Form 3160-3 (June 2015)

# LIMITED STATES

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2013

UNITED STATES	)			
DEPARTMENT OF THE II			5. Lease Serial No.	
BUREAU OF LAND MANA			NMNM082896	
APPLICATION FOR PERMIT TO D	RILL OR REENTER		6. If Indian, Allotee of	or Tribe Name
	EENTER		7. If Unit or CA Agre	eement, Name and No.
1b. Type of Well: ✓ Oil Well ☐ Gas Well ☐ O	ther		8. Lease Name and V	Well No.
1c. Type of Completion: Hydraulic Fracturing Si	ingle Zone Multiple Zone	;	NIMITZ MDP1 12-1	FEDERAL COM
			22H	
2. Name of Operator OXY USA INCORPORATED			9. API Well No. 30 015 47447	
3a. Address 5 Greenway Plaza, Suite 110, Houston, TX 77046	3b. Phone No. (include area c (713) 366-5716	code)	10. Field and Pool, o	or Exploratory ONE SPRING/COTTO
4. Location of Well (Report location clearly and in accordance v	with any State requirements.*)		11. Sec., T. R. M. or	Blk. and Survey or Area
At surface NWNW / 892 FNL / 311 FWL / LAT 32.2225	591 / LONG -103.841432		SEC 13/T24S/R30E	E/NMP
At proposed prod. zone NWNW / 20 FNL / 1250 FWL / L	AT 32.253985 / LONG -103.	838414		
14. Distance in miles and direction from nearest town or post offi 13 miles	ice*		12. County or Parish EDDY	13. State NM
15. Distance from proposed* location to nearest 20 feet	16. No of acres in lease	17. Spaci	ng Unit dedicated to the	uis well
property or lease line, ft. (Also to nearest drig. unit line, if any)	880	640.0		
18. Distance from proposed location*	19. Proposed Depth	20. BLM	/BIA Bond No. in file	
to nearest well, drilling, completed, applied for, on this lease, ft.	8656 feet / 19581 feet	FED: ES	SB000226	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3487 feet	22. Approximate date work w 07/30/2020	vill start*	23. Estimated duration 45 days	on
	24. Attachments			
The following, completed in accordance with the requirements of (as applicable)	f Onshore Oil and Gas Order No	o. 1, and the I	Hydraulic Fracturing ru	ıle per 43 CFR 3162.3-3
1. Well plat certified by a registered surveyor.			ns unless covered by an	existing bond on file (see
2. A Drilling Plan.	Item 20 above	/		
<ol><li>A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office</li></ol>			rmation and/or plans as	may be requested by the
25. Signature (Electronic Submission)	Name (Printed/Typed) LESLIE REEVES / Ph	h: (713) 366.		Date 08/19/2019
Title	LEOLIE REEVEO 711	11. (7 13) 300	3710	00/13/2013
Advisor Regulatory				
Approved by (Signature)	Name (Printed/Typed)	>	1	Date
(Electronic Submission)	Cody Layton / Ph: (57	5) 234-5959		08/28/2020
Title Assistant Field Manager Lands & Minerals	Carlsbad Field Office			
Application approval does not warrant or certify that the applicar applicant to conduct operations thereon.  Conditions of approval, if any, are attached.	t holds legal or equitable title to	o those rights	in the subject lease wh	nich would entitle the
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, n of the United States any false, fictitious or fraudulent statements				ny department or agency



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

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

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

DISTRICT III 1000 RIO BRAZOS RD., AZTEC, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

Phone: (505) 334-6178 Fax: (505) 334-6170 DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA FR., NM 87505 Phone: (505) 476-3460 Fax: (505) 478-3462

Santa Fe, New Mexico 87505

□ AMENDED REPORT

Thome: (600) 410 0100 Tux. (600) 1		ACREAGE DEDICATION PLAT	
API Number	Pool Code	Pool Name	
30-015- <sub>47447</sub>	13367	COTTON DRAW; BONE SPRING	
Property Code	Prop	erty Name	Well Number
329328	NIMITZ MDP1 1	2-1 FEDERAL COM	22H
OGRID No.	0per	ator Name	Elevation
16696	OXY	USA INC.	3487.2'

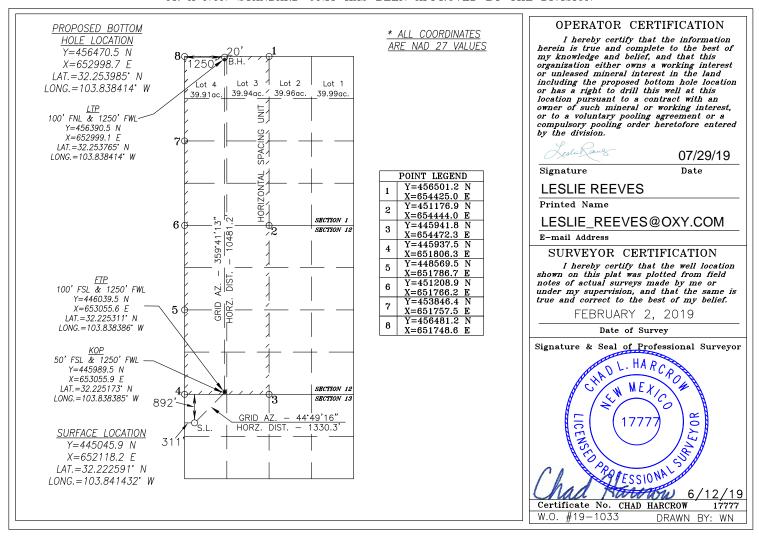
#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	13	24-S	30-E		892	NORTH	311	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
4	1	24-S 30-E			20	NORTH	1250	WEST	EDDY
Dedicated Acres	s Joint o	r Infill C	onsolidation	Code Or	der No.				
639.85									

## 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



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

Date: 07-18-2019

## State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

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

### **GAS CAPTURE PLAN**

$\boxtimes$	Original	Operator & OGRID No.: OXY USA INC 16696
$\Box$	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 <a href="Enterprise Field Services">Enterprise ("Enterprise")</a> and is connected to <a href="Enterprise">Enterprise</a> low/high pressure gathering system located in Eddy County, New Mexico. <a href="OXY USA INC.("OXY")</a> provides (periodically) to <a href="Enterprise">Enterprise</a> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <a href="OXY">OXY</a> and <a href="Enterprise">Enterprise</a> 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 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
  - 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

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** OXY USA INCORPORATED

WELL NAME & NO.: Nimitz MDP1 12-1 Federal COM / 22H

**SURFACE HOLE FOOTAGE:** 892'/N & 311'/W **BOTTOM HOLE FOOTAGE** 20'/N & 1250'/W

**LOCATION:** | Section 13, T.24 S., R.30 E., NMPM

**COUNTY:** | Eddy County, New Mexico

### COA

H2S	C Yes	<b>⊙</b> No	
Potash	O None	<ul><li>Secretary</li></ul>	© R-111-P
Cave/Karst Potential	C Low	• Medium	<sup>©</sup> High
Cave/Karst Potential	Critical		
Variance	O None	• Flex Hose	Other
Wellhead	Conventional	© Multibowl	O Both
Other	☐4 String Area	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	▼ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	<b>☑</b> 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 512 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.
- 2. The 9-5/8 inch intermediate casing shall be set at approximately 4180 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 Medium Cave/Karst 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.
- ❖ 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. Operator must run 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. When the Communitization Agreement number is known, it shall also be on the sign.

## **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.

## **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)
- 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.
- 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 intergrity 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 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.

## 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
  - 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 Data Report

## **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: 08/19/2019

Title: Advisor Regulatory

Street Address: 5 Greenway Plaza, Suite 110

City: Houston State: TX Zip: 77046

Phone: (713)497-2492

Email address: Leslie\_Reeves@oxy.com

## **Field Representative**

**Representative Name:** 

Street Address: 6001 Deauville

City: Midland State: TX Zip: 79706

Phone: (575)631-2442

Email address: Jim\_Wilson@oxy.com



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

## Application Data Report

APD ID: 10400046067

Submission Date: 08/19/2019

**Operator Name: OXY USA INCORPORATED** 

Well Name: NIMITZ MDP1 12-1 FEDERAL COM

Well Type: OIL WELL

Well Number: 22H

Well Work Type: Drill

Highlighted data reflects the most

recent changes

Show Final Text

## Section 1 - General

APD ID: 10400046067 Tie to previous NOS? N

Submission Date: 08/19/2019

**BLM Office: CARLSBAD** 

User: Leslie Reeves

Title: Advisor Regulatory

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM082896

Surface access agreement in place?

Allotted?

Lease Acres: 880

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? Y

**Permitting Agent? NO** 

APD Operator: OXY USA INCORPORATED

Operator letter of designation:

## **Operator Info**

**Operator Organization Name: OXY USA INCORPORATED** 

Operator Address: 5 Greenway Plaza, Suite 110

**Operator PO Box:** 

**Operator City:** Houston State: TX

**Operator Phone:** (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 API Number: Well Name: NIMITZ MDP1 12-1 FEDERAL COM Well Number: 22H

Pool Name: COTTON DRAW Field/Pool or Exploratory? Field and Pool Field Name: COTTON DRAW

> **BONE SPRING BONE SPRING**

**Zip:** 77046

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

Page 1 of 3

Well Name: NIMITZ MDP1 12-1 FEDERAL COM Well Number: 22H

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

Is the proposed well in a Helium production area? N Use Existing Well Pad? N New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name: Nimitz Number: 21H, 11H, 22H, 41H,

Well Class: HORIZONTAL MDP1 12-1 & 13 Federal Com 42H & 21H, 22H, 11H, 41H, 42H

Number of Legs: 1

Well Work Type: Drill
Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 13 Miles Distance to nearest well: 35 FT Distance to lease line: 20 FT

Reservoir well spacing assigned acres Measurement: 640 Acres

Well plat: NimitzMDP112\_1FdCom22H\_C\_102\_20190819103825.pdf

NimitzMDP112\_1FdCom22H\_SitePlan\_20190819103833.pdf

Well work start Date: 07/30/2020 Duration: 45 DAYS

## **Section 3 - Well Location Table**

Survey Type: RECTANGULAR

**Describe Survey Type:** 

Datum: NAD83 Vertical Datum: NAVD88

Survey number: Reference Datum: GROUND LEVEL

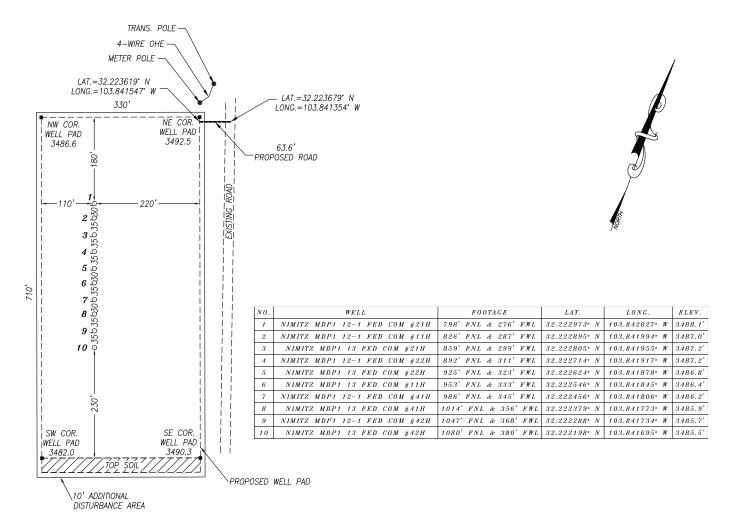
Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL Leg #1	892	FNL	311	FW L	24S	30E	13	Aliquot NWN W	32.22259 1	- 103.8414 32	EDD Y	NEW MEXI CO			NMNM 082896	348 7	0	0	Z
KOP Leg #1	50	FSL	125 0	FW L	24S	30E	12	Aliquot SWS W	32.22517 3	- 103.8383 85	EDD Y	NEW MEXI CO	–		NMNM 082896	- 519 7	909 7	868 4	N

Well Name: NIMITZ MDP1 12-1 FEDERAL COM Well Number: 22H

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 Leg #1-1	100	FSL	125 0	FW L	24S	30E	12	Aliquot SWS W	32.22531 1	- 103.8383 85	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 082896	- 519 9	914 8	868 6	Υ
PPP Leg #1-2	3	FNL	126 1	FW L	24S	30E	1	Aliquot SWS W	32.23965 4	- 103.8388 86	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 097133	- 518 4	143 21	867 1	Y
EXIT Leg #1	100	FNL	125 0	FW L	24S	30E	1	Aliquot NWN W	32.25376 5	- 103.8384 14	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 097133	- 516 9	195 00	865 6	Y
BHL Leg #1	20	FNL	125 0	FW L	24S	30E	1	Aliquot NWN W	32.25398 5	- 103.8384 14	EDD Y	NEW MEXI CO	NEW MEXI CO		NMNM 097133	- 516 9		865 6	N

## OXY USA INC.

SITE PLAN PAD 1317 FAA PERMIT: NO



#### NOTES:

- LATS & LONGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983.
- 2) DISTANCES ARE GRID VALUES.
- 3) ALL FEATURES ARE EXISTING UNLESS OTHERWISE NOTED

#### CERTIFICATION

I, CHAD HARCROW, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MIX KNOWLEDGE AND BELIEF.



### HARCROW SURVEYING, LLC 2316 W. MAIN ST, ARTESIA, N.M. 88210 PH: (575) 746-2158

c.harcrow@harcrowsurveying.com



200	0	200	400 Feet
	Scale: 1	"=200'	

OXY USA	INC.
SURVEY DATE: FEB. 2, 2019	SITE PLAN
DRAFTING DATE: JUNE 10, 2019	PAGE: 1 OF 1
APPROVED BY: CH DRAWN BY: WN	FILE: 19-1030



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

## Drilling Plan Data Report

09/08/2020

**APD ID**: 10400046067

**Submission Date:** 08/19/2019

Highlighted data reflects the most recent changes

Operator Name: OXY USA INCORPORATED

Well Number: 22H

**Show Final Text** 

Well Name: NIMITZ MDP1 12-1 FEDERAL COM

Well Work Type: Drill

Well Type: OIL WELL

## **Section 1 - Geologic Formations**

Formation	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
517894	RUSTLER	3500	462	462	ANHYDRITE, DOLOMITE, SHALE	USEABLE WATER	N
517895	SALADO	2680	820	820	ANHYDRITE, DOLOMITE, HALITE, SHALE	OTHER : SALT	N
517892	CASTILE	825	2675	2675	ANHYDRITE	OTHER : salt	N
517896	LAMAR	-630	4130	4130	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	N
517897	BELL CANYON	-654	4154	4155	SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER, USEABLE WATER: BRINE	N
517898	CHERRY CANYON	-1580	5080	5089	SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	N
517899	BRUSHY CANYON	-2865	6365	6440	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	N
517893	BONE SPRING	-4551	8051	8180	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	N

## **Section 2 - Blowout Prevention**

Pressure Rating (PSI): 5M Rating Depth: 8687

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: 22H

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:**

 $Nimitz MDP 112\_1Fd Com 22 H\_Choke Manifold\_20190819105629.pdf$ 

## **BOP Diagram Attachment:**

NimitzMDP112\_1FdCom22H\_BOP5M\_20190819105647.pdf NimitzMDP112\_1FdCom22H\_FlexHoseCert\_20190819105653.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	512	0	512	3487	2975	512	J-55	54.5	BUTT	1.12 5	1.2	BUOY	1.4	BUOY	1.4
	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	4180	0	4180		-693	4180	L-80	43.5	BUTT	1.12 5	1.2	BUOY	1.4	BUOY	1.4
	PRODUCTI ON	8.5	5.5	NEW	API	N	0	19581	0	8656		-5169	19581	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):

NimitzMDP112\_1FdCom22H\_CsgCriteria\_20190819133627.pdf

Well Name: NIMITZ MDP1 12-1 FEDERAL COM Well Number: 22H

## **Casing Attachments**

Casing ID: 2 String Type: INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

NimitzMDP112\_1FdCom22H\_CsgCriteria\_20190819133726.pdf

Casing ID: 3 String Type: PRODUCTION

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

NimitzMDP112\_1FdCom22H\_CsgCriteria\_20190819133812.pdf

## **Section 4 - Cement**

String Type	Lead/Tail	Stage Tool Depth	Тор МD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	512	546	1.33	14.8	726	100	CIC	Accelerator

INTERMEDIATE	Lead		0	3680	968	1.73	12.9	1675	50	Pozzolan C	Retarder
INTERMEDIATE	Tail		3680	4180	155	1.33	14.8	206	20	CIC	Accelerator
PRODUCTION	Lead	2	0	6365	900	1.87	12.9	1685	25	CL C	Accelerator

Well Name: NIMITZ MDP1 12-1 FEDERAL COM Well Number: 22H

String Type	Lead/Tail	Stage Tool Depth	Тор МБ	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%		Cement type	Additives
PRODUCTION	Lead	2	6365	8051	294	1.38	13.2	406	5	CIH		Retarder, Dispersant, Salt
PRODUCTION	Tail		8051	1958 0	2018	1.38	13.2	2785	5	CIH		Retarder, Dispersant, Salt

## **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**

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
4180	1958 0	OTHER: Water- Based and/or Oil-Based Mud	8	9.6							
0	512	WATER-BASED MUD	8.6	8.8							
512	4180	OTHER: Saturated Brine Based Mud or Oil-Based Mud	9.8	10							

Well Name: NIMITZ MDP1 12-1 FEDERAL COM Well Number: 22H

## 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: 4337 Anticipated Surface Pressure: 2426

**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\_1FdCom22H\_H2S1\_20190819134703.pdf NimitzMDP112\_1FdCom22H\_H2S2\_20190819134710.pdf NimitzMDP112\_1FdCom22H\_H2SEmerCont\_20190819134716.pdf

## **Section 8 - Other Information**

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

NimitzMDP112\_1FdCom22H\_DirectPlan\_20190819134736.pdf NimitzMDP112\_1FdCom22H\_DirectPlot\_20190819134742.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,

Well Name: NIMITZ MDP1 12-1 FEDERAL COM Well Number: 22H

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

### Other proposed operations facets attachment:

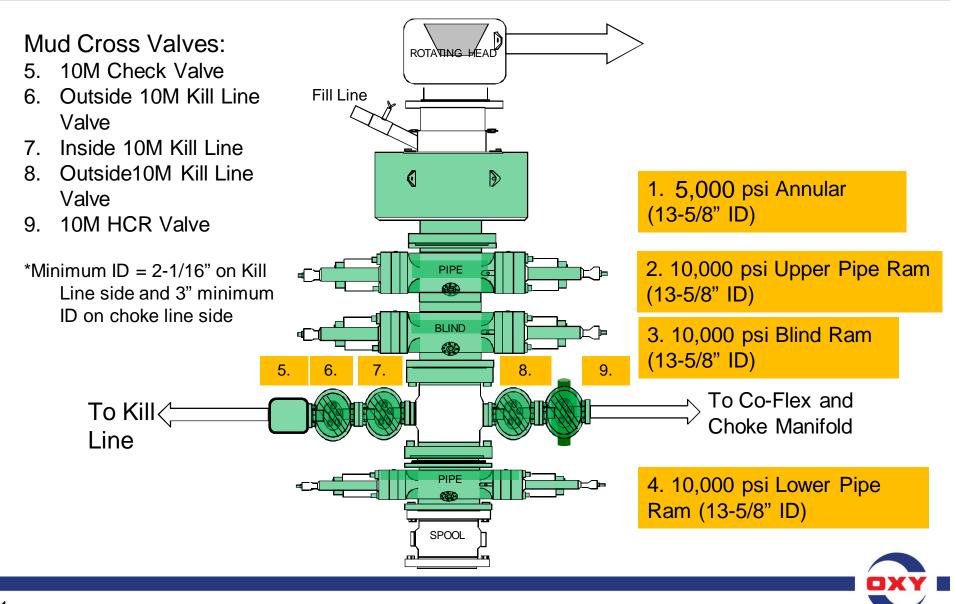
NimitzMDP112\_1FdCom22H\_DrillPlan\_20190819134906.pdf

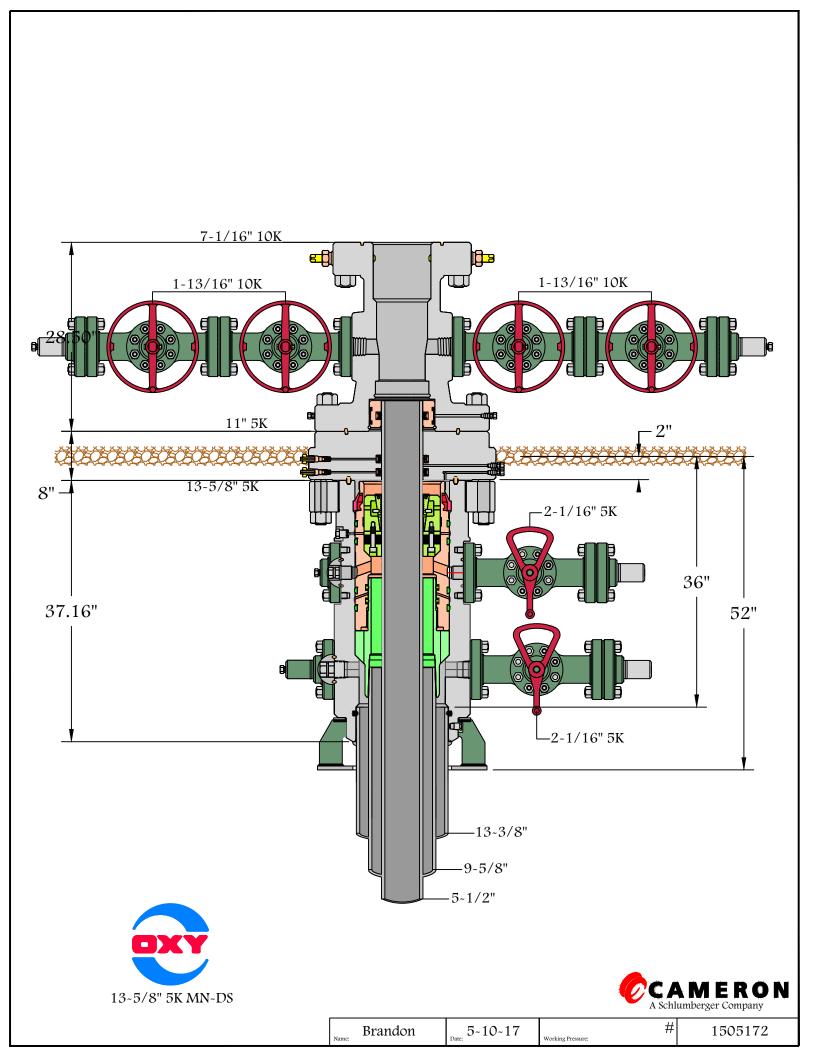
NimitzMDP112\_1FdCom22H\_GasCapPlan\_20190819134914.pdf

NimitzMDP112\_1FdCom22H\_SpudRigData\_20190819134922.pdf

## Other Variance attachment:

# 5/10M BOP Stack





## OXY

PRD NM DIRECTIONAL PLANS (NAD 1983) Nimitz MDP1 12\_1 Nimitz MDP1 12-1 Federal Com 22H

Wellbore #1

Plan: Permitting Plan

## **Standard Planning Report**

09 July, 2019

## Оху

#### Planning Report

Database: HOPSPP

Company: ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site:

Nimitz MDP1 12\_1

Well:

Nimitz MDP1 12-1 Federal Com 22H

Wellbore: Design: Wellbore #1 Permitting Plan Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

**Survey Calculation Method:** 

Well Nimitz MDP1 12-1 Federal Com 22H

RKB=26.5' @ 3513.70ft RKB=26.5' @ 3513.70ft

Grid

Minimum Curvature

Project PRD NM DIRECTIONAL PLANS (NAD 1983)

Map System: Geo Datum:

Map Zone:

US State Plane 1983 North American Datum 1983

North American Datum 1983

New Mexico Eastern Zone

System Datum: Mean Sea Level

Using geodetic scale factor

Site Nimitz MDP1 12\_1

Site Position: From: Map

Northing:

Map Easting:

446,271.81 usft 693,055.21 usft

Latitude: Longitude: 32° 13' 33.331024 N 103° 50' 33.713673 W

Position Uncertainty: 2.00 ft Slot Radius: 13.200 in Grid Convergence: 0.26 °

Well Nimitz MDP1 12-1 Federal Com 22H

Well Position +N/-S

-1,167.09 ft 247.01 ft Northing: Easting: 445,104.80 usft 693,302.20 usft Latitude: Longitude: 32° 13' 21.771474 N 103° 50' 30.900460 W

 +E/-W
 247.01 ft
 Easting:
 693,302.20 usft
 Longitude:
 103° 50' 30.900460 W

 Position Uncertainty
 2.00 ft
 Wellhead Elevation:
 0.00 ft
 Ground Level:
 3,487.20 ft

Wellbore Wellbore #1 Declination Dip Angle Field Strength **Model Name** Sample Date Magnetics (nT) (°) (°) 47,899 **HDGM** 7/9/2019 6.82 59.92

Design Permitting Plan Audit Notes: Version: Phase: **PROTOTYPE** Tie On Depth: 0.00 Depth From (TVD) +N/-S +E/-W Direction **Vertical Section:** (ft) (ft) (ft) (°) 0.00 0.00 0.00 4.40

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	
3,745.00	0.00	0.00	3,745.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,494.76	15.00	70.92	4,486.23	31.88	92.19	2.00	2.00	0.00	70.92	
7,530.19	15.00	70.92	7,418.30	288.57	834.44	0.00	0.00	0.00	0.00	
8,397.01	15.00	359.68	8,262.04	438.54	940.62	2.00	0.00	-8.22	-124.67	
9,148.71	90.17	359.68	8,686.70	993.67	937.56	10.00	10.00	0.00	0.00	FTP (Nimitz MDP1
19,580.91	90.17	359.68	8,655.70	11,425.66	880.16	0.00	0.00	0.00	0.00	PBHL (Nimitz MDP1

Database: Company: HOPSPP

**ENGINEERING DESIGNS** 

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Nimitz MDP1 12\_1

Well: Nimitz MDP1 12-1 Federal Com 22H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Nimitz MDP1 12-1 Federal Com 22H

RKB=26.5' @ 3513.70ft RKB=26.5' @ 3513.70ft

Grid

Measured Depth (ft)         Inclination (°)         Azim (°)           0.00         0.00         100.00         200.00           100.00         0.00         200.00         300.00           200.00         0.00         300.00         400.00           500.00         0.00         500.00         600.00           700.00         0.00         700.00         800.00         900.00           1,000.00         0.00         1,100.00         0.00         1,200.00         1,200.00         1,300.00         1,400.00         1,400.00         1,500.00         1,500.00         1,500.00         1,700.00         1,700.00         1,700.00         1,800.00         1,900.00         1,900.00         1,900.00         2,000.00         2,000.00         2,000.00         2,200.00         2,000.00         2,200.00         2,000.00         2,300.00         2,000.00         2,500.00         2,600.00         2,700.00         0.00         2,700.00         0.00         2,700.00         0.00         2,700.00         0.00         2,700.00         0.00         2,700.00         0.00         2,700.00         0.00         2,700.00         0.00         2,700.00         0.00         2,700.00         0.00         2,700.00         0.00         2,700.00		0.00 0.00 0.00 0.00 0.00 0.00 0.00	+E/-W (ft) 0.00 0.00 0.00 0.00 0.00	Vertical Section (ft)  0.00 0.00 0.00 0.00 0.00 0.00 0.00	Dogleg Rate (°/100ft) 0.00 0.00 0.00 0.00 0.00	Build Rate (°/100ft) 0.00 0.00 0.00 0.00	Turn Rate (°/100ft) 0.00 0.00 0.00
100.00	0.00 100.0 0.00 200.0 0.00 300.0 0.00 400.0 0.00 500.0 0.00 600.0 0.00 700.0 0.00 800.0	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	0.00 0.00	0.00
200.00       0.00         300.00       0.00         400.00       0.00         500.00       0.00         600.00       0.00         700.00       0.00         800.00       0.00         900.00       0.00         1,000.00       0.00         1,200.00       0.00         1,300.00       0.00         1,300.00       0.00         1,500.00       0.00         1,500.00       0.00         1,600.00       0.00         1,800.00       0.00         1,900.00       0.00         2,000.00       0.00         2,300.00       0.00         2,500.00       0.00         2,500.00       0.00         2,600.00       0.00	0.00 200.0 0.00 300.0 0.00 400.0 0.00 500.0 0.00 600.0 0.00 700.0 0.00 800.0	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	
300.00	0.00 300.0 0.00 400.0 0.00 500.0 0.00 600.0 0.00 700.0 0.00 800.0	0.00 00 00 00 0.00	0.00 0.00	0.00	0.00		0.00
400.00       0.00         500.00       0.00         600.00       0.00         700.00       0.00         800.00       0.00         900.00       0.00         1,000.00       0.00         1,200.00       0.00         1,300.00       0.00         1,400.00       0.00         1,500.00       0.00         1,600.00       0.00         1,700.00       0.00         1,800.00       0.00         2,000.00       0.00         2,100.00       0.00         2,300.00       0.00         2,500.00       0.00         2,600.00       0.00	0.00 400.0 0.00 500.0 0.00 600.0 0.00 700.0 0.00 800.0	0.00 0.00	0.00			0 00	
500.00       0.00         600.00       0.00         700.00       0.00         800.00       0.00         900.00       0.00         1,000.00       0.00         1,200.00       0.00         1,300.00       0.00         1,500.00       0.00         1,600.00       0.00         1,700.00       0.00         1,800.00       0.00         1,900.00       0.00         2,000.00       0.00         2,300.00       0.00         2,500.00       0.00         2,500.00       0.00         2,600.00       0.00	0.00 500.0 0.00 600.0 0.00 700.0 0.00 800.0	0.00		0.00	0.00	0.00	0.00
600.00 0.00 700.00 0.00 800.00 0.00 800.00 0.00 900.00 0.00 1,000.00 0.00 1,100.00 0.00 1,300.00 0.00 1,400.00 0.00 1,500.00 0.00 1,600.00 0.00 1,700.00 0.00 1,800.00 0.00 1,900.00 0.00 2,000.00 0.00 2,100.00 0.00 2,300.00 0.00 2,400.00 0.00 2,500.00 0.00 2,500.00 0.00 2,500.00 0.00 2,600.00 0.00	0.00 600.0 0.00 700.0 0.00 800.0		0.00		0.00	0.00	0.00
700.00 800.00 900.00 0.00 1,000.00 1,100.00 0.00 1,100.00 0.00	0.00 700.0 0.00 800.0	0.00	0.00	0.00	0.00	0.00	0.00
800.00       0.00         900.00       0.00         1,000.00       0.00         1,100.00       0.00         1,200.00       0.00         1,300.00       0.00         1,400.00       0.00         1,500.00       0.00         1,600.00       0.00         1,700.00       0.00         1,800.00       0.00         2,000.00       0.00         2,100.00       0.00         2,300.00       0.00         2,500.00       0.00         2,600.00       0.00	0.008 00.0		0.00	0.00	0.00	0.00	0.00
900.00 0.00  1,000.00 0.00  1,100.00 0.00  1,200.00 0.00  1,300.00 0.00  1,400.00 0.00  1,500.00 0.00  1,600.00 0.00  1,700.00 0.00  1,800.00 0.00  2,000.00 0.00  2,100.00 0.00  2,200.00 0.00  2,300.00 0.00  2,400.00 0.00  2,500.00 0.00  2,500.00 0.00  2,500.00 0.00  2,500.00 0.00  2,600.00 0.00		0.00	0.00	0.00	0.00	0.00	0.00
1,000.00 1,100.00 1,100.00 1,200.00 1,300.00 1,300.00 1,400.00 1,500.00 1,600.00 1,700.00 1,800.00 1,900.00 2,000.00 2,300.00 2,500.00 2,500.00 2,500.00 2,500.00 2,500.00 2,600.00 2,600.00 2,000.00 2,600.00 2,600.00 2,000.00 2,500.00 2,500.00 2,600.00 2,000.00 2,600.00 2,000.00 2,000.00 2,000.00 2,000.00 2,000.00 2,000.00 2,000.00 2,000.00 2,000.00 2,000.00 2,000.00 2,000.00 2,000.00 2,000.00	0.00 900.0	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00 1,200.00 1,200.00 1,300.00 1,400.00 0.00 1,500.00 1,600.00 1,700.00 0.00 1,800.00 0.00 1,900.00 2,000.00 2,200.00 2,300.00 2,400.00 2,500.00 2,500.00 2,500.00 2,500.00 2,600.00 0.00		0.00	0.00	0.00	0.00	0.00	0.00
1,200.00 1,300.00 1,300.00 1,400.00 0.00 1,500.00 0.00 1,600.00 0.00 1,700.00 0.00 1,800.00 0.00 1,900.00 2,000.00 2,100.00 2,300.00 2,400.00 2,500.00 2,500.00 2,500.00 2,600.00 0.00	0.00 1,000.0	00.00	0.00	0.00	0.00	0.00	0.00
1,200.00 1,300.00 1,300.00 1,400.00 0.00 1,500.00 0.00 1,600.00 0.00 1,700.00 0.00 1,800.00 0.00 1,900.00 2,000.00 2,100.00 2,300.00 2,400.00 2,500.00 2,500.00 2,500.00 2,600.00 0.00	0.00 1,100.0		0.00	0.00	0.00	0.00	0.00
1,300.00 1,400.00 0.00 1,500.00 0.00 1,500.00 0.00 1,600.00 0.00 1,700.00 0.00 1,800.00 0.00 2,000.00 2,100.00 0.00 2,200.00 0.00 2,300.00 0.00 2,400.00 0.00 2,500.00 0.00 2,500.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.00 1,200.0		0.00	0.00	0.00	0.00	0.00
1,400.00 0.00 1,500.00 0.00 1,600.00 0.00 1,700.00 0.00 1,800.00 0.00 1,900.00 0.00 2,000.00 0.00 2,100.00 0.00 2,200.00 0.00 2,300.00 0.00 2,400.00 0.00 2,500.00 0.00 2,500.00 0.00 2,500.00 0.00 2,600.00 0.00	0.00 1,300.0		0.00	0.00	0.00	0.00	0.00
1,500.00 0.00 1,600.00 0.00 1,700.00 0.00 1,800.00 0.00 1,900.00 0.00 2,000.00 0.00 2,100.00 0.00 2,200.00 0.00 2,300.00 0.00 2,400.00 0.00 2,500.00 0.00 2,500.00 0.00 2,600.00 0.00	0.00 1,400.0		0.00	0.00	0.00	0.00	0.00
1,600.00 1,700.00 1,700.00 1,800.00 1,900.00 2,000.00 2,100.00 2,200.00 2,300.00 2,400.00 2,500.00 2,500.00 2,600.00 0.00							
1,700.00 1,800.00 1,900.00 0.00 2,000.00 2,100.00 0.00 2,200.00 0.00 2,300.00 0.00 2,400.00 0.00 2,500.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.00 1,500.0		0.00	0.00	0.00	0.00	0.00
1,800.00 1,900.00 2,000.00 2,100.00 2,200.00 2,300.00 2,400.00 2,500.00 2,600.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.00 1,600.0		0.00	0.00	0.00	0.00	0.00
1,900.00 0.00 2,000.00 0.00 2,100.00 0.00 2,200.00 0.00 2,300.00 0.00 2,400.00 0.00 2,500.00 0.00 2,600.00 0.00	0.00 1,700.0		0.00	0.00	0.00	0.00	0.00
2,000.00     0.00       2,100.00     0.00       2,200.00     0.00       2,300.00     0.00       2,400.00     0.00       2,500.00     0.00       2,600.00     0.00	0.00 1,800.0		0.00	0.00	0.00	0.00	0.00
2,100.00 0.00 2,200.00 0.00 2,300.00 0.00 2,400.00 0.00 2,500.00 0.00 2,600.00 0.00	0.00 1,900.0		0.00	0.00	0.00	0.00	0.00
2,200.00 0.00 2,300.00 0.00 2,400.00 0.00 2,500.00 0.00 2,600.00 0.00	0.00 2,000.0		0.00	0.00	0.00	0.00	0.00
2,300.00 0.00 2,400.00 0.00 2,500.00 0.00 2,600.00 0.00	0.00 2,100.0		0.00	0.00	0.00	0.00	0.00
2,400.00 0.00 2,500.00 0.00 2,600.00 0.00	0.00 2,200.0		0.00	0.00	0.00	0.00	0.00
2,500.00 0.00 2,600.00 0.00	0.00 2,300.0	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00 0.00	0.00 2,400.0	0.00	0.00	0.00	0.00	0.00	0.00
	0.00 2,500.0	00.00	0.00	0.00	0.00	0.00	0.00
	0.00 2,600.0		0.00	0.00	0.00	0.00	0.00
Z. / UU.UU U.UU	0.00 2,700.0		0.00	0.00	0.00	0.00	0.00
2,800.00 0.00	0.00 2,800.0		0.00	0.00	0.00	0.00	0.00
2,900.00 0.00	0.00 2,900.0		0.00	0.00	0.00	0.00	0.00
3,000.00 0.00	0.00 3,000.0		0.00	0.00	0.00	0.00	0.00
3,100.00 0.00	0.00 3,000.0		0.00	0.00	0.00	0.00	0.00
3,200.00 0.00	0.00 3,100.0		0.00	0.00	0.00	0.00	0.00
3,300.00 0.00	0.00 3,200.0		0.00	0.00	0.00	0.00	0.00
3,400.00 0.00	0.00 3,400.0		0.00	0.00	0.00	0.00	0.00
3,500.00 0.00	0.00 3,500.0		0.00	0.00	0.00	0.00	0.00
3,600.00 0.00	0.00 3,600.0		0.00	0.00	0.00	0.00	0.00
3,700.00 0.00	0.00 3,700.0		0.00	0.00	0.00	0.00	0.00
3,745.00 0.00	0.00 3,745.0		0.00	0.00	0.00	0.00	0.00
	70.92 3,800.0		0.50	0.21	2.00	2.00	0.00
	70.92 3,899.9		3.96	1.67	2.00	2.00	0.00
	70.92 3,999.6		10.72	4.52	2.00	2.00	0.00
	70.92 4,099.0		20.76	8.75	2.00	2.00	0.00
	70.92 4,198.0		34.08	14.37	2.00	2.00	0.00
4,300.00 11.10	70.92 4,296.5	53 17.52	50.65	21.35	2.00	2.00	0.00
4,400.00 13.10	70.92 4,394.3	31 24.37	70.46	29.71	2.00	2.00	0.00
	70.92 4,486.2		92.19	38.87	2.00	2.00	0.00
	70.92 4,491.2		93.48	39.41	0.00	0.00	0.00
	70.92 4,587.8		117.93	49.72	0.00	0.00	0.00
			142.38	60.03	0.00	0.00	0.00
	70.92 4,684.4						
	70.92 4,684.4	10 57 70	166 04				0.00
	70.92 4,781.0		166.84	70.34	0.00	0.00	0.00
5,100.00 15.00 5,100.00 15.00		66.15	166.84 191.29 215.74				0.00 0.00 0.00

Database: Company: HOPSPP

**ENGINEERING DESIGNS** 

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Nimitz MDP1 12\_1

Well: Nimitz MDP1 12-1 Federal Com 22H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Nimitz MDP1 12-1 Federal Com 22H

RKB=26.5' @ 3513.70ft RKB=26.5' @ 3513.70ft

Grid

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)
5,200.00	15.00	70.92	5,167.46	91.52	264.65	111.58	0.00	0.00	0.00
5,300.00	15.00	70.92	5,264.05	99.98	289.10	121.89	0.00	0.00	0.00
5,400.00	15.00	70.92	5,360.64	108.43	313.55	132.20	0.00	0.00	0.00
5,500.00	15.00	70.92	5,457.24	116.89	338.00	142.50	0.00	0.00	0.00
5,600.00	15.00	70.92	5,553.83	125.35	362.46	152.81	0.00	0.00	0.00
5,700.00	15.00	70.92	5,650.43	133.80	386.91	163.12	0.00	0.00	0.00
5,800.00	15.00	70.92	5,747.02	142.26	411.36	173.43	0.00	0.00	0.00
5,900.00	15.00	70.92	5,843.62	150.71	435.82	183.74	0.00	0.00	0.00
6,000.00	15.00	70.92	5,940.21	159.17	460.27	194.05	0.00	0.00	0.00
6,100.00	15.00	70.92	6,036.81	167.63	484.72	204.36	0.00	0.00	0.00
6,200.00	15.00	70.92	6,133.40	176.08	509.17	214.67	0.00	0.00	0.00
6,300.00	15.00	70.92	6,230.00	184.54	533.63	224.98	0.00	0.00	0.00
6,400.00	15.00	70.92	6,326.59	193.00	558.08	235.29	0.00	0.00	0.00
6,500.00	15.00	70.92	6,423.19	201.45	582.53	245.60	0.00	0.00	0.00
6,600.00	15.00	70.92	6,519.78	209.91	606.99	255.91	0.00	0.00	0.00
6,700.00	15.00	70.92	6,616.38	218.36	631.44	266.22	0.00	0.00	0.00
6,800.00	15.00	70.92	6,712.97	226.82	655.89	276.53	0.00	0.00	0.00
6,900.00	15.00	70.92	6,809.57	235.28	680.34	286.84	0.00	0.00	0.00
7,000.00	15.00	70.92	6,906.16	243.73	704.80	297.15	0.00	0.00	0.00
7,100.00	15.00	70.92	7,002.76	252.19	729.25	307.46	0.00	0.00	0.00
7,100.00	15.00	70.92	7,002.70	260.65	753.70	317.77	0.00	0.00	0.00
7,300.00	15.00	70.92	7,195.95	269.10	778.15	328.07	0.00	0.00	0.00
7,400.00	15.00	70.92	7,292.54	277.56	802.61	338.38	0.00	0.00	0.00
7,500.00	15.00	70.92	7,389.14	286.02	827.06	348.69	0.00	0.00	0.00
7,530.19	15.00	70.92	7,418.30	288.57	834.44	351.81	0.00	0.00	0.00
7,600.00	14.25	66.25	7,485.85	294.98	850.84	359.46	2.00	-1.07	-6.69
7,700.00	13.35	58.74	7,582.97	305.93	871.98	372.00	2.00	-0.89	-7.51
7,800.00	12.71	50.34	7,680.40	318.94	890.31	386.38	2.00	-0.65	-8.41
7,900.00	12.35	41.25	7,778.03	334.00	905.83	402.59	2.00	-0.36	-9.08
8,000.00	12.31	31.88	7,875.74	351.09	918.52	420.60	2.00	-0.04	-9.37
8,100.00	12.58	22.68	7,973.40	370.19	928.35	440.40	2.00	0.27	-9.20
8,200.00	13.15	14.06	8,070.89	391.28	935.31	461.96	2.00	0.57	-8.62
8,300.00	13.98	6.30	8,168.11	414.33	939.40	485.26	2.00	0.83	-7.76
8,397.01	15.00	359.68	8,262.04	438.54	940.62	509.49	2.00	1.05	-6.82
8,400.00	15.30	359.68	8,264.92	439.32	940.61	510.27	10.00	10.00	0.00
8,500.00	25.30	359.68	8,358.59	473.97	940.42	544.80	10.00	10.00	0.00
8,600.00	35.30	359.68	8,444.83	524.35	940.14	595.01	10.00	10.00	0.00
8,700.00	45.30	359.68	8,521.00	588.95	939.79	659.39	10.00	10.00	0.00
8,800.00	55.30	359.68	8,584.79	665.79	939.37	735.97	10.00	10.00	0.00
8,900.00	65.30	359.68	8,634.28	752.54	938.89	822.43	10.00	10.00	0.00
9,000.00	75.30	359.68	8,667.95	846.56	938.37	916.14	10.00	10.00	0.00
9,100.00	85.30	359.68	8,684.78	945.01	937.83	1,014.25	10.00	10.00	0.00
9,148.71	90.17	359.68	8,686.70	993.67	937.56	1,062.74	10.00	10.00	0.00
9,200.00	90.17	359.68	8,686.55	1,044.95	937.28	1,113.86	0.00	0.00	0.00
9,300.00	90.17	359.68	8,686.25	1,144.95	936.73	1,213.52	0.00	0.00	0.00
9,400.00	90.17	359.68	8,685.95	1,244.95	936.18	1,313.18	0.00	0.00	0.00
9,500.00	90.17	359.68	8,685.66	1,344.95	935.63	1,412.84	0.00	0.00	0.00
9,600.00	90.17	359.68	8,685.36	1,444.95	935.08	1,512.50	0.00	0.00	0.00
9,700.00	90.17	359.68	8,685.06	1,544.94	934.53	1,612.16	0.00	0.00	0.00
9,800.00	90.17	359.68	8,684.76	1,644.94	933.98	1,711.82	0.00	0.00	0.00
9,900.00	90.17	359.68	8,684.47	1,744.94	933.43	1,811.48	0.00	0.00	0.00
10,000.00	90.17	359.68	8,684.17	1,844.94	932.88	1,911.14	0.00	0.00	0.00
10,100.00				4 0 4 4 0 4	000 00		0.00	0.00	0.00
10, 100.00	90.17	359.68	8,683.87	1,944.94	932.33	2,010.80	0.00	0.00	0.00

Database: Company: HOPSPP

**ENGINEERING DESIGNS** 

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Nimitz MDP1 12\_1

Well: Nimitz MDP1 12-1 Federal Com 22H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Nimitz MDP1 12-1 Federal Com 22H

RKB=26.5' @ 3513.70ft RKB=26.5' @ 3513.70ft

Grid

lanned 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)
10,300.00 10,400.00		359.68 359.68	8,683.28 8,682.98	2,144.93 2,244.93	931.23 930.68	2,210.12 2,309.78	0.00 0.00	0.00 0.00	0.00 0.00
10,500.00 10,600.00 10,700.00 10,800.00	90.17 90.17 90.17	359.68 359.68 359.68 359.68	8,682.68 8,682.39 8,682.09 8,681.79	2,344.93 2,444.93 2,544.92 2,644.92	930.13 929.58 929.03 928.48	2,409.44 2,509.10 2,608.76 2,708.42	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
10,900.00 11,000.00 11,100.00 11,200.00 11,300.00	90.17 90.17 90.17 90.17	359.68 359.68 359.68 359.68 359.68	8,681.50 8,681.20 8,680.90 8,680.60 8,680.31	2,744.92 2,844.92 2,944.92 3,044.91 3,144.91	927.93 927.38 926.83 926.27 925.72	2,808.08 2,907.74 3,007.40 3,107.06 3,206.72	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
11,400.00 11,500.00 11,600.00 11,700.00 11,800.00	90.17 90.17 90.17	359.68 359.68 359.68 359.68 359.68	8,680.01 8,679.71 8,679.42 8,679.12 8,678.82	3,244.91 3,344.91 3,444.91 3,544.90 3,644.90	925.17 924.62 924.07 923.52 922.97	3,306.38 3,406.04 3,505.70 3,605.37 3,705.03	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
11,900.00 12,000.00 12,100.00 12,200.00 12,300.00	90.17 90.17 90.17 90.17	359.68 359.68 359.68 359.68 359.68	8,678.52 8,678.23 8,677.93 8,677.63 8,677.34	3,744.90 3,844.90 3,944.90 4,044.89 4,144.89	922.42 921.87 921.32 920.77 920.22	3,804.69 3,904.35 4,004.01 4,103.67 4,203.33	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
12,400.00 12,500.00 12,600.00 12,700.00	90.17 90.17 90.17	359.68 359.68 359.68 359.68	8,677.04 8,676.74 8,676.44 8,676.15	4,244.89 4,344.89 4,444.89 4,544.88	919.67 919.12 918.57 918.02	4,302.99 4,402.65 4,502.31 4,601.97	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
12,800.00 12,900.00 13,000.00 13,100.00 13,200.00	90.17 90.17 90.17	359.68 359.68 359.68 359.68 359.68	8,675.85 8,675.55 8,675.26 8,674.96 8,674.66	4,644.88 4,744.88 4,844.88 4,944.88 5,044.88	917.47 916.92 916.37 915.82 915.27	4,701.63 4,801.29 4,900.95 5,000.61 5,100.27	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
13,300.00 13,400.00 13,500.00 13,600.00	90.17 90.17 90.17	359.68 359.68 359.68 359.68	8,674.36 8,674.07 8,673.77 8,673.47	5,144.87 5,244.87 5,344.87 5,444.87	914.72 914.17 913.62 913.07	5,199.93 5,299.59 5,399.25 5,498.91	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
13,700.00 13,800.00 13,900.00 14,000.00	90.17 90.17 90.17	359.68 359.68 359.68 359.68	8,673.18 8,672.88 8,672.58 8,672.28	5,544.87 5,644.86 5,744.86 5,844.86	912.52 911.97 911.42 910.87	5,598.57 5,698.23 5,797.89 5,897.55	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
14,100.00 14,200.00 14,300.00 14,400.00	90.17 90.17	359.68 359.68 359.68 359.68	8,671.99 8,671.69 8,671.39 8,671.10	5,944.86 6,044.86 6,144.85 6,244.85	910.32 909.77 909.22 908.67	5,997.21 6,096.87 6,196.54 6,296.20	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
14,500.00 14,600.00 14,700.00 14,800.00 14,900.00	90.17 90.17 90.17	359.68 359.68 359.68 359.68 359.68	8,670.80 8,670.50 8,670.20 8,669.91 8,669.61	6,344.85 6,444.85 6,544.85 6,644.84 6,744.84	908.12 907.57 907.02 906.47 905.92	6,395.86 6,495.52 6,595.18 6,694.84 6,794.50	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
15,000.00 15,100.00 15,200.00 15,300.00 15,400.00	90.17 90.17 90.17	359.68 359.68 359.68 359.68 359.68	8,669.31 8,669.02 8,668.72 8,668.42 8,668.12	6,844.84 6,944.84 7,044.84 7,144.83 7,244.83	905.37 904.81 904.26 903.71 903.16	6,894.16 6,993.82 7,093.48 7,193.14 7,292.80	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
15,500.00 15,600.00		359.68 359.68	8,667.83 8,667.53	7,344.83 7,444.83	902.61 902.06	7,392.46 7,492.12	0.00 0.00	0.00 0.00	0.00 0.00

Database: HOPSPP Company: ENGINEE

ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Nimitz MDP1 12\_1

Well: Nimitz MDP1 12-1 Federal Com 22H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Nimitz MDP1 12-1 Federal Com 22H

RKB=26.5' @ 3513.70ft RKB=26.5' @ 3513.70ft

Grid

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
15,700.00	90.17	359.68	8,667.23	7,544.83	901.51	7,591.78	0.00	0.00	0.00
15,800.00	90.17	359.68	8,666.94	7,644.82	900.96	7,691.44	0.00	0.00	0.00
15,900.00	90.17	359.68	8,666.64	7,744.82	900.41	7,791.10	0.00	0.00	0.00
16,000.00	90.17	359.68	8,666.34	7,844.82	899.86	7,890.76	0.00	0.00	0.00
16,100.00	90.17	359.68	8,666.04	7,944.82	899.31	7,990.42	0.00	0.00	0.00
16,200.00	90.17	359.68	8,665.75	8,044.82	898.76	8,090.08	0.00	0.00	0.00
16,300.00	90.17	359.68	8,665.45	8,144.81	898.21	8,189.74	0.00	0.00	0.00
16,400.00	90.17	359.68	8,665.15	8,244.81	897.66	8,289.40	0.00	0.00	0.00
16,500.00	90.17	359.68	8,664.86	8,344.81	897.11	8,389.06	0.00	0.00	0.00
16,600.00	90.17	359.68	8,664.56	8,444.81	896.56	8,488.72	0.00	0.00	0.00
16,700.00	90.17	359.68	8,664.26	8,544.81	896.01	8,588.38	0.00	0.00	0.00
16,800.00	90.17	359.68	8,663.96	8,644.80	895.46	8,688.05	0.00	0.00	0.00
16,900.00	90.17	359.68	8,663.67	8,744.80	894.91	8,787.71	0.00	0.00	0.00
17,000.00	90.17	359.68	8,663.37	8,844.80	894.36	8,887.37	0.00	0.00	0.00
17,100.00	90.17	359.68	8,663.07	8,944.80	893.81	8,987.03	0.00	0.00	0.00
17,200.00	90.17	359.68	8,662.78	9,044.80	893.26	9,086.69	0.00	0.00	0.00
17,300.00	90.17	359.68	8,662.48	9,144.79	892.71	9,186.35	0.00	0.00	0.00
17,400.00	90.17	359.68	8,662.18	9,244.79	892.16	9,286.01	0.00	0.00	0.00
17,500.00	90.17	359.68	8,661.88	9,344.79	891.61	9,385.67	0.00	0.00	0.00
17,600.00	90.17	359.68	8,661.59	9,444.79	891.06	9,485.33	0.00	0.00	0.00
17,700.00	90.17	359.68	8,661.29	9,544.79	890.51	9,584.99	0.00	0.00	0.00
17,800.00	90.17	359.68	8,660.99	9,644.79	889.96	9,684.65	0.00	0.00	0.00
17,900.00	90.17	359.68	8,660.70	9,744.78	889.41	9,784.31	0.00	0.00	0.00
18,000.00	90.17	359.68	8,660.40	9,844.78	888.86	9,883.97	0.00	0.00	0.00
18,100.00	90.17	359.68	8,660.10	9,944.78	888.31	9,983.63	0.00	0.00	0.00
18,200.00	90.17	359.68	8,659.80	10,044.78	887.76	10,083.29	0.00	0.00	0.00
18,300.00	90.17	359.68	8,659.51	10,144.78	887.21	10,182.95	0.00	0.00	0.00
18,400.00	90.17	359.68	8,659.21	10,244.77	886.66	10,282.61	0.00	0.00	0.00
18,500.00	90.17	359.68	8,658.91	10,344.77	886.11	10,382.27	0.00	0.00	0.00
18,600.00	90.17	359.68	8,658.62	10,444.77	885.56	10,481.93	0.00	0.00	0.00
18,700.00	90.17	359.68	8,658.32	10,544.77	885.01	10,581.59	0.00	0.00	0.00
18,800.00	90.17	359.68	8,658.02	10,644.77	884.46	10,681.25	0.00	0.00	0.00
18,900.00	90.17	359.68	8,657.72	10,744.76	883.91	10,780.91	0.00	0.00	0.00
19,000.00	90.17	359.68	8,657.43	10,844.76	883.36	10,880.57	0.00	0.00	0.00
19,100.00	90.17	359.68	8,657.13	10,944.76	882.80	10,980.23	0.00	0.00	0.00
19,200.00	90.17	359.68	8,656.83	11,044.76	882.25	11,079.89	0.00	0.00	0.00
19,300.00	90.17	359.68	8,656.53	11,144.76	881.70	11,179.56	0.00	0.00	0.00
19,400.00	90.17	359.68	8,656.24	11,244.75	881.15	11,279.22	0.00	0.00	0.00
19,500.00	90.17	359.68	8,655.94	11,344.75	880.60	11,378.88	0.00	0.00	0.00
19,580.91	90.17	359.68	8.655.70	11,425.66	880.16	11,459.51	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 cen - Point	0.00 ter	0.00	8,655.70	11,425.66	880.16	456,529.70	694,182.30	32° 15' 14.788602 N	103° 50' 20.042834
FTP (Nimitz MDP1 - plan hits target cen - Point	0.00 ter	0.00	8,686.70	993.67	937.56	446,098.40	694,239.70	32° 13' 31.561278 N	103° 50' 19.933658

## Оху

## **Planning Report**

Database: HOPSPP

Company: ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Nimitz MDP1 12\_1

Well: Nimitz MDP1 12-1 Federal Com 22H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Nimitz MDP1 12-1 Federal Com 22H

RKB=26.5' @ 3513.70ft RKB=26.5' @ 3513.70ft

Grid

Plan Annotati	ions				
	Measured	Vertical	Local Coor	dinates	
	Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
	3,745.00	3,745.00	0.00	0.00	Build 2.00°/100'
	4,494.76	4,486.23	31.88	92.19	Hold 15.00° Tangent
	7,530.19	7,418.30	288.57	834.44	Turn 2.00°/100'
	8,397.01	8,262.04	438.54	940.62	KOP, Build 10.00°/100'
	9,148.71	8,686.70	993.67	937.56	Landing Point
	19,580.91	8,655.70	11,425.66	880.16	TD at 19580.91' MD



Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Nimitz MDP1 12\_1

Well: Nimitz MDP1 12-1 Federal Com 22H

Wellbore: Wellbore #1
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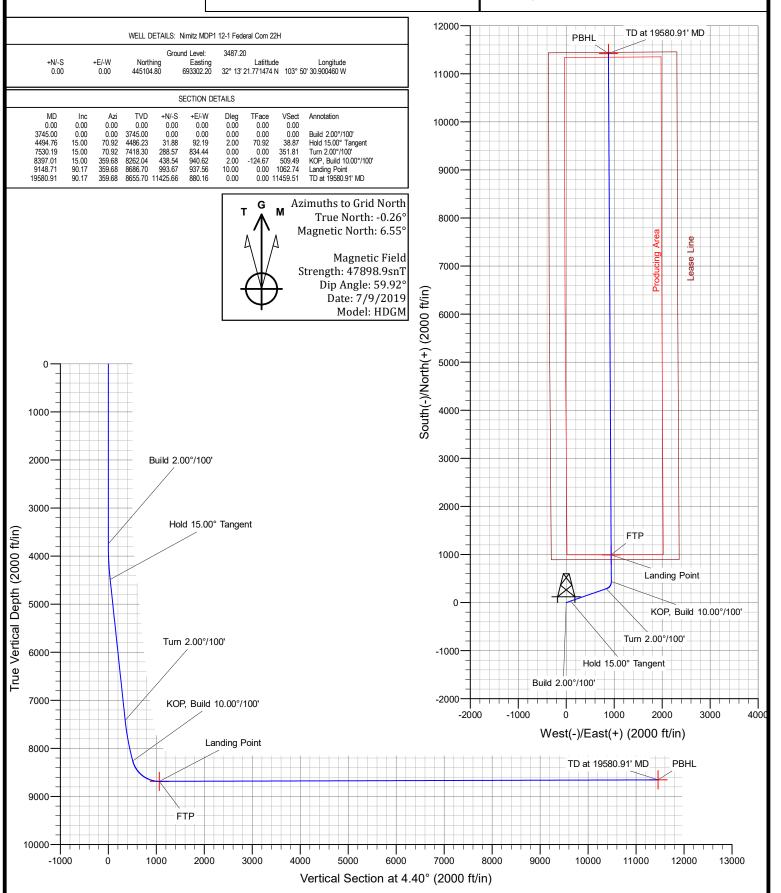
### PROJECT DETAILS: NM DIRECTIONAL PLANS (NAD 1983)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983

Ellipsoid: GRS 1980

Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level



## Oxy USA Inc. - Nimitz MDP1 12 1 Federal Com 22H

## 1. Geologic Formations

TVD of target	8686'	Pilot Hole Depth	N/A
MD at TD:	19580'	Deepest Expected fresh water:	462'

#### **Delaware Basin**

Formation	TVD - RKB	<b>Expected Fluids</b>		
Rustler	462			
Salado	820	Salt		
Castile	2,675	Salt		
Lamar/Delaware	4,130	Oil/Gas		
Bell Canyon	4,154	Oil/Gas		
Cherry Canyon	5,080	Oil/Gas		
Brushy Canyon	6,365	Losses		
<b>Bone Spring</b>	8,051	Oil/Gas		

<sup>\*</sup>H2S, water flows, loss of circulation, abnormal pressures, etc.

## 2. Casing Program

									Buoyant	Buoyant
Hala Sina (in)	Casing Interval		Csg. Size	Weight	Condo	C	SF	SF Burst	Body SF	Joint SF
Hole Size (in)	From (ft)	To (ft)	(in)	(lbs)	Grade	Conn.	Collapse	Sr Burst	Tension	Tension
17.5	0	512	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	4180	9.625	43.5	L-80	BTC	1.125	1.2	1.4	1.4
8.5	0	19580	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
	-	-			-	-		SF Values will:	meet or Exceed	i

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

### **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

<sup>\*</sup>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.

<sup>\*</sup>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 12\_1 Federal Com 22H

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 <sup>rd</sup> 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 <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)	546	14.8	1.33	6.365	5:26	Class C Cement, Accelerator	
Intermediate (Lead)	968	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)	294	13.2	1.38	6.692	17:50	Class H Cement, Retarder, Dispersant, Salt	
Production 1st Stage (Tail)	2018	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)	900	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	512	100%
Intermediate (Lead)	0	3680	50%
Intermediate (Tail)	3680	4180	20%
Production 1st Stage (Lead)	6365	8051	5%
Production 1st Stage (Tail)	8051	19580	5%
Production 2nd Stage (Tail)	0	6365	25%

## Oxy USA Inc. - Nimitz MDP1 12 1 Federal Com 22H

## \*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.

## 4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Туре		<b>✓</b>	Tested to:
		3M	Annula	Annular		70% of working pressure
12.25" Hole	12 5/0"		Blind Ra	am	✓	
12.23" Hole	13-5/8"	23.4	3M Pipe Ram Double Ram			250 / 2000
		3M			✓	250 psi / 3000 psi
				Other*		
	3M Annular		ır	✓	70% of working pressure	
0.5"11-1-	12 5/02		Blind Ram Pipe Ram Double Ram		✓	
8.5" Hole	13-5/8"	214				250
		3M			✓	250 psi / 3000 psi
	Other*			1		

<sup>\*</sup>Specify if additional ram is utilized.

## Oxy USA Inc. - Nimitz MDP1 12\_1 Federal Com 22H

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						
	greate	r, a pressure integrity test of each casing shoe shall be performed. Will be tested in					
	accord	lance with Onshore Oil and Gas Order #2 III.B.1.i.					
Ī	A vari	ance is requested for the use of a flexible choke line from the BOP to Choke					
l	Manif	old. See attached for specs and hydrostatic test chart.					
l	Y	Are anchors required by manufacturer?					
Ī	A mul	tibowl or a unionized multibowl wellhead system will be employed. The wellhead					
		onnection to the BOPE will meet all API 6A requirements. The BOP will be tested					
	per Or	nshore Order #2 after installation on the surface casing which will cover testing					
	require	ements for a maximum of 30 days. If any seal subject to test pressure is broken the					
	system	n 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.					

## **BOP Break Testing Request**

See attached schematics.

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		Temo	Weight	Via a a a iday	Water I egg
From (ft)	To (ft)	Туре	(ppg)	Viscosity	Water Loss
0	512	Water-Based Mud	8.6-8.8	40-60	N/C
512	4180	Saturated Brine- Based Mud	9.8-10.0	35-45	N/C
4180	19580	Water-Based or Oil- Based Mud	8.0-9.6	38-50	N/C

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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
what will be used to monitor the loss of gain of hald:	1 v 1/1vib Toteo/ v isual iviolitioning

## 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		

Additional 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	4337 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.

Hydı	ogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If		
H2S	H2S is detected in concentrations greater than 100 ppm, the operator will comply with the		
prov	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.	Yes

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• 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.	Yes
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.	

Total estimated cuttings volume: 1767.9 bbls.

## 9. Company Personnel

Name	<u>Title</u>	Office Phone	Mobile 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