### Rec'd 09/09/2020 - NMOCD

Form 3160-3 (June 2015) UNITED STATES	FORM APPROVED OMB No. 1004-0137 Expires: January 31, 2018			
DEPARTMENT OF THE IN		5. Lease Serial No.		
BUREAU OF LAND MANA		NMNM082896		
APPLICATION FOR PERMIT TO DF	RILL OR REENTER	6. If Indian, Allotee or Tribe Name		
		7. If Unit or CA Agreement, Name and No.		
1a. Type of work:   Image: Constraint of the second seco	7. If Ohnt of CA Agreement, Name and No.			
1b. Type of Well:     ✓     Oil Well     Gas Well     Oth	ler	8. Lease Name and Well No.		
1c. Type of Completion: Hydraulic Fracturing  Sin	gle Zone Multiple Zone	NIMITZ MDP1 12-1 FEDERAL COM		
2. Name of Operator OXY USA INCORPORATED		9. API Well No. 30 015 47446		
	3b. Phone No. (include area code) (713) 366-5716	10, Field and Pool, or Exploratory COTTON DRAW BONE SPRING/COTTO		
<ol> <li>Location of Well (Report location clearly and in accordance with At surface NWNW / 798 FNL / 276 FWL / LAT 32.22297</li> </ol>	11. Sec., T. R. M. or Blk. and Survey or Area SEC 13/T24S/R30E/NMP			
At proposed prod. zone NWNW / 20 FNL / 330 FWL / LAT				
14. Distance in miles and direction from nearest town or post offic 13 miles	e*	12. County or Parish13. StateEDDYNM		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease         17. Spacin           880         640.0	ing Unit dedicated to this well		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 35 feet	······	/BIA Bond No. in file SB000226		
	22. Approximate date work will start* 07/30/2020	23. Estimated duration 45 days		
	24. Attachments			
The following, completed in accordance with the requirements of (as applicable)	Onshore Oil and Gas Order No. 1, and the H	Hydraulic Fracturing rule per 43 CFR 3162.3-3		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System)</li> </ol>	Item 20 above).	ns unless covered by an existing bond on file (se		
SUPO must be filed with the appropriate Forest Service Office).	6. Such other site specific infor BLM.	rmation and/or plans as may be requested by the		
25. Signature (Electronic Submission)	Name (Printed/Typed) LESLIE REEVES / Ph: (713) 366-	-5716 Date 08/20/2019		
Title Advisor Regulatory				
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575) 234-5959	Date 08/28/2020		
Title     Office       Assistant Field Manager Lands & Minerals     Carlsbad Field Office				
Application approval does not warrant or certify that the applicant applicant to conduct operations thereon. Conditions of approval, if any, are attached.	holds legal or equitable title to those rights	in the subject lease which would entitle the		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, ma				



\*(Instructions on page 2) Entered - KMS NMOCD

DISTRICT I       State of New Mexico         1625 N. FRENCH DR., HOBBS, NM 88240       Energy, Minerals & Natural Resources Department         Phone: (575) 392-0720       OIL       CONSERVATION DIVISION         DISTRICT II       OIL       CONSERVATION DIVISION         Phone: (575) 748-1283 Fax: (575) 748-9720       1220 SOUTH ST. FRANCIS DR.       Submit one copy to appropriate         DISTRICT III       1220 SOUTH ST. FRANCIS DR.       District Office         DISTRICT IV       Santa Fe, New Mexico 87505       District Office         Phone: (505) 334-6178       WELL LOCATION AND ACREAGE DEDICATION PLAT       District Office         Menuber       Pool Code       Pool Code       Pool Name         30-015- 47446       13367       COTTON DRAW; BONE SPRING       Well Number									
329328 OGRID No			INI	MITZ M.	0perator Nam	FEDERAL COM	L	21 Elevation	
16696					OXY USA I	NC.		3488	3.1'
T		1		1	Surface Loca				
UL or lot No.	section 13	Township	Range 30-E	Lot Idn	Feet from the 798	North/South line	Feet from the 276	<b>East/West line</b> WEST	County EDDY
	10	24-3						WLJI	
UL or lot No.	Section	Township	Range	Hole Loc	Feet from the	rent From Sur North/South line	Feet from the	East/West line	County
4	1	24-S	30-E	Lot Iun	20	NORTH	330	WEST	EDDY
Dedicated Acres	Joint o		Consolidation	Code Ore	der No.				
320									
NO ALLO	WABLE W					UNTIL ALL INTER APPROVED BY 7		EN CONSOLIDA	ATED
HOLE L           Y=456;           X=693;           LAT.=32.2           LONG.=103           100' FNL           Y=4564           X=6932           LAT.=32.2           LONG.=103.           100' FSL           X=454           X=454           X=453           LAT.=32.2           LONG.=103.           100' FSL           X=446           X=693           LAT.=32           LONG.=103           SURFACE           Y=445           X=693           LAT.=32           LAT.=32           LONG.=103	<u>P</u> : 330' FWL 42.8 N 62.8 E — 53881' N	<b>6</b> <b>6</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b>		- 39.96ac 39 	CTION 1       1         CTION 12       2         3       3         4       3         5       6         7       3         8       3         CTION 12       3         5       6         7       8         5       5         6       7         8       3         5       54"	DINT LEGEND Y=456560.3 N X=695608.7 E Y=451236.0 N X=695656.4 E Y=446000.7 N X=695656.4 E Y=446906.4 N X=692990.3 E Y=445028.4 N X=692970.7 E Y=451267.9 N X=692950.0 E Y=453905.5 N X=692941.2 E Y=456540.3 N X=692932.3 E	I hereby of herein is true a organization eit, or unleased min including the p or has a right location pursua, owner of such a or to a volunta, compulsory pool, by the division. Signature LESLIE RE Printed Name LESLIE RE Printed Name E-mail Address SURVEYO I hereby of shown on this notes of actual under my super true and correc FEBR	08 EVES EVES EVES CEVES COXY. EEVES COXY. CERTIFICAT Cortify that the well oblat was plotted fro surveys made by I vision, and that the to the best of m UARY 2, 2019 ate of Survey CARY 2, 2019 CONTRACTOR CONTRACTON CONTRACTOR CONTR	ormation e best of this interest e land this th an interest, nt or a re entered /20/19 te COM l location m field ne or e same is y belief.

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

## GAS CAPTURE PLAN

Date: 07-18-2019

 $\boxtimes$  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, recomplete 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	Expected MCF/D	Flared orVent	Comments
Nimitz MDP1 12_1 FED COM 11H	Pending	D-13-T24S-R30E	826' FNL 287' FWL	2,500	0	
Nimitz MDP1 12_1 FED COM 12H	Pending	N-12-T24S-R30E	615' FSL 1703'FWL	2,500	0	
Nimitz MDP1 12_1 FED COM 13H	Pending	C-13-T24S-R30E	498' FNL 2405' FWL	2,500	0	
Nimitz MDP1 12_1 FED COM 14H	Pending	P-12-T24S-R30E	830' FSL 795' FEL	2,500	0	
Nimitz MDP1 12_1 FED COM 21H	Pending	D-13-T24S-R30E	798' FNL 276' FWL	5,500	0	
Nimitz MDP1 12_1 FED COM 22H	Pending	D-13-T24S-R30E	892' FNL 311' FWL	5,500	0	
Nimitz MDP1 12_1 FED COM 23H	Pending	N-12-T24S-R30E	644' FSL 1766' FWL	5,500	0	
Nimitz MDP1 12_1 FED COM 24H	Pending	C-13-T24S-R30E	428' FNL 2405' FWL	5,500	0	
Nimitz MDP1 12_1 FED COM 25H	Pending	P-12-T24S-R30E	830'FSL 1350' FEL	5,500	0	
Nimitz MDP1 12_1 FED COM 26H	Pending	P-12-T24S-R30E	830' FSL 730' FEL	5,500	0	
Nimitz MDP1 12_1 FED COM 41H	Pending	D-13-T24S-R30E	986' FNL 345' FWL	7,200	0	
Nimitz MDP1 12_1 FED COM 42H	Pending	D-13-T24S-R30E	1047' FNL 368' FWL	7,200	0	
Nimitz MDP1 12_1 FED COM 43H	Pending	N-12-T24S-R30E	674' FSL 1830' FWL	7,200	0	
Nimitz MDP1 12_1 FED COM 44H	Pending	N-12-T24S-R30E	716' FSL 1921' FWL	7,200	0	
Nimitz MDP1 12_1 FED COM 45H	Pending	P-12-T24S-R30E	439' FSL 1138' FEL	7,200	0	
Nimitz MDP1 12_1 FED COM 46H	Pending	P-12-T24S-R30E	115' FSL 140' FEL	7,200	0	

Nimitz MDP1 12_1 FED COM 171H	Pending	M-12-T24S-R30E	275' FSL 67' FWL	4,200	0
Nimitz MDP1 12_1 FED COM 172H	Pending	N-12-T24S-R30E	585' FSL 1639' FWL	4,200	0
Nimitz MDP1 12_1 FED COM 173H	Pending	C-13-T24S-R30E	363' FNL 2405' FWL	4,200	0
Nimitz MDP1 12_1 FED COM 174H	Pending	C-13-T24S-R30E	293' FNL 2405' FWL	4,200	0
Nimitz MDP1 12_1 FED COM 175H	Pending	P-12-T24S-R30E	439' FSL 1068' FEL	4,200	0
Nimitz MDP1 12_1 FED COM 176H	Pending	P-12-T24S-R30E	439' FSL 968' FEL	4,200	0
Nimitz MDP1 13 FED COM 11H	Pending	D-13-T24S-R30E	953' FNL 333' FWL	1,700	0
Nimitz MDP1 13 FED COM 12H	Pending	N-12-T24S-R30E	630' FSL 1734' FWL	1,700	0
Nimitz MDP1 13 FED COM 13H	Pending	C-13-T24S-R30E	533' FNL 2405' FWL	1,700	0
Nimitz MDP1 13 FED COM 14H	Pending	P-12-T24S-R30E	830' FSL 660' FEL	1,700	0
Nimitz MDP1 13 FED COM 21H	Pending	D-13-T24S-R30E	859' FNL 299' FWL	3,700	0
Nimitz MDP1 13 FED COM 22H	Pending	D-13-T24S-R30E	925' FNL 323' FWL	3,700	0
Nimitz MDP1 13 FED COM 23H	Pending	N-12-T24S-R30E	659' FSL 1798' FWL	3,700	0
Nimitz MDP1 13 FED COM 24H	Pending	C-13-T24S-R30E	463' FNL 2405' FWL	3,700	0
Nimitz MDP1 13 FED COM 25H	Pending	P-12-T24S-R30E	830' FSL 760' FEL	3,700	0
Nimitz MDP1 13 FED COM 26H	Pending	P-12-T24S-R30E	830' FSL 695' FEL	3,700	0
Nimitz MDP1 13 FED COM 41H	Pending	D-13-T24S-R30E	1014' FNL 356' FWL	5,000	0
Nimitz MDP1 13 FED COM 42H	Pending	D-13-T24S-R30E	1080' FNL 380' FWL	5,000	0
Nimitz MDP1 13 FED COM 43H	Pending	N-12-T24S-R30E	689' FSL 1862' FWL	5,000	0
Nimitz MDP1 13 FED COM 44H	Pending	N-12-T24S-R30E	704' FSL 1893' FWL	5,000	0
Nimitz MDP1 13 FED COM 45H	Pending	P-12-T24S-R30E	439' FSL 1103' FEL	5,000	0
Nimitz MDP1 13 FED COM 46H	Pending	P-12-T24S-R30E	80' FSL 140' FEL	5,000	0
Nimitz MDP1 13 FED COM 171H	Pending	M-12-T24S-R30E	275' FSL 32' FWL	2,800	0
Nimitz MDP1 13 FED COM 172H	Pending	N-12-T24S-R30E	600' FSL 1671' FWL	2,800	0
Nimitz MDP1 13 FED COM 173H	Pending	C-13-T24S-R30E	328' FNL 2405' FWL	2,800	0
Nimitz MDP1 13 FED COM 174H	Pending	C-13-T24S-R30E	393' FNL 2405' FWL	2,800	0

Nimitz MDP1 13 FED COM 175H	Pending	P-12-T24S-R30E	439' FSL 1033' FEL	2,800	0	
Nimitz MDP1 13 FED COM 176H	Pending	P-12-T24S-R30E	439' FSL 998' FEL	2,800	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 <u>Enterprise Field Services, LLC ("Enterprise"</u>) and is connected to <u>Enterprise</u> low/high pressure gathering system located in Eddy County, New Mexico. <u>OXY USA INC. ("OXY"</u>) provides (periodically) to <u>Enterprise</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>OXY</u> and <u>Enterprise</u> 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 <u>Enterprise</u> system at that time. Based on current information, it is <u>OXY's</u> 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
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
  - 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

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	OXY USA INCORPORATED
WELL NAME & NO.:	Nimitz MDP1 12-1 Federal COM / 21H
SURFACE HOLE FOOTAGE:	798'/N & 276'/W
<b>BOTTOM HOLE FOOTAGE</b>	20'/N & 330'/W
LOCATION:	Section 13, T.24 S., R.30 E., NMPM
COUNTY:	Eddy County, New Mexico

# COA

H2S	C Yes	🖸 No	
Potash	C None	Secretary	© R-111-P
Cave/Karst Potential	CLow	Medium	C High
Cave/Karst Potential	Critical		
Variance	C None	• Flex Hose	C Other
Wellhead	Conventional	C Multibowl	💽 Both
Other	□4 String Area	Capitan Reef	□ WIPP
Other	Fluid Filled	Cement Squeeze	Pilot Hole
Special Requirements	□ Water Disposal	COM	🗖 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 **13-3/8** inch surface casing shall be set at approximately **534** 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.

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- b. Wait on cement (WOC) time for a primary cement job will be a minimum of <u>24 hours in the Potash Area</u> 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.
- 2. The **9-5/8** inch intermediate casing shall be set at approximately **4122** feet. The minimum required fill of cement behind the **9-5/8** 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 <u>Medium Cave/Karst Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- In <u>Secretary Potash Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- 3. The minimum required fill of cement behind the 5-1/2 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.

# Operator has proposed to pump down 9-5/8" X 5-1/2" annulus. <u>Operator must run</u> a CBL from TD of the 5-1/2" casing to surface. Submit results to BLM.

# 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 **3000 (3M)** psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **3000** (**3M**) 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 **3000** (**3M**) 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. <u>When the Communitization Agreement number is known, it shall also be on the sign.</u>

# **Offline Cementing**

• Contact the BLM prior to the commencement of any offline cementing procedure.

# **BOP Break Testing Variance**

• BOP break testing is not permitted on this well.

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# **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 2<sup>nd</sup> 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.
- <u>Wait on cement (WOC) for Potash Areas:</u> 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 <u>24</u> <u>hours</u>. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. <u>Wait on cement (WOC) for Water Basin:</u> 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 <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity 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.

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## 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.

## NMK06252020

Page 9 of 9



#### U.S. Department of the Interior BUREAU OF LAND MANAGEMENT



# **Operator Certification**

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: Leslie Reeves		Signed on: 08/20/2019
Title: Advisor Regulatory		
Street Address: 5 Greenway Plaza,	Suite 110	
City: Houston	State: TX	<b>Zip:</b> 77046
Phone: (713)497-2492		
Email address: Leslie_Reeves@oxy	.com	
Field Representative		
Representative Name:		

Street Address: 6001 DeauvilleCity: MidlandState: TXPhone: (575)631-2442

Email address: Jim\_Wilson@oxy.com

Zip: 79706

# **WAFMSS**

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

## **APD ID:** 10400046104

Operator Name: OXY USA INCORPORATED Well Name: NIMITZ MDP1 12-1 FEDERAL COM

Well Type: OIL WELL

## Submission Date: 08/20/2019

Well Number: 21H Well Work Type: Drill Highlighted data reflects the most recent changes

09/08/2020

**Application Data Report** 

Show Final Text

# Section 1 - General

APD ID:	10400046104	Tie to previous NOS?	N	Submission Date: 08/20/2019		
BLM Office:	CARLSBAD	User: Leslie Reeves	Title:	Advisor Regulatory		
Federal/India	an APD: FED	Is the first lease penetrated for production Federal or Indian? FED				
Lease numb	er: NMNM082896	Lease Acres: 880				
Surface acce	ess agreement in place?	Allotted?	Reservation:			
Agreement i	n place? NO	Federal or Indian agree	ment:			
Agreement r	number:					
Agreement r	name:					
Keep applica	ation confidential? Y					
Permitting A	gent? NO	APD Operator: OXY US	A INCORPORATED	)		
Operator let	ter of designation:					

# **Operator Info**

Operator Organization Name: OXY USA INCORPORATED					
Operator Address: 5 Greenway Plaza, Suite 110					
Operator PO Box: Zip: 770					
Operator City: Houston State: TX					
<b>Operator Phone:</b> (713)366-5716					

**Operator Internet Address:** 

# **Section 2 - Well Information**

Well in Master Development Plan? EXISTING	Master Development Plan name: Sand Dunes Area			
Well in Master SUPO?	Master SUPO name:			
Well in Master Drilling Plan?	Master Drilling Plan name:			
Well Name: NIMITZ MDP1 12-1 FEDERAL COM	Well Number: 21H	Well API Number:		
Field/Pool or Exploratory? Field and Pool	Field Name: COTTON DRAW BONE SPRING	Pool Name: COTTON DRAW BONE SPRING		
Is the proposed well in an area containing other mineral resources? USEABLE WATER, POTASH				

#### Well Number: 21H

## Is the proposed well in an area containing other mineral resources? USEABLE WATER, POTASH

Is the proposed well in a Helium production area? ${\sf N}$		Use Existing Well Pad? N	New surface disturbance?		
Type of Well	Type of Well Pad: MULTIPLE WELL		-	tz Number: 21H, 11H, 22H, 41H,	
Well Class: HORIZONTAL		MDP1 12-1 & 13 Federal Com Number of Legs: 1	42H & 21H, 22H, 11H, 41H, 42H		
Well Work Ty	<b>/pe:</b> Drill				
Well Type: O	IL WELL				
Describe We	II Туре:				
Well sub-Typ	e: INFILL				
Describe sub	o-type:				
Distance to t	own: 13 Miles	Distance to nea	arest well: 35 FT Dista	nce to lease line: 20 FT	
Reservoir we	ell spacing assigned acres	Measurement:	640 Acres		
Well plat:	NimitzMDP112_1FdCom21	H_SitePlan_201	90819142953.pdf		
	NimitzMDP112_1FdCom21	H_C_102_2019	0820064907.pdf		
Well work sta	art Date: 07/30/2020		Duration: 45 DAYS		

# **Section 3 - Well Location Table**

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Survey number:

Vertical Datum: NAVD88

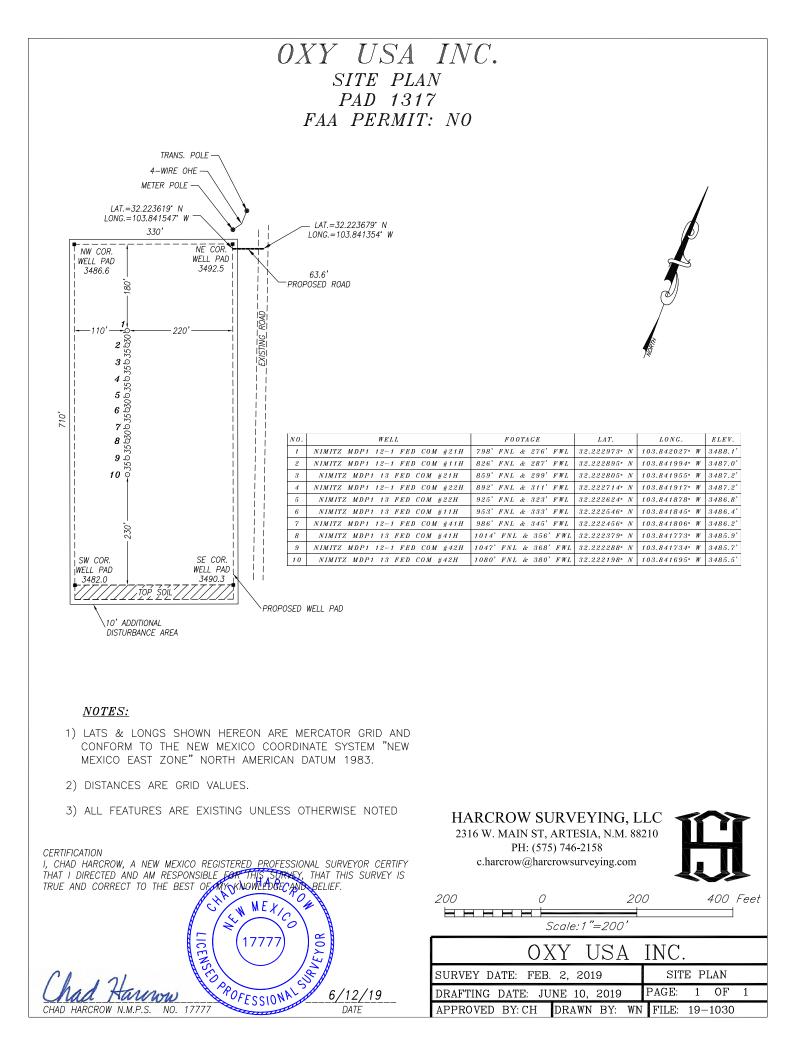
### Reference Datum: GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL Leg #1	798	FNL	276	FW L	24S	30E		Aliquot NWN W		- 103.8420 27	EDD Y	NEW MEXI CO		F	NMNM 082896	348 8	0	0	N
KOP Leg #1	50	FSL	330	FW L	24S	30E	12	Aliquot SWS W		- 103.8418 46		NEW MEXI CO			NMNM 082896	- 518 4	898 2	867 2	N

# Operator Name: OXY USA INCORPORATED Well Name: NIMITZ MDP1 12-1 FEDERAL COM

## Well Number: 21H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
PPP	3	FNL	341	FW	24S	30E	1	Aliquot	32.23965	-	EDD	1		F	NMNM	-	142	865	Y
Leg #1-1				L				SWS W		103.8418 61	Y	MEXI CO	MEXI CO		097133	517 0	01	8	
PPP	100	FSL	330	FW	24S	30E	12	Aliquot	32.22544	-	EDD	NEW		F	NMNM	-	903	867	Y
Leg				L				SWS	1	103.8418 46	Y	MEXI CO	MEXI CO		082896	518	2	5	
#1-2								W		40		00	00			1			
EXIT	100	FNL	330	FW	24S	30E	1	Aliquot	32.25388	-	EDD			F	NMNM	-	193	864	Y
Leg			0	L				NWN	1	103.8418	Y	MEXI	MEXI		097133	515	79	1	
#1								W		76		CO	со			3			
BHL	20	FNL	330	FW	24S	30E	1	Aliquot	32.25410	-	EDD	NEW	NEW	F	NMNM	-	194	864	N
Leg				L				NWN	1	103.8418	Y	MEXI	MEXI		097133	515	59	1	
#1								W		77		co	co			3			



# **WAFMSS**

#### U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

**Operator Name: OXY USA INCORPORATED** 

Well Name: NIMITZ MDP1 12-1 FEDERAL COM

**APD ID:** 10400046104

Submission Date: 08/20/2019

Highlighted data reflects the most recent changes

09/08/2020

Drilling Plan Data Report

Show Final Text

Well Type: OIL WELL

## Well Work Type: Drill

Well Number: 21H

# **Section 1 - Geologic Formations**

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
518629	RUSTLER	3500	453	453	ANHYDRITE, DOLOMITE, SHALE	USEABLE WATER	N
518630	SALADO	2690	810	810	ANHYDRITE, DOLOMITE, HALITE, SHALE	OTHER : SALT	N
518627	CASTILE	873	2627	2627	ANHYDRITE	OTHER : salt	N
518631	LAMAR	-602	4102	4102	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	N
518632	BELL CANYON	-625	4125	4125	SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER, USEABLE WATER : BRINE	N
518633	CHERRY CANYON	-1563	5063	5063	SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	N
518634	BRUSHY CANYON	-2867	6367	6368	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	N
518628	BONE SPRING	-4539	8039	8065	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	N

# **Section 2 - Blowout Prevention**

Pressure Rating (PSI): 5M

Rating Depth: 8675

Equipment: 13-5/8" 5M Annular, Blind Ram, Double Ram

## Requesting Variance? YES

Variance request: Request for the use of a flexible choke line from the BOP to Choke Manifold.

**Testing Procedure:** BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore 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. A multibowl wellhead 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 will be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. BOP Break Testing Request OXY requests permission to adjust the BOP break testing requirements as per the agreement reached in the OXY/BLM meeting on September 5, 2019. A separate sundry will be sent prior to spud that reflects the pad based break testing plan. BOP break test under the following conditions: After a full BOP test is conducted When skidding to drill an intermediate section where ICP is set into the third

Well Name: NIMITZ MDP1 12-1 FEDERAL COM

### Well Number: 21H

Bone Spring or shallower. When skidding to drill a production section that does not penetrate into the third Bone Spring or deeper. If the kill line is broken prior to skid, two tests will be performed. 1. Wellhead flange, co-flex hose, kill line connections and upper pipe rams 2. Wellhead flange, HCR valve, check valve, upper pipe rams If the kill line is not broken prior to skid, only one test will be performed. 1. Wellhead flange, co-flex hose, check valve, upper pipe rams

# Choke Diagram Attachment:

 $Nimitz MDP112\_1FdCom21H\_ChokeManifold\_20190820072452.pdf$ 

## **BOP Diagram Attachment:**

 $Nimitz MDP112\_1FdCom21H\_FlexHoseCert\_20190820072503.pdf$ 

NimitzMDP112\_1FdCom21H\_BOP5M\_20190820072521.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	503	0	503	3488	2985	503	J-55	54.5	BUTT	1.12 5	1.2	BUOY	1.4	BUOY	1.4
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	4152	0	4152		-664	4152	L-80	43.5	BUTT	1.12 5	1.2	BUOY	1.4	BUOY	1.4
3	PRODUCTI ON	8.5	5.5	NEW	API	N	0	19458	0	11325		-7837	19458	P- 110			1.12 5	1.2	BUOY	1.4	BUOY	1.4

## **Casing Attachments**

Casing ID: 1

String Type: SURFACE

Inspection Document:

Spec Document:

**Tapered String Spec:** 

# Casing Design Assumptions and Worksheet(s):

 $Nimitz MDP112\_1FdCom21H\_CsgCriteria\_20190820072658.pdf$ 

Well Name: NIMITZ MDP1 12-1 FEDERAL COM

Well Number: 21H

## **Casing Attachments**

Casing ID: 2 String Type: INTERMEDIATE

**Inspection Document:** 

Spec Document:

Tapered String Spec:

## Casing Design Assumptions and Worksheet(s):

NimitzMDP112\_1FdCom21H\_CsgCriteria\_20190820072726.pdf

Casing ID: 3 String Type: PRODUCTION

**Inspection Document:** 

Spec Document:

**Tapered String Spec:** 

## Casing Design Assumptions and Worksheet(s):

NimitzMDP112\_1FdCom21H\_CsgCriteria\_20190820072803.pdf

 $NimitzMDP112\_1FdCom21H\_5.500in\_x\_20\_20190820072814.00$ 

NimitzMDP112\_1FdCom21H\_5.500in\_x\_20\_20190820072818.00

NimitzMDP112\_1FdCom21H\_5.500in\_x\_20\_20190820072822.00

Section	4 - Ce	emen	t								
String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	503	537	1.33	14.8	714	100	CIC	Accelerator

Section	Λ	Comont
JECHUI		Cement

INTERMEDIATE	Lead	0	3652	961	1.73	12.9	1663	50	Pozzolan C	Retarder

# Operator Name: OXY USA INCORPORATED

# Well Name: NIMITZ MDP1 12-1 FEDERAL COM

### Well Number: 21H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%		Cement type	Additives
INTERMEDIATE	Tail		3652	4152	155	1.33	14.8	206	20	CIC		Accelerator
PRODUCTION	Lead	2	6367	8039	292	1.38	13.2	403	5	CLH		Retarder, Dispersant, Salt

PRODUCTION	Lead	2	8039	1945 8	1999	1.38	13.2	2759	5	СІН	Retarder, Dispersant, Salt
PRODUCTION	Tail		0	6367	901	1.87	12.9	1687	25	CIC	Accelerator

# **Section 5 - Circulating Medium**

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

**Describe what will be on location to control well or mitigate other conditions:** Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements. 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.

Describe the mud monitoring system utilized: PVT/MD Totco/Visual Monitoring

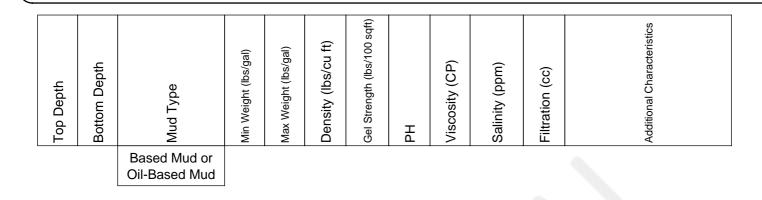
# Circulating Medium Table

Lop Depth 4125	Bottom Depth	od L Pn W OTHER : Water-	∞ Min Weight (lbs/gal)	G Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Hd	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
	8	Based and/or Oil-Based Mud	C								
0	503	WATER-BASED MUD	8.6	8.8							
503	4152	OTHER : Saturated Brine	9.8	10							

# Operator Name: OXY USA INCORPORATED

## Well Name: NIMITZ MDP1 12-1 FEDERAL COM

### Well Number: 21H



# Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

GR from TD to surface (horizontal well - vertical portion of hole). Mud Log from intermediate shoe to TD.

## List of open and cased hole logs run in the well:

GAMMA RAY LOG, MUD LOG/GEOLOGIC LITHOLOGY LOG,

## Coring operation description for the well:

No coring is planned at this time.

# **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 4331

Anticipated Surface Pressure: 2422

Anticipated Bottom Hole Temperature(F): 150

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

# Hydrogen Sulfide drilling operations plan required? YES

# Hydrogen sulfide drilling operations plan:

NimitzMDP112\_1FdCom21H\_H2S1\_20190820073503.pdf NimitzMDP112\_1FdCom21H\_H2S2\_20190820073509.pdf NimitzMDP112\_1FdCom21H\_H2SEmerCont\_20190820073515.pdf Well Name: NIMITZ MDP1 12-1 FEDERAL COM

#### Well Number: 21H

# **Section 8 - Other Information**

### Proposed horizontal/directional/multi-lateral plan submission:

NimitzMDP112\_1FdCom21H\_DirectPlan\_20190820073538.pdf NimitzMDP112\_1FdCom21H\_DirectPlot\_20190820073544.pdf

### Other proposed operations facets description:

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 will be run in case a contingency second stage is required for cement to reach surface. If cement circulated to surface during first stage we will drop a cancelation cone and not pump the second stage.

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

OXY requests to pump a two stage cement job on the intermediate II casing string with the first stage being pumped conventionally with the calculated TOC @ the Bone Spring and the second stage performed as a bradenhead squeeze with planned cement from the Bone Spring to surface.

Annular Clearance Variance Request - As per the agreement reached in the OXY/BLM 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.

Well will be drilled with a walking/skidding operation. Plan to drill the multiple 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.

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.

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 nippled 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 nippling 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.

Well Name: NIMITZ MDP1 12-1 FEDERAL COM

### Well Number: 21H

13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

## Other proposed operations facets attachment:

NimitzMDP112\_1FdCom21H\_DrillPlan\_20190820073610.pdf NimitzMDP112\_1FdCom21H\_GasCapPlan\_20190820073618.pdf NimitzMDP112\_1FdCom21H\_SpudRigData\_20190820073625.pdf

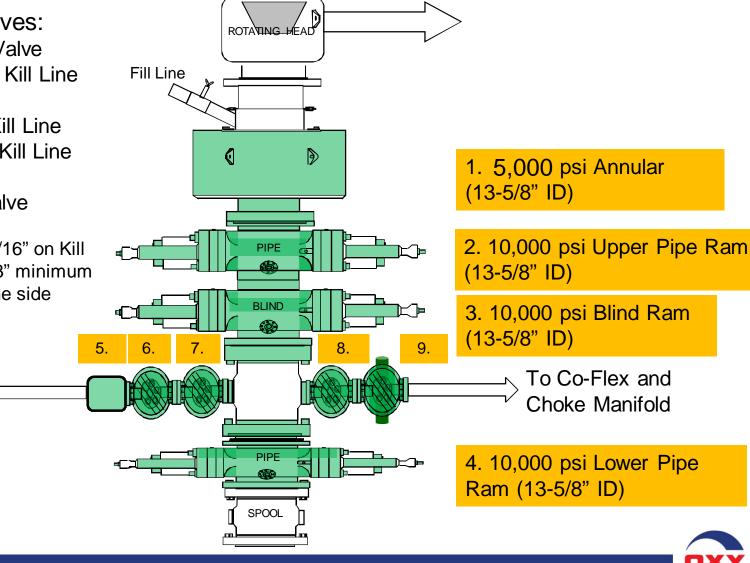
## Other Variance attachment:

# 5/10M BOP Stack

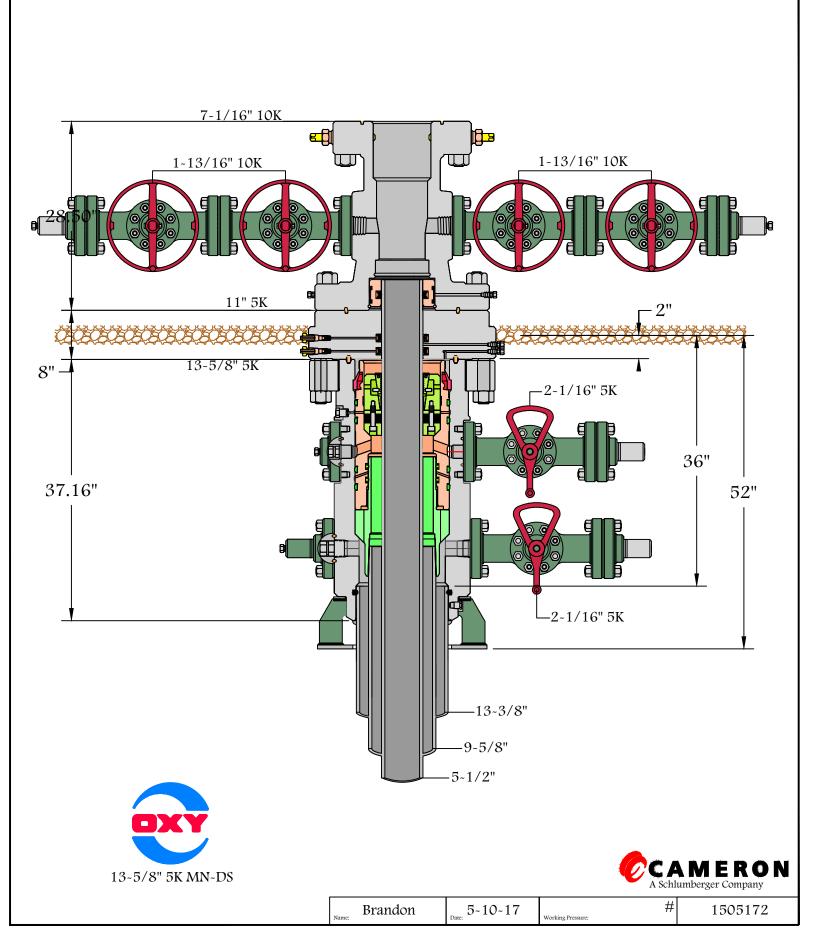
Mud Cross Valves:

- 5. 10M Check Valve
- 6. Outside 10M Kill Line Valve
- 7. Inside 10M Kill Line
- 8. Outside10M Kill Line Valve
- 9. 10M HCR Valve
- \*Minimum ID = 2-1/16" on Kill Line side and 3" minimum ID on choke line side

To Kill ↓ Line







# OXY

PRD NM DIRECTIONAL PLANS (NAD 1983) Nimitz MDP1 12\_1 Nimitz MDP1 12-1 Federal Com 21H

Wellbore #1

**Plan: Permitting Plan** 

# **Standard Planning Report**

09 July, 2019

Database: Company: Project: Site: Well: Wellbore: Design:	PRD I Nimitz Nimitz Wellb	NEERING DES NM DIRECTIO 2 MDP1 12_1 2 MDP1 12-1 F	NAL PLANS	, ,	TVD Refe MD Refer North Ref	ence:	F	Well Nimitz MD RKB=26.5' @ 3 RKB=26.5' @ 3 Grid Minimum Curva	514.60ft 514.60ft	eral Com 21H
Project	PRD N	IM DIRECTION	NAL PLANS (I	NAD 1983)						
Map System: Geo Datum: Map Zone:	North Ar	e Plane 1983 merican Datum xico Eastern Z			System Da	tum:		an Sea Level	ale factor	
Site	Nimitz	MDP1 12_1								
Site Position: From: Position Uncer	Map tainty:		North Eastin .00 ft Slot F	-		055.21 usft	Latitude: Longitude: Grid Converg	gence:	1	32° 13' 33.331024 N 103° 50' 33.713673 W 0.26 °
Well	Nimitz I	MDP1 12-1 Fe	deral Com 21	Н						
Well Position	+N/-S +E/-W	,		orthing: isting:		445,198.60 693,267.60		tude: gitude:		32° 13' 22.701256 N 103° 50' 31.298251 W
Position Uncer	tainty	2	2.00 ft W	ellhead Eleva	ition:	0.0	00 ft Gro	und Level:		3,488.10 ft
Wellbore	Wellbo	ore #1								
Magnetics	Мо	del Name	Sampl		Declina (°)		<b>Dip A</b> (°)			Strength nT)
		HDGM		7/9/2019		6.82		59.92		47,899
Design	Permit	ting Plan								
Audit Notes:										
Version:			Phas	e: P	ROTOTYPE	Tie	On Depth:		0.00	
Vertical Sectio	n:	De	epth From (T (ft)	VD)	+N/-S (ft)	+E/ (f			ection (°)	
			0.00		0.00	0.0	00	35	9.97	
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 6,040.00 6,539.81	0.00 0.00 10.00 10.00	0.00 0.00 9.64 9.64	0.00 6,040.00 6,537.28 8,117.16	0.00 0.00 42.88 317.42	0.00 0.00 7.28 53.90	0.00 0.00 2.00 0.00	0.00 0.00 2.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 9.64 0.00	
8,144.05		3.04	0,117.10	517.42	55.50	0.00	0.00	-11.53	-94.78	

Database:	HOPSPP	Local Co-ordinate Reference:	Well Nimitz MDP1 12-1 Federal Com 21H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3514.60ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3514.60ft
Site:	Nimitz MDP1 12_1	North Reference:	Grid
Well:	Nimitz MDP1 12-1 Federal Com 21H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

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

Database:	HOPSPP	Local Co-ordinate Reference:	Well Nimitz MDP1 12-1 Federal Com 21H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3514.60ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3514.60ft
Site:	Nimitz MDP1 12_1	North Reference:	Grid
Well:	Nimitz MDP1 12-1 Federal Com 21H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

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
6,040.00	0.00	0.00	6,040.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	1.20	9.64	6,100.00	0.62	0.11	0.62	2.00	2.00	0.00
6,200.00	3.20	9.64	6,199.92	4.40	0.75	4.40	2.00	2.00	0.00
6,300.00	5.20	9.64	6,299.64	11.62	1.97	11.62	2.00	2.00	0.00
6,400.00	7.20	9.64	6,399.05	22.27	3.78	22.27	2.00	2.00	0.00
6,500.00	9.20	9.64	6,498.03	36.33	6.17	36.33	2.00	2.00	0.00
6,539.81	10.00	9.64	6,537.28	42.88	7.28	42.87	2.00	2.00	0.00
6,600.00	10.00	9.64	6,596.55	53.18	9.03	53.17	0.00	0.00	0.00
6,700.00	10.00	9.64	6,695.04	70.29	11.94	70.28	0.00	0.00	0.00
6,800.00	10.00	9.64	6,793.52	87.40	14.84	87.40	0.00	0.00	0.00
6,900.00	10.00	9.64	6,892.00	104.52	17.75	104.51	0.00	0.00	0.00
7,000.00	10.00	9.64	6,990.48	121.63	20.65	121.62	0.00	0.00	0.00
7,100.00	10.00	9.64	7,088.96	138.74	23.56	138.73	0.00	0.00	0.00
7,200.00	10.00	9.64	7,187.45	155.86	26.46	155.85	0.00	0.00	0.00
7,300.00	10.00	9.64	7,285.93	172.97	29.37	172.96	0.00	0.00	0.00
7,400.00	10.00	9.64	7,384.41	190.08	32.28	190.07	0.00	0.00	0.00
7,500.00	10.00	9.64	7,482.89	207.20	35.18	207.18	0.00	0.00	0.00
7,600.00	10.00	9.64	7,581.37	224.31	38.09	224.29	0.00	0.00	0.00
7,700.00	10.00	9.64	7,679.86	241.42	40.99	241.41	0.00	0.00	0.00
7,800.00	10.00	9.64	7,778.34	258.54	43.90	258.52	0.00	0.00	0.00
7,900.00	10.00	9.64	7,876.82	275.65	46.81	275.63	0.00	0.00	0.00
8,000.00	10.00	9.64	7,975.30	292.77	49.71	292.74	0.00	0.00	0.00
8,100.00	10.00	9.64	8,073.78	309.88	52.62	309.85	0.00	0.00	0.00
8,144.05	10.00	9.64	8,117.16	317.42	53.90	317.39	0.00	0.00	0.00
8,200.00	9.97	3.18	8,172.27	327.04	54.98	327.01	2.00	-0.06	-11.54
8,230.33	10.00	359.69	8,202.14	332.29	55.11	332.27	2.00	0.12	-11.52
8,300.00	16.97	359.69	8,269.85	348.53	55.02	348.50	10.00	10.00	0.00
8,400.00	26.97	359.69	8,362.47	385.89	54.82	385.86	10.00	10.00	0.00
8,500.00	36.97	359.69	8,447.20	438.76	54.53	438.74	10.00	10.00	0.00
8,600.00	46.97	359.69	8,521.46	505.55	54.16	505.52	10.00	10.00	0.00
8,700.00	56.97	359.69	8,582.99	584.21	53.73	584.19	10.00	10.00	0.00
8,800.00	66.97	359.69	8,629.93	672.37	53.24	672.34	10.00	10.00	0.00
8,900.00	76.97	359.69	8,660.84	767.33	52.72	767.31	10.00	10.00	0.00
9,000.00	86.97	359.69	8,674.80	866.22	52.18	866.20	10.00	10.00	0.00
9,032.25	90.19	359.69	8,675.60	898.46	52.00	898.44	10.00	10.00	0.00
9,100.00	90.19	359.69	8,675.37	966.21	51.63	966.18	0.00	0.00	0.00
9,200.00	90.19	359.69	8,675.04	1,066.20	51.08	1,066.18	0.00	0.00	0.00
9,300.00	90.19	359.69	8,674.70	1,166.20	50.53	1,166.18	0.00	0.00	0.00
9,400.00	90.19	359.69	8,674.37	1,266.20	49.99	1,266.18	0.00	0.00	0.00
9,500.00	90.19	359.69	8,674.03	1,366.20	49.44	1,366.18	0.00	0.00	0.00
9,600.00	90.19	359.69	8,673.69	1,466.20	48.89	1,466.17	0.00	0.00	0.00
9,700.00	90.19	359.69	8,673.36	1,566.19	48.34	1,566.17	0.00	0.00	0.00
9,800.00	90.19	359.69	8,673.02	1,666.19	47.79	1,666.17	0.00	0.00	0.00
9,900.00	90.19	359.69	8,672.69	1,766.19	47.24	1,766.17	0.00	0.00	0.00
10,000.00	90.19	359.69	8,672.35	1,866.19	46.69	1,866.17	0.00	0.00	0.00
10,100.00	90.19	359.69	8,672.02	1,966.19	46.15	1,966.16	0.00	0.00	0.00
10,200.00	90.19	359.69	8,671.68	2,066.18	45.60	2,066.16	0.00	0.00	0.00

Database:	HOPSPP	Local Co-ordinate Reference:	Well Nimitz MDP1 12-1 Federal Com 21H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3514.60ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3514.60ft
Site:	Nimitz MDP1 12_1	North Reference:	Grid
Well:	Nimitz MDP1 12-1 Federal Com 21H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

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)
10,300.00	90.19	359.69	8,671.34	2,166.18	45.05	2,166.16	0.00	0.00	0.00
10,400.00	90.19	359.69	8,671.01	2,266.18	44.50	2,266.16	0.00	0.00	0.00
40 500 00	00.40	050.00	0.070.07	0.000.40	40.05	0.000.40	0.00	0.00	0.00
10,500.00	90.19	359.69	8,670.67	2,366.18	43.95	2,366.16	0.00	0.00	0.00
10,600.00	90.19	359.69	8,670.34	2,466.18	43.40	2,466.16	0.00	0.00	0.00
10,700.00	90.19	359.69	8,670.00	2,566.17	42.85	2,566.15	0.00	0.00	0.00
10,800.00	90.19	359.69	8,669.67	2,666.17	42.31	2,666.15	0.00	0.00	0.00
10,900.00	90.19	359.69	8,669.33	2,766.17	41.76	2,766.15	0.00	0.00	0.00
11,000.00	90.19	359.69	8,668.99	2,866.17	41.21	2,866.15	0.00	0.00	0.00
11,100.00	90.19	359.69	8,668.66	2,966.17	40.66	2,966.15	0.00	0.00	0.00
11,200.00	90.19	359.69	8,668.32	3,066.16	40.11	3,066.14	0.00	0.00	0.00
11,300.00	90.19	359.69	8,667.99	3,166.16	39.56	3,166.14	0.00	0.00	0.00
11,400.00	90.19	359.69	8,667.65	3,266.16	39.01	3,266.14	0.00	0.00	0.00
11 500 00	00.10	250.60	0 667 22	2 266 16	29.46	2 266 14	0.00	0.00	0.00
11,500.00	90.19	359.69	8,667.32	3,366.16	38.46	3,366.14	0.00	0.00	0.00
11,600.00	90.19	359.69	8,666.98	3,466.16	37.92	3,466.14	0.00	0.00	0.00
11,700.00	90.19	359.69	8,666.65	3,566.15	37.37	3,566.14	0.00	0.00	0.00
11,800.00	90.19	359.69	8,666.31	3,666.15	36.82	3,666.13	0.00	0.00	0.00
11,900.00	90.19	359.69	8,665.97	3,766.15	36.27	3,766.13	0.00	0.00	0.00
12,000.00	90.19	359.69	8,665.64	3,866.15	35.72	3,866.13	0.00	0.00	0.00
12,100.00	90.19	359.69	8,665.30	3,966.15	35.17	3,966.13	0.00	0.00	0.00
12,200.00	90.19	359.69	8,664.97	4,066.14	34.62	4,066.13	0.00	0.00	0.00
12,300.00	90.19	359.69	8,664.63	4,166.14	34.08	4,166.12	0.00	0.00	0.00
12,400.00	90.19	359.69	8,664.30	4,266.14	33.53	4,266.12	0.00	0.00	0.00
12.500.00	90.19	359.69	8,663.96	4,366.14	32.98	4,366.12	0.00	0.00	0.00
12,600.00	90.19	359.69	8,663.62	4,466.13	32.43	4,466.12	0.00	0.00	0.00
12,700.00	90.19	359.69	8,663.29	4,566.13	31.88	4,566.12	0.00	0.00	0.00
12,800.00	90.19	359.69	8,662.95	4,666.13	31.33	4,666.12	0.00	0.00	0.00
12,900.00	90.19	359.69	8,662.62	4,766.13	30.78	4,766.11	0.00	0.00	0.00
13,000.00	90.19	359.69	8,662.28	4,866.13	30.24	4,866.11	0.00	0.00	0.00
13,100.00	90.19	359.69	8,661.95	4,966.12	29.69	4,966.11	0.00	0.00	0.00
13,200.00	90.19	359.69	8,661.61	5,066.12	29.14	5,066.11	0.00	0.00	0.00
13,300.00	90.19	359.69	8,661.27	5,166.12	28.59	5,166.11	0.00	0.00	0.00
13,400.00	90.19	359.69	8,660.94	5,266.12	28.04	5,266.10	0.00	0.00	0.00
13,500.00	90.19	359.69	8,660.60	5,366.12	27.49	5,366.10	0.00	0.00	0.00
13,600.00	90.19	359.69	8,660.27	5,466.11	26.94	5,466.10	0.00	0.00	0.00
13,700.00	90.19	359.69	8,659.93	5,566.11	26.39	5,566.10	0.00	0.00	0.00
13,800.00	90.19	359.69	8,659.60	5,666.11	25.85	5,666.10	0.00	0.00	0.00
13,900.00	90.19	359.69	8,659.26	5,766.11	25.30	5,766.10	0.00	0.00	0.00
14,000.00	90.19	359.69	8,658.92	5,866.11	24.75	5,866.09	0.00	0.00	0.00
	90.19	359.69 359.69	8,658.92 8,658.59	5,866.11 5,966.10	24.75 24.20	5,866.09 5,966.09	0.00	0.00	0.00
14,100.00 14,200.00	90.19	359.69 359.69	8,658.59 8,658.25	5,966.10 6,066.10	24.20 23.65	5,966.09 6,066.09	0.00	0.00	0.00
				,					
14,300.00	90.19	359.69 359.69	8,657.92 8,657.58	6,166.10 6,266,10	23.10	6,166.09	0.00 0.00	0.00	0.00 0.00
14,400.00	90.19	359.69	8,657.58	6,266.10	22.55	6,266.09		0.00	
14,500.00	90.19	359.69	8,657.25	6,366.10	22.01	6,366.08	0.00	0.00	0.00
14,600.00	90.19	359.69	8,656.91	6,466.09	21.46	6,466.08	0.00	0.00	0.00
14,700.00	90.19	359.69	8,656.57	6,566.09	20.91	6,566.08	0.00	0.00	0.00
14,800.00	90.19	359.69	8,656.24	6,666.09	20.36	6,666.08	0.00	0.00	0.00
14,900.00	90.19	359.69	8,655.90	6,766.09	19.81	6,766.08	0.00	0.00	0.00
15,000.00	90.19	359.69	8,655.57	6,866.09	19.26	6,866.08	0.00	0.00	0.00
15,100.00	90.19	359.69	8,655.23	6,966.08	18.71	6,966.07	0.00	0.00	0.00
15,200.00	90.19	359.69	8,654.90	7,066.08	18.17	7,066.07	0.00	0.00	0.00
15,300.00	90.19	359.69	8,654.56	7,166.08	17.62	7,166.07	0.00	0.00	0.00
15,400.00	90.19	359.69	8,654.23	7,100.08	17.02	7,100.07	0.00	0.00	0.00
15,500.00	90.19	359.69	8,653.89	7,366.07	16.52	7,366.07	0.00	0.00	0.00
15,600.00	90.19	359.69	8,653.55	7,466.07	15.97	7,466.06	0.00	0.00	0.00

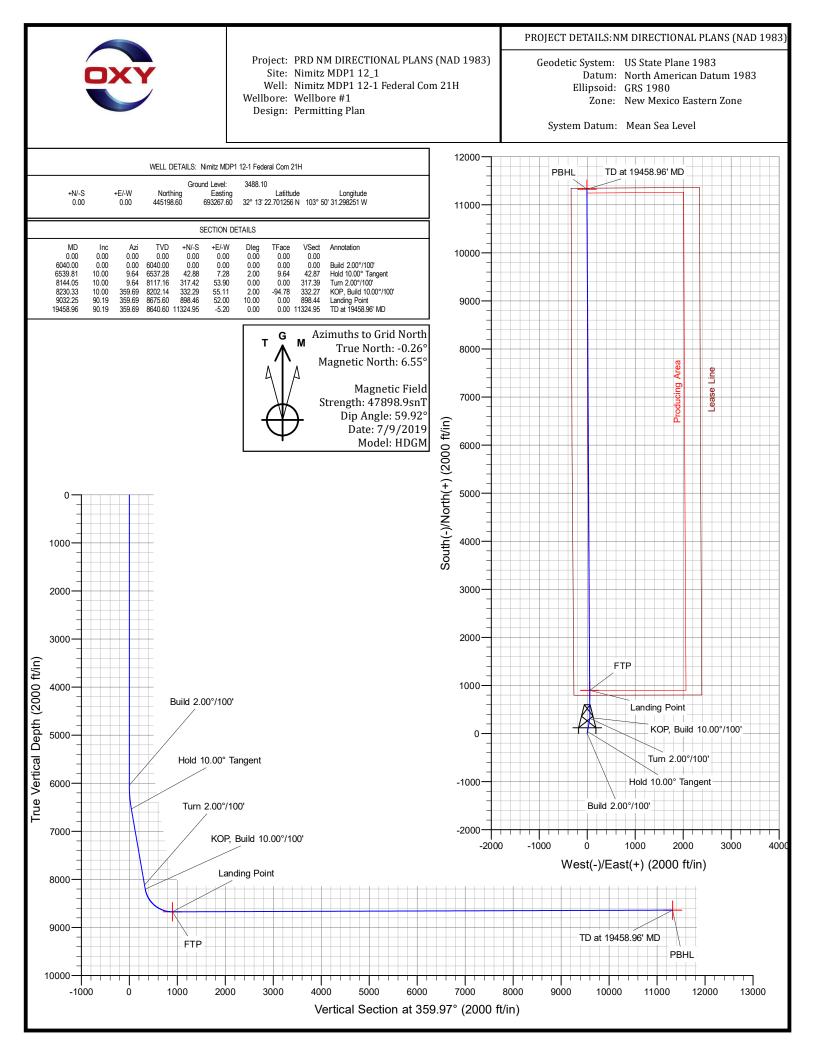
Database:	HOPSPP	Local Co-ordinate Reference:	Well Nimitz MDP1 12-1 Federal Com 21H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3514.60ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3514.60ft
Site:	Nimitz MDP1 12_1	North Reference:	Grid
Well:	Nimitz MDP1 12-1 Federal Com 21H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

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 15,800.00 15,900.00	90.19 90.19 90.19	359.69 359.69 359.69	8,653.22 8,652.88 8,652.55	7,566.07 7,666.07 7,766.07	15.42 14.87 14.33	7,566.06 7,666.06 7,766.06	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
16,000.00 16,100.00 16,200.00 16,300.00 16,400.00	90.19 90.19 90.19 90.19 90.19 90.19	359.69 359.69 359.69 359.69 359.69 359.69	8,652.21 8,651.88 8,651.54 8,651.20 8,650.87	7,866.06 7,966.06 8,066.06 8,166.06 8,266.06	13.78 13.23 12.68 12.13 11.58	7,866.06 7,966.06 8,066.05 8,166.05 8,266.05	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
16,500.00 16,600.00 16,700.00 16,800.00 16,900.00	90.19 90.19 90.19 90.19 90.19 90.19	359.69 359.69 359.69 359.69 359.69 359.69	8,650.53 8,650.20 8,649.86 8,649.53 8,649.19	8,366.05 8,466.05 8,566.05 8,666.05 8,766.05	11.03 10.48 9.94 9.39 8.84	8,366.05 8,466.05 8,566.04 8,666.04 8,766.04	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
17,000.00 17,100.00 17,200.00 17,300.00 17,400.00	90.19 90.19 90.19 90.19 90.19 90.19	359.69 359.69 359.69 359.69 359.69 359.69	8,648.85 8,648.52 8,648.18 8,647.85 8,647.51	8,866.04 8,966.04 9,066.04 9,166.04 9,266.04	8.29 7.74 7.19 6.64 6.10	8,866.04 8,966.04 9,066.04 9,166.03 9,266.03	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
17,500.00 17,600.00 17,700.00 17,800.00 17,900.00	90.19 90.19 90.19 90.19 90.19 90.19	359.69 359.69 359.69 359.69 359.69 359.69	8,647.18 8,646.84 8,646.50 8,646.17 8,645.83	9,366.03 9,466.03 9,566.03 9,666.03 9,766.03	5.55 5.00 4.45 3.90 3.35	9,366.03 9,466.03 9,566.03 9,666.02 9,766.02	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
18,000.00 18,100.00 18,200.00 18,300.00 18,400.00	90.19 90.19 90.19 90.19 90.19 90.19	359.69 359.69 359.69 359.69 359.69 359.69	8,645.50 8,645.16 8,644.83 8,644.49 8,644.15	9,866.02 9,966.02 10,066.02 10,166.02 10,266.01	2.80 2.26 1.71 1.16 0.61	9,866.02 9,966.02 10,066.02 10,166.02 10,266.01	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
18,500.00 18,600.00 18,700.00 18,800.00 18,900.00	90.19 90.19 90.19 90.19 90.19 90.19	359.69 359.69 359.69 359.69 359.69 359.69	8,643.82 8,643.48 8,643.15 8,642.81 8,642.48	10,366.01 10,466.01 10,566.01 10,666.01 10,766.00	0.06 -0.49 -1.04 -1.59 -2.13	10,366.01 10,466.01 10,566.01 10,666.01 10,766.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
19,000.00 19,100.00 19,200.00 19,300.00 19,400.00	90.19 90.19 90.19 90.19 90.19 90.19	359.69 359.69 359.69 359.69 359.69	8,642.14 8,641.81 8,641.47 8,641.13 8,640.80	10,866.00 10,966.00 11,066.00 11,166.00 11,265.99	-2.68 -3.23 -3.78 -4.33 -4.88	10,866.00 10,966.00 11,066.00 11,166.00 11,266.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
19,458.96	90.19	359.69	8,640.60	11,324.95	-5.20	11,324.95	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL (Nimitz MDP1 - plan hits target cer - Point	0.00 nter	0.00	8,640.60	11,324.95	-5.20	456,522.80	693,262.40	32° 15' 14.762119 N	103° 50' 30.755576
FTP (Nimitz MDP1 - plan hits target cer - Point	0.00 hter	0.00	8,675.60	898.46	52.00	446,097.00	693,319.60	32° 13' 31.589200 N	103° 50' 30.645070

Database:	HOPSPP	Local Co-ordinate Reference:	Well Nimitz MDP1 12-1 Federal Com 21H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3514.60ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3514.60ft
Site:	Nimitz MDP1 12_1	North Reference:	Grid
Well:	Nimitz MDP1 12-1 Federal Com 21H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		
Plan Annotations			

Measured	l Vertical	Local Coo	ordinates	
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
6,040.0	0 6,040.00	0.00	0.00	Build 2.00°/100'
6,539.8	1 6,537.28	42.88	7.28	Hold 10.00° Tangent
8,144.0	5 8,117.16	317.42	53.90	Turn 2.00°/100'
8,230.3	3 8,202.14	332.29	55.11	KOP, Build 10.00°/100'
9,032.2	5 8,675.60	898.46	52.00	Landing Point
19,458.9	6 8,640.60	11,324.95	-5.20	TD at 19458.96' MD



## 1. Geologic Formations

TVD of target	8675'	Pilot Hole Depth	N/A
MD at TD:	19458'	Deepest Expected fresh water:	453'

## **Delaware Basin**

Formation	TVD - RKB	<b>Expected Fluids</b>
Rustler	453	
Salado	810	Salt
Castile	2,627	Salt
Lamar/Delaware	4,102	Oil/Gas
Bell Canyon	4,125	Oil/Gas
Cherry Canyon	5,063	Oil/Gas
Brushy Canyon	6,367	Losses
Bone Spring	8,039	Oil/Gas

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

## 2. Casing Program

									Buoyant	Buoyant
Hole Size (in)	Casing	Casing Interval Csg. Size Weight		Conn.	SF SF Burst	Body SF	Joint SF			
Hole Size (III)	From (ft)	To (ft)	(in)	(lbs)	Grade	Conn.	Collapse	Sr Burst	Tension	Tension
17.5	0	503	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	4152	9.625	43.5	L-80	BTC	1.125	1.2	1.4	1.4
8.5	0	19458	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
								SF Values will	meet or Exceed	1

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 cancelation 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.

## **Annular Clearance Variance Request**

As per the agreement reached in the Oxy/BLM 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

1

Day USA Inc Nimiz MDI I 12_I Feueral Com 2111	
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?	Ν
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 <sup>rd</sup> string cement tied back	V
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 <sup>nd</sup> 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?	

# 3. Cementing Program

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H20 (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Surface (Tail)	537	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate (Lead)	961	12.9	1.73	8.784	15:26	Pozzolan Cement, Retarder
Intermediate (Tail)	155	14.8	1.33	6.368	7:11	Class C Cement, Accelerator
Production 1st Stage (Lead)	292	13.2	1.38	6.692	17:50	Class H Cement, Retarder, Dispersant, Salt
Production 1st Stage (Tail)	1999	13.2	1.38	6.686	3:49	Class H Cement, Retarder, Dispersant, Salt
2nd Stage Production Lead Slurry to be pumped as Bradenhead Squeeze from surface, down the Production annulus.						
Production 2nd Stage (Tail)	901	12.9	1.872	10.11	21:54	Class C Cement, Accelerator

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	N/A	N/A	N/A
Surface (Tail)	0	503	100%
Intermediate (Lead)	0	3652	50%
Intermediate (Tail)	3652	4152	20%
Production 1st Stage (Lead)	6367	8039	5%
Production 1st Stage (Tail)	8039	19458	5%
Production 2nd Stage (Tail)	0	6367	25%

# \*Offline Cementing Request\*

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 nippled 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 nippling 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.

ssure Control Equipment							
BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Туре	1	*	Tested to:	
		3M	Annula	ar	✓	70% of working pressure	
10.05" 11.1	13-5/8"		Blind R	am	✓	250 psi / 3000 psi	
12.25" Hole		3M	Pipe Ra	ım			
			Double F	Ram	*		
			Other*				
8.5" Hole		3M	Annular		✓	70% of working pressure	
	13-5/8"		Blind Ram		✓		
	15-5/8	214	Pipe Ra	ım		250 mai / 2000 mai	
		3M	Double F	Ram	✓	250 psi / 3000 psi	
			Other*				

# 4. Pressure Control Equipment

\*Specify if additional ram is utilized.

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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 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 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		Trime	Tyme		W/second second	
From (ft)	To (ft)	Туре	(ppg)	Viscosity	Water Loss	
0	503	Water-Based Mud	8.6-8.8	40-60	N/C	
503	4152	Saturated Brine- Based Mud	9.8-10.0	35-45	N/C	
4152	19458	Water-Based or Oil- Based Mud	8.0-9.6	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,

4

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 f	luid? PVT/MD Totco/Visual Monitoring
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# 6. Logging and Testing Procedures

Logg	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					

Addi	tional logs planned	Interval
No	Resistivity	
No	Density	
No	CBL	
Yes	Mud log	ICP - TD
No	PEX	

## 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4331 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	150°F

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. IfH2S is detected in concentrations greater than 100 ppm, the operator will comply with theprovisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measuredvalues and formations will be provided to the BLM.NH2S 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.		
• We plan to drill the four 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.		
Will more than one drilling rig be used for drilling operations? If yes, describe.		

٠	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.	
	its entirety per the APD. Please see the attached document for information	

# Total estimated cuttings volume: 1755.9 bbls.

# 9. Company Personnel

Name	<u>Title</u>	<b>Office Phone</b>	<b>Mobile</b> Phone
Linsay Earle	Drilling Engineer	713-350-4921	832-596-5507
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



APD ID: 10400046104 **Operator Name: OXY USA INCORPORATED** Well Name: NIMITZ MDP1 12-1 FEDERAL COM Well Type: OIL WELL

# **Bond Information**

Federal/Indian APD: FED BLM Bond number: ESB000226 **BIA Bond number:** Do you have a reclamation bond? NO Is the reclamation bond a rider under the BLM bond? Is the reclamation bond BLM or Forest Service? **BLM reclamation bond number:** Forest Service reclamation bond number: Forest Service reclamation bond attachment: **Reclamation bond number: Reclamation bond amount: Reclamation bond rider amount:** Additional reclamation bond information attachment: Submission Date: 08/20/2019

400 m

Well Number: 21H Well Work Type: Drill Highlighted data reflects the most recent changes

09/08/2020

Bond Info Data Report

Show Final Text