# **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an

FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018

Expires: January .	5
Lease Serial No.	
NMNM0545035	

6	If Indian	∆11ottee	or Tribe	Name

abandoned wel	I. Use form 3160-3 (APD	)) for such p	proposals.		o. If Indian, Anottee	oi iiibe	Name
SUBMITIN	7. If Unit or CA/Agre	ement, l	Name and/or No.				
Type of Well     ☐ Gas Well ☐ Other					8. Well Name and No PURE GOLD MD		17 FED COM 171F
Name of Operator     OXY USA INCORPORATED	Contact: § E-Mail: SARAH_CH	SARAH CHA HAPMAN@OX			9. API Well No. 30-015-45716-	00-X1 <sup>,</sup>	
3a. Address 5 GREENWAY PLAZA SUITE HOUSTON, TX 77046-0521	110	3b. Phone No Ph: 713-35	. (include area code 0-4997		10. Field and Pool or WILDCAT-WOI	Explora LFCAN	tory Area 1P
4. Location of Well (Footage, Sec., T.	, R., M., or Survey Description)		· · · · · · · · · · · · · · · · · · ·		11. County or Parish,	State	
Sec 29 T23S R31E SWSW 690FSL 955FWL 32.270073 N Lat, 103.805267 W Lon					EDDY COUNT	Y, NM	
12. CHECK THE AP	PROPRIATE BOX(ES) T	TO INDICA	TE NATURE O	F NOTICE,	REPORT, OR OT	HER D	ATA
TYPE OF SUBMISSION			TYPE O	F ACTION		-	
Notice of Intent	☐ Acidize	Dee	pen-	☐ Product	ion (Start/Resume)	u W	Vater Shut-Off
	☐ Alter Casing	☐ Hyd	raulic Fracturing	☐ Reclam	ation		Vell Integrity
☐ Subsequent Report	□ Casing Repair	☐ New	Construction	☐ Recomp	olete	<b>⊠</b> 0	
☐ Final Abandonment Notice	☐ Change Plans	🗖 Plug	and Abandon	☐ Tempor	arily Abandon		Change to Original A
	☐ Convert to Injection	☐ Plug	Back	☐ Water D	Disposal		
1. Changing 9-5/8?? casing we 2. Changing Deep intermediate 3. Changed 7-5/8?? SF from 40 4. Updated cement calculations 5. Option to run production cas 6. Option to cement 9-5/8" and/ The wells in which we are requia0-015-45716 Pure Gold MDP 30-015-45718 Pure Gol	e hole size from 8.5?? to 8 000?? to 6000?? ?h s based on new casing an ing with DQW TORQ conr /or 7-5/8" intermediate stri esting these changes are 1 29-17 Federal Com 1711 1 29-17 Federal Com 1721 1 29-17 Federal Com 1731	3.75?? ?h  d hole sizes nections to a ngs offline (I listed below H NMNM054 H NMNM054	ccommodate honow in drill plan) : : :5035	Carlst	oad Field CD Artes NM OIL	sia cons	SERVATION
14. I hereby certify that the foregoing is t	rue and correct.		Lb., 4b a DI M Mai		ART	ESIA D	STRICT
	Electronic Submission #48 For OXY USA I nitted to AFMSS for proces	NCORPORA!	ΓEĎ, sent to the	Carlsbad	UU	T 0 2	2019
Name (Printed/Typed) SARAH CH	APMAN		Title REGUL	ATORY SPE		<del></del>	WEIS
					· !/C	ECEI	VEL.
Signature (Electronic Su			Date 08/30/20				*.
	THIS SPACE FOR	R FEDERA	L OR STATE (	OFFICE US	SE	· · · · · · · · · · · · · · · · · · ·	
Approved By NDUNGU KAMAU			TitlePETROLE	UM ENGINE	ER		Date 09/23/2019
onditions of approval, if any, are attached. rtify that the applicant holds legal or equit hich would entitle the applicant to conduct	able title to those rights in the st		Office Carlsbac	<u>.</u>			
itle 18 U.S.C. Section 1001 and Title 43 U. States any false, fictitious or fraudulent sta				willfully to ma	ke to any department or	agency o	of the United
nstructions on page 2) ** BLM REVIS	SED ** BLM REVISED	** BLM RE	VISED ** BLM	REVISED	** BLM REVISE	) **	

Accept, Krof 10-9-19,

# Additional data for EC transaction #481269 that would not fit on the form

## 32. Additional remarks, continued

30-015-45740 Pure Gold MDP1 29-17 Federal Com 174H NMNM0545035 30-015-45780 Pure Gold MDP1 29-17 Federal Com 175H NMNM0545035

Please find attachments for further information.

### Revisions to Operator-Submitted EC Data for Sundry Notice #481269

**Operator Submitted** 

**BLM Revised (AFMSS)** 

Sundry Type:

APDCH NOI

Lease:

NMNM0545035

APDCH NOI

NMNM0545035

Agreement:

Operator:

OXY USA INC. P.O. BOX 50250 MIDLAND, TX 79710 Ph: 432-685-5717

**OXY USA INCORPORATED** 5 GREENWAY PLAZA SUITE 110 HOUSTON, TX 77046-0521 Ph: 713.350.4816

Admin Contact:

SARAH CHAPMAN REGULATORY SPECIALIST E-Mail: SARAH\_CHAPMAN@OXY.COM Cell: 281-642-5503 Ph: 713-350-4997

SARAH CHAPMAN REGULATORY SPECIALIST E-Mail: SARAH\_CHAPMAN@OXY.COM Cell: 281-642-5503 Ph: 713-350-4997

Tech Contact:

SARAH CHAPMAN

REGULATORY SPECIALIST E-Mail: SARAH\_CHAPMAN@OXY.COM Cell: 281-642-5503 Ph: 713-350-4997

SARAH CHAPMAN REGULATORY SPECIALIST E-Mail: SARAH\_CHAPMAN@OXY.COM Cell: 281-642-5503

Ph: 713-350-4997

WILDCAT-WOLFCAMP

Location:

State:

County:

EDDY COUNTY

Field/Pool:

WILDCAT WOLFCAMP

NM EDDY

Well/Facility:

PURE GOLD MDP1 29-17 FED COM 171H Sec 29 T23S R31E Mer NMP SWSW 690FSL 955FWL 32.270073 N Lat, 103.805260 W Lon

PURE GOLD MDP1 29-17 FED COM 171H Sec 29 T23S R31E SWSW 690FSL 955FWL 32.270073 N Lat, 103.805267 W Lon

# PERFORMANCE DATA

TMK UP TORQ™ DQW Technical Data Sheet

5.500 in

20.00 lbs/ft

P110 CY

psi psi lbs lbs psi psi


Tubular Parameters					
Size	5.500	in	Minimum Yield	110,000	
Nominal Weight	20.00	lbs/ft	Minimum Tensile	125,000	
Grade	P110 CY		Yield Load	641,000	
PE Weight	19.81	lbs/ft	Tensile Load	729,000	
Wall Thickness	0.361	in	Min. Internal Yield Pressure	12,640	
Nominal ID	4.778	in	Collapse Pressure	11,110	
Drift Diameter	4.653	in -	4		

lin²

5.828

Conn	ection	Param	eters

Nom. Pipe Body Area

Connection Larameters		
Connection OD	6.050	in
Connection ID	4.778	in
Make-Up Loss	4.324	in
Critical Section Area	5.828	in²
Tension Efficiency	100.0	%
Compression Efficiency	100.0	%
Yield Load In Tension	641,000	lbs
Min. Internal Yield Pressure	12,640	psi
Collapse Pressure	11,110	psi
Uniaxial Bending	92	°/ 100 ft

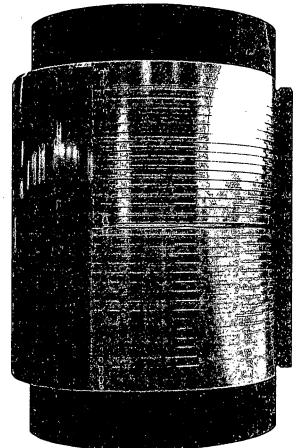
Make-Up Torques	
Min. Make-Up Torque	
0 1 14 1 11 7	

Min. Make-Up Torque	14,000	ft-lbs
Opt. Make-Up Torque	16,000	ft-lbs
Max. Make-Up Torque	18,000	ft-lbs
Operating Torque	36,800	ft-lbs
Yield Torque	46,000	ft-lbs

Printed on: March-05-2019



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# 1. Summary of Changes

- Changing 9-5/8" casing weight from 43.5ppf to 40ppf
- Changing Deep intermediate hole size from 8.5" to 8.75"
- Changed 7-5/8" SF from 4000' to 6000'
- Updated cement calculations based on new casing and hole sizes

## 2. Casing Program

									Buoyant	Buoyant
Hole Size (in)	Casing	Interval	Csg. Size	Weight.	芸で新加藤	1747/1915	N 在SFEE	SF Burst	Body SF	Joint SF
Hole Size (III)	From (ft)	ELECTO (n) OT CATE	(ln)	語 (lbs)	ALCE OF THE PARTY	Conn	Collapse ::	Dr Durst	Tension :	Tension
17.5	0	436	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	4145	9.625	40	L-80	BTC	1.125	1.2	1.4	1.4
8.75	,o	10805	7.625	26.4	L-80 HC	SF (0 ft to 6000 ft) FJ (6000 ft to 10805 ft)	1.125	1.2	1.4	1.4
6.75	0	24207	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
SF Values will meet or Excee						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 set casing shallower yet still below the salts if losses or hole conditions require this. Cement volumes may be adjusted if casing is set shallower and a DV tool may be run in case hole conditions merit pumping a second stage cement job to comply with permitted top of cement. If cement circulated to surface during first stage, we will drop a cancelation cone and not pump the second stage.

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

### **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.

	Yor 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 Coniton Poof?	N
Is well located within Capitan Reef?	IN
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	Contractor of Contractor
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?	
TOTAL PROPERTY OF THE PROPERTY	2. <b>(1) (1) (1) (1) (1) (1) (1)</b>
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
	AT THE PERSON NAMED IN
Is well located in high Cave/Karst?	N .
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

# 3. Cementing Program

Casing String	#Sks*	Wt. (Ib/gal)	Yld (ft3/sack)	H20 (gal/sk)	500# Comp Strength (hours)	Slury Description
Surface (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Surface (Tail)	467	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate (Lead)	887	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)	274	13.2	1.65	8.640	11:54	Class H Cement, Retarder, Dispersant, Salt
Intermediate II 2nd Stag Intermediate II 2nd Stage (Lead)	ge (Tail Slurry) t	o be pumped a	s Bradenhead	Squeeze from N/A		the Intermediate annulus
Intermediate II 2nd Stage (Tail)	397	12.9	1.92	10.410		Class C Cement, Accelerator
Production (Lead)	N/A	N/A	N/A	N/A		N/A
Production (Tail)	1018	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	436	100%
Intermediate (Lead)	. 0	3645	50%
Intermediate (Tail)	3645	4145	20%
Intermediate II 1st Stage (Lead)	N/A	N/A	N/A
Intermediate II 1st Stage (Tail)	6537	10805	5%
Intermediate II 2nd Stage (Lead)	· N/A	N/A	N/A
Intermediate II 2nd Stage (Tail)	0	6537	25%
Production (Lead)	N/A	N/A	N/A
Production (Tail)	10305	24207	20%

# **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:

- 1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe).
- 2. Land casing.
- 3. Fill pipe with kill weight fluid, and confirm well is static.
  - a. If well is not static notify BLM and kill well.
  - b. Once well is static notify BLM with intent to proceed with nipple down and offline cementing.
- 4. Set and pressure test annular packoff.
- 5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange. If any barrier fails to test, the BOP stack will not be nippled down until after the cement job is completed.
- 6. Skid rig to next well on pad.
- 7. Confirm well is static before removing cap flange.
- 8. If well is not static notify BLM and kill well prior to cementing or nippling up for further remediation.
- 9. Install offline cement tool.
- 10. Rig up cement equipment.
  - a. Notify BLM prior to cement job.
- 11. Perform cement job.
- 12. Confirm well is static and floats are holding after cement job.
- 13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

# 4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min Required WP	Ţype		V	Tested to:
		3M	Annula	ar	✓	70% of working pressure
12.25" Hole	13-5/8"	3M	Blind Ram		✓	
12.23 11016	13-3/6		Pipe Ram			250 psi / 3000 psi
		3101	. Double F	Ram	<b>~</b>	230 psi / 3000 psi
			Other*			
		5M	Annular		<b>✓</b>	70% of working pressure
8.75" Hole	12 5/00	3-5/8" 5M	Blind Ram		✓	250 psi / 5000 psi
8./3" Hole	13-5/8"		Pipe Ram			
			Double Ram		✓	
			Other*			,
		5M	Annular		<b>✓</b>	70% of working pressure
6.75" Hole	13-5/8"	5M	Blind Ram		√	
			Pipe Ram			250 mai / 5000 mai
			Double Ram		✓	250 psi / 5000 psi
			Other*			

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

Oxy will utilize a 5M annular with a 10M BOPE stack. The BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

Formation integrity test will be performed per Onshore Order #2.				
On Exploratory wells or on that portion of any well approved for a 5M BOPE system or				
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**

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow BOP Break Testing under the following conditions:

- After a full BOP test is conducted on the first well on the pad.
- When skidding to drill an intermediate section that the casing point is either shallower than the 3<sup>rd</sup> Bone Spring or 10000' TVD.
- Full BOP test will be required prior to drilling any production hole.

## 5. Mud Program

From (ft)	pth To (ft)	Type	Weight (ppg)	Viscosity -	Water Loss
0	436	Water-Based Mud	8.6-8.8	40-60	N/C
436	4145	Saturated Brine-Based Mud	9.8-10.0	35-45	N/C
4145	10805	Water-Based or Oil- Based Mud	8.0-9.6	38-50	N/C
10805	24207	Water-Based or Oil- Based Mud	9.5-12.0	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?	TO 3 7000 /3 600 /00 / /3 7° 1 3 6 '/ '
What will be used to monitor the loss or gain of fluid?	PV [/N/II] Lotco/Vigilal Mioniforing
I What will be used to informed the loss of gain of maid:	i v i/iviD i otco/ v isuai iviointoinig

## 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7416 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 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

# 8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe.	Yes
• We plan to drill the two 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.	
<ul> <li>Will more than one drilling rig be used for drilling operations? If yes, describe.</li> <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: 1758.9 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	Mobile Phone
Linsay Earle	Drilling Engineer	713-350-4921	832-596-5507
Margaret Giltner	Drilling Engineer Supervisor	713-366-5026	210-683-8480
Simon Benavides	Drilling Superintendent	713-522-8652	281-684-6897
Diego Tellez	Drilling Manager	713-350-4602	713-303-4932