

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

Well Name: DR PI FED UNIT 18_7 IPP	Well Location: T22S / R32E / SEC 18 / SWSE / 32.3847667 / -103.7100697	County or Parish/State: LEA / NM
Well Number: 312H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM032411, NMNM32411	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002548167	Well Status: Drilling Well	Operator: OXY USA INCORPORATED

Notice of Intent

Sundry ID: 2653941

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 01/26/2022

Time Sundry Submitted: 08:38

Date proposed operation will begin: 06/17/2022

Procedure Description: OXY USA Inc. respectfully requests to amend the subject well APD to update the following: - Received approval for unit agreement - New Well Name: DR PI FED UNIT 18_7 IPP 312H - Horizontal spacing unit (HSU)/well spacing – only BHL updated, no change to SHL - Drill plan – casing, cement, BOP and mud program Attached for your reference/review are the following: - C102 revised well plat - Drill plan, casing data sheets and directional plan/plot - Well control plan

NOI Attachments

Procedure Description

- DrPiFedUnit18_7IPP312H_DrillPlan3.28.22_20220328104738.pdf
- DrPiFedUnit18_7IPP312H_TNSWedge441_5.500in_20_20220316095735.00
- DrPiFedUnit18_7IPP312H_TNSWedge461_5.500in_20_20220316095735.00
- DrPiFedUnit18_7IPP312H_13inADAPT_13.375in_7.625in_10x10_20220316095729.pdf
- DrPiFedUnit18_7IPP312H_C102_Sundry3.16.22_20220316095729.pdf
- DrPiFedUnit18_7IPP312H_TNSWedge425_5.500in_20_20220316095728.00
- DrPiFedUnit18_7IPP312H_OxyWellControlPlan_20220316095729.pdf

Well Name: DR PI FED UNIT 18_71PP

Well Location: T22S / R32E / SEC 18 / SWSE / 32.3847667 / -103.7100697

County or Parish/State: LEA / NM

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Lease Number: NMNM032411, NMNM32411

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US Well Number: 3002548167

Well Status: Drilling Well

Operator: OXY USA INCORPORATED

Conditions of Approval

Additional

Dr_Pi_Federal_Unit_18___PP_312H_DrillingCOA_Sundry_2653941_20220603120120.pdf

182232_Sundry_26553941_Dr._Pi_Federal_Unit_Lea_NMNM32411_Oxy_13_22_06_03_2022_NMK_20220603120050.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: RONI MATHEW

Signed on: JUN 10, 2022 11:50 AM

Name: OXY USA INCORPORATED

Title: REGULATORY SPECIALIST

Street Address: 5 Greenway Plaza, Suite 110

City: Houston

State: TX

Phone: (713) 215-7827

Email address: RONI_MATHEW@OXY.COM

Field

Representative Name: JIM WILSON

Street Address: 6001 DEAUVILLE BLVD.

City: MIDLAND

State: TX

Zip: 79710

Phone: (575)631-2442

Email address: JIM_WILSON@OXY.COM

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: 06/10/2022

Signature: Chris Walls

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

ALL PREVIOUS COAs STILL APPLY

OPERATOR'S NAME:	OXY USA INCORPORATED
LEASE NO.:	NMNM032411
LOCATION:	Section 18, T.22 S., R.32 E., NMPM
COUNTY:	Lea County, New Mexico

WELL NAME & NO.:	Dr Pi Fed Unit 18_7 IPP 312H
SURFACE HOLE FOOTAGE:	170'/S & 1460'/E
BOTTOM HOLE FOOTAGE:	20'/N & 2200'/E

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input type="radio"/> Multibowl	<input checked="" type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input checked="" type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit

A. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2.

Option 1:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M) psi**.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **10,000 (10M) psi**. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 3500 (3.5M) psi**.

Option 2:

1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 3500 (3.5M) psi.**
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

B. SPECIAL REQUIREMENT (S)**Unit Wells**

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months.

182232 Sundry_26553941 Dr. Pi Federal Unit Lea NMNM32411 Oxy 13-22 06-03-2022 NMK

Dr. Pi Federal Unit

13 3/8 surface csg in a		17 1/2 inch hole.		Design Factors					Surface																						
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight																				
"A"	54.50	J 55	BTC	16.45	2.6	0.48	952	6	0.83	5.01	51,884																				
"B"			BTC				0				0																				
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,496							Totals:	952			51,884																				
<p>Comparison of Proposed to Minimum Required Cement Volumes</p> <table border="1"> <thead> <tr> <th>Hole Size</th> <th>Annular Volume</th> <th>1 Stage Cmt Sx</th> <th>1 Stage CuFt Cmt</th> <th>Min Cu Ft</th> <th>1 Stage % Excess</th> <th>Drilling Mud Wt</th> <th>Calc MASP</th> <th>Req'd BOPE</th> <th>Min Dist Hole-Cplg</th> </tr> </thead> <tbody> <tr> <td>17 1/2</td> <td>0.6946</td> <td>look ↘</td> <td>0</td> <td>661</td> <td></td> <td>8.80</td> <td>3274</td> <td>5M</td> <td>1.56</td> </tr> </tbody> </table>												Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg	17 1/2	0.6946	look ↘	0	661		8.80	3274	5M	1.56
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg																						
17 1/2	0.6946	look ↘	0	661		8.80	3274	5M	1.56																						
Burst Frac Gradient(s) for Segment(s) A, B = , b All > 0.70, OK.						Alternate Burst = 0.83 > 0.7 therefore okay.																									

7 5/8 casing inside the		13 3/8		Design Factors					Int 1																						
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight																				
"A"	26.40	HCL 80	BTC	2.08	0.85	1.06	11,035	1	1.84	1.48	291,324																				
"B"							0				0																				
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	11,035			291,324																				
<p>The cement volume(s) are intended to achieve a top of 0 ft from surface or a 952 ft overlap.</p> <table border="1"> <thead> <tr> <th>Hole Size</th> <th>Annular Volume</th> <th>1 Stage Cmt Sx</th> <th>1 Stage CuFt Cmt</th> <th>Min Cu Ft</th> <th>1 Stage % Excess</th> <th>Drilling Mud Wt</th> <th>Calc MASP</th> <th>Req'd BOPE</th> <th>Min Dist Hole-Cplg</th> </tr> </thead> <tbody> <tr> <td>9 7/8</td> <td>0.2148</td> <td>look ↘</td> <td>0</td> <td>2690</td> <td></td> <td>10.00</td> <td>5004</td> <td>10M</td> <td>0.69</td> </tr> </tbody> </table>												Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg	9 7/8	0.2148	look ↘	0	2690		10.00	5004	10M	0.69
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg																						
9 7/8	0.2148	look ↘	0	2690		10.00	5004	10M	0.69																						
Class 'H' tail cmt yld > 1.20						Alternate Collapse = 1.28 > 1.125 therefore keep 1/3 fluid filled.																									

0 casing inside the		7 5/8		Design Factors					Int 2																						
Segment	#/ft	Grade	Coupling	#N/A	Collapse	Burst	Length	B@s	a-B	a-C	Weight																				
"A"							0				0																				
"B"							0				0																				
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	0			0																				
<p>The cement volume(s) are intended to achieve a top of 0 ft from surface or a 11035 ft overlap.</p> <table border="1"> <thead> <tr> <th>Hole Size</th> <th>Annular Volume</th> <th>1 Stage Cmt Sx</th> <th>1 Stage CuFt Cmt</th> <th>Min Cu Ft</th> <th>1 Stage % Excess</th> <th>Drilling Mud Wt</th> <th>Calc MASP</th> <th>Req'd BOPE</th> <th>Min Dist Hole-Cplg</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>look ↘</td> <td>0</td> <td></td> <td></td> <td></td> <td>5004</td> <td>10M</td> <td></td> </tr> </tbody> </table>												Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg	0		look ↘	0				5004	10M	
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg																						
0		look ↘	0				5004	10M																							
Class 'C' tail cmt yld > 1.35						MASP is within 10% of 5000psig, need exrta equip?																									

5 1/2 In tandem @		0		Design Factors					Prod 1																						
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight																				
"A"	20.00	P 110	DQX	2.75	1.47	1.67	22,527	2	2.52	2.22	450,540																				
"B"							0				0																				
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,564							Totals:	22,527			450,540																				
<p>Cmt vol calc includes previous csg (tandem conn) TOC 0 ft from surface or a overlap.</p> <table border="1"> <thead> <tr> <th>Hole Size</th> <th>Annular Volume</th> <th>1 Stage Cmt Sx</th> <th>1 Stage CuFt Cmt</th> <th>Min Cu Ft</th> <th>1 Stage % Excess</th> <th>Drilling Mud Wt</th> <th>Calc MASP</th> <th>Req'd BOPE</th> <th>Min Dist Hole-Cplg</th> </tr> </thead> <tbody> <tr> <td>6 3/4</td> <td>0.0835</td> <td>look ↘</td> <td>0</td> <td>1881</td> <td></td> <td>12.50</td> <td></td> <td></td> <td>0.35</td> </tr> </tbody> </table>												Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg	6 3/4	0.0835	look ↘	0	1881		12.50			0.35
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg																						
6 3/4	0.0835	look ↘	0	1881		12.50			0.35																						
Class 'H' tail cmt yld > 1.20						Capitan Reef est top XXXX. MASP is within 10% of 5000psig, need exrta equip?																									

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-9720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-48167	Pool Code 5695	Pool Name BILBREY BASIN; BONE SPRING
Property Code	Property Name DR PI FED UNIT 18_7 IPP	Well Number 312H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3663.2'

Surface Location

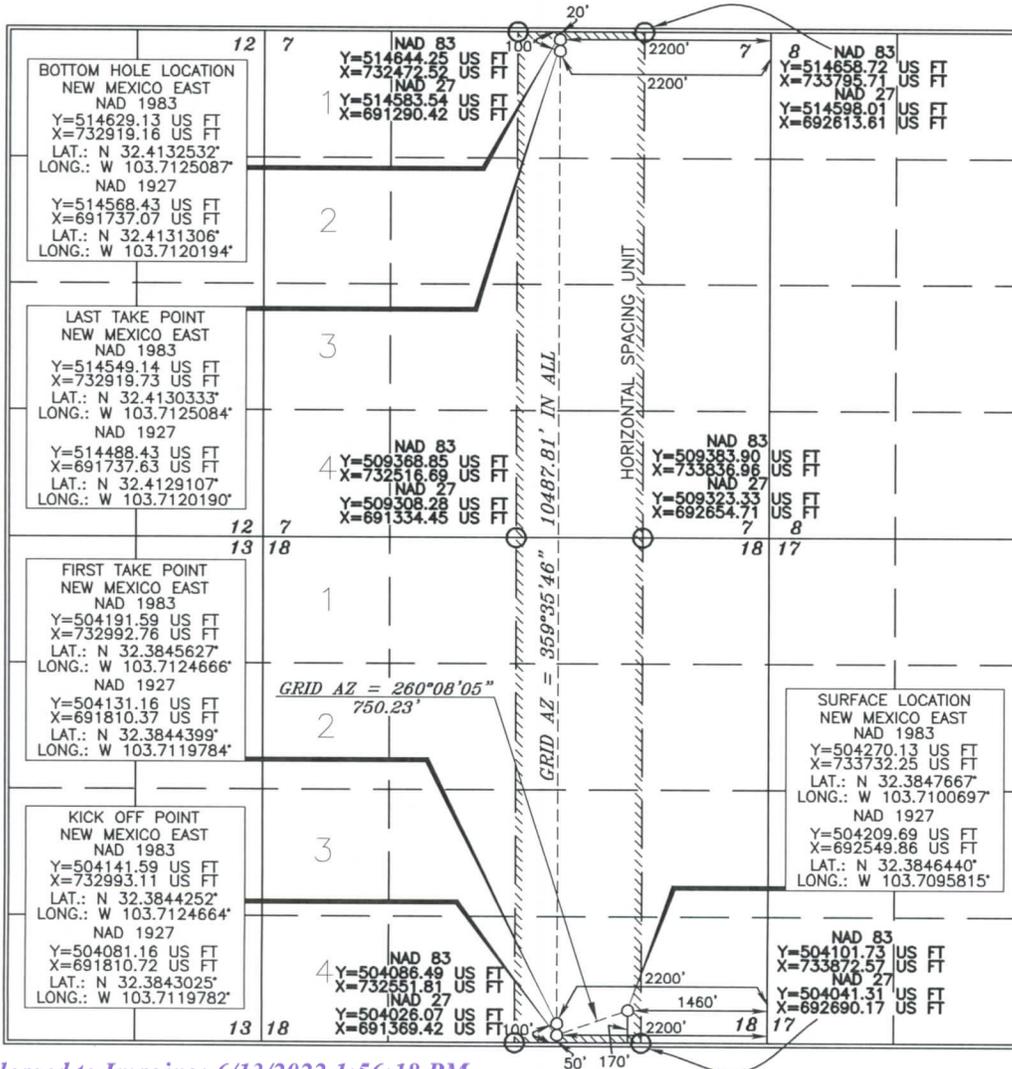
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	18	22 SOUTH	32 EAST, N.M.P.M.		170'	SOUTH	1460'	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	7	22 SOUTH	32 EAST, N.M.P.M.		20'	NORTH	2200'	EAST	LEA

Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Roni Mathew 1/22/2022
Signature Date

Roni Mathew
Printed Name
roni_mathew@oxy.com
E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

TERRY J. ASH
15079
JULY 30, 2019
Date of Survey

Terry J. Ash
Signature and Seal of Professional Surveyor

Certificate Number 15079

Oxy USA Inc. - Dr Pi Fed Unit 18_7 IPP 312H

Drill Plan

1. Geologic Formations

TVD of Target (ft):	11654	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	22527	Deepest Expected Fresh Water (ft):	892

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	892	892	
Salado	1185	1185	Salt
Castile	2881	2881	Salt
Delaware	4681	4677	Oil/Gas/Brine
Bell Canyon	4740	4735	Oil/Gas/Brine
Cherry Canyon	5610	5592	Oil/Gas/Brine
Brushy Canyon	6835	6799	Losses
Bone Spring	8625	8561	Oil/Gas
Bone Spring 1st	9722	9642	Oil/Gas
Bone Spring 2nd	10377	10287	Oil/Gas
Bone Spring 3rd	11402	11293	Oil/Gas
Wolfcamp			Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

*H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

Section	Hole Size (in)	MD		TVD		Csg. OD (in)	Csg. Wt. (ppf)	Grade	Conn.
		From (ft)	To (ft)	From (ft)	To (ft)				
Surface	17.5	0	952	0	952	13.375	54.5	J-55	BTC
Intermediate	9.875	0	8035	0	7933	7.625	26.4	L-80 HC	BTC
Intermediate	9.875	8035	11035	7933	10933	7.625	29.7	L-80 HC	BTC
Production	6.75	10935	22527	10833	11654	5.5	20	P-110	DQX

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 production casing with DQX, TORQ DQW, Wedge 425, Wedge 461, and/or Wedge 441 connections to accommodate hole conditions or drilling operations.

<i>All Casing SF Values will meet or exceed those below</i>			
SF Collapse	SF Burst	Body SF Tension	Joint SF 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.

*Oxy requests a variance to the annular clearance requirement between the liner hanger equipment and the Intermediate casing. These components are made to seal against the casing and thus will not meet the requirement. Cement will be brought to the liner top and a liner top packer will also be used.

	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
Capitan Reef	
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.	
SOPA	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
R-111-P	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
High Cave/Karst	
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?	
Critical Cave/Karst	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Section	Stage	Slurry:	Capacities	ft ³ /ft	Excess:	From	To	Sacks	Volume (ft ³)	Placement
Surface	1	Surface - Tail	OH x Csg	0.6946	100%	952	-	994	1323	Circulate
Int.	1	Intermediate 1S - Tail	OH x Csg	0.2148	5%	11,035	7,085	540	891	Circulate
Int.	2	Intermediate 2S - Tail BH	OH x Csg	0.2148	25%	7,085	952	858	1646	Bradenhead
Int.	2	Intermediate 2S - Tail BH	Csg x Csg	0.5509	0%	952	-	273	524	Bradenhead
Prod.	1	Production - Tail	OH x Csg	0.2526	5%	22,527	11,035	2209	3048	Circulate
Prod.	1	Production - Tail	Csg x Csg	0.0999	0%	11,035	10,935	7	10	Circulate

Description	Density (lb/gal)	Yield (ft ³ /sk)	Water (gal/sk)	500psi Time (hh:mm)	Cmt. Class	Accelerator	Retarder	Dispersant	Salt
Surface - Tail	14.8	1.33	6.365	5:26	C	x			
Intermediate 1S - Tail	13.2	1.65	8.64	11:54	H	x	x	x	x
Intermediate 2S - Tail BH	12.9	1.92	10.41	23:10	C	x			
Production - Tail	13.2	1.38	6.686	3:39	H		x	x	x

Cement Top and Liner Overlap

- Oxy is requesting permission to have minimum fill of cement behind the 5-1/2" production liner to be 100 ft into previous casing string
 The reason for this is so that we can come back and develop shallower benches from the same 7.625" mainbore in the future
- Cement will be brought to the top of this liner hanger

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 nipped 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 nipping 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	Type	✓	Tested to:	Deepest TVD Depth (ft) per Section:
9.875" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	10933
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
6.75" Hole	13-5/8"	5M	Annular	✓	100% of working pressure	11654
		10M	Blind Ram	✓	250 psi / 10000 psi	
			Pipe Ram			
			Double Ram	✓		
			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?
	<p>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.</p> <p>See attached schematics.</p>

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

5. Mud Program

Section	Depth - MD		Depth - TVD		Type	Weight (ppg)	Viscosity	Water Loss
	From (ft)	To (ft)	From (ft)	To (ft)				
Surface	0	952	0	952	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate	952	11035	952	10933	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Production	11035	22527	10933	11654	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 loss or gain of fluid?	PVT/MD Totco/Visual Monitoring
---	--------------------------------

6. Logging and Testing Procedures

Logging, Coring and Testing.	
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

Additional logs planned		Interval
No	Resistivity	
No	Density	
No	CBL	
Yes	Mud log	Bone Spring – TD
No	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7576 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	174°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.	
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. We plan to drill the 3 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.	Yes
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, 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.	Yes

Total Estimated Cuttings Volume: 1748 bbls

Attachments

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

9. Company Personnel

Name	Title	Office Phone	Mobile Phone
Garrett Granier	Drilling Engineer	713-513-6633	832-265-0581
Filip Krneta	Drilling Engineer Supervisor	713-350-4751	832-244-4980
Simon Benavides	Drilling Superintendent	713-522-8652	281-684-6897
Diego Tellez	Drilling Manager	713-350-4602	713-303-4932

Oxy Well Control Plan

A. Component and Preventer Compatibility Table

The table below, which covers the drilling and casing of the >5M MASP portion of the well, outlines the tubulars and the compatible preventers in use. This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

Pilot hole and Lateral sections, 10M requirement

Component	OD	Preventer	RWP
Drillpipe	4-1/2"-5"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
HWDP	4-1/2"-5"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
Drill collars and MWD tools	4-3/4" – 5-1/2"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
Mud Motor	4-3/4"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
Production casing	5-1/2"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
ALL	0" - 13-5/8"	Annular	5M
Open-hole	6-3/4"	Blind Rams	10M

VBR = Variable Bore Ram. Compatible range listed in chart.

HWDP = Heavy Weight Drill Pipe

MWD = Measurement While Drilling

B. Well Control Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the Bottom Hole Assembly (BHA) through the Blowout Preventers (BOP). The pressure at which control is swapped from the annular to another compatible ram will occur when the anticipated pressure is approaching or envisioned to exceed 70% of the 5M annular Rated Working Pressure (RWP) or 3500 PSI.

General Procedure While Drilling

1. Sound alarm (alert crew)
2. Space out drill string
3. Shut down pumps (stop pumps and rotary)
4. Shut-in Well (uppermost applicable BOP, typically annular preventer first. The Hydraulic Control Remote (HCR) valve and choke will already be in the closed position).
5. Confirm shut-in
6. Notify tool pusher/company representative

7. Read and record the following:
 - a. SIDPP and SICP
 - b. Pit gain
 - c. Time
8. Regroup and identify forward plan
9. If pressure has built or expected to reach 70% of the annular RWP during kill operations, crew will reconfirm spacing and swap to the upper pipe ram

General Procedure While Tripping

1. Sound alarm (alert crew)
2. Stab full opening safety valve and close
3. Space out drill string
4. Shut-in (uppermost applicable BOP, typically annular preventer first. The HCR and choke will already be in the closed position)
5. Confirm shut-in
6. Notify tool pusher/company representative
7. Read and record the following
 - a. SIDPP and SICP
 - b. Pit gain
 - c. Time
 - d. Regroup and identify forward plan
 - e. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to the upper pipe ram

General Procedure While Running Casing

1. Sound alarm (alert crew)
2. Stab crossover and full opening safety valve and close
3. Space out string
4. Shut-in (uppermost applicable BOP, typically annular preventer first. The HCR and choke will already be in the closed position).
5. Confirm shut-in
6. Notify tool pusher/company representative
7. Read and record the following:
 - a. SIDPP and SICP
 - b. Pit gain
 - c. Time
 - d. Regroup and identify forward plan.
 - e. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to compatible pipe ram.

General Procedure With No Pipe In Hole (Open Hole)

1. Sound alarm (alert crew)
2. Shut-in with blind rams or BSR. (The HCR and choke will already be in the closed position)
3. Confirm shut-in
4. Notify tool pusher/company representative

5. Read and record the following:
 - a. SICP
 - b. Pit gain
 - c. Time
6. Regroup and identify forward plan

General Procedures While Pulling BHA thru Stack

1. PRIOR to pulling last joint of drill pipe thru the stack.
 - a. Perform flow check, if flowing:
 - b. Sound alarm (alert crew)
 - c. Stab full opening safety valve and close
 - d. Space out drill string with tool joint just beneath the upper pipe ram
 - e. Shut-in using upper pipe ram. (The HCR and choke will already be in the closed position)
 - f. Confirm shut-in
 - g. Notify tool pusher/company representative
 - h. Read and record the following:
 - i. SIDPP and SICP
 - ii. Pit gain
 - iii. Time
 - iv. Regroup and identify forward plan
2. With BHA in the stack and compatible ram preventer and pipe combo immediately available.
 - a. Sound alarm (alert crew)
 - b. Stab crossover and full opening safety valve and close
 - c. Space out drill string with upset just beneath the compatible pipe ram
 - d. Shut-in using compatible pipe ram. (The HCR and choke will already be in the closed position.)
 - e. Confirm shut-in
 - f. Notify tool pusher/company representative
 - g. Read and record the following:
 - i. SIDPP and SICP
 - ii. Pit gain
 - iii. Time
 - iv. Regroup and identify forward plan
3. With BHA in the stack and NO compatible ram preventer and pipe combo immediately available.
 - a. Sound alarm (alert crew)
 - b. If possible to pick up high enough, pull string clear of the stack and follow “Open Hole” scenario
 - c. If impossible to pick up high enough to pull the string clear of the stack
 - d. Stab crossover, make up one joint/stand of drill pipe, and full opening safety valve and close
 - e. Space out drill string with tool joint just beneath the upper pipe ram

- f. Shut-in using upper pipe ram. (The HCR and choke will already be in the closed position)
- g. Confirm shut-in
- h. Notify tool pusher/company representative
- i. Read and record the following:
 - i. SIDPP and SICP
 - ii. Pit gain
 - iii. Time
- j. Regroup and identify forward plan



TenarisHydril Wedge 425[®]



Coupling	Pipe Body
Grade: P110-CY	Grade: P110-CY
Body: White	1st Band: White
1st Band: Grey	2nd Band: Grey
2nd Band: -	3rd Band: -
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	5.500 in.	Wall Thickness	0.361 in.	Grade	P110-CY
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry		Performance	
Nominal OD	5.500 in.	Wall Thickness	0.361 in.
Nominal Weight	20 lb/ft	Plain End Weight	19.83 lb/ft
Drift	4.653 in.	OD Tolerance	API
Nominal ID	4.778 in.		
		Body Yield Strength	641 x1000 lb
		Min. Internal Yield Pressure	12,640 psi
		SMYS	110,000 psi
		Collapse Pressure	11,100 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5.777 in.	Tension Efficiency	90 %	Minimum	15,700 ft-lb
Connection ID	4.734 in.	Joint Yield Strength	577 x1000 lb	Optimum	19,600 ft-lb
Make-up Loss	5.823 in.	Internal Pressure Capacity	12,640 psi	Maximum	21,600 ft-lb
Threads per inch	3.77	Compression Efficiency	90 %		
Connection OD Option	Regular	Compression Strength	577 x1000 lb		
		Max. Allowable Bending	82 °/100 ft		
		External Pressure Capacity	11,100 psi		
				Operation Limit Torques	
				Operating Torque	29,000 ft-lb
				Yield Torque	36,000 ft-lb

Notes

This connection is fully interchangeable with:
 TORQ® SFW™ - 5.5 in. - 0.361 in.
 Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

For the latest performance data, always visit our website: www.tenaris.com

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TenarisHydril Wedge 441®



Coupling	Pipe Body
Grade: P110-CY	Grade: P110-CY
Body: White	1st Band: White
1st Band: Grey	2nd Band: Grey
2nd Band: -	3rd Band: -
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	5.500 in.	Wall Thickness	0.361 in.	Grade	P110-CY
Min. Wall Thickness	87.50 %	Drift	API Standard	Type	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry		Performance	
Nominal OD	5.500 in.	Wall Thickness	0.361 in.
Nominal Weight	20 lb/ft	Plain End Weight	19.83 lb/ft
Drift	4.653 in.	OD Tolerance	API
Nominal ID	4.778 in.		
		Body Yield Strength	641 x1000 lb
		Min. Internal Yield Pressure	12,640 psi
		SMYS	110,000 psi
		Collapse Pressure	11,100 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5.852 in.	Tension Efficiency	81.50 %	Minimum	15,000 ft-lb
Coupling Length	8.714 in.	Joint Yield Strength	522 x1000 lb	Optimum	16,000 ft-lb
Connection ID	4.778 in.	Internal Pressure Capacity	12,640 psi	Maximum	19,200 ft-lb
Make-up Loss	3.780 in.	Compression Efficiency	81.50 %		
Threads per inch	3.40	Compression Strength	522 x1000 lb	Operation Limit Torques	
Connection OD Option	Regular	Max. Allowable Bending	71 °/100 ft	Operating Torque	32,000 ft-lb
		External Pressure Capacity	11,100 psi	Yield Torque	38,000 ft-lb
				Buck-On	
				Minimum	19,200 ft-lb
				Maximum	20,700 ft-lb

Notes

This connection is fully interchangeable with:
 Wedge 441® - 5.5 in. - 0.304 in.
 Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

For the latest performance data, always visit our website: www.tenaris.com

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5.500" 20.00 lb/ft P110-CY TenarisHydril Wedge 461™ Matched Strength



Special Data Sheet

TH DS-20.0359
12 August 2020
Rev 00

Nominal OD	5.500 in.	Wall Thickness	0.361 in.	Grade	P110-CY
Min Wall Thickness	87.5%	Type	CASING	Connection OD Option	MATCHED STRENGTH

Pipe Body Data

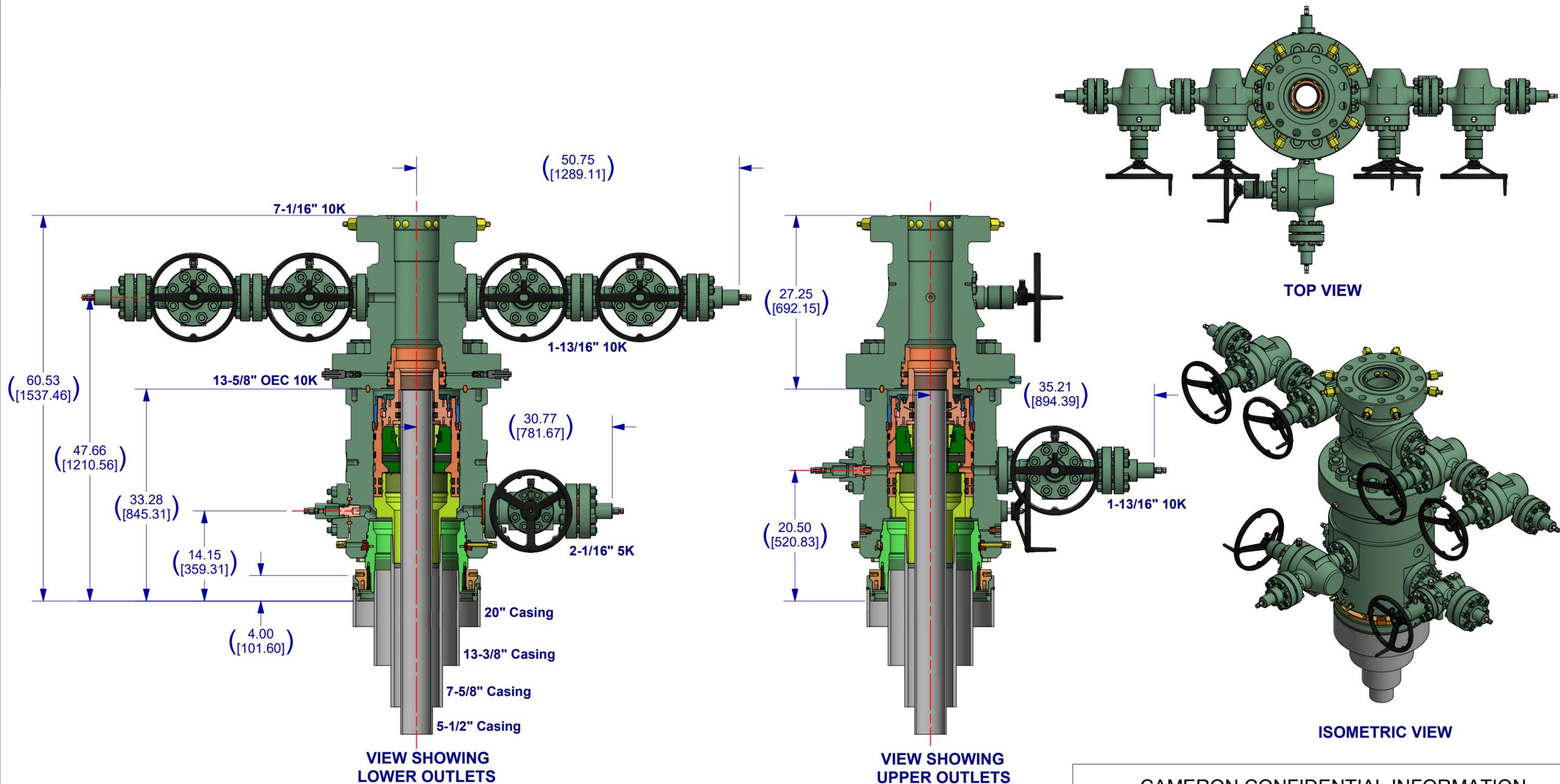
Geometry			Performance		
Nominal OD	5.500 in.	Nominal ID	4.778 in.	Body Yield Strength	641 x 1000 lbs
Nominal Weight	20.00 lbs/ft	Wall Thickness	0.361 in.	Internal Yield	12640 psi
Standard Drift Diameter	4.653 in.	Plain End Weight	19.83 lbs/ft	SMYS	110000 psi
Special Drift Diameter	N/A	OD Tolerance	API	Collapse Pressure	11110 psi

Connection Data

Geometry		Performance		Make-up Torques	
Matched Strength OD	6.050 in.	Tension Efficiency	100%	Minimum	17000 ft-lbs
Make-up Loss	3.775 in.	Joint Yield Strength	641 x 1000 lbs	Optimum	18000 ft-lbs
Threads per in.	3.40	Internal Yield	12640 psi	Maximum	21600 ft-lbs
Connection OD Option	MATCHED STRENGTH	Compression Efficiency	100%	Operational Limit Torques	
Coupling Length	7.714 in.	Compression Strength	641 x 1000 lbs	Operating Torque	32000 ft-lbs
		Bending	92 °/100 ft	Yield Torque	38000 ft-lbs
		Collapse	11110 psi	Buck-On Torques	
				Minimum	21600 ft-lbs
				Maximum	23100 ft-lbs

Notes

*If you need to use torque values that are higher than the maximum indicated, please contact a local Tenaris technical sales representative



NOTE: This is a proposal drawing and dimensions shown are subject to change during the final design process.

CAMERON CONFIDENTIAL INFORMATION			
DO NOT SCALE		 SURFACE SYSTEMS	13-5/8" 10K 'ADAPT-NST' WELLHEAD
DRAWN BY: L.FERRER	DATE: 01/14/2022		
CHECKED BY: C.OATES	DATE: 01/14/2022		
DRAWING NO: QD-06-00092	REV: 02		

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
 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 116345

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 116345
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	previous COA's apply	6/13/2022