oceined by Opp D: 8/15/2023 8:19:20 Office	State of New Mic			Form C-103 of
<u>District I</u> – (575) 393-6161 1625 N. French Dr., Hobbs, NM 88240	Energy, Minerals and Natu	WE:	LL API NO.	Revised July 18, 2013
<u>District II</u> – (575) 748-1283 811 S. First St., Artesia, NM 88210	OIL CONSERVATION	1313/191/3N	25-51698 ndicate Type of Leas	se.
<u>District III</u> – (505) 334-6178 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Fran	icis Dr.	STATE	FEE
<u>District IV</u> – (505) 476-3460	Santa Fe, NM 87	7505 6. S	State Oil & Gas Lease	e No.
1220 S. St. Francis Dr., Santa Fe, NM 87505		3256	325	
	ICES AND REPORTS ON WELLS	7. I	ease Name or Unit A	Agreement Name
	OSALS TO DRILL OR TO DEEPEN OR PLU CATION FOR PERMIT" (FORM C-101) FO	OR SUCH AV	OGATO 30 31 S	STATE COM
1. Type of Well: Oil Well	Gas Well  Other	8. \	Well Number 72H	
2. Name of Operator OXY USA INC.		9. <b>(</b> 1669	OGRID Number 96	
3. Address of Operator		10.	Pool name or Wildca	at
5 Greenway Plaza, Housto	n, TX 77046	RE	D TANK; BONE SP	PRING, EAST
4. Well Location				
	feet from the North	line and 2295	feet from the $V$	
Section 30		inge 33E NM	PM Coun	nty Lea
	11. Elevation <i>(Show whether DR,</i> 3695' GR	, RKB, RT, GR, etc.)		
	3333 3.1			
	CHANGE PLANS  MULTIPLE COMPL  Deleted operations. (Clearly state all pork). SEE RULE 19.15.7.14 NMAC completion.		pertinent dates, inclu	uding estimated date
down to 3 strings. Our original pencountered in previous wells.	quests permission to change our plan called for 2 intermediate strir During the drilling of the current v ee string design (single Intermedi	ngs (9 5/8" & 7 5/8") of well we did not encount	casing due to shallo er these shallow ha	ow hazards azards, and were
Spud Date:	Rig Release Da			
	above is true and complete to the bo	est of my knowledge and	oelief.	
SIGNATURE Sach	Mckinny_TITLE_Regul	atory Analyst Sr.	DATE	08/15/2023
Type or print name Sarah McKinne For State Use Only	∍y E-mail address	s: _sarah_mckinney@oxy	c.com PHONE:	713-215-7295
APPROVED BY:Conditions of Approval (if any):	TITLE		DATE	

# Oxy USA Inc. - AVOGATO 30\_31 STATE COM 72H Drill Plan

## 1. Geologic Formations

TVD of Target (ft):	11395	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	22262	Deepest Expected Fresh Water (ft):	996

#### **Delaware Basin**

Formation	MD-RKB (ft)	TVD-RKB (ft)	<b>Expected Fluids</b>
Rustler	996	996	
Salado	1671	1671	Salt
Castile	3121	3121	Salt
Delaware	4919	4919	Oil/Gas/Brine
Bell Canyon	4986	4986	Oil/Gas/Brine
Cherry Canyon	5873	5867	Oil/Gas/Brine
Brushy Canyon	7188	7153	Losses
Bone Spring	8831	8761	Oil/Gas
Bone Spring 1st	9964	9870	Oil/Gas
Bone Spring 2nd	10661	10564	Oil/Gas
Bone Spring 3rd			Oil/Gas
Wolfcamp			Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

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

# 2. Casing Program

		IV	ID	T\	/D				
	Hole	From	То	From	То	Csg.	Csg Wt.		
Section	Size (in)	(ft)	(ft)	(ft)	(ft)	OD (in)	(ppf)	Grade	Conn.
Surface	17.5	0	1056	0	1056	13.375	54.5	J-55	ВТС
Intermediate	12.25	0	10943	0	10841	7.625	26.4	L-80 HC	ВТС
Production	6.75	0	22262	0	11395	5.5	20	P-110	Wedge 461

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

<sup>\*</sup>Oxy requests the option to run production casing with Wedge 425, Wedge 461, and/or Wedge 441 connections to accommodate hole conditions or drilling operations.

All Casing SF Values will meet or exceed						
those below						
SF	SF	Body SF	Joint SF			
Collapse	Burst	Tension	Tension			
1.125	1.2	1.4	1.4			

## **Annular Clearance Variance Request**

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

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

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards?	Y
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	Y
the collapse pressure rating of the casing?	1
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?	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 strings cemented to surface?	

# 3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	тос	Placement	Description
Surface	1	Surface - Tail	1103	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	1118	1.65	13.2	5%	7,438	Circulate	Class H+Accel., Disper., Salt
Int.	2	Intermediate 2S - Tail BH	2679	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	892	1.38	13.2	25%	10,443	Circulate	Class H+Ret., Disper., Salt

### **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 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:

- 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.

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.

#### 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		Туре	✓	Tested to:	Deepest TVD Depth (ft) per Section:
		5M		Annular	✓	70% of working pressure	
				Blind Ram	<b>&gt;</b>		10841
12.25" Hole	13-5/8"	5M		Pipe Ram		250 psi / 5000 psi	
				Double Ram	<b>&gt;</b>	250 psi / 5000 psi	
			Other*				
		5M		Annular	<b>&gt;</b>	100% of working pressure	
				Blind Ram	>		
6.75" Hole	13-5/8"	10M		Pipe Ram		250 poi / 10000 poi	11395
				Double Ram		250 psi / 10000 psi	
			Other*				

#### \*Specify if additional ram is utilized

Per BLM's Memorandum No. NM-2017-008: *Decision and Rationale for a Variance Allowing the Use of a 5M Annular Preventer with a 10M BOP Stack,* Oxy requests to employ a 5M annular with a 10M BOPE stack in the pilot and lateral sections of the well and will ensure that two barriers to flow are maintained at all times. Please see attached Well Control Plan.

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.

Created On: 8/15/2023 at 7:25 AM

Formation integrity test will be performed per Onshore Order #2.

On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.

A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.

Y Are anchors required by manufacturer?

A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015.

See attached schematics.

## **BOP Break Testing Request**

Oxy requests permission to adjust the BOP break testing requirements as per the agreement reached in the OXY/BLM meeting on September 5, 2019.

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.

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

Oxy will use Cameron ADAPT wellhead system that uses an OEC top flange connection. This connection has been fully vetted and verified by API to Spec 6A and carries an API monogram.

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## 5. Mud Program

Section	Depth -	- MD	Depth - TVD		Depth - TVD		Temp Weight		Type W		Viceosity	Water
Section	From (ft)	To (ft)	From (ft)	To (ft)	Туре	(ppg)	Viscosity	Loss				
Surface	0	1056	0	1056	Water-Based Mud	8.6 - 8.8	40-60	N/C				
Intermediate	1056	10943	1056	10841	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C				
Production	10943	22262	10841	11395	Water-Based or Oil- Based Mud	9.5 - 12.5	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	PVT/MD Totco/Visual Monitorin			
loss or gain of fluid?	PVI/MD TOLCO/VISUAL Monitoring			

6. Logging and Testing Procedures

	00 0					
Loggi	Logging, Coring and Testing.					
Yes Will run GR from TD to surface (horizontal well – vertical portion of hole).						
res	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					

Addit	ional logs planned	Interval
No	Resistivity	
No	Density	
Yes	CBL	Production string
Yes	Mud log	Bone Spring – TD
No	PEX	

## 7. Drilling Conditions

Condition	Specify what type and where?	
BH Pressure at deepest TVD	7407 psi	
Abnormal Temperature	No	
BH Temperature at deepest TVD	172°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

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.

DLIVI.	
N	H2S is present
Υ	H2S Plan attached

## 8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe.	
We plan to drill the 2 well pad in batch by section: all surface sections, intermediate	Yes
sections and production sections. The wellhead will be secured with a night cap whenever	res
the rig is not over the well.	
Will more than one drilling rig be used for drilling operations? If yes, describe.	
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,	Yes
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: 2257 bbls** 

#### **Attachments**

- \_x\_\_ Directional Plan
- \_x\_\_ H2S Contingency Plan
- \_x\_\_ Flex III Attachments
- \_x\_\_ Spudder Rig Attachment
- \_x\_\_ Premium Connection Specs

## 9. Company Personnel

<u>Name</u>	<u>Title</u>	Office Phone	<b>Mobile Phone</b>
Garrett Granier	Drilling Engineer	713-513-6633	832-265-0581
Derek Adam	Drilling Engineer Supervisor	713-366-5170	916-802-8873
Casey Martin	<b>Drilling Superintendent</b>	713-497-2530	337-764-4278
Kevin Threadgill	Drilling Manager	713-366-5958	361-815-0788

District I
1625 N. French Dr., Hobbs, NM 88240
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1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 252068

#### **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	252068
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By		Condition Date
pkautz	None	8/31/2023