

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

Well Name	Well Number	US Well Number	Lease Number	Case Number	Operator
MALTESE 5_8	35H	3002548978	NMNM14164	NMNM14164	OXY USA
MALTESE 5_8	38H	3002548981	NMNM019628	NMNM019628	OXY USA
MALTESE 5_8	33H	3002548976	NMNM019628	NMNM019628	OXY USA
MALTESE 5_8	31H	3002548974	NMNM14164	NMNM14164	OXY USA
MALTESE 5_8	36H	3002548979	NMNM014164	NMNM014164	OXY USA
MALTESE 5_8	37H	3002548980	NMNM14164	NMNM14164	OXY USA
SAKER 6-7	33H	3002548934	NMNM14164	NMNM14164	OXY USA
SAKER 6-7	37H	3002548938	NMNM14164	NMNM14164	OXY USA
SAKER 6-7	38H	3002548939	NMNM14164	NMNM14164	OXY USA

### **Notice of Intent**

**Sundry ID: 2730625** 

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 05/12/2023 Time Sundry Submitted: 07:26

Date proposed operation will begin: 06/01/2023

**Procedure Description:** OXY USA INC. respectfully requests approval from our approved APD to change the following casing designs. There will be no change to our surface hole locations. Deepen the TD of the surface hole from the Top of the Rustler, to now the Base of the Rustler. Update the surface casing size from 10 ¾" to 13 3/8" Update the intermediate hole size to have flexibility between 12 ¼" casing and 8 ¾" casing to accommodate hole conditions or drilling operations. We also request pre-approval for a 4 string contingency plan dependent on hole conditions or drilling operations. Drill plans for both 3 string and 4 string casing strings attached. For the Maltese 5\_8 Fed Com 38H we request that the pilot hole be omitted from our plans.

#### **NOI Attachments**

#### **Procedure Description**

Maltese5\_8FedCom38H\_DrillPlan\_3S\_20230524093618.pdf

 $Maltese 5\_8 Fed Com 38 H\_Drill Plan\_4 S Cont\_20230524093618.pdf$ 

Saker6\_7FedCom38H\_DrillPlan\_4SCont\_20230512072533.pdf

Saker6\_7FedCom38H\_DrillPlan\_3S\_20230512072532.pdf

Saker6\_7FedCom37H\_DrillPlan\_3S\_20230512072530.pdf

Saker6\_7FedCom37H\_DrillPlan\_4SCont\_20230512072532.pdf

Maltese5\_8FedCom36H\_DrillPlan\_3S\_20230512072533.pdf

Saker6\_7FedCom33H\_DrillPlan\_4SCont\_20230512072529.pdf

Maltese5\_8FedCom36H\_DrillPlan\_4SCont\_20230512072516.pdf

Maltese5\_8FedCom37H\_DrillPlan\_4SCont\_20230512072516.pdf

Saker6\_7FedCom33H\_DrillPlan\_3S\_20230512072519.pdf

Maltese5\_8FedCom37H\_DrillPlan\_3S\_20230512072516.pdf

Maltese5\_8FedCom35H\_DrillPlan\_3S\_20230512072513.pdf

Maltese5\_8FedCom35H\_DrillPlan\_4SCont\_20230512072514.pdf

Maltese\_5\_8\_Fed\_Com\_Csg\_Specs\_for\_3\_String\_Drill\_Plan\_20230512072502.pdf

Maltese\_5\_8\_Fed\_Com\_Csg\_Specs\_for\_4\_String\_Drill\_Plan\_20230512072502.pdf

Maltese5\_8FedCom31H\_DrillPlan\_3S\_20230512072501.pdf

Maltese5\_8FedCom31H\_DrillPlan\_4SCont\_20230512072501.pdf

Maltese5\_8FedCom33H\_DrillPlan\_4SCont\_20230512072503.pdf

Maltese5\_8FedCom33H\_DrillPlan\_3S\_20230512072502.pdf

# **Conditions of Approval**

#### **Additional**

MALTESE\_AND\_SAKER\_\_\_\_BATCH\_\_\_2730625\_\_\_COA\_20230607111403.pdf

## **Operator**

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: SARAH MCKINNEY Signed on: MAY 24, 2023 09:36 AM

Name: OXY USA INCORPORATED

Title: Regulatory Analyst Sr

Street Address: 5 GREENWAY PLAZA SUITE 110

City: HOUSTON State: TX

Phone: (713) 215-7295

Email address: SARAH\_MCKINNEY@OXY.COM

# **Field**

**Representative Name:** 

**Street Address:** 

City: State: Zip:

Phone:

**Email address:** 

# **BLM Point of Contact**

**BLM POC Name:** KEITH P IMMATTY

**BLM POC Phone:** 5759884722

**Disposition:** Approved

Signature: Keith Immatty

**BLM POC Title:** ENGINEER

BLM POC Email Address: KIMMATTY@BLM.GOV

**Disposition Date:** 06/07/2023



# 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	Туре	Casing
Connection OD Option	REGULAR				

#### Pipe Body Data

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.		

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-lb
Optimum	16,000 ft-lb
Maximum	19,200 ft-lb
Operation Limit Torques	
Operating Torque	32,000 ft-lb
Operating Torque Yield Torque	32,000 ft-lb 38,000 ft-lb
	<u> </u>
Yield Torque	<u> </u>

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

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# **Tenaris**Hydril

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

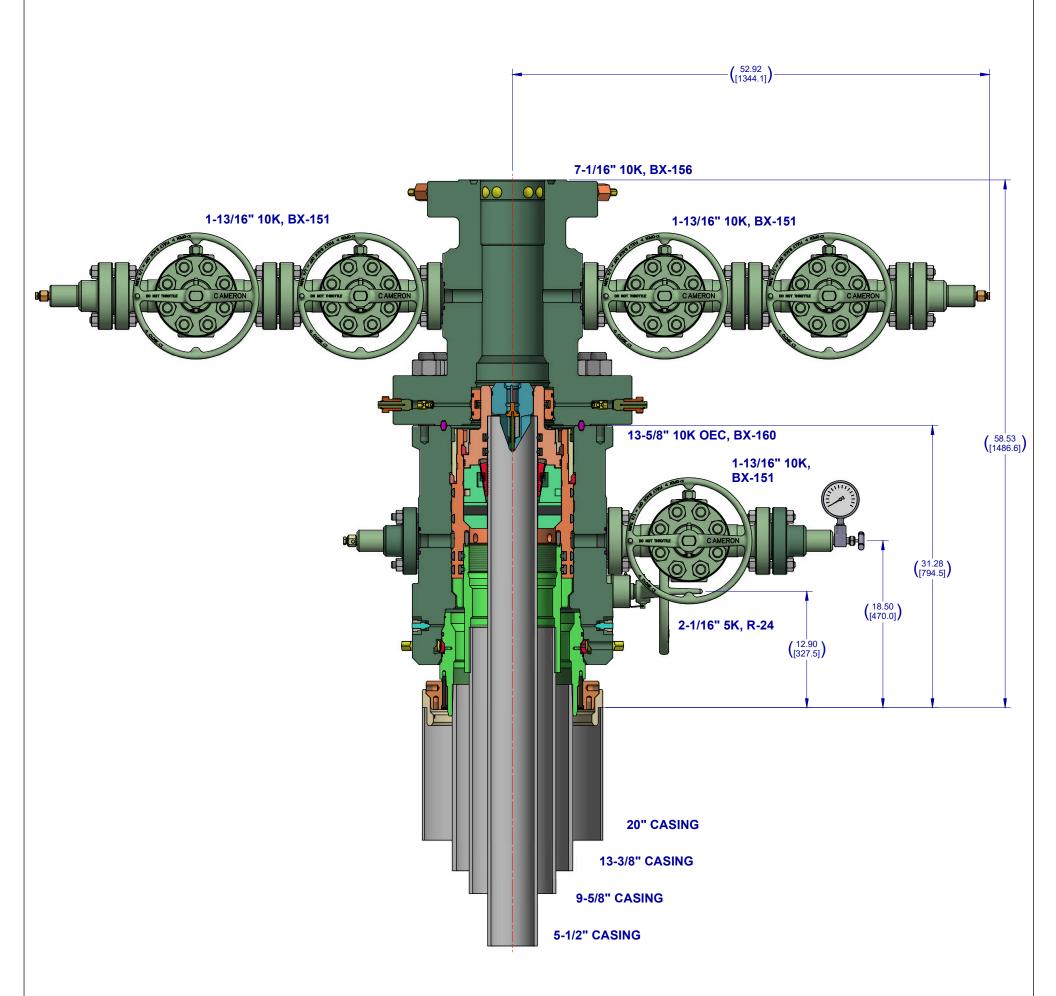


Special Data Sheet TH DS-20.0359 12 August 2020 Rev 00

Nominal OD	5.500 in.	Wall Thickness	0.361 in.	Grade	P110-CY
Min Wall Thickness	87.5%	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 Torque	s
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

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



# Notes:

1. THIS IS A PROPOSAL DRAWING AND DIMENSIONS SHOWN ARE SUBJECT TO CHANGE DURING THE FINAL DESIGN PROCESS.

 ${\bf 2.~DIGITALLY~ENABLED~SOLUTIONS,~CHOKES~AND~ESD'S~AVAILABLE~ON~REQUEST}\\$ 

CONFIDENTIAL						
SURFACE TREATMENT	DO NOT SC	ALE		CAMERON	SURFACE	
	DRAWN BY:	DATE			SYSTEMS	
	D. GOTTUNG	18 Feb 22 A Schlumberger Company			OTOTEMO	
MATERIAL & HEAT TREAT	MATERIAL & HEAT TREAT CHECKED BY: DATE					
	D. GOTTUNG 18 Feb 22		OXY 13-5/8" 10K ADAPT			
	APPROVED BY:	DATE	16" X 10-3/4" X 7-5/8" X 5-1/2"		X 5-1/2"	
	D. GOTTUNG	18 Feb 22		10 11 00 1 11 00 1	10 1/2	
	5.068 LBS INITIAL USE B/M: 73.748 KG		SHEET 1 of 1	SD-053434-94-	-12 REV:	

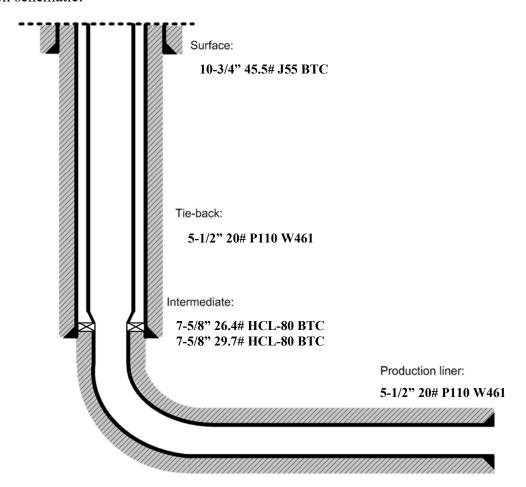
# **OXY USA WTP LP**

#### **Standard SL1 Tieback Details**

Below is a summary that describes the general operational steps to drill and complete the well.

- Drill 14-3/4" hole x 10-3/4" casing for surface section. Cement to surface.
- Drill 9-7/8" hole x 7-5/8" casing for intermediate section. Cement to surface.
- Drill 6-3/4" hole x 5-1/2" liner for production section. Cement to top of liner, 100' inside 7-5/8" shoe.
- Release drilling rig from location.
- Move in workover rig and run a 5-1/2" 20# P110 Wedge 461 tie-back frac string and seal assembly. Tie into liner hanger Polished Bore Receptacle (PBR) with seal assembly.
- Pump hydraulic fracture job.
- Flowback and produce well.

#### General well schematic:





# 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: -  5th Band: -  6th Band: -		
Body: White       1st Band: White         1st Band: Grey       2nd Band: Grey         2nd Band: -       3rd Band: -         3rd Band: -       4th Band: -         5th Band: -       5th Band: -	Coupling	Pipe Body
1st Band: Grey 2nd Band: Grey 2nd Band: - 3rd Band: - 3rd Band: - 4th Band: - 5th Band: -	Grade: P110-CY	Grade: P110-CY
2nd Band: - 3rd Band: -  3rd Band: - 4th Band: -  5th Band: -	Body: White	1st Band: White
3rd Band: - 4th Band: - 5th Band: -	1st Band: Grey	2nd Band: Grey
5th Band: -	2nd Band: -	3rd Band: -
our buriar	3rd Band: -	4th Band: -
6th 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	Туре	Casing
Connection OD Option	REGULAR				

#### Pipe Body Data

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.		

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

Performance	
Tension Efficiency	90 %
Joint Yield Strength	577 x1000 lb
Internal Pressure Capacity	12,640 psi
Compression Efficiency	90 %
Compression Strength	577 x1000 lb
Max. Allowable Bending	82 °/100 ft
External Pressure Capacity	11,100 psi

Make-Up Torques	
Minimum	15,700 ft-lb
Optimum	19,600 ft-lb
Maximum	21,600 ft-lb
Operation Limit Torques	
Operating Torque	29,000 ft-lb
Yield Torque	36,000 ft-lb

#### Notes

This connection is fully interchangeable with: TORQ® SFW $^{\text{m}}$  - 5.5 in. - 0.361 in. Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

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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	Туре	Casing
Connection OD Option	REGULAR				

#### Pipe Body Data

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.		

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-lb
Optimum	16,000 ft-lb
Maximum	19,200 ft-lb
Operation Limit Torques	
Operating Torque	32,000 ft-lb
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 lastest performance data, always visit our website: www.tenaris.com

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# **Tenaris**Hydril

# 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%	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	5
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

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



# U. S. Steel Tubular Products Product Information

# 7 5/8 29.70 lb (0.375) L80 HC BTC

8.125 Special Clearance Coupling

5/20/2019

	o. 120 opecial olearance ooupling			5/20/2019	
Mechanical Properties	Coupling Pipe Body				
	Yield Strength				
	Minimum	80	80	ksi	
	Maximum	95	95	ksi	
	Tensile Strength				
	Minimum	95	95 k	(si	
Dimensions, Nominal	Outside Diameter		7.625	in.	
	Wall		0.375	in.	
	Inside Diameter Drift		6.875	in.	
	API		6.750	in.	
	Nominal Linear Weight, T&	С	29.70	lbs/ft	
	Weight, Plain End		29.06	lbs/ft	
	Pipe Cross Sectional Area Coupling Diameter		8.541	sq. in.	
	ВТС		8.125	in.	
Performance Ratings, Minimum	Collapse				
	Plain End		5,780	psi	
	ВТС		5,780	psi	
	Internal Yield Pressure				
	Plain End		6,880	psi	
	BTC		6,550	psi	
	Yield Strength, Pipe Body Joint Strength		683	1,000 lbs	
	BTC		721	1,000 lbs	

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USS Product Data Sheet 2019 rev28

U. S. Steel Tubular Products, Inc. - 460 Wildwood Forest Dr., Suite 300S, Spring, TX 77380 <a href="https://www.uss.com">www.uss.com</a>

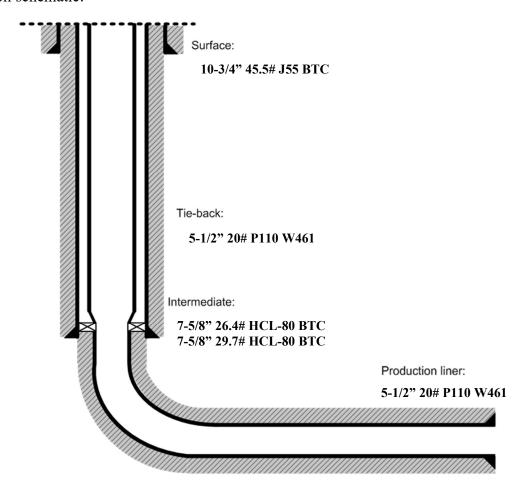
# **OXY USA WTP LP**

#### **Standard SL1 Tieback Details**

Below is a summary that describes the general operational steps to drill and complete the well.

- Drill 14-3/4" hole x 10-3/4" casing for surface section. Cement to surface.
- Drill 9-7/8" hole x 7-5/8" casing for intermediate section. Cement to surface.
- Drill 6-3/4" hole x 5-1/2" liner for production section. Cement to top of liner, 100' inside 7-5/8" shoe.
- Release drilling rig from location.
- Move in workover rig and run a 5-1/2" 20# P110 Wedge 461 tie-back frac string and seal assembly. Tie into liner hanger Polished Bore Receptacle (PBR) with seal assembly.
- Pump hydraulic fracture job.
- Flowback and produce well.

#### General well schematic:



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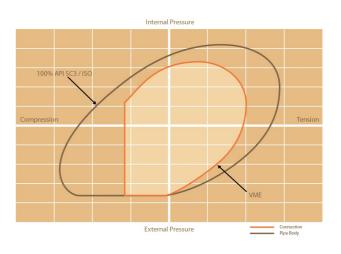
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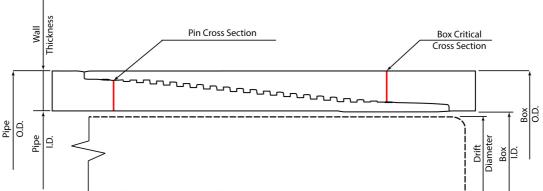
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TUBULAR PARAMETERS		PIPE BODY PROPERTIES
Nominal OD, (inch)	7.625	PE Weight, (lbs/ft)
Wall Thickness, (inch)	0.328	Nominal Weight, (lbs/ft)
Pipe Grade	L80 HC	Nominal ID, (inch)
Drift	Standard	Drift Diameter, (inch)
		Nominal Pipe Body Area, (sq inch)
CONNECTION PARAMETERS		Yield Strength in Tension, (klbs)
Connection OD (inch)	7.63	Min. Internal Yield Pressure, (psi)
Connection ID, (inch)	6.975	Collapse Pressure, (psi)
Make-Up Loss, (inch)	4.165	
Connection Critical Area, (sq inch)	2.520	
Yield Strength in Tension, (klbs)	347	
Yeld Strength in Compression, (klbs)	347	
Tension Efficiency	58%	100% API 5C3 / ISO
Compression Efficiency	58%	
Min. Internal Yield Pressure, (psi)	6 020	Y (
Collapse Pressure, (psi)	3 910	Compression
Uniaxial Bending (deg/100ft)	28.0	
MAKE-UP TORQUES		
Yield Torque, (ft-lb)	22 200	
Minimum Make-Up Torque, (ft-lb)	12 500	
Optimum Make-Up Torque, (ft-lb)	13 900	
Maximum Make-Up Torque, (ft-lb)	15 300	





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Print date: 07/10/2018 20:11

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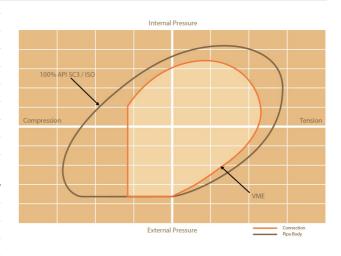
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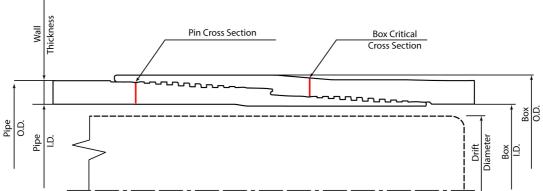
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TUBULAR PARAMETERS		PIPE BODY PROPERTIES
Nominal OD, (inch)	7.625	PE Weight, (lbs/ft)
Wall Thickness, (inch)	0.328	Nominal Weight, (lbs/ft)
Pipe Grade	L80 HC	Nominal ID, (inch)
Drift	Standard	Drift Diameter, (inch)
		Nominal Pipe Body Area, (sq inch
CONNECTION PARAMETERS		Yield Strength in Tension, (klbs)
Connection OD (inch)	7.79	Min. Internal Yield Pressure, (psi)
Connection ID, (inch)	6.938	Collapse Pressure, (psi)
Make-Up Loss, (inch)	6.029	
Connection Critical Area, (sq inch)	5.948	
Yield Strength in Tension, (klbs)	533	
Yeld Strength in Compression, (klbs)	533	
Tension Efficiency	89%	100% API 5C3 / ISO
Compression Efficiency	89%	
Min. Internal Yield Pressure, (psi)	6 020	<b>Y</b>
Collapse Pressure, (psi)	3 910	Compression
Uniaxial Bending (deg/100ft)	42.7	
MAKE-UP TORQUES		
Yield Torque, (ft-lb)	22 600	
Minimum Make-Up Torque, (ft-lb)	15 000	
Optimum Make-Up Torque, (ft-lb)	16 500	
Maximum Make-Up Torque, (ft-lb)	18 200	





NOTE: The content of this Technical Data Sheet is for general information only and does not guarantee performance or imply fitness for a particular purpose, which only a competent drilling professional can determine considering the specific installation and operation parameters. This information supersede all prior versions for this connection. Information that is printed or downloaded is no longer controlled by TMK and might not be the latest information. Anyone using the information herein does so at their own risk. To verify that you have the latest technical information, please contact PAO "TMK" Technical Sales in Russia (Tel: +7 (495) 775-76-00, Email: techsales@tmk-group.com) and TMK IPSCO in North America (Tel: +1 (281)949-1044, Email: techsales@tmk-ipsco.com).

Print date: 07/10/2018 20:00



# 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	Туре	Casing
Connection OD Option	REGULAR				

#### Pipe Body Data

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.		

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

Performance	
Tension Efficiency	90 %
Joint Yield Strength	577 x1000 lb
Internal Pressure Capacity	12,640 psi
Compression Efficiency	90 %
Compression Strength	577 x1000 lb
Max. Allowable Bending	82 °/100 ft
External Pressure Capacity	11,100 psi

Make-Up Torques	
Minimum	15,700 ft-lb
Optimum	19,600 ft-lb
Maximum	21,600 ft-lb
Operation Limit Torques	
Operating Torque	29,000 ft-lb
Yield Torque	36,000 ft-lb

#### Notes

This connection is fully interchangeable with: TORQ® SFW $^{\text{m}}$  - 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

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# **Tenaris**Hydril

# 7.625" 29.70 lb/ft L80-IC TenarisHydril Wedge 425™

**Special Data Sheet** 

TH DS-21.3633.00 18 October 2021

Nominal OD	7.625 in.	Wall Thickness	0.375 in.	Grade	L80-IC
Min Wall Thickness	90%	Type CASING		Connection OD Option	REGULAR
Pipe Body Data					
Geometry				Performance	
Nominal OD	7.625 in.	Nominal ID	6.875 in.	Body Yield Strength	683 x 1000 lbs
Nominal Weight	29.70 lbs/ft	Wall Thickness	0.375 in.	Internal Yield¹	6890 psi
Standard Drift Diameter	6.750 in.	Plain End Weight	29.06 lbs/ft	SMYS	80000 psi
Special Drift Diameter	NA	OD Tolerance	API	Collapse Pressure	5900 psi
Connection Data					
Geometry		Performance		Make-up Torques	
Connection OD	7.888 in.	Tension Efficiency	90%	Minimum	22500 ft-lbs
Connection ID	6.831 in.	Joint Yield Strength	615 x 1000 lbs	Optimum	25000 ft-lbs
Make-up Loss	5.646 in.	Internal Yield¹	7080 psi	Maximum	27500 ft-lbs
Threads per in.	3.51	Compression Efficiency	90%	Operational Limit Torques	
Connection OD Option	REGULAR	Compression Strength	615 x 1000 lbs	Operating Torque	49000 ft-lbs
Critical Section Area	7.994 sq in.	Bending	43 °/100 ft	Yield Torque	61000 ft-lbs
		Collapse	5900 psi		

#### Notes

- 1. Internal Yield Rating is based on 90% RBW
- 2. Important Note: In October 2019, TenarisHydril Wedge 625® RF™ was renamed TenarisHydril Wedge 425™. Product dimensions and properties remain identical and both connections are fully interchangeable.

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

# Oxy USA Inc. - Saker 6\_7 Fed Com 38H Drill Plan

# 1. Geologic Formations

TVD of Target (ft):	12043	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	22125	Deepest Expected Fresh Water (ft):	776

#### **Delaware Basin**

Formation	MD-RKB (ft)	TVD-RKB (ft)	<b>Expected Fluids</b>
Rustler	776	776	
Salado	1394	1394	Salt
Castile	3426	3426	Salt
Delaware	5288	5288	Oil/Gas/Brine
Bell Canyon	5336	5336	Oil/Gas/Brine
Cherry Canyon	6220	6220	Oil/Gas/Brine
Brushy Canyon	7596	7596	Losses
Bone Spring	8765	8765	Oil/Gas
Bone Spring 1st	9936	9935	Oil/Gas
Bone Spring 2nd	10405	10399	Oil/Gas
Bone Spring 3rd	11434	11412	Oil/Gas
Wolfcamp	11873	11758	Oil/Gas
Penn	_	_	Oil/Gas
Strawn	_		Oil/Gas

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

# 2. Casing Program

		MD		TVD					
	Hole	From	То	From	То	Csg.	Csg Wt.		
Section	Size (in)	(ft)	(ft)	(ft)	(ft)	OD (in)	(ppf)	Grade	Conn.
Surface	17.5	0	1334	0	1334	13.375	54.5	J-55	ВТС
Intermediate	12.25	0	11150	0	11131	7.625	29.7	L-80 HC	ВТС
Production	6.75	10950	22125	10931	12043	5.5	20	P-110	Wedge 461

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

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

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

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

All Casing SF Values will meet or							
exceed those below							
SF	SF Body SF Joint S						
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?				
If not provide justification (loading assumptions, casing design criteria).	Y			
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching	Y			
the collapse pressure rating of the casing?	1			
Is well located within Capitan Reef?	N			
If yes, does production casing cement tie back a minimum of 50' above the Reef?				
Is well within the designated 4 string boundary.				
Is well located in SOPA but not in R-111-P?	N			
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back				
500' into previous casing?				
	_			
Is well located in R-111-P and SOPA?	N			
If yes, are the first three strings cemented to surface?				
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?				
Is well located in high Cave/Karst?	N			
If yes, are there two strings cemented to surface?				
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?				
Is well located in critical Cave/Karst?	N			
If yes, are there three strings cemented to surface?				

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# 3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	тос	Placement	Description
Surface	1	Surface - Tail	1393	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	1054	1.65	13.2	5%	7,846	Circulate	Class H+Accel., Disper., Salt
Int.	2	Intermediate 2S - Tail BH	2816	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	844	1.38	13.2	25%	10,950	Circulate	Class H+Ret., Disper., Salt

### **Cement Top and Liner Overlap**

• Oxy is requesting permission to have minimum fill of cement behind the 5-1/2" production liner to be 200 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"/7.827" 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 nippled down until after the cement job is completed.
- 6. Skid rig to next well on pad.
- 7. Confirm well is static before removing cap flange.
- 8. If well is not static notify BLM and kill well prior to cementing or nippling up for further remediation.
- 9. Install offline cement tool.
- 10. Rig up cement equipment.
  - a. Notify BLM prior to cement job.
- 11. Perform cement job.
- 12. Confirm well is static and floats are holding after cement job.
- 13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

Oxy requests permission to adjust the CBL requirement after bradenhead cement jobs, on 7-5/8" intermediate casings, as per the agreement reached in the OXY/BLM meeting on September 5, 2019.

#### Three string wells:

- CBL will be required on one well per pad
- If the pumped volume of cement is less than permitted in the APD, BLM will be notified and a CBL may be run
- Echometer will be used after bradenhead cement job to determine TOC before pumping top-out cement

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## 4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP		Туре	<b>&gt;</b>	Tested to:	Deepest TVD Depth (ft) per Section:
		5M		Annular	<b>\</b>	70% of working pressure	
				Blind Ram	>		11131
12.25" Hole	13-5/8"	5M		Pipe Ram		250 psi / 5000 psi	
		SIVI		Double Ram	>	250 psi / 5000 psi	
			Other*				
		5M		Annular	>	100% of working pressure	
				Blind Ram			
6.75" Hole	13-5/8"	10M		Pipe Ram		250 poi / 10000 poi	12043
				Double Ram		250 psi / 10000 psi	
			Other*				

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

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

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

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

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

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

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

Y Are anchors required by manufacturer?

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

See attached schematics.

## **BOP Break Testing Request**

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

BOP break test under the following conditions:

- After a full BOP test is conducted
- When skidding to drill an intermediate section where ICP is set into the third Bone Spring or shallower.

If the kill line is broken prior to skid, two tests will be performed.

- 1) Wellhead flange, co-flex hose, kill line connections and upper pipe rams
- 2) Wellhead flange, HCR valve, check valve, upper pipe rams

If the kill line is not broken prior to skid, only one test will be performed.

1) Wellhead flange, co-flex hose, check valve, upper pipe rams

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

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# 5. Mud Program

Section	Depth -	- MD	Depth -	TVD	Tyma	Weight Wigg		Water
Section	From (ft)	To (ft)	From (ft)	To (ft)	Туре	(ppg)	Viscosity	Loss
Surface	0	1334	0	1334	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate	1334	11150	1334	11131	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Production	11150	22125	11131	12043	Water-Based or Oil- Based Mud	9.5 - 12.5	38-50	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

What will be used to monitor the	DVT/NAD Totas (Visual Maxitarias
loss or gain of fluid?	PVT/MD Totco/Visual Monitoring

**6. Logging and Testing Procedures** 

	00 0 1 1 1 0 1 1 1 1 1					
Loggi	Logging, Coring and Testing.					
Yes Will run GR from TD to surface (horizontal well – vertical portion of hole).						
res	Stated logs run will be in the Completion Report and submitted to the BLM.					
No	Logs are planned based on well control or offset log information.					
No	Drill stem test? If yes, explain					
No	Coring? If yes, explain					

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

# 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7828 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	177°F

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

DLIVI.	
N	H2S is present
Υ	H2S Plan attached

# 8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe.	
We plan to drill the 3 well pad in batch by section: all surface sections, intermediate	Vas
sections and production sections. The wellhead will be secured with a night cap whenever	Yes
the rig is not over the well.	
Will more than one drilling rig be used for drilling operations? If yes, describe.	
Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for	
this well. If the timing between rigs is such that Oxy would not be able to preset surface,	Yes
the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the	
attached document for information on the spudder rig.	

**Total Estimated Cuttings Volume: 2314 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	<b>Mobile Phone</b>
Garrett Granier	Drilling Engineer	713-513-6633	832-265-0581
Derek Adam	<b>Drilling Engineer Supervisor</b>	713-366-5170	916-802-8873
Casey Martin	<b>Drilling Superintendent</b>	713-497-2530	337-764-4278
Kevin Threadgill	Drilling Manager	713-366-5958	361-815-0788

# Oxy USA Inc. - Saker 6\_7 Fed Com 38H Drill Plan

# 1. Geologic Formations

TVD of Target (ft):	12043	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	22125	Deepest Expected Fresh Water (ft):	776

#### **Delaware Basin**

Formation	MD-RKB (ft)	TVD-RKB (ft)	<b>Expected Fluids</b>
Rustler	776	776	
Salado	1394	1394	Salt
Castile	3426	3426	Salt
Delaware	5288	5288	Oil/Gas/Brine
Bell Canyon	5336	5336	Oil/Gas/Brine
Cherry Canyon	6220	6220	Oil/Gas/Brine
Brushy Canyon	7596	7596	Losses
Bone Spring	8765	8765	Oil/Gas
Bone Spring 1st	9936	9935	Oil/Gas
Bone Spring 2nd	10405	10399	Oil/Gas
Bone Spring 3rd	11434	11412	Oil/Gas
Wolfcamp	11873	11758	Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

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

# 2. Casing Program

		M	ID	T\	/D				
	Hole	From	То	From	То	Csg.	Csg Wt.		
Section	Size (in)	(ft)	(ft)	(ft)	(ft)	OD (in)	(ppf)	Grade	Conn.
Surface	17.5	0	1334	0	1334	13.375	54.5	J-55	ВТС
Salt	12.25	0	5388	0	5388	9.625	40	L-80 HC	ВТС
Intermediate	8.75	0	6650	0	6631	7.625	26.4	L-80 HC	Wedge 425
Intermediate	8.75	6650	11150	6631	11131	7.625	29.7	L-80 HC	BTC-SC
Production	6.75	10950	22125	10931	12043	5.5	20	P-110	Wedge 461

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

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

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

# **Annular Clearance Variance Request**

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

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

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards?	Y
If not provide justification (loading assumptions, casing design criteria).	1
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching	Y
the collapse pressure rating of the casing?	1
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back	
500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

# 3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	тос	Placement	Description
Surface	1	Surface - Tail	1393	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.1	1	Intermediate - Tail	141	1.33	14.8	20%	4,888	Circulate	Class C+Accel.
Int.1	1	Intermediate - Lead	1245	1.73	12.9	50%	-	Circulate	Class Pozz+Ret.
Int. 2	1	Intermediate 1S - Tail	211	1.65	13.2	5%	7,846	Circulate	Class H+Accel., Disper., Salt
Int. 2	2	Intermediate 2S - Tail BH	523	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	844	1.38	13.2	25%	10,950	Circulate	Class H+Ret., Disper., Salt

### **Cement Top and Liner Overlap**

• Oxy is requesting permission to have minimum fill of cement behind the 5-1/2" production liner to be 200 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''/7.827'' mainbore in the future

• Cement will be brought to the top of this liner hanger

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#### **Offline Cementing**

Oxy requests a variance to cement the 9.625" and/or 7.625" intermediate casing strings offline in accordance to the approved variance, EC Tran 461365.

The summarized operational sequence will be as follows:

Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe). Land casing.

Fill pipe with kill weight fluid, and confirm well is static.

If well Oxy requests a variance to cement the 9.625" and/or 7.625" intermediate casing strings offline in accordance to the approved variance, EC Tran 461365.

The summarized operational sequence will be as follows:

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

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## 4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Туре	1	Tested to:	TVD Depth (ft) per Section:	
		5M	Annular	✓	70% of working pressure		
			Blind Ram	✓			
12.25" Hole	13-5/8"	5M	Pipe Ram		250 psi / 5000 psi	5388	
		Sivi	Double Ram	✓	230 psi / 3000 psi		
			Other*				
		5M	Annular	✓	√ 70% of working pressure		
	13-5/8"		Blind Ram	✓		11131	
8.75" Hole		5M	Pipe Ram		250 psi / 5000 psi		
		SIVI	Double Ram	✓	250 psi / 5000 psi		
			Other*				
			5M	Annular	✓	100% of working pressure	
6.75" Hole			Blind Ram	✓			
	13-5/8"	10M	Pipe Ram		250 psi / 10000 psi	12043	
		TOW	Double Ram	✓	250 psi / 10000 psi		
			Other*				

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

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

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

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

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

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

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

Y Are anchors required by manufacturer?

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

See attached schematics.

## **BOP Break Testing Request**

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

BOP break test under the following conditions:

- After a full BOP test is conducted
- When skidding to drill an intermediate section where ICP is set into the third Bone Spring or shallower.

If the kill line is broken prior to skid, two tests will be performed.

- 1) Wellhead flange, co-flex hose, kill line connections and upper pipe rams
- 2) Wellhead flange, HCR valve, check valve, upper pipe rams

If the kill line is not broken prior to skid, only one test will be performed.

1) Wellhead flange, co-flex hose, check valve, upper pipe rams

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

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# 5. Mud Program

Section	Depth		Depth - TVD		Tymo	Weight	Viceosity	Water
Section	From (ft)	To (ft)	From (ft)	To (ft)	Туре	(ppg)	Viscosity	Loss
Surface	0	1334	0	1334	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate 1	1334	5388	1334	5388	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Intermediate 2	5388	11150	5388	11131	Water-Based or Oil- Based Mud	8.0 - 10.0	38-50	N/C
Production	11150	22125	11131	12043	Water-Based or Oil- Based Mud	9.5 - 12.5	38-50	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

What will be used to monitor the	DVT/MD Total Missel Manitoring
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).	
res	Stated logs run will be in the Completion Report and submitted to the BLM.	
No	Logs are planned based on well control or offset log information.	
No	Drill stem test? If yes, explain	
No	Coring? If yes, explain	

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

# 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7828 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	177°F

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

DLIVI.	
N	H2S is present
Υ	H2S Plan attached

# 8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe.	
We plan to drill the 3 well pad in batch by section: all surface sections, intermediate	Yes
sections and production sections. The wellhead will be secured with a night cap whenever	res
the rig is not over the well.	
Will more than one drilling rig be used for drilling operations? If yes, describe.	
Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for	
this well. If the timing between rigs is such that Oxy would not be able to preset surface,	Yes
the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the	
attached document for information on the spudder rig.	

**Total Estimated Cuttings Volume:** 1903 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	<b>Mobile Phone</b>
Garrett Granier	Drilling Engineer	713-513-6633	832-265-0581
Derek Adam	Drilling Engineer Supervisor	713-366-5170	916-802-8873
Casey Martin	Drilling Superintendent	713-497-2530	337-764-4278
Kevin Threadgill	Drilling Manager	713-366-5958	361-815-0788

District I
1625 N. French Dr., Hobbs, NM 88240
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

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 225039

#### **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	225039
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By		Condition Date
pkautz	None	7/26/2023