,574.00	-4,817.92	355.96	4,830.83	0.00	0.00	0.00	
16,500.00	90.22	179.93	11,573.61	-4,917.91	356.09	4,930.63	0.00	0.00	0.00	
16,600.00	90.22	179.93	11,573.22	-5,017.91	356.22	5,030.43	0.00	0.00	0.00	
16,700.00	90.22	179.93	11,572.83	-5,117.91	356.35	5,130.24	0.00	0.00	0.00	
16,800.00	90.22	179.93	11,572.45	-5,217.91	356.48	5,230.04	0.00	0.00	0.00	
16,900.00	90.22	179.93	11,572.06	-5,317.91	356.61	5,329.84	0.00	0.00	0.00	
17,000.00	90.22	179.93	11,571.67	-5,417.91	356.74	5,429.64	0.00	0.00	0.00	
17,100.00	90.22	179.93	11,571.28	-5,517.91	356.87	5,529.44	0.00	0.00	0.00	
17,121.79	90.22	179.93	11,571.20	-5,539.70	356.89	5,551.18	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL (Nimitz MDP1 - hit/miss target - Shape - Point)	0.00	0.00	11,571.20	-5,539.70	356.89	440,732.43	693,377.08	32° 12' 38.500374 N	103° 50' 30.261599	
FTP (Nimitz MDP1 13 - plan hits target center - Point)	0.00	0.00	11,591.20	-374.75	350.22	445,897.03	693,370.41	32° 13' 29.608057 N	103° 50' 30.064218	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
7,917.00	7,917.00	0.00	0.00	Build 2.00°/100'
8,416.97	8,414.43	26.62	34.42	Hold 10.00° Tangent
10,258.09	10,227.59	222.19	287.31	Turn 2.00°/100'
11,154.58	11,117.74	191.72	349.49	KOP, Build 10.00°/100'
11,956.80	11,591.20	-374.75	350.22	Landing Point
17,121.79	11,571.20	-5,539.70	356.89	TD at 17121.79' MD

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

Date: 07-18-2019

☒ Original Operator & OGRID No.: OXY USA INC. - 16696
☐ Amended - Reason for Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Flared or Vented	Comment
Nimitz MDP1 12_1 Fed Com 11H	Pending	D-13-T24S-R30E	826' FNL 287' FWL	0	
Nimitz MDP1 12_1 Fed Com 12H	Pending	N-12-T24S-R30E	615' FSL 1703' FWL	0	
Nimitz MDP1 12_1 Fed Com 13H	Pending	C-13-T24S-R30E	498' FNL 2405' FWL	0	
Nimitz MDP1 12_1 Fed Com 14H	Pending	P-12-T24S-R30E	830' FSL 795' FEL	0	
Nimitz MDP1 12_1 Fed Com 21H	Pending	D-13-T24S-R30E	798' FNL 276' FWL	0	
Nimitz MDP1 12_1 Fed Com 22H	Pending	D-13-T24S-R30E	892' FNL 311' FWL	0	
Nimitz MDP1 12_1 Fed Com 23H	Pending	N-12-T24S-R30E	644' FSL 1766' FWL	0	
Nimitz MDP1 12_1 Fed Com 24H	Pending	C-13-T24S-R30E	428' FNL 2405' FWL	0	
Nimitz MDP1 12_1 Fed Com 25H	Pending	P-12-T24S-R30E	830' FSL 1350' FEL	0	
Nimitz MDP1 12_1 Fed Com 26H	Pending	P-12-T24S-R30E	830' FSL 730' FEL	0	
Nimitz MDP1 12_1 Fed Com 41H	Pending			0	
Nimitz MDP1 12_1 Fed Com 42H	Pending	D-13-T24S-R30E	1047' FNL 368' FWL	0	
Nimitz MDP1 12_1 Fed Com 43H	Pending	N-12-T24S-R30E	674' FSL 1830' FWL	0	
Nimitz MDP1 12_1 Fed Com 44H	Pending	N-12-T24S-R30E	716' FSL 1921' FWL	0	
Nimitz MDP1 12_1 Fed Com 45H	Pending	P-12-T24S-R30E	439' FSL 1138' FEL	0	
Nimitz MDP1 12_1 Fed Com 46H	Pending	P-12-T24S-R30E	115' FSL 140' FEL	0	
Nimitz MDP1 12_1 Fed Com 171H	Pending	M-12-T24S-R30E	275' FSL 67' FWL	0	
Nimitz MDP1 12_1 Fed Com 172H	Pending	N-12-T24S-R30E	585' FSL 1639' FWL	0	
Nimitz MDP1 12_1 Fed Com 173H	Pending	C-13-T24S-R30E	363' FNL 2405' FWL	0	
Nimitz MDP1 12_1 Fed Com 174H	Pending	C-13-T24S-R30E	293' FNL 2405' FWL	0	
Nimitz MDP1 12_1 Fed Com 175H	Pending	P-12-T24S-R30E	439' FSL 1068' FEL	0	
Nimitz MDP1 12_1 Fed Com 176H	Pending	P-12-T24S-R30E	439' FSL 968' FEL	0	
Nimitz MDP1 13 Fed Com 11H	Pending	D-13-T24S-R30E	953' FNL 333' FWL	0	
Nimitz MDP1 13 Fed Com 12H	Pending	N-12-T24S-R30E	630' FSL 1734' FWL	0	
Nimitz MDP1 13 Fed Com 13H	Pending	C-13-T24S-R30E	533' FNL 2405' FWL	0	
Nimitz MDP1 13 Fed Com 14H	Pending	P-12-T24S-R30E	830' FSL 660' FEL	0	
Nimitz MDP1 13 Fed Com 21H	Pending	D-13-T24S-R30E	859' FNL 299' FWL	0	
Nimitz MDP1 13 Fed Com 22H	Pending	D-13-T24S-R30E	925' FNL 323' FWL	0	
Nimitz MDP1 13 Fed Com 23H	Pending	N-12-T24S-R30E	659' FSL 1798' FWL	0	
Nimitz MDP1 13 Fed Com 24H	Pending	C-13-T24S-R30E	463' FNL 2405' FWL	0	
Nimitz MDP1 13 Fed Com 25H	Pending	P-12-T24S-R30E	830' FSL 760' FEL	0	
Nimitz MDP1 13 Fed Com 26H	Pending	P-12-T24S-R30E	830' FSL 695' FEL	0	
Nimitz MDP1 13 Fed Com 41H	Pending	D-13-T24S-R30E	1014' FNL 356' FWL	0	

Nimitz MDP1 13 Fed Com 42H	Pending	D-13-T24S-R30E	1080' FNL 380' FWL	0	
Nimitz MDP1 13 Fed Com 43H	Pending	N-12-T24S-R30E	689' FSL 1862' FWL	0	
Nimitz MDP1 13 Fed Com 44H	Pending	N-12-T24S-R30E	704' FSL 1893' FWL	0	
Nimitz MDP1 13 Fed Com 45H	Pending	P-12-T24S-R30E	439' FSL 1103' FEL	0	
Nimitz MDP1 13 Fed Com 46H	Pending	P-12-T24S-R30E	80' FSL 140' FEL	0	
Nimitz MDP1 13 Fed Com 171H	Pending	M-12-T24S-R30E	275' FSL 32' FWL	0	
Nimitz MDP1 13 Fed Com 172H	Pending	N-12-T24S-R30E	600' FSL 1671' FWL	0	
Nimitz MDP1 13 Fed Com 173H	Pending	C-13-T24S-R30E	328' FNL 2405' FWL	0	
Nimitz MDP1 13 Fed Com 174H	Pending	C-13-T24S-R30E	393' FNL 2405' FWL	0	
Nimitz MDP1 13 Fed Com 175H	Pending	P-12-T24S-R30E	439' FSL 1033' FEL	0	
Nimitz MDP1 13 Fed Com 176H	Pending	P-12-T24S-R30E	439' FSL 998' FEL	0	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, where a gas transporter system is in place. The gas produced from production facility is dedicated to Enterprise Field Services, LLC (“Enterprise”) and is connected to Enterprise low/high pressure gathering system located in Eddy County, New Mexico. OXY USA INC. (“OXY”) provides (periodically) to Enterprise a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, OXY and Enterprise have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Enterprise’s Processing Plant located in Sec. 36, Twn. 24S, Rng. 30E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on Enterprise system at that time. Based on current information, it is OXY’s belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - o Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - o Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

Oxy USA Inc. - Nimitz MDP1 13 Federal Com 171H

1. Geologic Formations

TVD of target	11597'	Pilot Hole Depth	N/A
MD at TD:	17121'	Deepest Expected fresh water:	460'

Delaware Basin

Formation	TVD - RKB	Expected Fluids
Rustler	460	
Salado	818	Salt
Castile	2,634	Salt
Lamar/Delaware	4,112	Oil/Gas/Brine
Bell Canyon	4,134	Oil/Gas/Brine
Cherry Canyon	5,073	Oil/Gas/Brine
Brushy Canyon	6,375	Losses
Bone Spring	8,047	Oil/Gas
1st Bone Spring	8,989	Oil/Gas
2nd Bone Spring	9,720	Oil/Gas
3rd Bone Spring	10,899	Oil/Gas
Wolfcamp	11,348	Oil/Gas

*H₂S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

Hole Size (in)	Casing Interval		Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	Buoyant	Buoyant
	From (ft)	To (ft)							Body SF Tension	Joint SF Tension
14.75	0	758	10.75	40.5	J-55	BTC	1.125	1.2	1.4	1.4
9.875	0	11054	7.625	26.4	L-80 HC	BTC	1.125	1.2	1.4	1.4
6.75	0	11604	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
6.75	11604	17121	4.5	13.5	P-110	DQX	1.125	1.2	1.4	1.4
SF Values will meet or Exceed										

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

*Oxy requests the option to set casing shallower yet still below the salts if losses or hole conditions require this. Cement volumes may be adjusted if casing is set shallower and a DV tool may be run in case hole conditions merit pumping a second stage cement job to comply with permitted top of cement. If cement circulated to surface during first stage, we will drop a cancellation cone and not pump the second stage.

*Oxy requests the option to run production casing with DQX, SF TORQ, and/or DQW TORQ connections to accommodate hole conditions or drilling operations.

Oxy USA Inc. - Nimitz MDP1 13 Federal Com 171H

Annular Clearance Variance Request

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow deviation from the 0.422" annular clearance requirement from Onshore Order #2 under the following conditions:

1. Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casings.
2. Annular clearance less than 0.422" is acceptable for the curve and lateral portions of the production open hole section.

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	Y
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	Y
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

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3. Cementing Program

Casing String	# Sk	Wt. (lb/gal)	Yld (ft ³ /sack)	H2O (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Surface (Tail)	621	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate 1st Stage (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Intermediate 1st Stage (Tail)	613	13.2	1.65	8.640	11:54	Class H Cement, Retarder, Dispersant, Salt
Intermediate 2nd Stage (Tail Slurry) to be pumped as Bradenhead Squeeze from surface, down the Intermediate annulus						
Intermediate 2nd Stage (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Intermediate 2nd Stage (Tail)	815	12.9	1.92	10.41	23:10	Class C Cement, Accelerator
Production (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Production (Tail)	744	13.2	1.38	6.686	3:39	Class H Cement, Retarder, Dispersant, Salt

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	N/A	N/A	N/A
Surface (Tail)	0	758	100%
Intermediate 1st Stage (Lead)	N/A	N/A	N/A
Intermediate 1st Stage (Tail)	6625	11054	5%
Intermediate 2nd Stage (Lead)	N/A	N/A	N/A
Intermediate 2nd Stage (Tail)	0	6625	10%
Production (Lead)	N/A	N/A	N/A
Production (Tail)	10554	17121	20%

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
9.875" Hole	13-5/8"	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 5000 psi
			Pipe Ram		
			Double Ram	✓	
			Other*		
6.75" Hole	13-5/8"	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 5000 psi
			Pipe Ram		
			Double Ram	✓	
			Other*		

*Specify if additional ram is utilized.

Oxy will utilize a 5M annular with a 10M BOPE stack. The BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore

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Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
Y	Are anchors required by manufacturer?
	A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015. See attached schematics.

BOP Break Testing Request

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow BOP Break Testing under the following conditions:

- After a full BOP test is conducted on the first well on the pad.
- When skidding to drill an intermediate section that casing point is either shallower than the third Bone Spring or 10,000 feet TVD.
- Full BOP test will be required prior to drilling any production hole.

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	758	Water-Based Mud	8.6-8.8	40-60	N/C
758	11054	Saturated Brine-Based or Oil-Based Mud	8.0-10.0	35-45	N/C
11054	17121	Water-Based or Oil-Based Mud	9.5-12.0	38-50	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

What will be used to monitor the loss or gain of fluid?	PVT/MD Totco/Visual Monitoring
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6. Logging and Testing Procedures

Logging, Coring and Testing.	
Yes	Will run GR from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
No	Logs are planned based on well control or offset log information.
No	Drill stem test? If yes, explain
No	Coring? If yes, explain

Additional logs planned	Interval
No	Resistivity
No	Density
No	CBL
Yes	Mud log
No	PEX

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7237 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	173°F

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Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
N	H2S is present
Y	H2S Plan attached

8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe. <ul style="list-style-type: none">We plan to drill the two well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well.	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe. <ul style="list-style-type: none">Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Oxy would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.	Yes

Total estimated cuttings volume: 1404.1 bbls.

Attachments

- ☒ Directional Plan
- ☒ H2S Contingency Plan
- ☒ Flex III Attachments
- ☒ Spudder Rig Attachment
- ☒ Premium Connection Specs

9. Company Personnel

Name	Title	Office Phone	Mobile Phone
Ben Pelton	Drilling Engineer	713-497-2379	701-690-8645
Margaret Giltner	Drilling Engineer Supervisor	713-366-5026	210-683-8480
Simon Benavides	Drilling Superintendent	713-522-8652	281-684-6897
Diego Tellez	Drilling Manager	713-350-4602	713-303-4932

OXY USA Inc.
APD Attachment
Offline Cementing

OXY respectfully requests a variance to cement the 9-5/8" and/or 7-5/8" intermediate casing strings offline.

The summarized operational sequence will be as follows:

1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe).
2. Land casing.
3. Fill pipe with kill weight fluid, and confirm well is static.
 - a. If well is not static notify BLM and kill well.
 - b. Once well is static notify BLM with intent to proceed with nipple down and offline cementing.
4. Set and pressure test annular packoff.
5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange. If any barrier fails to test, the BOP stack will not be nipped down until after the cement job is completed.
6. Skid rig to next well on pad.
7. Confirm well is static before removing cap flange.
8. If well is not static notify BLM and kill well prior to cementing or nipping up for further remediation.
9. Install offline cement tool.
10. Rig up cement equipment.
 - a. Notify BLM prior to cement job.
11. Perform cement job.
12. Confirm well is static and floats are holding after cement job.
13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.