S. Department of the Interior UREAU OF LAND MANAGEMENT		Sundry Print Repo
Well Name: PURE GOLD MDP1 29-17 FED COM	Well Location: T23S / R31E / SEC 29 / SESW / 32.2701494 / -103.8039245	County or Parish/State: EDDY / NM
Well Number: 8H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0545035	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001545754	Well Status: Drilling Well	Operator: OXY USA INCORPORATED

Notice of Intent

Sundry ID: 2640173

Type of Submission: Notice of Intent

Date Sundry Submitted: 10/18/2021

Date proposed operation will begin: 11/30/2021

Type of Action: Other Time Sundry Submitted: 02:02

Procedure Description: OXY USA Inc. respectfully requests approval to amend the approved APD directional plan, casing, cementing and mud programs. See the attached updated drill plan and directional plan for reference. Also note the C102 well plat for reference.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

New_KPLA_4S_Wellbore_Schematic_20211116102320.pdf

PUREGOLDMDP129_17FEDCOM8H_DrillPlan_20211116102301.pdf

PureGoldMDP129_17FedCom8HC102_Nov2021_20211116102207.pdf

PUREGOLDMDP129_17FEDCOM8H_TNSWedge461_5.500in_20_P110CY_20211018101858.pdf

PUREGOLDMDP129_17FEDCOM8H_TNSWedge441_5.500in_20_P110CY_20211018101851.pdf

PUREGOLDMDP129_17FEDCOM8H_TNSWedge425_5.500in_20_P110CY_20211018101846.pdf

PureGoldMDP129_28FederalCom8H_DirectPlan_20211018101803.pdf

PureGoldMDP129_28FederalCom8H_DirectPlot_20211018101746.pdf

<i>eived by OCD: 11/22/2021 9:11:18 AM</i> Well Name: PURE GOLD MDP1 29-17 FED COM	Well Location: T23S / R31E / SEC 29 / SESW / 32.2701494 / -103.8039245	County or Parish/State: EDDY /
Well Number: 8H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0545035	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001545754	Well Status: Drilling Well	Operator: OXY USA INCORPORATED

Conditions of Approval

Additional Reviews

Pure_Gold_MDP1_29_17_Fed_Com_8H_Sundry_ID_2640173_20211118095012.pdf

Operator Certification

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 submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signa	ature: LESLIE REEVES					
Name: OXY USA INCORP	ORATED					
Title: Advisor Regulatory						
Street Address: 5 GREENWAY PLAZA, SUITE 110						
City: HOUSTON	State: TX					
Phone: (713) 497-2492						
Email address: LESLIE_R	EEVES@OXY.COM					

Field Representative

Representative Name: Street Address: City:

Phone:

Email address:

State:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS BLM POC Phone: 5752342234 Disposition: Approved Signature: Chris Walls BLM POC Title: Petroleum Engineer BLM POC Email Address: cwalls@blm.gov

Zip:

Disposition Date: 11/18/2021

Signed on: NOV 16, 2021 10:23 AM

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA Incorporated
LEASE NO.:	NMNM0545035
LOCATION:	Section 29, T.23 S., R.31 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	Pure Gold 29-17 Fed Com 8H
SURFACE HOLE FOOTAGE:	430'/S & 2470'/W
BOTTOM HOLE FOOTAGE	2621'/S & 2600'/W

COA

H2S	C Yes	🖸 No	
Potash	🖸 None	C Secretary	🖸 R-111-P
Cave/Karst Potential	🖸 Low	C Medium	🕻 High
Cave/Karst Potential	Critical		
Variance	C None	🖸 Flex Hose	C Other
Wellhead	Conventional	C Multibowl	🖸 Both
Other	4 String Area	Capitan Reef	□ WIPP
Other	Fluid Filled	Cement Squeeze	🗖 Pilot Hole
Special Requirements	□ Water Disposal	COM	🗖 Unit

|--|

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

- 1. The 13-3/8 inch surface casing shall be set at approximately 461 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of

six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of <u>24 hours in the Potash Area</u> or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

- 3. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:
 - Cement should tie-back at least 500 feet into previous casing string and below the base of potash interval. Operator shall provide method of verification.
 Wait on cement (WOC) time for a primary cement job is to include

the lead cement slurry due to cave/karst or potash. Operator has proposed to pump down the 9-5/8" X 7-5/8" annulus post completion. Operator must run Echo meter to varify Comput Slurry top in the

completion. <u>Operator must run Echo-meter to verify Cement Slurry top in the</u> <u>annulus. Submit results to the BLM. No displacement fluid shall be utilized at</u> <u>top of the cement slurry.</u>

Operator has proposed an open annulus completion in R111P. Operator shall provide a method of verification pre-completion top of cement. <u>Submit results to</u> <u>the BLM. Pressure monitoring device and Pressure Safety Valves shall be</u> <u>installed at surface on both the 7-5/8" X 9-5/8" annulus and the 9-5/8" X 5-1/2"</u> <u>annulus for the life of the well.</u>

In the event of a casing failure during completion, the operator shall contact the BLM at (575-706-2779) and (575-361-2822 Eddy County).

- 4. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification. **Cement excess is less than 25%, more cement might be required.**

C. 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 **3000 (3M)** psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** inch intermediate casing shoe shall be **5000 (5M)** psi.
- c. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 7-5/8 inch intermediate casing shoe shall be 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (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 5000 (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.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. <u>When the Communitization Agreement number is known, it shall also be on the sign.</u>

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (Annular preventer must be tested to 70% working pressure)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required.
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.

Offline Cementing

Contact the BLM prior to the commencement of any offline cementing procedure.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
 - Eddy County Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
 - Lea County Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- <u>Wait on cement (WOC) for Potash Areas:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least <u>24</u> <u>hours</u>. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. <u>Wait on cement (WOC) for Water Basin:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. 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. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - 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. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. 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.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not

hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.
- C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

 District I

 1625 N. French Dr., Hobbs, NM 88240

 Phone: (375) 393-6161 Fax: (575) 393-0720

 District II

 811 S. First St., Artesia, NM 88210

 Phone: (375) 748-1283 Fax: (575) 748-9720

 District III

 1000 Rio Brazos Road, Aztec, NM 87410

 Phone: (305) 334-6178 Fax: (505) 334-6170

 District IIV

 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 Pool Code									Pool Name			
30-015-45754 33740						IN	IGLE WE	ELLS; BON	IE SPRIN	G		
Property Code						Property Name					И	Vell Number
324872 PURE GOLD MDP.						1 "29_17" FEDERAL COM					8H	
OGRID No. Operator Name Elevation								Elevation				
16696		OXY USA INC. 3357							357.6'			
Surface Location												
UL or lot no.	Section	Township	wnship Range				Feet from the	North/South line	Feet from the	East/We	est line	County
N	29	23 SOUTH	31 E.	AST, N.	М. Р. М.	.P.M. 430' SOUTH 2470' WE			WES	T	EDDY	
Bottom Hole Location If Different From Surface												
UL or lot no.	Section	Township	ownship Range			Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County
K	17	23 SOUTH	OUTH 31 EAST, N.M.P.M.				2621'	SOUTH	2600'	WES	T	EDDY
Dedicated	Acres	Joint or Infill	Consolidati	ion Code	Order No.	1		1				1
800												

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.

NAD 83 FT 2600' Y=474917.46 BOTTOM HOLE LOCATION X=70483.33 US FT 2600' I X=70476.66 US FT Y=474937.46 VS FT 2600' I X=70476.66 US FT Y=474937.45 VS FT 2600' I X=70474.66 US FT Y=474957.46 US FT X=66666.01 US FT Y=474857.89 US FT Y=474957.46 US FT X=66662.01 US FT Y=474857.89 US FT	OPERATOR CERTIFICATION
XT701027 NAD 27 YT=774843.43 US FT 2600' NAD 27 NAD 1983 YT=474843.43 US FT 1000 US F	I hereby certify that the information contained herein is true and
x = 663660.16 US FT x = 663660.16 US FT x = 66293.49 US FT x = 766125.56 US FT x = 766125.56 US FT x = 766125.56 US FT x = 766125.56 US FT x = 766293.49 US FT	complete to the best of my knowledge and belief, and that this
LAT.: N 32.3044192' N NAD 1927	organization either owns a working interest or unleased mineral
Y=474830.44 US FT X=664942.39 US FT	interest in the land including the proposed bottom hole location or
$\ 18 17 \Rightarrow 17 16 AT \cdot N 32 3042964^{\circ} \ $	has a right to drill this well at this location pursuant to a contract
X=472259.53 US FT	with an owner of such a mineral or working interest, or to a
NAD 83 19 20 21 LONG:: W 103.7994847' Y=472259.53 US FT Y=472276.56 US FT X=704857.10 US FT Y=472276.56 US FT Y=472199.97 US FT Y=47216.99 US FT Y=47216.69 US FT Y=47216.99 US FT Y=47216.69 US FT Y=472216.99 US FT X=665673.86 US FT NAD 1983	voluntary pooling agreement or a compulsory pooling order
	heretofore entered by the division.
Y=474810.08 Y=474810.08 Y=76126.01 Y=706126.01 Y=706126.01 Y=706126.01 Y=706126.01 Y=706126.01 Y=706126.01	Leslie I. Reeves 10/18/2021
O Y LON:: W 103.7999719" Z K NAD 1927 Y=474750.44 US FT Y=474750.44 US FT	Signature Date
Y=474750.44 Y=474750.44 Y=474750.44 Y=474750.44 Y=474750.44 Y=10 Y=474750.44 Y=474750.44 Y=10 <	LESLIE REEVES
LAT.: N 32.3040765"	
LONG.: W 103.7994846"	LESLIE_REEVES@OXY.COM
	A MALLE A GOLVOO
NAD 83	
NAD B3	SURVEYOR CERTIFICATION
19 20 11 20 21 New MEXICO EASI	I hereby certify that the well location shown on this
<i>GRID AZ = 160°47'24"</i>	plat was plotted from field notes of actual surveys made by my orfunder my supervision, and that the
401.68' LAT.: N 32.2684528' (SHL TO KOP) B K NAD 1927	same is true and correct to the best of my belief.
NAD 1927 SURFACE LOCATION	SAL (15079)
NEW MEXICO EAST	Diff of the State
NAD 1983 Y=462135.19 US X=706067.26 US FT IS	Date of Survey
LAT.: N 32.2693599'	Date of Survey Signature and Scalue SSIONAL UN Professional Surveyor:
NAD 1927	Professional Surveyor.
Y=462075.89 US FT NAD 1983 X=664883.71 US FT Y=461755.88 US FT LAT:: N 32.2692369' X=706199.42 US FT	Λ
LONG.: W 103.7998800°	T Ale Mulahan
	Jerry G. Clark 11/4/2021
NAD B3 Constraint Constraint <thconstraint< th=""> Constraint</thconstraint<>	Certificate Number 15079
X=663735.38 US FT 30 29 2600 20100 29 28 100 29 28	WO# 180605WL-b (Rev. B) (AS)

Released to Imaging: 1/13/2022 8:40:33 AM 56

Oxy USA Inc. - PURE GOLD MDP1 29_17 FED COM 8H Drill Plan

1. Geologic Formations

TVD of Tar	get (ft): 10933	Pilot Hole Depth (ft):	
Total Measured Dep	oth (ft): 24205	Deepest Expected Fresh Water (ft):	399

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	399	399	
Salado	735	735	Salt
Castile	2683	2683	Salt
Delaware	elaware 4101		Oil/Gas/Brine
Bell Canyon	4136	4136	Oil/Gas/Brine
Cherry Canyon	5056	5056	Oil/Gas/Brine
Brushy Canyon	6271	6270	Losses
Bone Spring	7976	7951	Oil/Gas
Bone Spring 1st	9021	8981	Oil/Gas
Bone Spring 2nd	9673	9623	Oil/Gas
Bone Spring 3rd	10910	10789	Oil/Gas
Wolfcamp			Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

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

2. Casing Program

		N	ID	T١	/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	459	0	459	13.375	54.5	J-55	BTC
Salt	12.25	0	4201	0	4201	9.625	40	L-80 HC	BTC
Intermediate	8.75	0	5771	0	5771	7.625	26.4	L-80 HC	TMK UP SF
Intermediate	8.75	5771	10207	5771	10147	7.625	26.4	L-80 HC	TMK UP FJ
Production	6.75	0	24205	0	10933	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.

All Casing SF Values will meet or exceed						
those below						
SF	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?	Ν
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?	Ν
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back	
500' into previous casing?	
	37
Is well located in R-111-P and SOPA?	Y
If yes, are the first three strings cemented to surface?	Y
Is 2 nd string set 100' to 600' below the base of salt?	Y
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
	•
Is well located in critical Cave/Karst?	Ν
If yes, are there three strings cemented to surface?	

Occidental - Permian New Mexico

3. Cementing Program

Section	Stage	Slurry:	Capacities	ft^3/ft	Excess:	From	То	Sacks	Volume (ft^3)	Placement
Surface	1	Surface - Tail	OH x Csg	0.6946	100%	459	-	479	638	Circulate
Int.1	1	Intermediate - Tail	OH x Csg	0.3132	20%	4,201	3,701	141	188	Circulate
Int.1	1	Intermediate - Lead	OH x Csg	0.3132	50%	3,701	459	880	1523	Circulate
Int.1	1	Intermediate - Lead	Csg x Csg	0.3627	0%	459	-	96	166	Circulate
Int. 2	1	Intermediate 1S - Tail	OH x Csg	0.1005	5%	10,207	6,521	236	389	Circulate
Int. 2	2	Intermediate 2S - Tail BH	OH x Csg	0.1005	25%	6,521	4,201	152	291	Bradenhead - Post Comp
Int. 2	2	Intermediate 2S - Tail BH	Csg x Csg	0.1086	0%	4,201	3,701	28	54	Bradenhead - Post Comp
Prod.	1	Production - Tail	OH x Csg	0.0835	20%	24,205	10,207	1017	1403	Circulate
Prod.	1	Production - Tail	Csg x Csg	0.0999	0%	10,207	9,707	36	50	Circulate

Description	Density (Ib/gal)	Yield (ft3/sk)	Water (gal/sk)	500psi Time (hh:mm)	Cmt. Class	Accelerator	Retarder	Dispersant	Salt
Surface - Tail	14.8	1.33	6.365	5:26	С	х			
Intermediate - Lead	12.9	1.73	8.784	15:26	Pozz		х		
Intermediate - Tail	14.8	1.33	6.368	7:11	С	х			
Intermediate 1S - Tail	13.2	1.65	8.64	11:54	Н	х	х	х	х
Intermediate 2S - Tail BH	12.9	1.92	10.41	23:10	С	х			
Production - Tail	13.2	1.38	6.686	3:39	Н		х	х	х

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.

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Тур	oe 🔹	~	Tested to:	TVD Depth (ft) per Section:
		3M	Annı	ılar 🔹		70% of working pressure	
			Blind I	Ram 💊			
12.25" Hole	13-5/8"	ЗM	Pipe F	Ram		250 psi / 3000 psi	4201
		5101	Double	Ram 💊		230 psi / 3000 psi	
			Other*				
	13-5/8"	5M	Annı	ılar 🔹		70% of working pressure	10147
			Blind I	Ram 💊			
8.75" Hole		5M	Pipe F	Ram		250 psi / 5000 psi	
			Double	Ram 🔹	\checkmark	250 psi / 5000 psi	
			Other*				
		5M	Annı	ılar 🔹	<	100% of working pressure	
6.75" Hole			Blind I	Ram 🛛 🖌			
	13-5/8"	1014	Pipe F	Ram		250 psi / 10000 psi	10933
		10M	Double	Ram	<	250 psi / 10000 psi	
			Other*				

*Specify if additional ram is utilized

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

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

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.

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

5. Mud Program

Section	Depth		Depth - TVD		Tuno	Weight	Viscosity	Water		
Section	From (ft)	To (ft)	From (ft)	To (ft)	Туре	(ppg)	viscosity	Loss		
Surface	0	459	0	459	Water-Based Mud	8.6 - 8.8	40-60	N/C		
Intermediate 1	459	4201	459	4201	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C		
Intermediate 2	4201	10207	4201	10147	Water-Based or Oil- Based Mud	8.0 - 10.0	38-50	N/C		
Production	10207	24205	10147	10933	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 Monitoring
loss or gain of fluid?	

6. Logging and Testing Procedures

Log	ging, 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

Add	tional 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	7107 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	168°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.

Ν	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

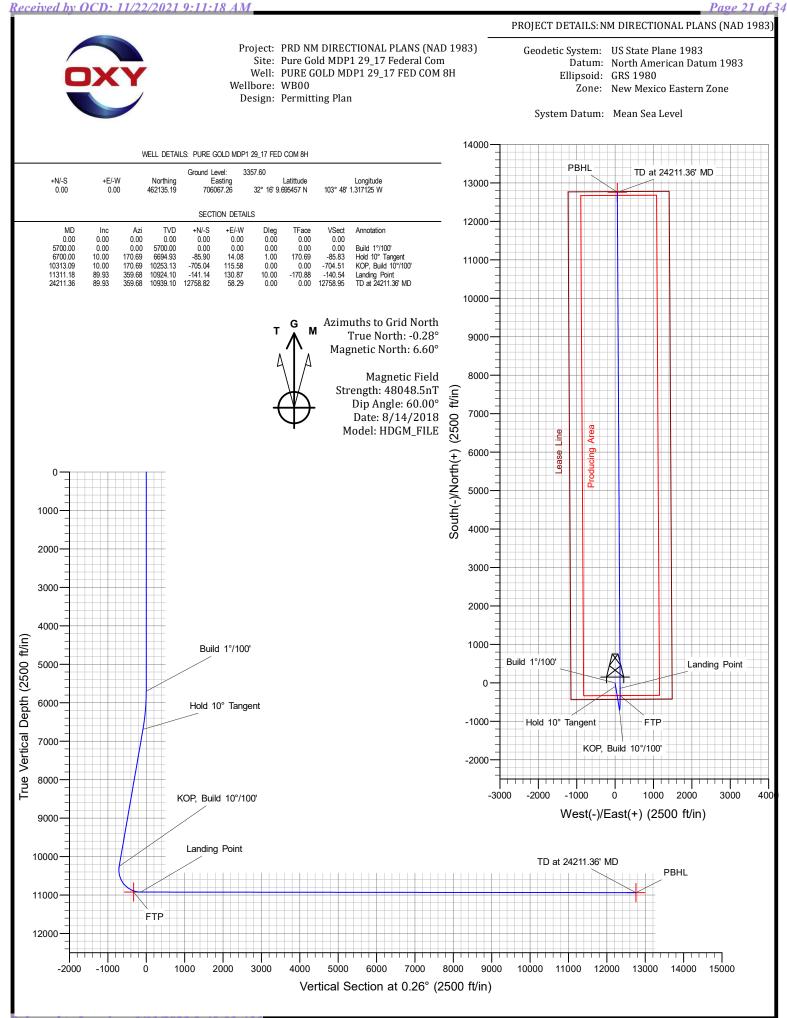
Total Estimated Cuttings Volume: 1749 bbls

Attachments

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

9. Company Personnel

Name	<u>Title</u>	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

PRD NM DIRECTIONAL PLANS (NAD 1983) Pure Gold MDP1 29_17 Federal Com PURE GOLD MDP1 29_17 FED COM 8H

WB00

Plan: Permitting Plan

Standard Planning Report

23 September, 2021

OXY Planning Report

)atabase:	HOPSF	P			Local Co-	ordinate Refe	erence:	Well PURE GC	DLD MDP1 29	17 FED COM 8H	
Company:	ENGIN	EERING DES	SIGNS		TVD Refe	rence:	ſ	RKB=26.5' @ 3	3384.10ft		
Project:			NAL PLANS	· /	MD Refere	ence:	F	RKB=26.5' @ 3	3384.10ft		
Site:			17 Federal (North Ref			Grid			
Vell: Vellbore:		JOLD MDP1	29_17 FED (COM 8H	Survey Ca	alculation Me	thod:	Minimum Curva	ature		
Velibore: Design:		WB00 Permitting Plan									
•											
Project			NAL PLANS (I	NAD 1983)							
Map System: Geo Datum:		Plane 1983 erican Datum	1983		System Da	tum:	Me	an Sea Level			
Map Zone:		ico Eastern Z					Us	ing geodetic so	cale factor		
•											
Site	Pure Go	ld MDP1 29_	17 Federal C	om							
Site Position:			North	-			Latitude:			32° 16' 12.264239	
From:	Мар		Eastin	•	704,5		Longitude:		1	03° 48' 19.372708	
Position Uncertaint	<u>y:</u>	50.	.00 ft Slot F	Radius:		13.200 in	Grid Conver	gence:		0.28	
Well	PURE G	OLD MDP1 2	29_17 FED C	DM 8H							
Well Position	+N/-S	-25	1.94 ft No	orthing:		462,135.19 u		tude:		32° 16' 9.695457	
	+E/-W	1,55	1.57 ft Ea	sting:		706,067.26 u	usft Lon	gitude:		103° 48' 1.317125	
Position Uncertaint	y		1.00 ft W	ellhead Eleva	tion:	0.0	0 ft Gro	und Level:		3,357.60	
Wellbore	WB00										
Magnetics	Mod	el Name	Sampl	e Date	Declinat (°)	tion	Dip A (°			Strength nT)	
	ŀ	HDGM_FILE		8/14/2018	6.88 60.0			60.00	0 48,048.5000000		
Design	Permittir	ıg Plan									
Audit Notes:											
Version:			Phas	e: P	ROTOTYPE	Tie	On Depth:		0.00		
								Dir	oction		
	Depth From (TVD)			וחע	+N/-S +E/-W (ft) (ft)			Direction (°)			
		D	epth From (T (ft)	VD)	+N/-S (ft)				(°)		
		D		VD)			:)		(°) 0.26		
Vertical Section:			(ft) 0.00	VD)	(ft)	(ft	:)				
Vertical Section: Plan Survey Tool P	J	Date	(ft)	VD)	(ft)	(ft	:)				
Vertical Section:	Program Depth (ft)	Date	(ft) 0.00	VD)	(ft)	(ft	:)				
Vertical Section: Plan Survey Tool P Depth From (ft)	Depth	Date To Survey	(ft) 0.00 9/23/2021 7 (Wellbore)		(ft) 0.00 Tool Name	(ff))0				
Vertical Section: Plan Survey Tool P Depth From (ft)	Depth (ft)	Date To Survey	(ft) 0.00 9/23/2021	10)	(ft) 0.00 Tool Name B001Mb_MWI	(ff 0.0))0				
Vertical Section: Plan Survey Tool P Depth From (ft)	Depth (ft)	Date To Survey	(ft) 0.00 9/23/2021 7 (Wellbore)	10)	(ft) 0.00 Tool Name	(ff 0.0))0				
Vertical Section: Plan Survey Tool P Depth From (ft)	Depth (ft)	Date To Survey	(ft) 0.00 9/23/2021 7 (Wellbore)	10)	(ft) 0.00 Tool Name B001Mb_MWI	(ff 0.0))0				
Vertical Section: Plan Survey Tool P Depth From (ft) 1 0.00	Depth (ft)	Date To Survey	(ft) 0.00 9/23/2021 7 (Wellbore)	10)	(ft) 0.00 Tool Name B001Mb_MWI	(ff 0.0 D+HRGM + HRGM))0				
Vertical Section: Plan Survey Tool P Depth From (ft) 1 0.00 Plan Sections Measured Depth Inclii	Depth (ft) 24,211	Date To Survey .36 Permitt	(ft) 0.00 9/23/2021 7 (Wellbore) ing Plan (WBC)0) +N/-S	(ft) 0.00 Tool Name B001Mb_MWI OWSG MWD +E/-W	(ff 0.0 D+HRGM + HRGM Dogleg Rate	e) 00 Remarks Build Rate	Turn Rate	0.26 TFO		
Vertical Section: Plan Survey Tool P Depth From (ft) 1 0.00 Plan Sections Measured Depth Inclii	Depth (ft) 24,211	Date To Survey .36 Permitt	(ft) 0.00 9/23/2021 r (Wellbore) ing Plan (WB0)0)	(ft) 0.00 Tool Name B001Mb_MWI OWSG MWD	(ff 0.0 D+HRGM + HRGM	;))0 Remarks Build	Turn	0.26	Target	
Vertical Section: Plan Survey Tool P Depth From (ft) 1 0.00 Plan Sections Measured Depth Inclii (ft)	Depth (ft) 24,211	Date To Survey .36 Permitti Azimuth (°)	(ft) 0.00 9/23/2021 7 (Wellbore) ing Plan (WBC Vertical Depth (ft)	10) +N/-S (ft)	(ft) 0.00 Tool Name B001Mb_MWI OWSG MWD +E/-W (ft)	(ff 0.0 D+HRGM + HRGM Dogleg Rate (°/100ft)	Remarks Build Rate (°/100ft)	Turn Rate (°/100ft)	0.26 TFO (°)	Target	
Vertical Section: Plan Survey Tool P Depth From (ft) 1 0.00 Plan Sections Measured Depth Inclii	Depth (ft) 24,211	Date To Survey .36 Permitt	(ft) 0.00 9/23/2021 7 (Wellbore) ing Plan (WBC)0) +N/-S	(ft) 0.00 Tool Name B001Mb_MWI OWSG MWD +E/-W	(ff 0.0 D+HRGM + HRGM Dogleg Rate	e) 00 Remarks Build Rate	Turn Rate	0.26 TFO	Target	
Vertical Section: Plan Survey Tool P Depth From (ft) 1 0.00 Plan Sections Measured Depth Inclin (ft) 0.00	Depth (ft) 24,211 nation (°) 0.00	Date To Survey .36 Permitti Azimuth (°) 0.00	(ft) 0.00 9/23/2021 r (Wellbore) ing Plan (WBC Vertical Depth (ft) 0.00	10) +N/-S (ft) 0.00	(ft) 0.00 Tool Name B001Mb_MWI OWSG MWD +E/-W (ft) 0.00	(ff 0.0 D+HRGM + HRGM Dogleg Rate (°/100ft) 0.00	Remarks Build Rate (°/100ft) 0.00	Turn Rate (°/100ft) 0.00	0.26 TFO (°) 0.00	Target	
Vertical Section: Plan Survey Tool P Depth From (ft) 1 0.00 Plan Sections Measured Depth Inclii (ft) 0.00 5,700.00	Depth (ft) 24,211 nation (°) 0.00 0.00	Date To Survey .36 Permitt Azimuth (°) 0.00 0.00	(ft) 0.00 9/23/2021 7 (Wellbore) ing Plan (WBC Vertical Depth (ft) 0.00 5,700.00	00) +N/-S (ft) 0.00 0.00	(ft) 0.00 Tool Name B001Mb_MWI OWSG MWD +E/-W (ft) 0.00 0.00	(ff 0.0 D+HRGM + HRGM Dogleg Rate (°/100ft) 0.00 0.00	;))0 Remarks Build Rate (°/100ft) 0.00 0.00	Turn Rate (°/100ft) 0.00 0.00	0.26 TFO (°) 0.00 0.00	Target	
Vertical Section: Plan Survey Tool P Depth From (ft) 1 0.00 Plan Sections Measured Depth (ft) Incli (ft) 0.00 5,700.00 6,700.00	Depth (ft) 24,211 nation (°) 0.00 0.00 10.00	Date To Survey .36 Permitt Azimuth (°) 0.00 0.00 170.69	(ft) 0.00 9/23/2021 r (Wellbore) ing Plan (WB0 Vertical Depth (ft) 0.00 5,700.00 6,694.93	00) +N/-S (ft) 0.00 0.00 -85.90	(ft) 0.00 Tool Name B001Mb_MWI OWSG MWD +E/-W (ft) 0.00 0.00 0.00 14.08	(ff 0.0 0+HRGM + HRGM Dogleg Rate (°/100ft) 0.00 0.00 1.00	;))0 Remarks Build Rate (°/100ft) 0.00 0.00 1.00	Turn Rate (°/100ft) 0.00 0.00 0.00	TFO (°) 0.00 0.00 170.69	Target	

Database:	HOPSPP	Local Co-ordinate Reference:	Well PURE GOLD MDP1 29_17 FED COM 8H
Company: Project: Site: Well: Wellbore: Design:	ENGINEERING DESIGNS PRD NM DIRECTIONAL PLANS (NAD 1983) Pure Gold MDP1 29_17 Federal Com PURE GOLD MDP1 29_17 FED COM 8H WB00 Permitting Plan	TVD Reference: MD Reference: North Reference: Survey Calculation Method:	RKB=26.5' @ 3384.10ft RKB=26.5' @ 3384.10ft Grid Minimum Curvature

100.00 0.00 0.00 100.00 0.00	n 9 ft)
100.00 0.00 0.00 100.00 0.00	0.00
200.00 0.00 0.00 200.00 0.00	0.00
300.00 0.00 0.00 300.00 0.00	0.00
400.00 0.00 0.00 400.00 0.00	0.00
500.00 0.00 0.00 500.00 0.00	0.00
600.00 0.00 0.00 600.00 0.00	
700.00 0.00 0.00 700.00 0.00 0.00 0.00	0.00 0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
1,900.00 0.00 0.00 1,900.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00
2,000.00 0.00 0.00 2,000.00 0.00 0.00 0.	0.00
	0.00
2,200.00 0.00 0.00 2,200.00 0.00 0.00 0.	0.00
	0.00
2,400.00 0.00 0.00 2,400.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00
2,500.00 0.00 0.00 2,500.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00
	0.00
	0.00
	0.00
	0.00
3,000.00 0.00 0.00 3,000.00 0.00 0.00 0.	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00 0.00
	0.00 0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
5,300.00 0.00 5,300.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00

Database:	HOPSPP	Local Co-ordinate Reference:	Well PURE GOLD MDP1 29_17 FED COM 8H
Company: Project: Site:	ENGINEERING DESIGNS PRD NM DIRECTIONAL PLANS (NAD 1983) Pure Gold MDP1 29 17 Federal Com	TVD Reference: MD Reference: North Reference:	RKB=26.5' @ 3384.10ft RKB=26.5' @ 3384.10ft Grid
Well: Wellbore: Design:	PURE GOLD MDP1 29_17 FED COM 8H WB00 Permitting Plan	Survey Calculation Method:	Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00 5,600.00 5,700.00	0.00 0.00 0.00	0.00 0.00 0.00	5,500.00 5,600.00 5,700.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
5,800.00 5,900.00	1.00 2.00	170.69 170.69	5,800.00 5,899.96	-0.86 -3.44	0.14 0.56	-0.86 -3.44	1.00 1.00	1.00 1.00	0.00 0.00
6,000.00 6,100.00	3.00 4.00	170.69 170.69	5,999.86 6,099.68	-7.75 -13.77	1.27 2.26	-7.74 -13.76	1.00 1.00	1.00 1.00	0.00 0.00
6,200.00	5.00	170.69	6,199.37	-21.52	3.53	-21.50	1.00	1.00	0.00
6,300.00 6,400.00	6.00 7.00	170.69 170.69	6,298.90 6,398.26	-30.97 -42.14	5.08 6.91	-30.95 -42.11	1.00 1.00	1.00 1.00	0.00 0.00
6,500.00 6,600.00	8.00 9.00	170.69 170.69	6,497.40 6,596.30	-55.03 -69.61	9.02 11.41	-54.98 -69.56	1.00 1.00	1.00 1.00	0.00 0.00
6,700.00	10.00	170.69	6,694.93	-85.90	14.08	-85.83	1.00	1.00	0.00
6,800.00 6,900.00	10.00 10.00	170.69 170.69	6,793.41 6,891.89	-103.03 -120.17	16.89 19.70	-102.96 -120.08	0.00 0.00	0.00 0.00	0.00 0.00
7,000.00	10.00	170.69	6,990.37	-137.31	22.51	-137.20	0.00	0.00	0.00
7,100.00	10.00 10.00	170.69 170.69	7,088.85 7,187.33	-154.44 -171.58	25.32 28.13	-154.33 -171.45	0.00 0.00	0.00 0.00	0.00 0.00
7,300.00	10.00	170.69	7,285.82	-188.72	30.94	-188.57	0.00	0.00	0.00
7,400.00	10.00	170.69	7,384.30	-205.85	33.75	-205.69	0.00	0.00	0.00
7,500.00 7,600.00	10.00 10.00	170.69 170.69	7,482.78 7,581.26	-222.99 -240.12	36.56 39.36	-222.82 -239.94	0.00 0.00	0.00 0.00	0.00 0.00
7,600.00	10.00	170.69	7,581.26	-240.12 -257.26	39.36 42.17	-239.94 -257.06	0.00	0.00	0.00
7,800.00	10.00	170.69	7,778.22	-274.40	44.98	-274.19	0.00	0.00	0.00
7,900.00	10.00	170.69	7,876.70	-291.53	47.79	-291.31	0.00	0.00	0.00
8,000.00 8,100.00	10.00 10.00	170.69 170.69	7,975.18 8,073.66	-308.67 -325.80	50.60 53.41	-308.43 -325.56	0.00 0.00	0.00 0.00	0.00 0.00
8,200.00	10.00	170.69	8,172.14	-325.80	56.22	-325.56	0.00	0.00	0.00
8,300.00	10.00	170.69	8,270.62	-360.08	59.03	-359.80	0.00	0.00	0.00
8,400.00	10.00	170.69	8,369.10	-377.21	61.84	-376.93	0.00	0.00	0.00
8,500.00 8,600.00	10.00 10.00	170.69 170.69	8,467.58 8,566.07	-394.35 -411.48	64.65 67.46	-394.05 -411.17	0.00 0.00	0.00 0.00	0.00 0.00
8,700.00	10.00	170.69	8,664.55	-428.62	70.27	-428.29	0.00	0.00	0.00
8,800.00	10.00	170.69	8,763.03	-445.76	73.08	-445.42	0.00	0.00	0.00
8,900.00	10.00	170.69	8,861.51	-462.89	75.88	-462.54	0.00	0.00	0.00
9,000.00 9,100.00	10.00 10.00	170.69 170.69	8,959.99 9,058.47	-480.03 -497.16	78.69 81.50	-479.66 -496.79	0.00 0.00	0.00 0.00	0.00 0.00
9,200.00	10.00	170.69	9,156.95	-514.30	84.31	-513.91	0.00	0.00	0.00
9,300.00	10.00	170.69	9,255.43	-531.44	87.12	-531.03	0.00	0.00	0.00
9,400.00 9,500.00	10.00 10.00	170.69 170.69	9,353.91 9,452.39	-548.57 -565.71	89.93 92.74	-548.16 -565.28	0.00 0.00	0.00 0.00	0.00 0.00
9,600.00	10.00	170.69	9,452.59 9,550.87	-582.84	92.74 95.55	-582.40	0.00	0.00	0.00
9,700.00	10.00	170.69	9,649.35	-599.98	98.36	-599.53	0.00	0.00	0.00
9,800.00	10.00	170.69	9,747.84	-617.12	101.17	-616.65	0.00	0.00	0.00
9,900.00	10.00	170.69	9,846.32	-634.25	103.98	-633.77	0.00	0.00	0.00
10,000.00 10,100.00	10.00 10.00	170.69 170.69	9,944.80 10,043.28	-651.39 -668.53	106.79 109.60	-650.89 -668.02	0.00 0.00	0.00 0.00	0.00 0.00
10,200.00	10.00	170.69	10,043.28	-685.66	112.40	-685.14	0.00	0.00	0.00
10,300.00	10.00	170.69	10,240.24	-702.80	115.21	-702.26	0.00	0.00	0.00
10,313.09	10.00	170.69	10,253.13	-705.04	115.58	-704.51	0.00	0.00	0.00
10,400.00	1.97	126.60	10,339.52	-713.39	118.01	-712.85	10.00	-9.24	-50.73
10,500.00 10,600.00	8.95 18.88	9.74 4.30	10,439.13 10,536.08	-706.73 -682.87	120.71 123.25	-706.18 -682.30	10.00 10.00	6.98 9.92	-116.85 -5.45
10,000.00	10.00	4.30	10,030.08	-002.07	123.23	-002.30	10.00	9.92	-0.40

COMPASS 5000.15 Build 91E

Database:	HOPSPP	Local Co-ordinate Reference:	Well PURE GOLD MDP1 29_17 FED COM 8H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3384.10ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3384.10ft
Site:	Pure Gold MDP1 29_17 Federal Com	North Reference:	Grid
Well:	PURE GOLD MDP1 29_17 FED COM 8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,700.00 10,800.00	28.85 38.84	2.54 1.64	10,627.42 10,710.36	-642.53 -586.94	125.54 127.51	-641.95 -586.35	10.00 10.00	9.98 9.99	-1.75 -0.91
10,900.00 11,000.00 11,100.00 11,200.00 11,300.00	48.83 58.83 68.82 78.82 88.82	1.06 0.63 0.29 359.99 359.71	10,782.40 10,841.34 10,885.40 10,913.23 10,923.98	-517.78 -437.17 -347.54 -251.62 -152.33	129.10 130.27 130.97 131.20 130.93	-517.19 -436.57 -346.93 -251.02 -151.73	10.00 10.00 10.00 10.00 10.00	9.99 9.99 10.00 10.00 10.00	-0.58 -0.43 -0.34 -0.30 -0.28
11,311.18 11,400.00 11,500.00 11,600.00 11,700.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68 359.68	10,924.11 10,924.21 10,924.32 10,924.44 10,924.56	-141.14 -52.33 47.67 147.67 247.67	130.87 130.37 129.81 129.25 128.68	-140.54 -51.73 48.26 148.26 248.25	10.00 0.00 0.00 0.00 0.00	10.00 0.00 0.00 0.00 0.00	-0.28 0.00 0.00 0.00 0.00
11,800.00 11,900.00 12,000.00 12,100.00 12,200.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68 359.68	10,924.67 10,924.79 10,924.91 10,925.02 10,925.14	347.66 447.66 547.66 647.66 747.66	128.12 127.56 126.99 126.43 125.87	348.25 448.24 548.24 648.23 748.22	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
12,300.00 12,400.00 12,500.00 12,600.00 12,700.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68	10,925.25 10,925.37 10,925.49 10,925.60 10,925.72	847.66 947.65 1,047.65 1,147.65 1,247.65	125.31 124.74 124.18 123.62 123.06	848.22 948.21 1,048.21 1,148.20 1,248.20	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
12,800.00 12,900.00 13,000.00 13,100.00 13,200.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68 359.68	10,925.84 10,925.95 10,926.07 10,926.18 10,926.30	1,347.65 1,447.65 1,547.64 1,647.64 1,747.64	122.49 121.93 121.37 120.81 120.24	1,348.19 1,448.19 1,548.18 1,648.18 1,748.17	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
13,300.00 13,400.00 13,500.00 13,600.00 13,700.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68 359.68	10,926.42 10,926.53 10,926.65 10,926.77 10,926.88	1,847.64 1,947.64 2,047.64 2,147.63 2,247.63	119.68 119.12 118.56 117.99 117.43	1,848.17 1,948.16 2,048.16 2,148.15 2,248.15	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
13,800.00 13,900.00 14,000.00 14,100.00 14,200.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68 359.68	10,927.00 10,927.11 10,927.23 10,927.35 10,927.46	2,347.63 2,447.63 2,547.63 2,647.63 2,747.62	116.87 116.31 115.74 115.18 114.62	2,348.14 2,448.14 2,548.13 2,648.12 2,748.12	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
14,300.00 14,400.00 14,500.00 14,600.00 14,700.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68 359.68	10,927.58 10,927.70 10,927.81 10,927.93 10,928.04	2,847.62 2,947.62 3,047.62 3,147.62 3,247.62	114.05 113.49 112.93 112.37 111.80	2,848.11 2,948.11 3,048.10 3,148.10 3,248.09	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
14,800.00 14,900.00 15,000.00 15,100.00 15,200.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68 359.68	10,928.16 10,928.28 10,928.39 10,928.51 10,928.63	3,347.61 3,447.61 3,547.61 3,647.61 3,747.61	111.24 110.68 110.12 109.55 108.99	3,348.09 3,448.08 3,548.08 3,648.07 3,748.07	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
15,300.00 15,400.00 15,500.00 15,600.00 15,700.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68	10,928.74 10,928.86 10,928.97 10,929.09 10,929.21	3,847.61 3,947.60 4,047.60 4,147.60 4,247.60	108.43 107.87 107.30 106.74 106.18	3,848.06 3,948.06 4,048.05 4,148.05 4,248.04	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
15,800.00 15,900.00	89.93 89.93	359.68 359.68	10,929.32 10,929.44	4,347.60 4,447.60	105.62 105.05	4,348.04 4,448.03	0.00 0.00	0.00 0.00	0.00 0.00

Database:	HOPSPP	Local Co-ordinate Reference:	Well PURE GOLD MDP1 29_17 FED COM 8H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3384.10ft
Project: Site:	PRD NM DIRECTIONAL PLANS (NAD 1983) Pure Gold MDP1 29_17 Federal Com	MD Reference: North Reference:	RKB=26.5' @ 3384.10ft Grid
Well: Wellbore:	PURE GOLD MDP1 29_17 FED COM 8H WB00	Survey Calculation Method:	Minimum Curvature
Design:	Permitting Plan		

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
16,000.00	89.93	359.68	10,929.56	4,547.59	104.49	4,548.02	0.00	0.00	0.00
16,100.00	89.93	359.68	10,929.67	4,647.59	103.93	4,648.02	0.00	0.00	0.00
16,200.00	89.93	359.68	10,929.79	4,747.59	103.37	4,748.01	0.00	0.00	0.00
16 200 00	00.02	250.69	10,929.90	4 9 4 7 5 9	100.00	4 0 4 0 0 4	0.00	0.00	0.00
16,300.00	89.93	359.68		4,847.59	102.80 102.24	4,848.01	0.00		
16,400.00 16,500.00	89.93 89.93	359.68 359.68	10,930.02 10,930.14	4,947.59 5,047.59	102.24	4,948.00 5,048.00	0.00 0.00	0.00 0.00	0.00 0.00
16,600.00	89.93	359.68	10,930.14	5,047.59 5,147.58	101.00	5,048.00 5,147.99	0.00	0.00	0.00
16,700.00	89.93	359.68	10,930.25	5,247.58	101.12	5,247.99	0.00	0.00	0.00
16,800.00	89.93	359.68	10,930.49	5,347.58	99.99	5,347.98	0.00	0.00	0.00
16,900.00	89.93	359.68	10,930.60	5,447.58	99.43	5,447.98	0.00	0.00	0.00
17,000.00	89.93	359.68	10,930.72	5,547.58	98.86	5,547.97	0.00	0.00	0.00
17,100.00	89.93	359.68	10,930.83	5,647.58	98.30	5,647.97	0.00	0.00	0.00
17,200.00	89.93	359.68	10,930.95	5,747.57	97.74	5,747.96	0.00	0.00	0.00
17,300.00	89.93	359.68	10,931.07	5,847.57	97.18	5,847.96	0.00	0.00	0.00
17,400.00	89.93	359.68	10,931.18	5,947.57	96.61	5,947.95	0.00	0.00	0.00
17,500.00	89.93	359.68	10,931.30	6,047.57	96.05	6,047.95	0.00	0.00	0.00
17,600.00	89.93	359.68	10,931.42	6,147.57	95.49	6,147.94	0.00	0.00	0.00
17,700.00	89.93	359.68	10,931.53	6,247.57	94.93	6,247.94	0.00	0.00	0.00
17,800.00	89.93	359.68	10,931.65	6,347.56	94.36	6,347.93	0.00	0.00	0.00
17,900.00	89.93	359.68	10,931.76	6,447.56	93.80	6,447.92	0.00	0.00	0.00
18,000.00	89.93	359.68	10,931.88	6,547.56	93.24	6,547.92	0.00	0.00	0.00
18,100.00	89.93	359.68	10,932.00	6,647.56	92.68	6,647.91	0.00	0.00	0.00
18,200.00	89.93	359.68	10,932.11	6,747.56	92.11	6,747.91	0.00	0.00	0.00
				,					
18,300.00	89.93	359.68	10,932.23	6,847.56	91.55	6,847.90	0.00	0.00	0.00
18,400.00	89.93	359.68	10,932.35	6,947.56	90.99	6,947.90	0.00	0.00	0.00
18,500.00	89.93	359.68	10,932.46	7,047.55	90.43	7,047.89	0.00	0.00	0.00
18,600.00	89.93	359.68	10,932.58	7,147.55	89.86	7,147.89	0.00	0.00	0.00
18,700.00	89.93	359.68	10,932.69	7,247.55	89.30	7,247.88	0.00	0.00	0.00
18,800.00	89.93	359.68	10,932.81	7,347.55	88.74	7,347.88	0.00	0.00	0.00
18,900.00	89.93	359.68	10,932.93	7,447.55	88.18	7,447.87	0.00	0.00	0.00
19,000.00	89.93	359.68	10,933.04	7,547.55	87.61	7,547.87	0.00	0.00	0.00
19,100.00	89.93	359.68	10,933.16	7,647.54	87.05	7,647.86	0.00	0.00	0.00
19,200.00	89.93	359.68	10,933.28	7,747.54	86.49	7,747.86	0.00	0.00	0.00
19,300.00	89.93	359.68	10,933.39	7,847.54	85.92	7,847.85	0.00	0.00	0.00
19,400.00	89.93	359.68	10,933.51	7,947.54	85.36	7,947.85	0.00	0.00	0.00
19,500.00	89.93	359.68	10,933.62	8,047.54	84.80	8,047.84	0.00	0.00	0.00
19,600.00	89.93	359.68	10,933.74	8,147.54	84.24	8,147.84	0.00	0.00	0.00
19,700.00	89.93	359.68	10,933.86	8,247.53	83.67	8,247.83	0.00	0.00	0.00
19.800.00	89.93	359.68	10.933.97	8,347.53	83.11	8,347.82	0.00	0.00	0.00
19,800.00	89.93	359.68	10,933.97	8,447.53 8,447.53	82.55	8,447.82	0.00	0.00	0.00
20,000.00	89.93	359.68	10,934.09	8,547.53	81.99	8,547.81	0.00	0.00	0.00
20,000.00	89.93	359.68	10,934.20	8,647.53	81.42	8,647.81	0.00	0.00	0.00
20,100.00	89.93	359.68	10,934.44	8,747.53	80.86	8,747.80	0.00	0.00	0.00
				,					
20,300.00	89.93	359.68	10,934.55	8,847.52	80.30	8,847.80	0.00	0.00	0.00
20,400.00	89.93	359.68	10,934.67	8,947.52	79.74	8,947.79	0.00	0.00	0.00
20,500.00	89.93	359.68	10,934.79	9,047.52	79.17	9,047.79	0.00	0.00	0.00
20,600.00 20,700.00	89.93 80.03	359.68 359.68	10,934.90	9,147.52 0.247.52	78.61 78.05	9,147.78 9,247.78	0.00 0.00	0.00 0.00	0.00 0.00
	89.93		10,935.02	9,247.52		9,247.78			
20,800.00	89.93	359.68	10,935.13	9,347.52	77.49	9,347.77	0.00	0.00	0.00
20,900.00	89.93	359.68	10,935.25	9,447.51	76.92	9,447.77	0.00	0.00	0.00
21,000.00	89.93	359.68	10,935.37	9,547.51	76.36	9,547.76	0.00	0.00	0.00
21,100.00	89.93	359.68	10,935.48	9,647.51	75.80	9,647.76	0.00	0.00	0.00
21,200.00	89.93	359.68	10,935.60	9,747.51	75.24	9,747.75	0.00	0.00	0.00
21,300.00	89.93	359.68	10,935.72	9,847.51	74.67	9,847.75	0.00	0.00	0.00
	00.00	200.00	, 	-,		-,	0.00	0.00	

Database:	HOPSPP	Local Co-ordinate Reference:	Well PURE GOLD MDP1 29_17 FED COM 8H
Company: Project:	ENGINEERING DESIGNS PRD NM DIRECTIONAL PLANS (NAD 1983)	TVD Reference: MD Reference:	RKB=26.5' @ 3384.10ft RKB=26.5' @ 3384.10ft
Site:	Pure Gold MDP1 29_17 Federal Com	North Reference:	Grid
Well:	PURE GOLD MDP1 29_17 FED COM 8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
21,400.00 21,500.00 21,600.00 21,700.00	89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68	10,935.83 10,935.95 10,936.06 10,936.18	9,947.51 10,047.50 10,147.50 10,247.50	74.11 73.55 72.99 72.42	9,947.74 10,047.74 10,147.73 10,247.72	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
21,800.00 21,900.00 22,000.00 22,100.00 22,200.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68 359.68	10,936.30 10,936.41 10,936.53 10,936.65 10,936.76	10,347.50 10,447.50 10,547.50 10,647.49 10,747.49	71.86 71.30 70.73 70.17 69.61	10,347.72 10,447.71 10,547.71 10,647.70 10,747.70	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
22,300.00 22,400.00 22,500.00 22,600.00 22,700.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68 359.68	10,936.88 10,936.99 10,937.11 10,937.23 10,937.34	10,847.49 10,947.49 11,047.49 11,147.49 11,247.48	69.05 68.48 67.92 67.36 66.80	10,847.69 10,947.69 11,047.68 11,147.68 11,247.67	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
22,800.00 22,900.00 23,000.00 23,100.00 23,200.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68 359.68	10,937.46 10,937.58 10,937.69 10,937.81 10,937.92	11,347.48 11,447.48 11,547.48 11,647.48 11,747.48	66.23 65.67 65.11 64.55 63.98	11,347.67 11,447.66 11,547.66 11,647.65 11,747.65	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
23,300.00 23,400.00 23,500.00 23,600.00 23,700.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68 359.68	10,938.04 10,938.16 10,938.27 10,938.39 10,938.51	11,847.47 11,947.47 12,047.47 12,147.47 12,247.47	63.42 62.86 62.30 61.73 61.17	11,847.64 11,947.64 12,047.63 12,147.62 12,247.62	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
23,800.00 23,900.00 24,000.00 24,100.00 24,200.00	89.93 89.93 89.93 89.93 89.93 89.93	359.68 359.68 359.68 359.68 359.68 359.68	10,938.62 10,938.74 10,938.85 10,938.97 10,939.09	12,347.47 12,447.46 12,547.46 12,647.46 12,747.46	60.61 60.05 59.48 58.92 58.36	12,347.61 12,447.61 12,547.60 12,647.60 12,747.59	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
24,211.36	89.93	359.68	10,939.10	12,758.82	58.29	12,758.95	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP (Pure Gold MDP1 - plan misses target - Point	0.00 center by 30		10,924.10 28.31ft MD	-329.33 (10894.97 TV	131.89 D, -320.90 N	461,805.88 , 131.08 E)	706,199.14	32° 16' 6.430264 N	103° 47' 59.800179
PBHL (Pure Gold - plan hits target cer - Point	0.00 hter	0.00	10,939.10	12,758.82	58.29	474,893.22	706,125.55	32° 18' 15.940142 N	103° 47' 59.899329

Database:	HOPSPP	Local Co-ordinate Reference:	Well PURE GOLD MDP1 29_17 FED COM 8H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3384.10ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3384.10ft
Site:	Pure Gold MDP1 29_17 Federal Com	North Reference:	Grid
Well:	PURE GOLD MDP1 29_17 FED COM 8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Nama	Lithe Leave	Dip (°)	Dip Direction (°)	
		Name	Lithology	()	••	
405.10	405.10	RUSTLER				
741.10	741.10	SALADO				
2,683.10	2,683.10	CASTILE				
4,107.10	4,107.10	DELAWARE				
4,136.10	4,136.10	BELL CANYON				
5,057.10	5,057.10	CHERRY CANYON				
6,271.05	6,270.10	BRUSHY CANYON				
7,975.55	7,951.10	BONE SPRING				
9,021.44	8,981.10	BONE SPRING 1ST				
9,679.43	9,629.10	BONE SPRING 2ND				
10,910.28	10,789.10	BONE SPRING 3RD				

Plan Annotation	IS				
N	leasured	Vertical	Local Coor	dinates	
	Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
	5,700.00	5,700.00	0.00	0.00	Build 1°/100'
	6,700.00	6,694.93	-85.90	14.08	Hold 10° Tangent
	10,313.09	10,253.13	-705.04	115.58	KOP, Build 10°/100'
	11,311.18	10,924.11	-141.14	130.87	Landing Point
	24,211.36	10,939.10	12,758.82	58.29	TD at 24211.36' MD

.

Tenaris Hydril

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

	١.	
-12	1	
	μ.	

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%	Туре	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					

Notes

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

Tenaris

TenarisHyc 425[®]



dril Wedg	e I	Couplin Grade: Body: V	P110-CY	Pipe Body Grade: P110-CY 1st Band: White	
			nd: Grey and: -	2nd Band: Grey 3rd Band: - 4th Band: -	
				5th Band: - 6th Band: -	
5.500 in.	Wall Thickness	0.361 in.	Grade		P110-CY
87.50 %	Pipe Body Drift	API Standard	Туре		Casing

Connection OD Option

Pipe Body Data

Outside Diameter

Min. Wall Thickness

Geometry			
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.		

Destau

REGULAR

Performance

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	
Connection OD	5.777 in.
Connection ID	4.734 in.
Make-up Loss	5.823 in.
Threads per inch	3.77
Connection OD Option	Regular

90 %
577 x1000 lb
12,640 psi
90 %
577 x1000 lb
82 °/100 ft
11,100 psi

Make-Up Torques	
Minimum	15,700 ft-lb
Optimum	19,600 ft-Ib
Maximum	21,600 ft-lb
Operation Limit Torques	
Operating Torque	29,000 ft-Ib
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 lastest performance data, always visit our website: www.tenaris.com

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information –if any- provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any loss, damage or injury resulting from, or in connection with any Information contained hereunder and use thereof. The Information is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's and remarks and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com . ©Tenaris 2021.All rights reserved.

Tenaris

TenarisHydril V 441[®]



		Couplir	ıg	Pipe Body	
Nedg	0	Grade:	P110-CY	Grade: P110-CY	
reug	G	Body: W	Vhite	1st Band: White	
		1st Ban	d: Grey	2nd Band: Grey	
		2nd Ba	nd: -	3rd Band: -	
		3rd Bar	nd: -	4th Band: -	
				5th Band: -	
				6th Band: -	
5.500 in.	Wall Thickness	0.361 in.	Grade		P110-CY
87.50 %	Drift	API Standard	Туре		Casing

Pipe Body Data

Outside Diameter

Min. Wall Thickness

Connection OD Option

Geometry			
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.		

Dorformonoc

REGULAR

Performance

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	
Connection OD	5.852 in.
Coupling Length	8.714 in.
Connection ID	4.778 in.
Make-up Loss	3.780 in.
Threads per inch	3.40
Connection OD Option	Regular

Performance	
Tension Efficiency	81.50 %
Joint Yield Strength	522 x1000 lb
Internal Pressure Capacity	12,640 psi
Compression Efficiency	81.50 %
Compression Strength	522 x1000 lb
Max. Allowable Bending	71 °/100 ft
External Pressure Capacity	11,100 psi

Make-Up Torques	
Minimum	15,000 ft-Ib
Optimum	16,000 ft-Ib
Maximum	19,200 ft-Ib
Operation Limit Torques	
Operating Torque	32,000 ft-Ib
Yield Torque	38,000 ft-lb
Buck-On	
Minimum	19,200 ft-Ib
Maximum	20,700 ft-lb

Notes

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

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

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information –if any-provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility of liability of any liab for any loss, damage or injury resulting from, or in connection with any Information contained hereunder any use thereof. The Information is document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's standard terms and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com . ©Tenaris 2021.All rights reserved.

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

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

COMMENTS

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	62914
	Action Type:
	[C-103] NOI Change of Plans (C-103A)
COMMENTS	

Created By Comment Comment Date KP GEO Review 11/23/2021 11/23/2021 kpickford

Action 62914

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

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	62914
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	11/23/2021

Page 34 of 34

.

Action 62914

Released to Imaging: 1/13/2022 8:40:33 AM