

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTEMNRD-OCDA ARTESIA  
REC'D: 8/04/2020FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.**5. Lease Serial No.  
NMNM21640

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.  
PRECIOUS 30-18 FEDERAL COM 32H9. API Well No.  
30-015-46611-00-X110. Field and Pool or Exploratory Area  
WILDCAT11. County or Parish, State  
EDDY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

OXY USA INCORPORATED

Contact: LESLIE REEVES

E-Mail: LESLIE\_REEVES@OXY.COM

3a. Address

5 GREENWAY PLAZA SUITE 110  
HOUSTON, TX 77046-0521

3b. Phone No. (include area code)

Ph: 713-497-2492

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 31 T23S R31E SWSW 570FNL 950FWL  
32.266609 N Lat, 103.822571 W Lon**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

OXY USA INC. respectfully requests to revise the casing and cement design and the mud program due to adding a contingency scenario for the subject well APD. See attached drill plan revisions.

Note: Contingency casing, BOP break testing, offline cementing and CBL variance language has been included.

OCD Accepted for Record 8/24/2020 - JAG

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #500364 verified by the BLM Well Information System**  
**For OXY USA INCORPORATED, sent to the Carlsbad**  
**Committed to AFMSS for processing by PRISCILLA PEREZ on 01/24/2020 (20PP1011SE)**

Name (Printed/Typed) LESLIE REEVES

Title REGULATORY ADVISOR

Signature (Electronic Submission)

Date 01/22/2020

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By NDUNGU KAMAU

Title PETROLEUM ENGINEER

Date 07/28/2020

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

Office Carlsbad

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

## Revisions to Operator-Submitted EC Data for Sundry Notice #500364

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM0546732A	NMNM21640
Agreement:		
Operator:	OXY USA INC PO 4294 HOUSTON, TX 77210 Ph: 713-497-2492	OXY USA INCORPORATED 5 GREENWAY PLAZA SUITE 110 HOUSTON, TX 77046-0521 Ph: 713.350.4816
Admin Contact:	LESLIE REEVES REGULATORY ADVISOR E-Mail: LESLIE_REEVES@OXY.COM Cell: 281-733-0824 Ph: 713-497-2492	LESLIE REEVES REGULATORY ADVISOR E-Mail: LESLIE_REEVES@OXY.COM Cell: 281-733-0824 Ph: 713-497-2492
Tech Contact:	LESLIE REEVES REGULATORY ADVISOR E-Mail: LESLIE_REEVES@OXY.COM Cell: 281-733-0824 Ph: 713-497-2492	LESLIE REEVES REGULATORY ADVISOR E-Mail: LESLIE_REEVES@OXY.COM Cell: 281-733-0824 Ph: 713-497-2492
Location:		
State:	NM	NM
County:	EDDY	EDDY
Field/Pool:	INGLE WELLS; BONE SPRING	WILDCAT
Well/Facility:	PRECIOUS 30-18 FEDERAL COM 32H Sec 31 T23S R31E Mer NMP NWNW 570FNL 950FWL 32.266080 N Lat, 103.822560 W Lon	PRECIOUS 30-18 FEDERAL COM 32H Sec 31 T23S R31E SWSW 570FNL 950FWL 32.266609 N Lat, 103.822571 W Lon

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	Oxy USA Incorporated
<b>LEASE NO.:</b>	NMNM021640
<b>WELL NAME &amp; NO.:</b>	Precious 30-18 Federal Com 32H
<b>SURFACE HOLE FOOTAGE:</b>	570'/N & 950'/W
<b>BOTTOM HOLE FOOTAGE:</b>	2620'/S & 1650'/W
<b>LOCATION:</b>	Section 31, T.23 S., R.31 E., NMPM
<b>COUNTY:</b>	Eddy County, New Mexico

**ALL PREVIOUS COAs STILL APPLY.**

### **A. CASING**

#### **Primary Casing Design:**

1. The **13-3/8** inch surface casing shall be set at approximately **409** 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 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 **R111 Potash Areas** if cement does not circulate to surface on the first two salt protection 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 **500 feet** into the previous casing. 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 **500 feet** into the previous casing. Operator shall provide method of verification.

**Operator has proposed to pump down 9-5/8" X 5-1/2" annulus. Operator must run a ECHO-METER or CBL from TD of the 5-1/2" casing to surface. Submit results to BLM.**

**Alternate Casing Design:**

**2<sup>nd</sup> Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.**

3. The minimum required fill of cement behind the **7-5/8** inch 2<sup>nd</sup> 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.

- c. 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.
  - d. 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 **R111 Potash Areas** if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing string must come to surface.

**Operator has proposed to pump down 9-5/8" X 7-5/8" annulus. Operator must run a ECHO-METER or CBL from TD of the 7-5/8" casing to surface. Submit results to BLM.**

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

**Option 1 (Single Stage):**

- Cement should tie-back **500 feet** into the previous casing. 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.

- c. 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.
- d. Second stage above DV tool:
  - Cement should tie-back **500 feet** into the previous casing. Operator shall provide method of verification.

## Oxy USA Inc. - Precious 30\_18 Federal Com 32H

This sundry reflects changes in casing design, cement design, and mud program design due to adding a contingency scenario.

API #: 30-015-46611

### 1. Geologic Formations

TVD of target	10605'	Pilot Hole Depth	N/A
MD at TD:	24084'	Deepest Expected fresh water:	359'

#### Delaware Basin

Formation	TVD - RKB	Expected Fluids
Rustler	359	
Salado	676	Salt
Castile	2,604	Salt
Lamar/Delaware	4,038	Oil/Gas/Brine
Bell Canyon	4,072	Oil/Gas/Brine
Cherry Canyon	4,969	Oil/Gas/Brine
Brushy Canyon	6,259	Losses
Bone Spring	7,941	Oil/Gas
1st Bone Spring	8,973	Oil/Gas
<b>2nd Bone Spring</b>	<b>9,615</b>	<b>Oil/Gas</b>

\*H<sub>2</sub>S, water flows, loss of circulation, abnormal pressures, etc.

### 2. Casing Program

#### Primary Plan:

Hole Size (in)	Casing Interval		Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF	SF Burst	Buoyant	Buoyant
	From (ft)	To (ft)					Collapse		Body SF	Joint SF
									Tension	Tension
17.5	0	409	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	4088	9.625	40	L-80	BTC	1.125	1.2	1.4	1.4
8.5	0	24084	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
							SF Values will meet or Exceed			

SF Values will meet or Exceed

#### Contingency Plan:

Hole Size (in)	Casing Interval		Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF	SF Burst	Buoyant	Buoyant
							Collapse		Body SF	Joint SF
	From (ft)	To (ft)		Tension					Tension	
17.5	0	409	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	4088	9.625	40	L-80	BTC	1.125	1.2	1.4	1.4
8.75	0	10094	7.625	26.4	L-80 HC	SF (0 ft to 6000 ft) FJ (6000 ft to 10094 ft)	1.125	1.2	1.4	1.4
6.75	0	24084	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
							SF Values will meet or Exceed			

SF Values will meet or Exceed

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

\*Oxy requests the option to run the 7.625" Intermediate II as a contingency string to be run only if severe hole conditions dictate an additional casing string necessary.

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

#### Annular Clearance Variance Request

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

1. Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casings.

## Oxy USA Inc. - Precious 30\_18 Federal Com 32H

2. Annular clearance less than 0.422" is acceptable for the curve and lateral portions of the production open hole section.

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

#### Primary Plan:

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H2O (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Surface (Tail)	439	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate (Lead)	950	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)	250	13.2	1.38	6.692	17:50	Class H Cement, Retarder, Dispersant, Salt
Production 1st Stage (Tail)	2822	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)	940	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	409	100%			
Intermediate (Lead)	0	3588	50%			
Intermediate (Tail)	3588	4088	20%			
Production 1st Stage (Lead)	6509	7941	5%			
Production 1st Stage (Tail)	7941	24084	5%			
Production 2nd Stage (Tail)	0	6509	25%			



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### Contingency Plan:

Casing String	# Sks	Wt. (lb/gal)	Yld (ft <sup>3</sup> /sack)	H2O (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Surface (Tail)	439	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate (Lead)	874	12.9	1.88	10.130	14:22	Pozzolan Cement, Retarder
Intermediate (Tail)	155	14.8	1.33	6.370	12:45	Class C Cement, Accelerator
Intermediate II 1st Stage (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Intermediate II 1st Stage (Tail)	230	13.2	1.65	8.640	11:54	Class H Cement, Retarder, Dispersant, Salt
Intermediate II 2nd Stage (Tail Slurry) to be pumped as Bradenhead Squeeze from surface, down the Intermediate annulus						
Intermediate II 2nd Stage (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Intermediate II 2nd Stage (Tail)	396	12.9	1.92	10.410	23:10	Class C Cement, Accelerator
Production (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Production (Tail)	1060	13.2	1.38	6.686	3:49	Class H Cement, Retarder, Dispersant, Salt

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	N/A	N/A	N/A
Surface (Tail)	0	409	100%
Intermediate (Lead)	0	3588	50%
Intermediate (Tail)	3588	4088	20%
Intermediate II 1st Stage (Lead)	N/A	N/A	N/A
Intermediate II 1st Stage (Tail)	6509	10094	5%
Intermediate II 2nd Stage (Lead)	N/A	N/A	N/A
Intermediate II 2nd Stage (Tail)	0	6509	25%
Production (Lead)	N/A	N/A	N/A
Production (Tail)	9594	24084	20%

\*Contingency design will only be employed if Oxy elects to run 7.625" Intermediate II string.

### Offline Cementing

Oxy requests a variance to cement the 9.625" and/or 7.625" intermediate casing strings offline in accordance to the approved variance, EC Tran 461365.

The summarized operational sequence will be as follows:

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

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

### **CBL Requirement**

Oxy requests permission to adjust the CBL requirement after bradenhead cement jobs, on 7-5/8" intermediate casings, as per the agreement reached in the OXY/BLM meeting on September 5, 2019.

#### **Four string wells:**

- CBL is not required
- If the pumped volume of cement is less than permitted in the APD, BLM will be notified and a CBL may be run
- Echometer will be used after bradenhead cement job to determine TOC before pumping top-out cement

#### **Three string wells:**

- CBL will be required on one well per pad
- If the pumped volume of cement is less than permitted in the APD, BLM will be notified and a CBL may be run
- Echometer will be used after bradenhead cement job to determine TOC before pumping top-out cement

### **4. Pressure Control Equipment**

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
12.25" Hole	13-5/8"	3M	Annular	✓	70% of working pressure
		3M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram		
			Double Ram	✓	
			Other*		
8.75" Hole	13-5/8"	3M	Annular	✓	70% of working pressure
		3M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram		
			Double Ram	✓	
			Other*		
6.75" Hole	13-5/8"	3M	Annular	✓	70% of working pressure
		3M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram		
			Double Ram	✓	
			Other*		

\*Specify if additional ram is utilized.

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.

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

### BOP Break Testing Request

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 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

### 5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	409	Water-Based Mud	8.6-8.8	40-60	N/C
409	4088	Saturated Brine-Based Mud	9.8-10.0	35-45	N/C
4088	24084	Water-Based or Oil-Based Mud	8.0-9.6	38-50	N/C

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

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

## Oxy USA Inc. - Precious 30 18 Federal Com 32H

<b>Logging, Coring and Testing.</b>		
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	
<b>Additional logs planned</b>		<b>Interval</b>
No	Resistivity	
No	Density	
No	CBL	
Yes	Mud log	ICP - TD
No	PEX	

### 7. Drilling Conditions

<b>Condition</b>	<b>Specify what type and where?</b>
BH Pressure at deepest TVD	6618 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	165°F

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

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

<b>8. Other facets of operation</b>	<b>Yes/No</b>
Will the well be drilled with a walking/skidding operation? If yes, describe. <ul style="list-style-type: none"> <li>We plan to drill the three 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.</li> </ul>	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe. <ul style="list-style-type: none"> <li>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.</li> </ul>	Yes

**Total estimated cuttings volume:** 1723.9 bbls.

### 9. Company Personnel

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