Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS.

FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

Expires: July 31, 2010								
5.	Lease Serial No. NMNM82896							

SUNDKI NOTICES AND REPORTS ON WELLS						141011410102030					
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.							6. If Indian, Allottee or Tribe Name				
SUBMIT IN TRIPLICATE - Other instructions on reverse side.								7. If Unit or CA/Agreement, Name and/or No.			
1. Type of Well ☑ Oil Well ☐ Gas Well ☐ Other								8. Well Name and No. NIMITZ 12 FEDERAL 4H			
Name of Operator OXY USA INC.	WART			9. API Well No. 30-015-41506							
3a. Address P.O. BOX 50250 MIDLAND, TX 79710	Pi	3b. Phone No. (include area code) Ph: 432-685-5717 Fx: 432-685-5742				10. Field and Pool, or Exploratory POKER LAKE DELAWARE, NW					
4. Location of Well (Footage, Sec., T				11. County or Parish, and State							
Sec 12 T24S R30E SESW 10 32.225300 N Lat, 103.835850				EDDY COUNTY, NM							
12. CHECK APPI	ROPRIATE BOX(ES) TO IN	IDICATE	NATURE	OF NO	TICE, R	EPORT	, OR OTH	IER D	ATA		
TYPE OF SUBMISSION		TYPE OF ACTION									
Notice of Intent	☐ Acidize	□ Deep	en	☐ Product		tion (Start/Resume)			Water Shut-Off		
_	☐ Alter Casing	☐ Fracture Trea			☐ Reclamation				Well Integrity		
☐ Subsequent Report	Casing Repair	□ New	Constructio	n	- .				Other		
☐ Final Abandonment Notice	☐ Change Plans		and Abando	n				Change to Original A PD			
13. Describe Proposed or Completed Ope	Convert to Injection	☐ Plug			■ Water Disposal						
OXY USA Inc. respectfully rec 1. Change the completion des sleeves and no cement.		_ •				,		F	RECEIVE DEC 1 9 2013 OCD ARTES		
Casing design modification, a. Surface Casing-	ification, to drill the well with larger bit sizes:								DEC 1 9 2013		
13-3/8" 54.5# J-55 BT&C new	new csg @ 0-590', 16" hole w/ 8.4# mud SEE ATTACH						OR I	NM	OCD ARTES		
Coll Rating (psi)-1130 Burst F SF Coll-4.34 SF Burst-1.44 S							Accepted for reco				
							,	IMO	, ,		
14. I hereby certify that the foregoing is	Electronic Submission #2291	SA INC., s	ent to the C	arlsbac		•			12/19/2		
Name (Printed/Typed) DAVID S		Title SR. REGULATORY ADV				OR					
Signature (Electronic S	Submission)		Date 12/	10/201	3 / D	DDU	VED	- 1	٠.		
	THIS SPACE FOR	FEDERA	L OR STA	TE O	FICE U	SE	V L D				
			·····		חבר	16	2013				
Approved By		ļ	Title	 	 				Date		
Conditions of approval, if any, are attached certify that the applicant holds legal or equivalent would entitle the applicant to condu	iitable title to those rights in the sub		Office	В	UREAU OF	hris V	IANAGEME	M.T.			
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s	U.S.C. Section 1212, make it a crim statements or representations as to a	e for any per ny matter wit	son knowing hin its jurisdi	y and wi				or ageno	ey of the United		

'Additional data for EC transaction #229105 that would not fit on the form

32. Additional remarks, continued

b. Intermediate Casing-No Change 9-5/8" 36# J-55 LT&C new csg @ 0-4200', 12-1/4" hole w/ 10.2# mud

Coll Rating (psi)-2024 Burst Rating (psi)-3520 SF Coll-1.55 SF Burst-1.24 SF Ten-1.98

c. Production Casing 7" 26# L-80 BT&C new csg @ 0-8370', 8-3/4" hole w/ 9.4# mud

Coll Rating (psi)-5411 Burst Rating (psi)-7240 SF Coll-1.50 SF Burst-1.21 SF Ten-2.24

d. Completion System4-1/2" 13.5# P110 BT&C new csg @ 7300-12151'M, 6-1/4" hole w/ 9.4# mud

Coll Rating (psi)-10686 Burst Rating (psi)-12406 SF Coll-2.82 SF Burst-1.21 SF Ten-2.69

Collapse and burst loads calculated using Stress Check with anticipated loads, see attached for design assumptions

- 3. Cement program adjustment to the new bit/casing sizes. Cement program modifications detailed below.
- a. Surface Circulate cement to surface w/ 200sx PP cmt w/ 4% Bentonite + 1% CaCl2 + .25#/sx Poly-E-Flake, 13.5ppg 1.73 yield 831# 24hr CS 150% Excess followed by 250sx PP cmt w/ 1% CaCl2, 14.8ppg 1.34 yield 1326# 24hr CS 150% Excess.
- b. Intermediate Circulate cement to surface w/ 1080sx HES light PP cmt w/ 3#/sx Salt + 5#/sx Kol-Seal + .125#/sx Poly-E-Flake, 12.9ppg 1.85 yield 607# 24hs CS 105% Excess followed by 360sx PP cmt w/ 1% CaCl2, 14.8ppg 1.34 yield 1650# 24hr CS 105% Excess.
- c. Production Circulate cement w/ 600sx Tuned Light (TM) system cmt w/ 3#/sx Kol-Seal + .125#/sx Poly-E-Flake, 10.2ppg 2.94 yield 900# 24hr CS 100% Excess followed by 150sx PP cmt w/ 3#/sx salt + .4% CFR-3 + .5% Halad(R)-344, 13.2ppg 1.64 yield 1275# 24hr CS 40% Excess.
- d. Completion System no cement

Description of Cement Additives: Calcium Chloride, Salt (Accelerator); CFR-3 (Dispersant); Bentonite (Light Weight Additive); Kol-Seal, Poly-E-Flake (Lost Circulation Additive); Halad(R)-344

The above cement volumes could be revised pending the caliper measurement.

- 4. See attached for Pressure Control Equipment update
- 5. Company Personnel:

Name Title Office Phone Mobile Phone
Anar Khalilov Drlg Engineer (713)985-6959 (832) 205-6365
Sebastian Millan Drlg Eng Supervisor (713)350-4950 (832) 528-3268
Roger Allen Drlg Superintendent (713)215-7617 (281) 682-3919
Oscar Quintero Drlg Manager (713)985-6343 (713) 689-4946

OXY USA Inc.

Nimitz 12 Federal #4H - 30-015-41506

Casing Design Assumptions:

Burst Loads

CSG Test (Surface)

- Internal: Displacement fluid + 70% CSG Burst rating
- External: Pore Pressure from section TD to surface

CSG Test (Intermediate)

- Internal: Displacement fluid + 70% CSG Burst rating
- External: Pore Pressure from the Intermediate hole TD to Surface CSG shoe and MW of the drilling mud that was in the hole when the CSG was run to surface

CSG Test (Production)

- Internal: Displacement fluid + 70% CSG Burst rating
- External: Pore Pressure from the well TD the Intermediate CSG shoe and MW of the drilling mud that was in the hole when the CSG was run to surface

Gas Kick (Surface/Intermediate)

- Internal: Gas Kick based on Pore Pressure or Fracture Gradient @ CSG shoe with a gas 0.115psi/ft Gas gradient to surface while drilling the next hole section (e.g. Gas Kick while drilling the production hole section is a burst load used to design the intermediate CSG)
- External: Pore Pressure from section TD to previous CSG shoe and MW of the drilling mud that was in the hole when the CSG was run to surface

Stimulation (Production/Completion System)

- Internal: Displacement fluid + Max Frac treating pressure (not to exceed 70% CSG Burst rating)
- External: Pore Pressure from the well TD to the Intermediate CSG shoe and 8.5 ppg MWE to surface

Collapse Loads

Lost Circulation (Surface/Intermediate)

- Internal: Losses experienced while drilling the next hole section (e.g. losses while drilling the production hole section are used as a collapse load to design the intermediate CSG). After losses there will be a column of mud inside the CSG with an equivalent weight to the Pore Pressure of the lost circulation zone
- External: MW of the drilling mud that was in the hole when the CSG was run

Cementing (Surface/Intermediate/Production)

- Internal: Displacement Fluid
- External: Cement Slurries to TOC, MW to surface

Full Evacuation (Production/Completion System)

- Internal: Atmospheric Pressure
- External: MW of the drilling mud that was in the hole when the CSG was run

Tension Loads

Running CSG (Surface/Intermediate/Production/Completion System)

• Axial load of the buoyant weight of the string plus either 100 klb over-pull or string weight in air, whichever is less

Green Cement (Surface/Intermediate/Production)

• Axial load of the buoyant weight of the string plus the cement plug bump pressure (Final displacement pressure + 500 psi)

Burst, Collapse and Tensile SF are calculated using Landmark's Stress Check (Casing Design) software.

OXY USA Inc. Nimitz 12 Federal #4H – 30-015-41506

Pressure Control Equipment

Surface: 0 - 590' None.

Intermediate & 8-3/4" Production: <u>590' MD/TVD - 8370' MD / 7945' TVD</u> Intermediate and Production hole will be drilled using a 13-5/8" 10M three ram BOP stack with **5" DP Rams**, 5M annular preventer and a 5M Choke Manifold.

- a) All BOP's and associated equipment will be tested in accordance with Onshore Order #2 (250/5000 psi on rams for 10 minutes each and 250/3500 for 10 minutes for annular preventer, equal to 70% of working pressure) with a third party BOP testing service before drilling out the surface casing shoe. A Multibowl wellhead system will be used in this well therefore the BOPE test will cover the test requirements for the 12-1/4" Intermediate and 8-3/4" Production sections.
- b) The Surface and intermediate casings strings will be tested to 70% of its burst rating for 30 minutes. This will also test the seals of the lock down pins that hold the pack-off in place in the Multibowl wellhead system.
- c) Pipe rams will be function tested every 24 hours and blind rams will be tested each time the drill pipe is out of the hole. These functional tests will be documented on the daily driller's log. A 2" kill line and 3" choke line will be accommodated on the drilling spool below the ram-type BOP.
- d) The BOPE test will be repeated within 21 days of the original test, on the first trip, if drilling the 12-1/4" intermediate or 8-3/4" production section takes more time than planned.
- e) Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines, and choke manifold having a 5000 psi working pressure rating and tested to 5000 psi.
- f) The Operator also requests a variance to connect the BOP choke outlet to the choke manifold using a co-flex hose manufactured by Contitech Rubber Industrial KFT. It is a 3" ID x 35' flexible hose with a 10,000 psi working pressure. It has been tested to 15,000 psi and is built to API Spec 16C. Once the flex line is installed it will be tied down with safety clamps. Certifications attached to original APD
- g) BOP & Choke manifold as per approved APD

6-1/8" Production: 8370' MD'/ 7945' TVD - 12151' MD / 7945' TVD. Production hole will be drilled using a 13-5/8" 10M three ram BOP stack with 4" DP Rams, 5M annular preventer and a 5M Choke Manifold.

- a) After changing pipe rams from 5" to 4" all BOP's and associated equipment will be tested in accordance with Onshore Order #2 (250/5000 psi on rams for 10 minutes each and 250/3500 for 10 minutes for annular preventer, equal to 70% of working pressure) with a third party BOP testing service before drilling out the surface casing shoe.
- b) The 7" production casing string will be tested to 70% of its burst rating for 30 minutes.
- c) As above
- d) As above
- e) As above
- f) As above
- g) As above

CONDITIONS OF APPROVAL

OPERATOR'S NAME: OXY USA Inc.

LEASE NO.: NMNM-82896

WELL NAME & NO.: | Nimitz 12 Federal 4H SURFACE HOLE FOOTAGE: | 0100' FSL & 2033' FWL

BOTTOM HOLE FOOTAGE: 0100 FSL & 2055 FWL

LOCATION: Section 12, T. 24 S., R 30 E., NMPM

COUNTY: Eddy County, New Mexico

I. DRILLING

A. DRILLING OPERATIONS 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

- 1. 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.
- 2. 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. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 3. 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 is located, this does not include the dog house or stairway area.
- 4. 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.

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. 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.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Secretary's Potash Medium Cave/Karst Possibility of water flows in the Castile, Salado, and Delaware formations. Possibility of lost circulation in the Delaware.

- 1. The 13-3/8 inch surface casing shall be set at approximately 590 feet (in a competent bed below the Magenta Dolomite, which is a Member of the Rustler, and if salt is encountered, set casing at least 25 feet 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 is to include the lead cement slurry.

- 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 minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - □ 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 and potash.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

- 3. The minimum required fill of cement behind the 7 inch production casing is:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office
- 4. The minimum required fill of cement behind the 4-1/2 inch production liner is:
 - ☐ Cement not required Packer/Port system to be used.
- 5. 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.

C. 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. Variance approved to use flex line from BOP to choke manifold. 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. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

- 3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi. 5M 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. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. 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.
 - b. The tests shall be done by an independent service company utilizing a test plug **not** a **cup** or **J-packer**.
 - c. 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.
 - d. The results of the test shall be reported to the appropriate BLM office.
 - e. 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.
 - f. 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.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. 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.

CRW 121613