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

Sundry Print Report

05/10/2021

Well Name: TALCO STATE FED COM	**Well Location:** T26S / R35E / SEC 16 / NWNW /	**County or Parish/State:**
Well Number: 221H	**Type of Well:** CONVENTIONAL GAS WELL	**Allottee or Tribe Name:**
Lease Number: NMNM0448921A	**Unit or CA Name:**	**Unit or CA Number:**
US Well Number: 3002548611	**Well Status:** Approved Application for Permit to Drill	**Operator:** TAP ROCK OPERATING LLC

Notice of Intent

Type of Submission: Notice of Intent

Type of Action Other

Date Sundry Submitted: 04/12/2021

Time Sundry Submitted: 05:10

Date proposed operation will begin: 04/12/2021

Procedure Description: Tap Rock would like to alter the casing plan for the Talco State Fed Com 221H. Tap Rock is requesting permission to: • run one of the two options listed in the attached casing table - A three or four string design. • alter the second intermediate string from 7.625 inch 29.7 lb P-110 W-513 to 7.625 inch 29.7 P-110 W-441 casing. This casing will be run to 12437 ft MD. Casing spec has been attached. • alter the production casing string from 5.5 inch 20 lb P-110 TXP by 5.5 inch 18 lb P-110 W-521 to 5.5 inch 20 lb P-110 TXP by 5.5 inch 20 lb P-110 W-441 casing. This casing will be run from approximately 12237 ft to 23403 ft MD. Casing spec has been attached. • have the option of running a DV tool during cementing operations. If no DV tool is ran, we would like to cement the intermediate section in a single stage.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Talco_State_Fed_Com_221H_Sundry_casing_Table_20210412_20210412170925.pdf

5.5_20_P110_IC_W441_20210412170925.pdf

7.625_29.7_P110ICY_W441_20210311154211_20210412170925.pdf

Well Name: TALCO STATE FED COM	**Well Location:** T26S / R35E / SEC 16 / NWNW /	**County or Parish/State:**
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US Well Number: 3002548611	**Well Status:** Approved Application for Permit to Drill	**Operator:** TAP ROCK OPERATING LLC

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 Signature: BILL RAMSEY

Signed on: APR 12, 2021 05:09 PM

Name: TAP ROCK OPERATING LLC

Title: Regulatory Analyst

Street Address: 523 PARK POINT DRIVE SUITE 200

City: GOLDEN **State:** CO

Phone: (720) 360-4028

Email address: BRAMSEY@TAPRK.COM

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 05/10/2021

Signature: Chris Walls

TALCO 221H

Section	Hole Size	Casing Size	Standard	Tapered	Top MD	Bottom MD	Top TVD	BTM TVD	Grade	Weight	Thread	Collapse	Burst	Tension
Surface	17.5	13.375	API	No	0	1100	0	1100	J-55	54.5	BUTT	1.13	1.15	1.6
1st Intermediate	12.25	9.625	API	No	0	5402	0	5390	J-55	40	BUTT	1.13	1.15	1.6
2nd Intermediate	8.75	7.625	API	No	0	5102	0	5090	P-110	29.7	BUTT	1.13	1.15	1.6
2nd Intermediate	8.75	7.625	NON API	Yes	5102	12437	5090	12412	P-110	29.7	W441	1.13	1.15	1.6
Production	6.75	5.5	NON API	No	0	12237	0	12212	P-110	20	TXP	1.13	1.15	1.6
Production	6.75	5.5	NON API	No	12237	23403	12212	13075	P-110	20	W441	1.13	1.15	1.6

Section	Drilled Interval			Casing Size	Standard	Tapered	Casing Set Depths				Casing Details					
	Hole Size	Top	Btm				Top MD	Bottom MD	Top TVD	BTM TVD	Grade	Weight	Thread	Collapse	Burst	Tension
Surface	17.5	0	1110	13.375	API	No	0	1100	0	1100	J-55	54.5	BUTT	1.13	1.15	1.6
Intermediate	9.875	1110	9500	7.625	API	No	0	9200	0	9179	P-110	29.7	BUTT	1.13	1.15	1.6
	8.75	9500	12447	7.625	NON API	Yes	9200	12437	9179	12412	P-110	29.7	W441	1.13	1.15	1.6
Production	6.75	12447	23403	5.5	NON API	No	0	12237	0	12212	P-110	20	TXP	1.13	1.15	1.6
Production	6.75			5.5	NON API	No	12237	23403	12212	13075	P-110	20	W441	1.13	1.15	1.6

*OPTION TO RUN 3 STRING OR 4 STRING DESIGN

Name	Type	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface	Lead	0	543	1.65	896	13.5	100%	C	5% NCl + LCM
	Tail	641	361	1.35	487	14.8	100%	C	5% NCl + LCM
1st Intermediate	Lead	0	1024	2.18	2233	12.7	65%	C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	4322	420	1.33	558	14.8	65%	C	5% NaCl + LCM
2nd Intermediate	Lead	5102	298	2.87	856	11.5	35%	TXI	Fluid Loss + Dispersant + Retarder + LCM
	Tail	11412	87	1.56	136	13.2	35%	H	Fluid Loss + Dispersant + Retarder + LCM
Production	Tail	11912	701	1.71	1200	14.2	25%	H	Fluid Loss + Dispersant + Retarder + LCM

Name		Type	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface		Lead	0	543	1.65	896	13.5	100%	C	5% NCl + LCM
		Tail	641	361	1.35	487	14.8	100%	C	5% NCl + LCM
Intermediate	Stage 1	Lead	0	1535	2.4	3684	11.5	65%	C	Fluid Loss + Dispersant + Retarder + LCM
		Tail	11412	106	1.56	166	13.2	65%	C	Fluid Loss + Dispersant + Retarder + LCM
	Stage 2	Primary	0	784	2.4	1882	11.5	65%	C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	DVT	5325								
Production		Primary	11912	701	1.71	1200	14.2	25%	H	Fluid Loss + Dispersant + Retarder + LCM

*OPTION TO RUN DV TOOL IF NECESSARY

Name	Top	Bottom	Type	Mud Weight	Visc	Fluid Loss
Surface	0	1100	FW Spud Mud	8.30	28	NC
Intermediate	1100	5402	Brine Water	10.00	30-32	NC
Intermediate 2	5402	12412	FW/Cut Brine	9.00	30-32	NC
Production	12412	23403	Oil Base Mud	11.50	50-70	<10

Name	Top	Bottom	Type	Mud Weight	Visc	Fluid Loss
Surface	0	1100	FW Gel	8.30	28	NC
Intermediate	1100	12422	DBE/Cut Brine	9.00	30-32	NC
Production	12422	23403	Oil Base Mud	11.50	55-75	<10

TenarisHydril

Data Sheet

TH DS-20.0313 28 July 2020
Rev 01

7.625" 29.70 lb/ft P110-ICY TenarisHydril Wedge 441™

PIPE BODY DATA					
GEOMETRY					
Nominal OD	7.625 in.	**Nominal Weight**	29.70 lbs/ft	**Standard Drift Diameter**	6.750 in.
Nominal ID	6.875 in.	**Wall Thickness**	0.375 in.	**Special Drift Diameter**	N/A
Plain End Weight	29.06 lbs/ft				
PERFORMANCE					
Body Yield Strength	1068 x 1000 lbs	**Internal Yield[1]**	11070 psi	**Collapse**	7360 psi

CONNECTION DATA					
GEOMETRY					
Connection OD	7.900 in.	**Connection ID**	6.875 in.	**Make-up Loss**	3.750 in.
Coupling Length	8.666 in.	**Threads per in.**	3.43		
PERFORMANCE					
Tension Efficiency	75%	**Joint Yield Strength**	801 x 1000 lbs	**Internal Yield[1]**	11070 psi
Compression Efficiency	75%	**Compression Strength**	801 x 1000 lbs	**Collapse**	7360 psi
Bending	56 °/100 ft				
MAKE-UP TORQUES					
Minimum	22000 ft-lbs	**Optimum**	23000 ft-lbs	**Maximum**	26000 ft-lbs
BUCK-ON TORQUES					
Minimum	26000 ft-lbs			**Maximum**	28000 ft-lbs
OPERATIONAL LIMIT TORQUES					
Operating Torque	41600 ft-lbs			**Yield Torque**	49000 ft-lbs

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

1. Internal Yield Rating is based on 90% RBW
2. Important Note: In October 2019, TenarisHydril Wedge XP® 2.0 SL™ was renamed TenarisHydril Wedge 441™. Product dimensions and properties remain identical and both connections are fully interchangeable.

TenarisHydril

Data Sheet

TH DS-19.0478 23 October 2019
Rev 01

5.500" 20.00 lb/ft P110-IC TenarisHydril Wedge 441™

PIPE BODY DATA					
GEOMETRY					
Nominal OD	5.500 in.	**Nominal Weight**	20.00 lbs/ft	**Standard Drift Diameter**	4.653 in.
Nominal ID	4.778 in.	**Wall Thickness**	0.361 in.	**Special Drift Diameter**	N/A
Plain End Weight	19.83 lbs/ft				
PERFORMANCE					
Body Yield Strength	641 x 1000 lbs	**Internal Yield**	12640 psi	**Collapse**	12100 psi

CONNECTION DATA					
GEOMETRY					
Connection OD	5.852 in.	**Connection ID**	4.778 in.	**Make-up Loss**	3.780 in.
Coupling Length	8.214 in.	**Threads per in.**	3.40		
PERFORMANCE					
Tension Efficiency	81.5%	**Joint Yield Strength**	522 x 1000 lbs	**Internal Yield**	12640 psi
Compression Efficiency	81.5%	**Compression Strength**	522 x 1000 lbs	**Collapse**	12100 psi
Bending	75 °/100 ft				
MAKE-UP TORQUES					
Minimum	14000 ft-lbs	**Optimum**	15000 ft-lbs	**Maximum**	18000 ft-lbs
BUCK-ON TORQUES					
Minimum	21600 ft-lbs			**Maximum**	23100 ft-lbs
OPERATIONAL LIMIT TORQUES					
Operating Torque	25000 ft-lbs			**Yield Torque**	29000 ft-lbs

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

CONDITIONS

Action 27553

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
TAP ROCK OPERATING, LLC 523 Park Point Drive Suite 200 Golden, CO80401	372043	27553	C-103A

OCD Reviewer	Condition
pkautz	None