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



Well Name	Well Number	US Well Number	Lease Number	Case Number	Operator
LLAMA MALL 26-	34H	3002550298	NMNM2379	NMNM2379	OXY USA
LLAMA MALL 26-	311H	3002550375	NMNM086149	NMNM086149	OXY USA
LLAMA MALL 26-	33H	3002550311	NMNM086149	NMNM086149	OXY USA
LLAMA MALL 26-	312H	3002550300	NMNM2379	NMNM2379	OXY USA
LLAMA MALL 26-	32H	3002550310	NMNM086149	NMNM086149	OXY USA
LLAMA MALL 26-	313H	3002550301	NMNM002379	NMNM002379	OXY USA
LLAMA MALL 26-	35H	3002550299	NMNM2379	NMNM2379	OXY USA

#### **Notice of Intent**

**Sundry ID: 2739313** 

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 07/05/2023 Time Sundry Submitted: 10:09

Date proposed operation will begin: 07/26/2023

**Procedure Description:** OXY USA INC. respectfully requests approval from our approved APD to change the following casing designs. There will be no change to our surface hole locations. Update the surface casing size from 10 ¾" to 13 3/8" Update the intermediate hole size to have flexibility between 12 ¼" hole and 8 ¾" hole to accommodate hole conditions or drilling operations. Have the flexibility to use the 9-7/8" Intermediate if we deem it safe. We also request pre-approval for a 4 string contingency plan dependent on hole conditions or drilling operations. Drill plans for both 3 string and 4 string casing strings attached for deepest well in batch (Llama Mall 26 35 Fed 35H).

## **NOI Attachments**

#### **Procedure Description**

LlamaMall26\_35FedCom35H\_DrillPlan\_4SCont\_20230705100731.pdf

LlamaMall26\_35FedCom35H\_TNSWedge425\_7.625in\_26.40ppf\_L80IC\_20230705100730.pdf

LlamaMall26\_35FedCom35H\_13inADAPT\_4S\_10x15\_20230705100715.pdf

LlamaMall26\_35FedCom35H\_DrillPlan\_3S\_20230705100658.pdf

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## **Conditions of Approval**

#### **Additional**

BATCH\_Llama\_Mall\_25\_35\_Fed\_Com\_COAs\_20230707103343.pdf

## **Operator**

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: SARAH MCKINNEY Signed on: JUL 05, 2023 10:07 AM

Name: OXY USA INCORPORATED

Title: Regulatory Analyst Sr

Street Address: 5 GREENWAY PLAZA SUITE 110

City: HOUSTON State: TX

Phone: (713) 215-7295

Email address: SARAH\_MCKINNEY@OXY.COM

**Field** 

**Representative Name:** 

**Street Address:** 

City: State: Zip:

Phone:

**Email address:** 

## **BLM Point of Contact**

BLM POC Name: CHRISTOPHER WALLS

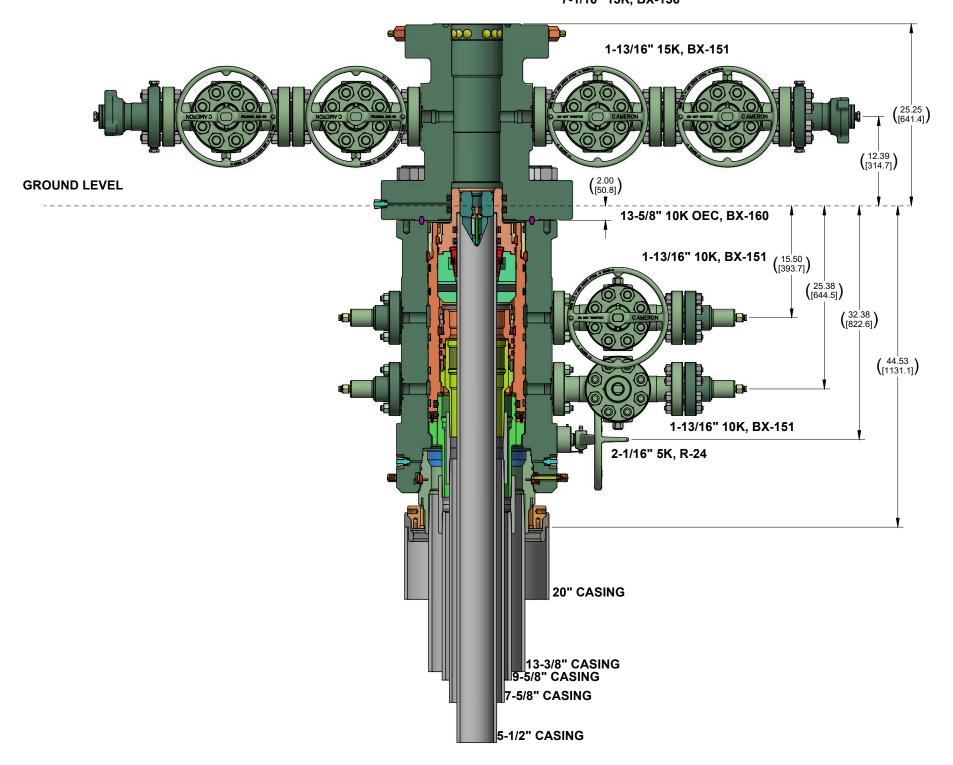
BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234 BLM POC Email Address: cwalls@blm.gov

**Disposition:** Approved **Disposition Date:** 07/07/2023

Signature: Chris Walls

# 7-1/16" 15K, BX-156



# Oxy USA Inc. - Llama Mall 26\_35 Fed Com 35H Drill Plan

## 1. Geologic Formations

TVD of Target (ft):	12357	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	22821	Deepest Expected Fresh Water (ft):	994

#### **Delaware Basin**

Formation	MD-RKB (ft)	TVD-RKB (ft)	<b>Expected Fluids</b>
Rustler	994	994	
Salado	1612	1612	Salt
Castile	3348	3348	Salt
Delaware	4822	4822	Oil/Gas/Brine
Bell Canyon	4911	4911	Oil/Gas/Brine
Cherry Canyon	5734	5734	Oil/Gas/Brine
Brushy Canyon	7030	7018	Losses
Bone Spring	8700	8666	Oil/Gas
Bone Spring 1st	9824	9775	Oil/Gas
Bone Spring 2nd	10520	10462	Oil/Gas
Bone Spring 3rd	11649	11576	Oil/Gas
Wolfcamp	12041	11927	Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

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

## 2. Casing Program

	MD TVD		/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	1054	0	1054	13.375	54.5	J-55	ВТС
Intermediate	12.25	0	11598	0	11511	7.625	26.4	L-80 HC	ВТС
Production	6.75	0	22821	0	12357	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 DQX, TORQ DQW, Wedge 425, Wedge 461, and/or Wedge 441 connections to accommodate hole conditions or drilling operations.

<sup>\*</sup>Oxy requests the option to run the 9.625" Intermediate I as a contingency string to be run only if severe hole conditions dictate an additional casing string necessary. This would make the planned 7.625" Casing the Intermediate II.

<sup>\*</sup>Oxy requests the option to pivot from 12.25" Intermediate I to 9.875" Intermediate I once we've gained for Drilling experience to remove the need for a 4 String Contingency

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Occidental - Permian New Mexico

All Casing SF Values will meet or						
exceed those below						
SF	SF	<b>Body SF</b>	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?	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?	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

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	тос	Placement	Description
Surface	1	Surface - Tail	1101	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	1378	1.65	13.2	5%	7,280	Circulate	Class H+Accel., Disper., Salt
Int.	2	Intermediate 2S - Tail BH	2621	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	885	1.38	13.2	25%	11,098	Circulate	Class H+Ret., Disper., Salt

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#### **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

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## 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>\</b>		
#REF!	13-5/8"	5M		Pipe Ram		250 psi / 5000 psi	11511
				Double Ram	>	250 psi / 5000 psi	
			Other*				
		5M		Annular	>	100% of working pressure	
				Blind Ram			
6.75" Hole	13-5/8"	10M		Pipe Ram		250 poi / 10000 poi	12357
				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.

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	Tyma	Weight	Viscosity	Water
Section	From (ft)	To (ft)	From (ft)	To (ft)	Type	(ppg)	Viscosity	Loss
Surface	0	1054	0	1054	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate	1054	11598	1054	11511	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Production	11598	22821	11511	12357	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

Loggi	ing, 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	8033 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	179°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 4 well pad in batch by section: all surface sections, intermediate	Vac
sections and production sections. The wellhead will be secured with a night cap whenever	Yes
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:** #REF!

#### **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	<b>Drilling Engineer Supervisor</b>	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

# Oxy USA Inc. - Llama Mall 26\_35 Fed Com 35H Drill Plan

# 1. Geologic Formations

TVD of Target (ft):	12357	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	22821	Deepest Expected Fresh Water (ft):	994

#### **Delaware Basin**

Formation	MD-RKB (ft)	TVD-RKB (ft)	<b>Expected Fluids</b>
Rustler	994	994	
Salado	1612	1612	Salt
Castile	3348	3348	Salt
Delaware	4822	4822	Oil/Gas/Brine
Bell Canyon	4911	4911	Oil/Gas/Brine
Cherry Canyon	5734	5734	Oil/Gas/Brine
Brushy Canyon	7030	7018	Losses
Bone Spring	8700	8666	Oil/Gas
Bone Spring 1st	9824	9775	Oil/Gas
Bone Spring 2nd	10520	10462	Oil/Gas
Bone Spring 3rd	11649	11576	Oil/Gas
Wolfcamp	12041	11927	Oil/Gas
Penn	_	_	Oil/Gas
Strawn	_		Oil/Gas

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

## 2. Casing Program

		V	1D	) TVD					
	Hole	From	То	From	То	Csg.	Csg Wt.		
Section	Size (in)	(ft)	(ft)	(ft)	(ft)	OD (in)	(ppf)	Grade	Conn.
Surface	17.5	0	1054	0	1054	13.375	54.5	J-55	ВТС
Salt	12.25	0	4922	0	4922	9.625	40	L-80 HC	ВТС
Intermediate	8.75	0	11598	0	11511	7.625	26.4	L-80 HC	Wedge 425
Production	6.75	0	22821	0	12357	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 DQX, TORQ DQW, 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).	1
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 three 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	1101	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.1	1	Intermediate - Tail	141	1.33	14.8	20%	4,422	Circulate	Class C+Accel.
Int.1	1	Intermediate - Lead	1136	1.73	12.9	50%	-	Circulate	Class Pozz+Ret.
Int. 2	1	Intermediate 1S - Tail	276	1.65	13.2	5%	7,280	Circulate	Class H+Accel., Disper., Salt
Int. 2	2	Intermediate 2S - Tail BH	486	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	885	1.38	13.2	25%	11,098	Circulate	Class H+Ret., Disper., Salt

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#### **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.

#### 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

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## 4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Туре	•	Tested to:	TVD Depth (ft) per Section:										
		5M	Annular	✓	70% of working pressure											
			Blind Ram	✓												
12.25" Hole	13-5/8"	5M	Pipe Ram		250 psi / 5000 psi	4922										
		Sivi	Double Ram	✓	230 psi / 3000 psi											
			Other*													
	13-5/8"												5M Annular ✓ 70% of working pres		70% of working pressure	
			Blind Ram	✓		11511										
8.75" Hole		5M	Pipe Ram		250 poi / 5000 poi											
			Double Ram	<b>✓</b>	250 psi / 5000 psi											
			Other*													
		5M	Annular	<b>✓</b>	100% of working pressure											
			Blind Ram	<b>✓</b>												
6.75" Hole	13-5/8"	1014	Pipe Ram		250 poi / 10000 poi	12357										
		10M	Double Ram	<b>✓</b>	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.

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.

Created On: 6/29/2023 at 3:01 PM

## 5. Mud Program

Section	Depth		Depth - TVD		Tymo	Weight	Viscosity	Water
Section	From (ft)	To (ft)	From (ft)	To (ft)	Туре	(ppg)	Viscosity	Loss
Surface	0	1054	0	1054	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate 1	1054	4922	1054	4922	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Intermediate 2	4922	11598	4922	11511	Water-Based or Oil- Based Mud	8.0 - 10.0	38-50	N/C
Production	11598	22821	11511	12357	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	DVT/MD Tatas Wiscol Manitoring
loss or gain of fluid?	PVT/MD Totco/Visual Monitoring

6. Logging and Testing Procedures

	00 0
Loggi	ing, 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	8033 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	179°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 4 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:** 1871 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



# TenarisHydril Wedge 425<sup>™</sup>



Coupling Pipe Body Grade: 180-IC Grade: 180-IC Body: Red 1st Band: Red 1st Band: Brown 2nd Band: Brown 2nd Band: -3rd Band: Pale Green 3rd Band: -4th Band: -5th Band: -6th Band: -

Outside Diameter	7.625 in.	Wall Thickness	0.328 in.	Grade	L80-IC
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Туре	Casing
Connection OD Option	REGULAR				

#### Pipe Body Data

Geometry			
Nominal OD	7.625 in.	Wall Thickness	0.328 in.
Nominal Weight	26.40 lb/ft	Plain End Weight	25.59 lb/ft
Drift	6.844 in.	OD Tolerance	API
Nominal ID	6.969 in.		

Performance	
Body Yield Strength	602 x1000 lb
Min. Internal Yield Pressure	6020 psi
SMYS	80,000 psi
Collapse Pressure	4500 psi

#### **Connection Data**

Geometry	
Connection OD	7.835 in.
Connection ID	6.925 in.
Make-up Loss	5.564 in.
Threads per inch	3.77
Connection OD Option	Regular

Performance	
Tension Efficiency	90 %
Joint Yield Strength	542 x1000 lb
Internal Pressure Capacity	6020 psi
Compression Efficiency	90 %
Compression Strength	542 x1000 lb
Max. Allowable Bending	43 °/100 ft
External Pressure Capacity	4500 psi

Make-Up Torques	
Minimum	21,600 ft-lb
Optimum	24,000 ft-lb
Maximum	26,400 ft-lb
Operation Limit Torques	
Operating Torque	46,500 ft-lb
Yield Torque	58,000 ft-lb

#### Notes

This connection is fully interchangeable with: TORQ® SFWTM - 7.625 in. - 0.328 in. Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

For the lastest performance data, always visit our website: www.tenaris.com
For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

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

CONDITIONS

Action 237740

#### **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	237740
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By		Condition Date
pkautz	None	7/26/2023