

Well Name: CYPRESS 33 FED COM	Well Location: T23S / R29E / SEC 33 / NWNE / 32.2685643 / -103.9855245	County or Parish/State: EDDY / NM
Well Number: 246H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM086024	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001547857	Well Status: Approved Application for Permit to Drill	Operator: TAP ROCK OPERATING LLC

Notice of Intent

Sundry ID: 2643948

Type of Submission: Notice of Intent

Date Sundry Submitted: 11/11/2021

Date proposed operation will begin: 11/11/2021

Type of Action: Other

Time Sundry Submitted: 07:46

Procedure Description: Tap Rock requests to change the BHL for the referenced well to: 30' FSL - 1650' FEL, Lot O Section 33, T23S-R29E See attached updated plat.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Cypress_33_Federal_246H_C_102_FINAL_Signed_20211111074539.pdf

Well Name: CYPRESS 33 FED COM	Well Location: T23S / R29E / SEC 33 / NWNE / 32.2685643 / -103.9855245	County or Parish/State: EDDY / NM
Well Number: 246H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM086024	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001547857	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: JEFFREY TRLICA	Signed on: NOV 11, 2021 07:46 AM
Name: TAP ROCK OPERATING LLC	
Title: Regulatory Analyst	
Street Address: 523 PARK POINT DRIVE SUITE 200	
City: GOLDEN	State: CO
Phone: (720) 772-5910	
Email address: JTRLICA@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: 11/18/2021
Signature: Chris Walls	

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-47857		² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP
⁴ Property Code 329906	⁵ Property Name CYPRESS 33 FED COM		⁶ Well Number 246H
⁷ OGRID No. 372043	⁸ Operator Name TAP ROCK OPERATING, LLC.		⁹ Elevation 3004'

¹⁰Surface Location

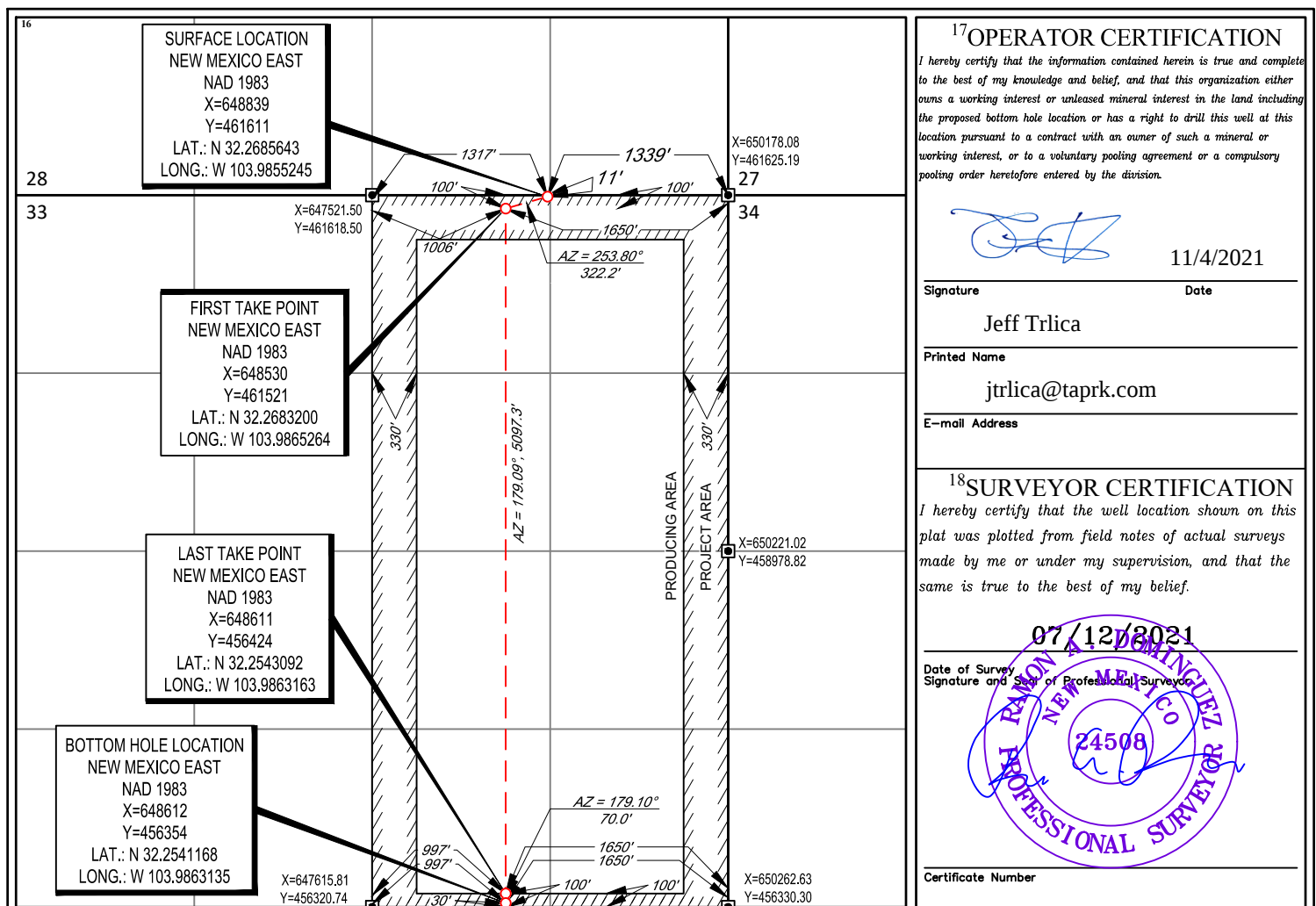
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	33	23-S	29-E	-	11'	NORTH	1339'	EAST	EDDY

¹¹Bottom Hole Location If Different From Surface

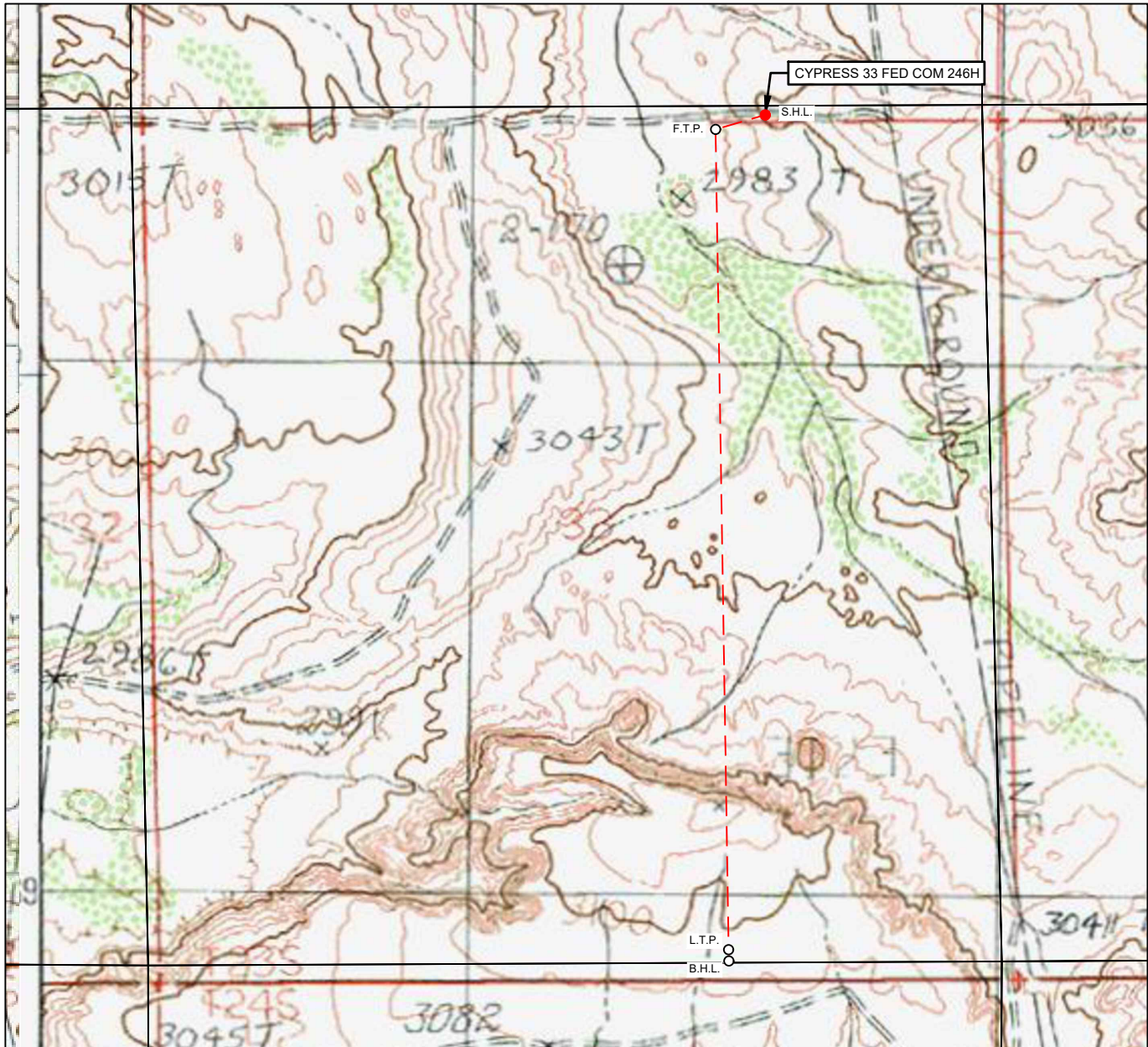
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	33	23-S	29-E	-	30'	SOUTH	1650'	EAST	EDDY

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



LOCATION & ELEVATION VERIFICATION MAP

LEASE NAME & WELL NO.: CYPRESS 33 FED COM 246H

SECTION 33 TWP 23-S RGE 29-E SURVEY N.M.P.M.
 COUNTY EDDY STATE NM ELEVATION 3004'
 DESCRIPTION 11' FSL & 1339' FEL

LATITUDE N 32.2685643 LONGITUDE W 103.9855245

SCALE: 1" = 1000'
 0' 500' 1000'

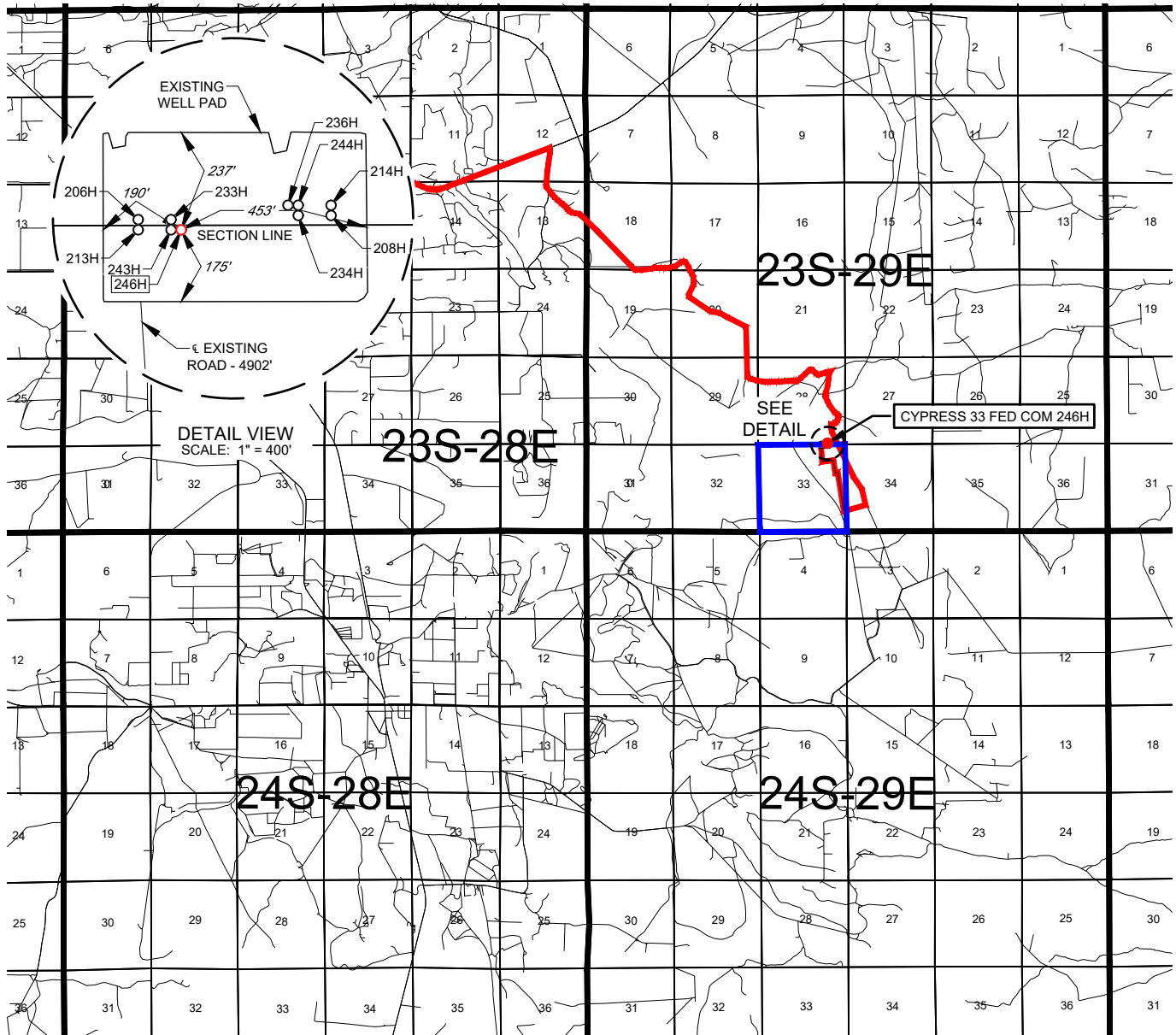
THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.



TOPOGRAPHIC
 LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
 TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
 WWW.TOPOGRAPHIC.COM

EXHIBIT 2
VICINITY MAPLEASE NAME & WELL NO.: CYPRESS 33 FED COM 246HSECTION 33 TWP 23-S RGE 29-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM
DESCRIPTION 11' FSL & 1339' FEL

DISTANCE & DIRECTION

FROM INT. OF NM-31, & STATE HWY 387, GO EAST ON NM-31 ± 1.7 MILES, THENCE SOUTH (RIGHT) ON FISHERMANS LN. ± 0.5 MILES, THENCE CONTINUE STRAIGHT ON A LEASE RD. ± 4.8 MILES, THENCE SOUTH (RIGHT) ON A LEASE RD. ± 0.6 MILES, THENCE CONTINUE SOUTH (RIGHT) ON A LEASE RD. ± 0.7 MILES, THENCE WEST (RIGHT) ON PROPOSED RD. ± 4902 FEET TO A POINT ± 201 FEET SOUTHWEST OF THE LOCATION.

SCALE: 1" = 10000'
0' 5000' 10000'

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

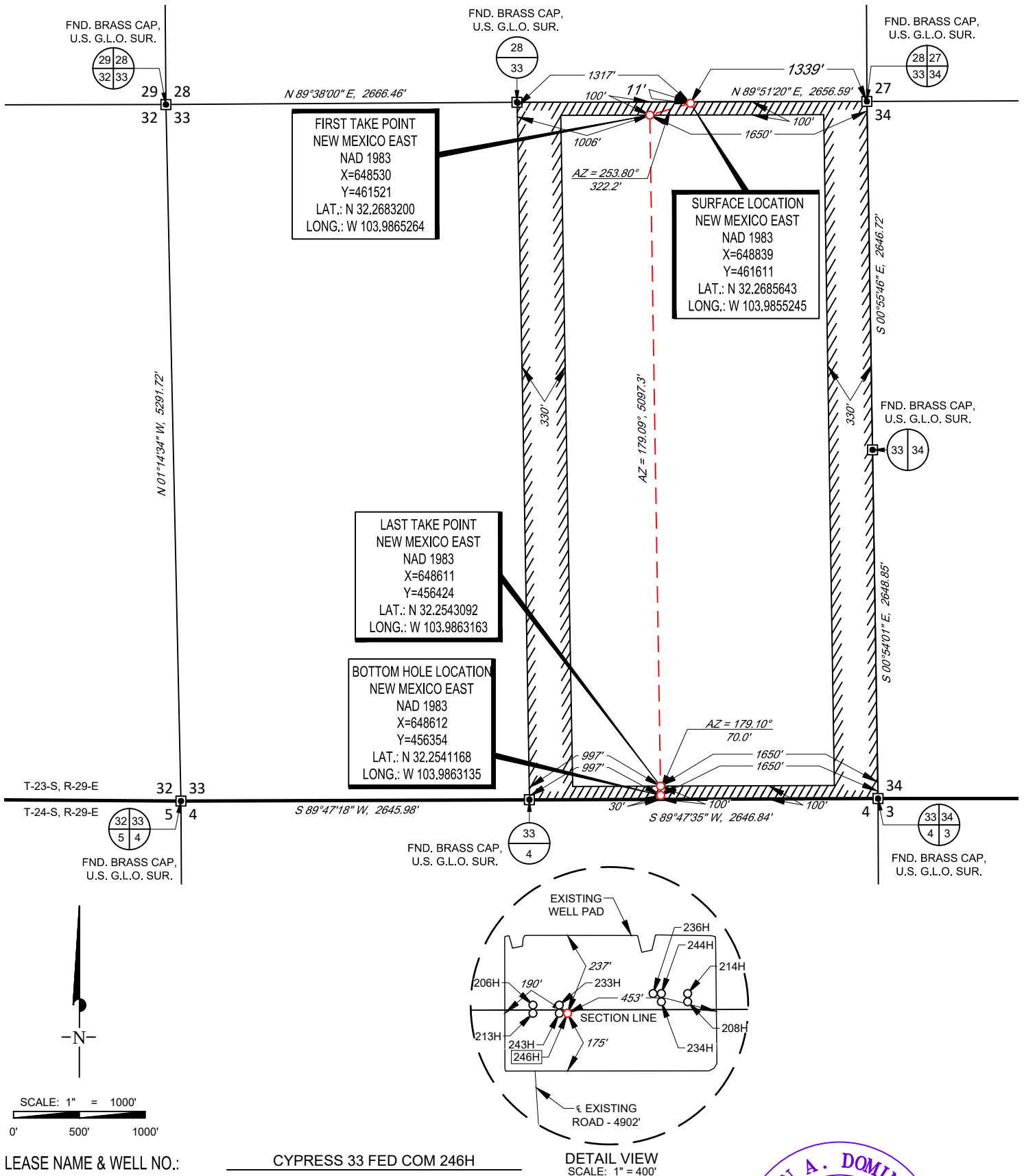
ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.



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TAP
ROCK
EXHIBIT 2A

SECTION 33, TOWNSHIP 23-S, RANGE 29-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: CYPRESS 33 FED COM 246H

SECTION 33 TWP 23-S RGE 29-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM
DESCRIPTION 11' FSL & 1339' FEL

DISTANCE & DIRECTION
FROM INT. OF NM-31, & STATE HWY 387, GO EAST ON NM-31 ±1.7 MILES, THENCE
SOUTH (RIGHT) ON FISHERMANS LN. ±0.5 MILES, THENCE CONTINUE STRAIGHT ON A
LEASE RD. ±4.8 MILES, THENCE SOUTH (RIGHT) ON A LEASE RD. ± 0.6 MILES, THENCE
CONTINUE SOUTH (RIGHT) ON A LEASE RD. ±0.7 MILES, THENCE WEST (RIGHT) ON
PROPOSED RD. ±4902 FEET TO A POINT ±201 FEET SOUTHWEST OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID
BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY
FEET.

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND
UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF
SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC THIS CERTIFICATION IS MADE AND
LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS
NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.



Ramon A. Dominguez, P.S. No. 24508
November 1, 2021

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

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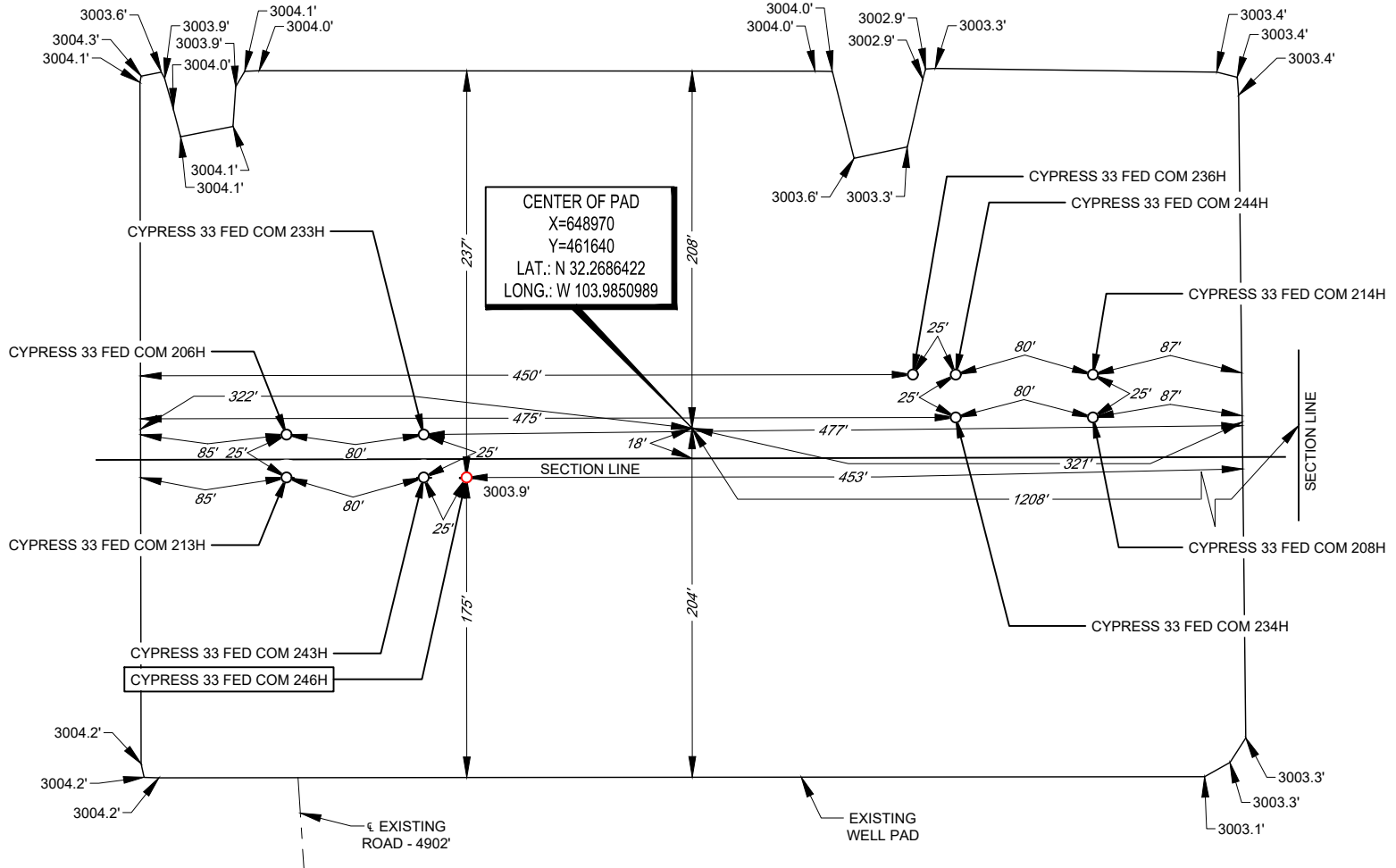
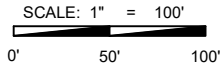


SECTION 33, TOWNSHIP 23-S, RANGE 29-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'

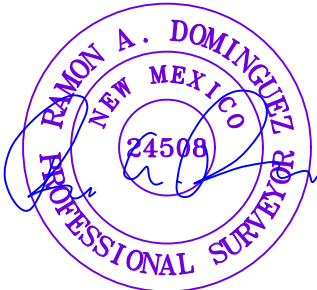
LEGEND

SECTION LINE
PROPOSED ROAD



LEASE NAME & WELL NO.: _____ CYPRESS 33 FED COM 246H _____
246H LATITUDE _____ N 32.2685643 _____ 246H LONGITUDE _____ W 103.9855245 _____

CENTER OF PAD IS 18' FSL & 1208' FEL



Ramon A. Dominguez, P.S. No. 24508

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET. ELEVATIONS USED ARE NAVD88, OBTAINED THROUGH AN OPUS SOLUTION.

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. ONLY THE DATA SHOWN ABOVE IS BEING CERTIFIED TO, ALL OTHER INFORMATION WAS INTENTIONALLY OMITTED. THIS PLAT IS ONLY INTENDED TO BE USED FOR A PERMIT AND IS NOT A BOUNDARY SURVEY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.



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WWW.TOPOGRAPHIC.COM

ORIGINAL DOCUMENT SIZE: 8.5" X 11"



Tap Rock Resources, LLC

**Eddy County, NM (NAD 83 NME)
(Cypress) Sec-33_T-23-S_R-29-E
Cypress 33 Fed Com #246H**

OWB

Plan: Plan #1

Standard Planning Report

11 November, 2021





Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Cypress 33 Fed Com #246H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3030.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB @ 3030.0usft
Site:	(Cypress) Sec-33_T-23-S_R-29-E	North Reference:	Grid
Well:	Cypress 33 Fed Com #246H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Project	Eddy County, NM (NAD 83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	(Cypress) Sec-33_T-23-S_R-29-E		
Site Position:		Northing:	461,636.00 usft
From:	Map	Easting:	648,734.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 16' 7.083 N
		Longitude:	103° 59' 9.109 W
		Grid Convergence:	0.19 °

Well	Cypress 33 Fed Com #246H		
Well Position	+N/-S	-25.0 usft	Northing: 461,611.00 usft
	+E/-W	105.0 usft	Easting: 648,839.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 32° 16' 6.832 N
			Longitude: 103° 59' 7.887 W
			Ground Level: 3,004.0 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	11/09/21	6.67	59.98	47,472.69027647

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	179.09

Plan Survey Tool Program	Date	11/11/21		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	16,039.5	Plan #1 (OWB)	MWD
				OWSG MWD - Standard

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,300.1	5.00	280.92	2,299.5	4.1	-21.4	1.00	1.00	0.00	280.92	
5,433.1	5.00	280.92	5,420.5	55.9	-289.6	0.00	0.00	0.00	0.00	
5,933.2	0.00	0.00	5,920.0	60.0	-311.0	1.00	-1.00	0.00	180.00	
10,395.2	0.00	0.00	10,382.0	60.0	-311.0	0.00	0.00	0.00	0.00	
11,295.3	90.01	179.09	10,955.0	-513.0	-301.9	10.00	10.00	19.90	179.09	
16,039.9	90.01	179.09	10,954.1	-5,257.0	-227.0	0.00	0.00	0.00	0.00	PBHL (Cypress 33)



Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Cypress 33 Fed Com #246H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3030.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB @ 3030.0usft
Site:	(Cypress) Sec-33_T-23-S_R-29-E	North Reference:	Grid
Well:	Cypress 33 Fed Com #246H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	1.00	280.92	1,900.0	0.2	-0.9	-0.2	1.00	1.00	0.00
2,000.0	2.00	280.92	2,000.0	0.7	-3.4	-0.7	1.00	1.00	0.00
2,100.0	3.00	280.92	2,099.9	1.5	-7.7	-1.6	1.00	1.00	0.00
2,200.0	4.00	280.92	2,199.7	2.6	-13.7	-2.9	1.00	1.00	0.00
2,300.1	5.00	280.92	2,299.5	4.1	-21.4	-4.5	1.00	1.00	0.00
2,400.0	5.00	280.92	2,399.0	5.8	-30.0	-6.3	0.00	0.00	0.00
2,500.0	5.00	280.92	2,498.6	7.4	-38.5	-8.0	0.00	0.00	0.00
2,600.0	5.00	280.92	2,598.2	9.1	-47.1	-9.8	0.00	0.00	0.00
2,700.0	5.00	280.92	2,697.8	10.7	-55.6	-11.6	0.00	0.00	0.00
2,800.0	5.00	280.92	2,797.5	12.4	-64.2	-13.4	0.00	0.00	0.00
2,900.0	5.00	280.92	2,897.1	14.0	-72.8	-15.2	0.00	0.00	0.00
3,000.0	5.00	280.92	2,996.7	15.7	-81.3	-17.0	0.00	0.00	0.00
3,100.0	5.00	280.92	3,096.3	17.3	-89.9	-18.8	0.00	0.00	0.00
3,200.0	5.00	280.92	3,195.9	19.0	-98.4	-20.6	0.00	0.00	0.00
3,300.0	5.00	280.92	3,295.6	20.6	-107.0	-22.3	0.00	0.00	0.00
3,400.0	5.00	280.92	3,395.2	22.3	-115.6	-24.1	0.00	0.00	0.00
3,500.0	5.00	280.92	3,494.8	23.9	-124.1	-25.9	0.00	0.00	0.00
3,600.0	5.00	280.92	3,594.4	25.6	-132.7	-27.7	0.00	0.00	0.00
3,700.0	5.00	280.92	3,694.0	27.2	-141.2	-29.5	0.00	0.00	0.00
3,800.0	5.00	280.92	3,793.7	28.9	-149.8	-31.3	0.00	0.00	0.00
3,900.0	5.00	280.92	3,893.3	30.6	-158.4	-33.1	0.00	0.00	0.00
4,000.0	5.00	280.92	3,992.9	32.2	-166.9	-34.8	0.00	0.00	0.00
4,100.0	5.00	280.92	4,092.5	33.9	-175.5	-36.6	0.00	0.00	0.00
4,200.0	5.00	280.92	4,192.1	35.5	-184.0	-38.4	0.00	0.00	0.00
4,300.0	5.00	280.92	4,291.8	37.2	-192.6	-40.2	0.00	0.00	0.00
4,400.0	5.00	280.92	4,391.4	38.8	-201.2	-42.0	0.00	0.00	0.00
4,500.0	5.00	280.92	4,491.0	40.5	-209.7	-43.8	0.00	0.00	0.00
4,600.0	5.00	280.92	4,590.6	42.1	-218.3	-45.6	0.00	0.00	0.00
4,700.0	5.00	280.92	4,690.2	43.8	-226.8	-47.4	0.00	0.00	0.00
4,800.0	5.00	280.92	4,789.8	45.4	-235.4	-49.1	0.00	0.00	0.00
4,900.0	5.00	280.92	4,889.5	47.1	-244.0	-50.9	0.00	0.00	0.00
5,000.0	5.00	280.92	4,989.1	48.7	-252.5	-52.7	0.00	0.00	0.00
5,100.0	5.00	280.92	5,088.7	50.4	-261.1	-54.5	0.00	0.00	0.00
5,200.0	5.00	280.92	5,188.3	52.0	-269.6	-56.3	0.00	0.00	0.00
5,300.0	5.00	280.92	5,287.9	53.7	-278.2	-58.1	0.00	0.00	0.00



Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Cypress 33 Fed Com #246H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3030.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB @ 3030.0usft
Site:	(Cypress) Sec-33_T-23-S_R-29-E	North Reference:	Grid
Well:	Cypress 33 Fed Com #246H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.0	5.00	280.92	5,387.6	55.3	-286.8	-59.9	0.00	0.00	0.00
5,433.1	5.00	280.92	5,420.5	55.9	-289.6	-60.5	0.00	0.00	0.00
5,500.0	4.33	280.92	5,487.2	56.9	-294.9	-61.6	1.00	-1.00	0.00
5,600.0	3.33	280.92	5,587.0	58.2	-301.5	-62.9	1.00	-1.00	0.00
5,700.0	2.33	280.92	5,686.9	59.1	-306.3	-64.0	1.00	-1.00	0.00
5,800.0	1.33	280.92	5,786.8	59.7	-309.5	-64.6	1.00	-1.00	0.00
5,900.0	0.33	280.92	5,886.8	60.0	-310.9	-64.9	1.00	-1.00	0.00
5,933.2	0.00	0.00	5,920.0	60.0	-311.0	-64.9	1.00	-1.00	0.00
6,000.0	0.00	0.00	5,986.8	60.0	-311.0	-64.9	0.00	0.00	0.00
6,100.0	0.00	0.00	6,086.8	60.0	-311.0	-64.9	0.00	0.00	0.00
6,200.0	0.00	0.00	6,186.8	60.0	-311.0	-64.9	0.00	0.00	0.00
6,300.0	0.00	0.00	6,286.8	60.0	-311.0	-64.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,386.8	60.0	-311.0	-64.9	0.00	0.00	0.00
6,500.0	0.00	0.00	6,486.8	60.0	-311.0	-64.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,586.8	60.0	-311.0	-64.9	0.00	0.00	0.00
6,700.0	0.00	0.00	6,686.8	60.0	-311.0	-64.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,786.8	60.0	-311.0	-64.9	0.00	0.00	0.00
6,900.0	0.00	0.00	6,886.8	60.0	-311.0	-64.9	0.00	0.00	0.00
7,000.0	0.00	0.00	6,986.8	60.0	-311.0	-64.9	0.00	0.00	0.00
7,100.0	0.00	0.00	7,086.8	60.0	-311.0	-64.9	0.00	0.00	0.00
7,200.0	0.00	0.00	7,186.8	60.0	-311.0	-64.9	0.00	0.00	0.00
7,300.0	0.00	0.00	7,286.8	60.0	-311.0	-64.9	0.00	0.00	0.00
7,400.0	0.00	0.00	7,386.8	60.0	-311.0	-64.9	0.00	0.00	0.00
7,500.0	0.00	0.00	7,486.8	60.0	-311.0	-64.9	0.00	0.00	0.00
7,600.0	0.00	0.00	7,586.8	60.0	-311.0	-64.9	0.00	0.00	0.00
7,700.0	0.00	0.00	7,686.8	60.0	-311.0	-64.9	0.00	0.00	0.00
7,800.0	0.00	0.00	7,786.8	60.0	-311.0	-64.9	0.00	0.00	0.00
7,900.0	0.00	0.00	7,886.8	60.0	-311.0	-64.9	0.00	0.00	0.00
8,000.0	0.00	0.00	7,986.8	60.0	-311.0	-64.9	0.00	0.00	0.00
8,100.0	0.00	0.00	8,086.8	60.0	-311.0	-64.9	0.00	0.00	0.00
8,200.0	0.00	0.00	8,186.8	60.0	-311.0	-64.9	0.00	0.00	0.00
8,300.0	0.00	0.00	8,286.8	60.0	-311.0	-64.9	0.00	0.00	0.00
8,400.0	0.00	0.00	8,386.8	60.0	-311.0	-64.9	0.00	0.00	0.00
8,500.0	0.00	0.00	8,486.8	60.0	-311.0	-64.9	0.00	0.00	0.00
8,600.0	0.00	0.00	8,586.8	60.0	-311.0	-64.9	0.00	0.00	0.00
8,700.0	0.00	0.00	8,686.8	60.0	-311.0	-64.9	0.00	0.00	0.00
8,800.0	0.00	0.00	8,786.8	60.0	-311.0	-64.9	0.00	0.00	0.00
8,900.0	0.00	0.00	8,886.8	60.0	-311.0	-64.9	0.00	0.00	0.00
9,000.0	0.00	0.00	8,986.8	60.0	-311.0	-64.9	0.00	0.00	0.00
9,100.0	0.00	0.00	9,086.8	60.0	-311.0	-64.9	0.00	0.00	0.00
9,200.0	0.00	0.00	9,186.8	60.0	-311.0	-64.9	0.00	0.00	0.00
9,300.0	0.00	0.00	9,286.8	60.0	-311.0	-64.9	0.00	0.00	0.00
9,400.0	0.00	0.00	9,386.8	60.0	-311.0	-64.9	0.00	0.00	0.00
9,500.0	0.00	0.00	9,486.8	60.0	-311.0	-64.9	0.00	0.00	0.00
9,600.0	0.00	0.00	9,586.8	60.0	-311.0	-64.9	0.00	0.00	0.00
9,700.0	0.00	0.00	9,686.8	60.0	-311.0	-64.9	0.00	0.00	0.00
9,800.0	0.00	0.00	9,786.8	60.0	-311.0	-64.9	0.00	0.00	0.00
9,900.0	0.00	0.00	9,886.8	60.0	-311.0	-64.9	0.00	0.00	0.00
10,000.0	0.00	0.00	9,986.8	60.0	-311.0	-64.9	0.00	0.00	0.00
10,100.0	0.00	0.00	10,086.8	60.0	-311.0	-64.9	0.00	0.00	0.00
10,200.0	0.00	0.00	10,186.8	60.0	-311.0	-64.9	0.00	0.00	0.00
10,300.0	0.00	0.00	10,286.8	60.0	-311.0	-64.9	0.00	0.00	0.00
10,395.2	0.00	0.00	10,382.0	60.0	-311.0	-64.9	0.00	0.00	0.00
10,400.0	0.48	179.09	10,386.8	60.0	-311.0	-64.9	10.00	10.00	0.00



Intrepid Planning Report



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Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3030.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB @ 3030.0usft
Site:	(Cypress) Sec-33_T-23-S_R-29-E	North Reference:	Grid
Well:	Cypress 33 Fed Com #246H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,450.0	5.48	179.09	10,436.7	57.4	-311.0	-62.3	10.00	10.00	0.00
10,500.0	10.48	179.09	10,486.2	50.4	-310.8	-55.4	10.00	10.00	0.00
10,550.0	15.48	179.09	10,534.9	39.2	-310.7	-44.1	10.00	10.00	0.00
10,600.0	20.48	179.09	10,582.5	23.8	-310.4	-28.7	10.00	10.00	0.00
10,650.0	25.48	179.09	10,628.5	4.3	-310.1	-9.2	10.00	10.00	0.00
10,700.0	30.48	179.09	10,672.6	-19.2	-309.7	14.2	10.00	10.00	0.00
10,750.0	35.48	179.09	10,714.6	-46.4	-309.3	41.5	10.00	10.00	0.00
10,800.0	40.48	179.09	10,754.0	-77.1	-308.8	72.2	10.00	10.00	0.00
10,850.0	45.48	179.09	10,790.5	-111.2	-308.3	106.3	10.00	10.00	0.00
10,900.0	50.48	179.09	10,824.0	-148.3	-307.7	143.4	10.00	10.00	0.00
10,950.0	55.48	179.09	10,854.1	-188.2	-307.1	183.3	10.00	10.00	0.00
11,000.0	60.48	179.09	10,880.6	-230.6	-306.4	225.7	10.00	10.00	0.00
11,050.0	65.48	179.09	10,903.3	-275.1	-305.7	270.2	10.00	10.00	0.00
11,100.0	70.48	179.09	10,922.0	-321.5	-305.0	316.6	10.00	10.00	0.00
11,150.0	75.48	179.09	10,936.7	-369.3	-304.2	364.4	10.00	10.00	0.00
11,200.0	80.48	179.09	10,947.1	-418.1	-303.4	413.3	10.00	10.00	0.00
11,250.0	85.48	179.09	10,953.2	-467.7	-302.7	462.9	10.00	10.00	0.00
11,295.3	90.01	179.09	10,955.0	-513.0	-301.9	508.1	10.00	10.00	0.00
11,300.0	90.01	179.09	10,955.0	-517.7	-301.9	512.8	0.00	0.00	0.00
11,400.0	90.01	179.09	10,954.9	-617.7	-300.3	612.8	0.00	0.00	0.00
11,500.0	90.01	179.09	10,954.9	-717.7	-298.7	712.8	0.00	0.00	0.00
11,600.0	90.01	179.09	10,954.9	-817.7	-297.1	812.8	0.00	0.00	0.00
11,700.0	90.01	179.09	10,954.9	-917.6	-295.6	912.8	0.00	0.00	0.00
11,800.0	90.01	179.09	10,954.9	-1,017.6	-294.0	1,012.8	0.00	0.00	0.00
11,900.0	90.01	179.09	10,954.8	-1,117.6	-292.4	1,112.8	0.00	0.00	0.00
12,000.0	90.01	179.09	10,954.8	-1,217.6	-290.8	1,212.8	0.00	0.00	0.00
12,100.0	90.01	179.09	10,954.8	-1,317.6	-289.2	1,312.8	0.00	0.00	0.00
12,200.0	90.01	179.09	10,954.8	-1,417.6	-287.7	1,412.8	0.00	0.00	0.00
12,300.0	90.01	179.09	10,954.8	-1,517.6	-286.1	1,512.8	0.00	0.00	0.00
12,400.0	90.01	179.09	10,954.8	-1,617.6	-284.5	1,612.8	0.00	0.00	0.00
12,500.0	90.01	179.09	10,954.7	-1,717.5	-282.9	1,712.8	0.00	0.00	0.00
12,600.0	90.01	179.09	10,954.7	-1,817.5	-281.3	1,812.8	0.00	0.00	0.00
12,700.0	90.01	179.09	10,954.7	-1,917.5	-279.8	1,912.8	0.00	0.00	0.00
12,800.0	90.01	179.09	10,954.7	-2,017.5	-278.2	2,012.8	0.00	0.00	0.00
12,900.0	90.01	179.09	10,954.7	-2,117.5	-276.6	2,112.8	0.00	0.00	0.00
13,000.0	90.01	179.09	10,954.6	-2,217.5	-275.0	2,212.8	0.00	0.00	0.00
13,100.0	90.01	179.09	10,954.6	-2,317.5	-273.4	2,312.8	0.00	0.00	0.00
13,200.0	90.01	179.09	10,954.6	-2,417.5	-271.9	2,412.8	0.00	0.00	0.00
13,300.0	90.01	179.09	10,954.6	-2,517.4	-270.3	2,512.8	0.00	0.00	0.00
13,400.0	90.01	179.09	10,954.6	-2,617.4	-268.7	2,612.8	0.00	0.00	0.00
13,500.0	90.01	179.09	10,954.6	-2,717.4	-267.1	2,712.8	0.00	0.00	0.00
13,600.0	90.01	179.09	10,954.5	-2,817.4	-265.5	2,812.8	0.00	0.00	0.00
13,700.0	90.01	179.09	10,954.5	-2,917.4	-264.0	2,912.8	0.00	0.00	0.00
13,800.0	90.01	179.09	10,954.5	-3,017.4	-262.4	3,012.8	0.00	0.00	0.00
13,900.0	90.01	179.09	10,954.5	-3,117.4	-260.8	3,112.8	0.00	0.00	0.00
14,000.0	90.01	179.09	10,954.5	-3,217.4	-259.2	3,212.8	0.00	0.00	0.00
14,100.0	90.01	179.09	10,954.4	-3,317.3	-257.6	3,312.8	0.00	0.00	0.00
14,200.0	90.01	179.09	10,954.4	-3,417.3	-256.1	3,412.8	0.00	0.00	0.00
14,300.0	90.01	179.09	10,954.4	-3,517.3	-254.5	3,512.8	0.00	0.00	0.00
14,400.0	90.01	179.09	10,954.4	-3,617.3	-252.9	3,612.8	0.00	0.00	0.00
14,500.0	90.01	179.09	10,954.4	-3,717.3	-251.3	3,712.8	0.00	0.00	0.00
14,600.0	90.01	179.09	10,954.3	-3,817.3	-249.7	3,812.8	0.00	0.00	0.00
14,700.0	90.01	179.09	10,954.3	-3,917.3	-248.2	3,912.8	0.00	0.00	0.00
14,800.0	90.01	179.09	10,954.3	-4,017.3	-246.6	4,012.8	0.00	0.00	0.00



Intrepid Planning Report



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Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB @ 3030.0usft
Site:	(Cypress) Sec-33_T-23-S_R-29-E	North Reference:	Grid
Well:	Cypress 33 Fed Com #246H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
14,900.0	90.01	179.09	10,954.3	-4,117.2	-245.0	4,112.8	0.00	0.00	0.00	
15,000.0	90.01	179.09	10,954.3	-4,217.2	-243.4	4,212.8	0.00	0.00	0.00	
15,100.0	90.01	179.09	10,954.3	-4,317.2	-241.8	4,312.8	0.00	0.00	0.00	
15,200.0	90.01	179.09	10,954.2	-4,417.2	-240.3	4,412.8	0.00	0.00	0.00	
15,300.0	90.01	179.09	10,954.2	-4,517.2	-238.7	4,512.8	0.00	0.00	0.00	
15,400.0	90.01	179.09	10,954.2	-4,617.2	-237.1	4,612.8	0.00	0.00	0.00	
15,500.0	90.01	179.09	10,954.2	-4,717.2	-235.5	4,712.8	0.00	0.00	0.00	
15,600.0	90.01	179.09	10,954.2	-4,817.2	-233.9	4,812.8	0.00	0.00	0.00	
15,700.0	90.01	179.09	10,954.1	-4,917.1	-232.4	4,912.8	0.00	0.00	0.00	
15,800.0	90.01	179.09	10,954.1	-5,017.1	-230.8	5,012.8	0.00	0.00	0.00	
15,900.0	90.01	179.09	10,954.1	-5,117.1	-229.2	5,112.8	0.00	0.00	0.00	
16,000.0	90.01	179.09	10,954.1	-5,217.1	-227.6	5,212.8	0.00	0.00	0.00	
16,039.9	90.01	179.09	10,954.1	-5,257.0	-227.0	5,252.7	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
LTP (Cypress 33 Fed - hit/miss target - Shape - Point)	0.00	0.00	10,954.1	-5,187.0	-228.0	456,424.00	648,611.00	32° 15' 15.510 N	103° 59' 10.738 W	- plan misses target center by 0.1usft at 15969.9usft MD (10954.1 TVD, -5187.0 N, -228.1 E)
PBHL (Cypress 33 Fe - plan hits target center - Rectangle (sides W100.0 H5,168.0 D30.0))	-0.01	179.09	10,954.1	-5,257.0	-227.0	456,354.00	648,612.00	32° 15' 14.817 N	103° 59' 10.729 W	
FTP (Cypress 33 Fed - plan misses target center by 139.2usft at 10932.3usft MD (10843.8 TVD, -173.8 N, -307.3 E) - Point)	0.00	0.00	10,955.0	-90.0	-309.0	461,521.00	648,530.00	32° 16' 5.951 N	103° 59' 11.490 W	



Intrepid Planning Report



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Well:	Cypress 33 Fed Com #246H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
190.0	190.0	Rustler Anhydrite			
500.0	500.0	Top Salt			
2,802.5	2,800.0	Base Salt			
3,023.4	3,020.0	Delaware Mountain Gp			
3,023.4	3,020.0	Lamar			
3,053.5	3,050.0	Bell Canyon			
3,098.7	3,095.0	Ramsey Sand			
3,911.8	3,905.0	Cherry Canyon			
5,096.3	5,085.0	Brushy Canyon			
6,713.2	6,700.0	Bone Spring Lime			
6,828.2	6,815.0	Upper Avalon			
7,168.2	7,155.0	Middle Avalon			
7,533.2	7,520.0	Lower Avalon			
7,708.2	7,695.0	1st Bone Spring Sand			
7,993.2	7,980.0	2nd Bone Spring Carb			
8,288.2	8,275.0	2nd Bone Spring Sand			
8,823.2	8,810.0	3rd Bone Spring Carb			
9,643.2	9,630.0	3rd Bone Spring Sand			
9,923.2	9,910.0	3rd BS W Sand			
9,983.2	9,970.0	Wolfcamp A X Sand			
10,073.2	10,060.0	Wolfcamp A Y Sand			
10,128.2	10,115.0	Wolfcamp A Lower			
10,443.3	10,430.0	Wolfcamp B			
10,714.5	10,685.0	Wolfcamp B1			
10,901.6	10,825.0	Wolfcamp C			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,800.0	1,800.0	0.0	0.0	NUDGE - Build 1.00
2,300.1	2,299.5	4.1	-21.4	HOLD - 3133.0 at 2300.1 MD
5,433.1	5,420.5	55.9	-289.6	DROP - -1.00
5,933.2	5,920.0	60.0	-311.0	HOLD - 4462.0 at 5933.2 MD
10,395.2	10,382.0	60.0	-311.0	KOP - DLS 10.00 TFO 179.09
11,295.3	10,955.0	-513.0	-301.9	EOC - 4744.6 hold at 11295.3 MD
16,039.9	10,954.1	-5,257.0	-227.0	TD at 16039.9



Drilling Operations Plan
 Cypress 33 Fed Com 246H
 Tap Rock Operating, LLC
 SHL 11' FNL & 1339' FEL, Sec. 33
 BHL 30' FSL & 1650' FEL, Sec. 33
 T. 23S., R. 29E, Eddy County, NM

Elevation above Sea Level: 3,004'

DRILLING PROGRAM

1. Estimated Tops

Formation	TVD	MD	Lithologies	Bearing
Quaternary Deposits	0	0	Surface	None
Rustler Anhydrite	190	190	Salt	Salt
Salado	500	500	Salt	Salt
Base Salt	2800	2803	Salt	Salt
Lamar	3020	3023	Limestone	None
Bell Canyon	3050	3054	Sandstone	Hydrocarbons
Cherry Canyon	3905	3912	Sandstone	Hydrocarbons
Brushy Canyon	5085	5096	Sandstone	Hydrocarbons
Bone Spring Lime	6700	6713	Limestone	Hydrocarbons
1st Bone Spring	7695	7708	Sandstone	Hydrocarbons
2nd Bone Spring	7980	7993	Sandstone	Hydrocarbons
3rd Bone Spring	8810	8823	Sandstone	Hydrocarbons
Wolfcamp	9970	9983	Shale	Hydrocarbons
KOP	10382	10395	Sandstone	Hydrocarbons
TD	10954	16040	Shale	Hydrocarbons

2. Notable Zones

Wolfcamp is the target formation.

3. Pressure Control

Pressure Control Equipment (See Schematics):

At 15,000', a 5,000 psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and 1 annular preventer will be used below surface casing to TD. See attachments for BOP and choke manifold diagrams. Also present will be an accumulator that meets the requirements of Onshore Order #2 for the pressure rating of the BOP stack. A rotating head will also be installed as needed. BOP will be inspected and operated as recommended in Onshore Order #2. A top drive check valve and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position. The wellhead will be a multi-bowl speed head.

BOP Test procedure will be as follows:



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After surface casing is set and the BOP is nipped up, the BOP pressure tests will be made with a third party tester to 250 psi low, 5000 psi high, and the annular preventer will be tested to 2,500 psi. The BOP will be tested in this manner after nipple-up if any break of the stack occurs.

Variance Requests:

Tap Rock requests a variance to run a multi-bowl speed head for setting the Intermediate 1, Intermediate 2, and Production Strings. Tap Rock requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used. Tap Rock requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, after drilling surface, 1st intermediate, and 2nd intermediate hole sections and cementing 2nd intermediate casing, a 10M dry hole cap with bleed off valve will be installed. The rig will then walk to another well on the pad. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test. Due to the Potash, Tap Rock will cement the 7-5/8" string to surface.

Tap Rock requests approval to possibly utilize a spudder rig to drill and set casing for the surface interval on this well. The spudder rig will be possibly utilized in order to reduce cost and save time. The wellhead will be installed and tested as soon as the surface casing is cut off per the existing COAs. A blind flange with the same pressure rating as the wellhead will be installed on the well. Once the spudder rig is removed, Tap Rock will secure the wellhead area by placing a guard rail around the cellar. Pressure will be monitored and a means for intervention will be maintained while the drilling rig is not over the well. Spudder rig operations are expected to take 2-3 days per well. The BLM will be notified 24 hours prior to commencing spudder rig operations. Within 90 days of the departure of the spudder rig, drilling operations will recommence on these wells. This rig will have a BOP stack equal or greater to the pressure rating required in the COAs. The BLM will be notified 24 hours before the larger rig moves on the pre-set wells. Tap Rock will have supervision on the spudder rig to ensure compliance with all BLM and NMOCD regulations.

4. Casing & Cement

All Casing will be new.

Name	Hole Size	Casing Size	Standard	Top MD	Bottom MD	Top TVD	BTM TVD	Grade	Weight	Thread	Collapse	Burst	Tension
Surface	17.5	13.375	API	0	265	0	265	J-55	54.5	BUTT	1.13	1.15	1.6
1st Intermediate	12.25	9.625	API	0	3073	0	3070	J-55	40	BUTT	1.13	1.15	1.6
2nd Intermediate	8.75	7.625	API	0	2773	0	2770	P-110	29.7	BUTT	1.13	1.15	1.6
2nd Intermediate	8.75	7.625	NON API	2773	10295	2770	10282	P-110	29.7	W441	1.13	1.15	1.6
Production	6.75	5.5	NON API	0	10095	0	10082	P-110	20	TXP	1.13	1.15	1.6
Production	6.75	5.5	NON API	10095	16040	10082	10954	P-110	20	W441	1.13	1.15	1.6



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Section	Drilled Interval			Casing Size	Standard	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	265	13.375	API	0	265	0	265	J-55	54.5	BUTT	1.13	1.15	1.6
Intermediate	9.875	265	7500	7.625	API	0	7200	0	7187	P-110	29.7	BUTT	1.13	1.15	1.6
	8.75	7500	10295	7.625	NON API	7200	10295	7187	10282	P-110	29.7	W441	1.13	1.15	1.6
Production	6.75	10295	16040	5.5	NON API	0	10095	0	10082	P-110	20	TXP	1.13	1.15	1.6
Production	6.75			5.5	NON API	10095	16040	10082	10954	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	Tail	0	277	1.33	368	14.8	100%	C	5% NCI + LCM
1st Intermediate	Lead	0	486	2.12	1031	11.0	65%	C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	2073	389	1.33	517	14.8	65%	C	5% NaCl + LCM
2nd Intermediate	Lead	2873	308	3.42	1053	10.5	65%	TXI	Fluid Loss + Dispersant + Retarder + LCM
	Tail	9295	123	1.35	166	13.2	65%	H	Fluid Loss + Dispersant + Retarder + LCM
Production	Tail	10095	451	1.32	595	14.2	20%	H	Fluid Loss + Dispersant + Retarder + LCM

Name		Type	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface		Tail	0	277	1.33	368	14.8	100%	C	5% NCI + LCM
Intermediate	Stage 1	Lead	0	878	3.42	3004	10.5	65%	C	Fluid Loss + Dispersant + Retarder + LCM
		Tail	9295	125	1.33	166	13.2	65%	C	Fluid Loss + Dispersant + Retarder + LCM
	Stage 2	Primary	0	497	2.4	1193	11.5	65%	C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	DVT	3223								
Production		Primary	10095	451	1.32	595	14.2	20%	H	Fluid Loss + Dispersant + Retarder + LCM

*OPTION TO RUN DV TOOL IF NECESSARY

If a DV tool is ran, the depth will be adjusted depending on current hole conditions. Cement volumes will be adjusted proportionally. The DV tool will be set a minimum of 50' below the previous casing shoe and at least 200' above the current casing shoe. If cement is not circulated to surface on the 1st cement job, the 2nd stage will be pumped as planned. If cement does not return to surface on the 2nd stage the BLM will be notified immediately.

5. Mud Program

Name	Top	Bottom	Type	Mud Weight	Visc	Fluid Loss
Surface	0	265	FW Spud Mud	8.40	28	NC
Intermediate	265	3073	Brine Water	10.00	30-32	NC
Intermediate 2	3073	10295	FW/Cut Brine	9.00	30-32	NC
Production	10295	16040	Oil Base Mud	11.50	50-70	<16

Name	Top	Bottom	Type	Mud Weight	Visc	Fluid Loss
Surface	0	265	FW Spud Mud	8.40	28	NC
Intermediate	265	10295	DBE/Cut Brine	9.00	30-32	NC
Production	10295	16040	Oil Base Mud	11.50	55-75	<10



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Electronic Pason mud monitor system complying with Onshore Order 1 will be used. All necessary mud products (e. g., barite, cedar bark) for weight addition and fluid loss control will always be on site. Mud program is subject to change due to hole conditions. A closed loop system will be used.

6. Cores, Tests, & Logs

- Electric Logging Program: No open-hole logs are planned at this time for the pilot hole.
- GR will be collected while drilling through the MWD tools from 9.625" casing shoe to TD.
- A 2-person mud logging program will be used from 7.625" casing shoe to TD.
- No DSTs or cores are planned at this time.
- CBL w/ CCL from as far as gravity will let it fall to TOC.

7. Down Hole Conditions

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is ≈6,550 psi. Expected bottom hole temperature is ≈170° F.

Tap Rock does not anticipate that there will be enough H₂S from the surface to the Wolfcamp formations to meet the BLM's Onshore Order 6 requirements for the submission of an "H₂S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Tap Rock has an H₂S safety package on all wells and an "H₂S Drilling Operations Plan" is attached. Adequate flare lines will be installed off the mud/gas separator where gas may be safely flared. All personnel will be familiar with all aspects of safe operation of equipment being used.

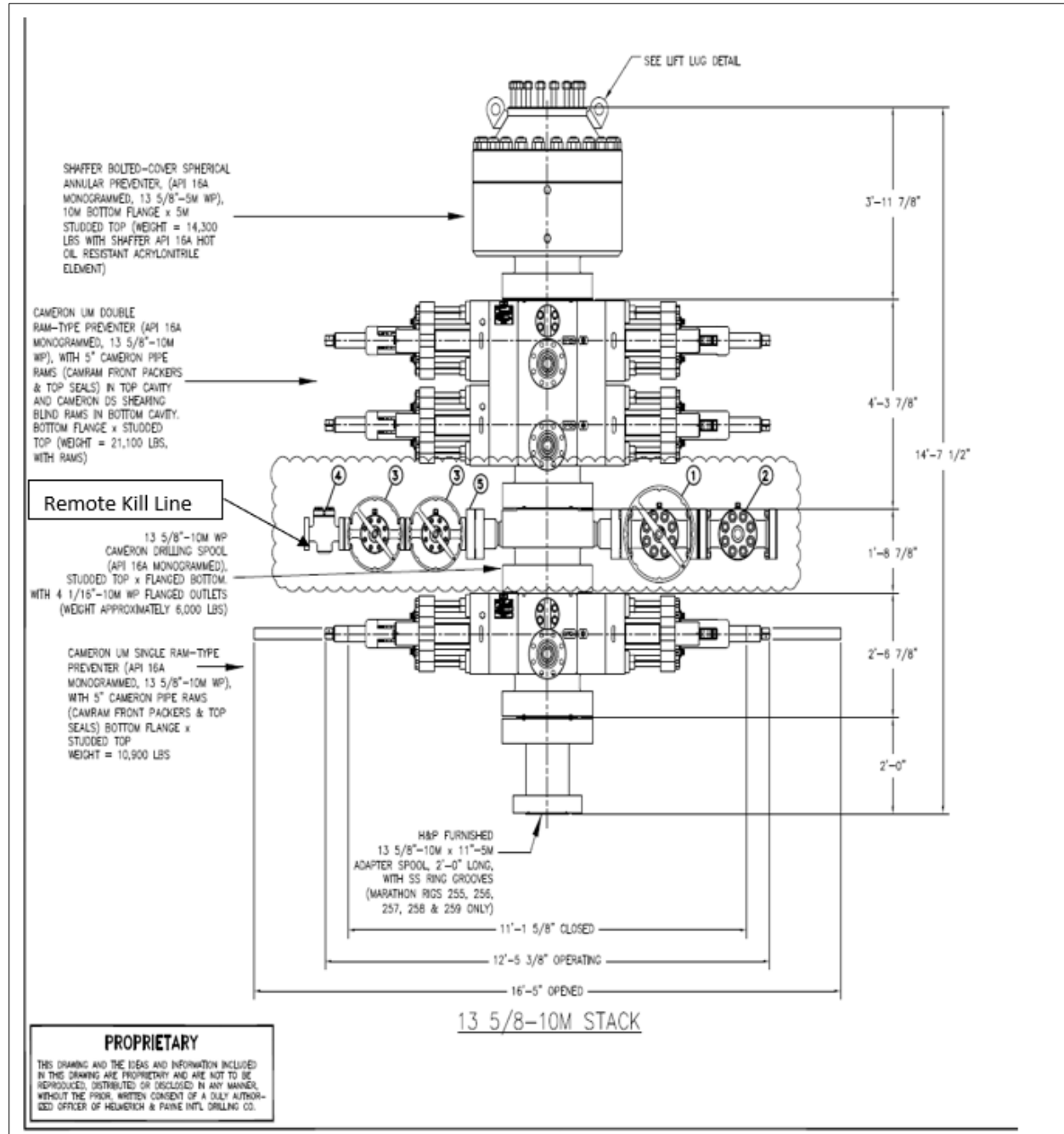
8. Other

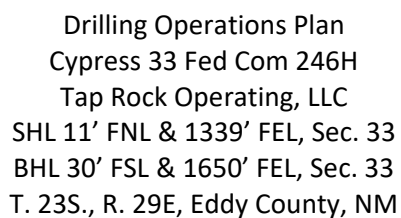
Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 30 days. If production casing is run an additional 60 days will be required to complete and construct surface facilities.



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5,000 psi BOP Stack

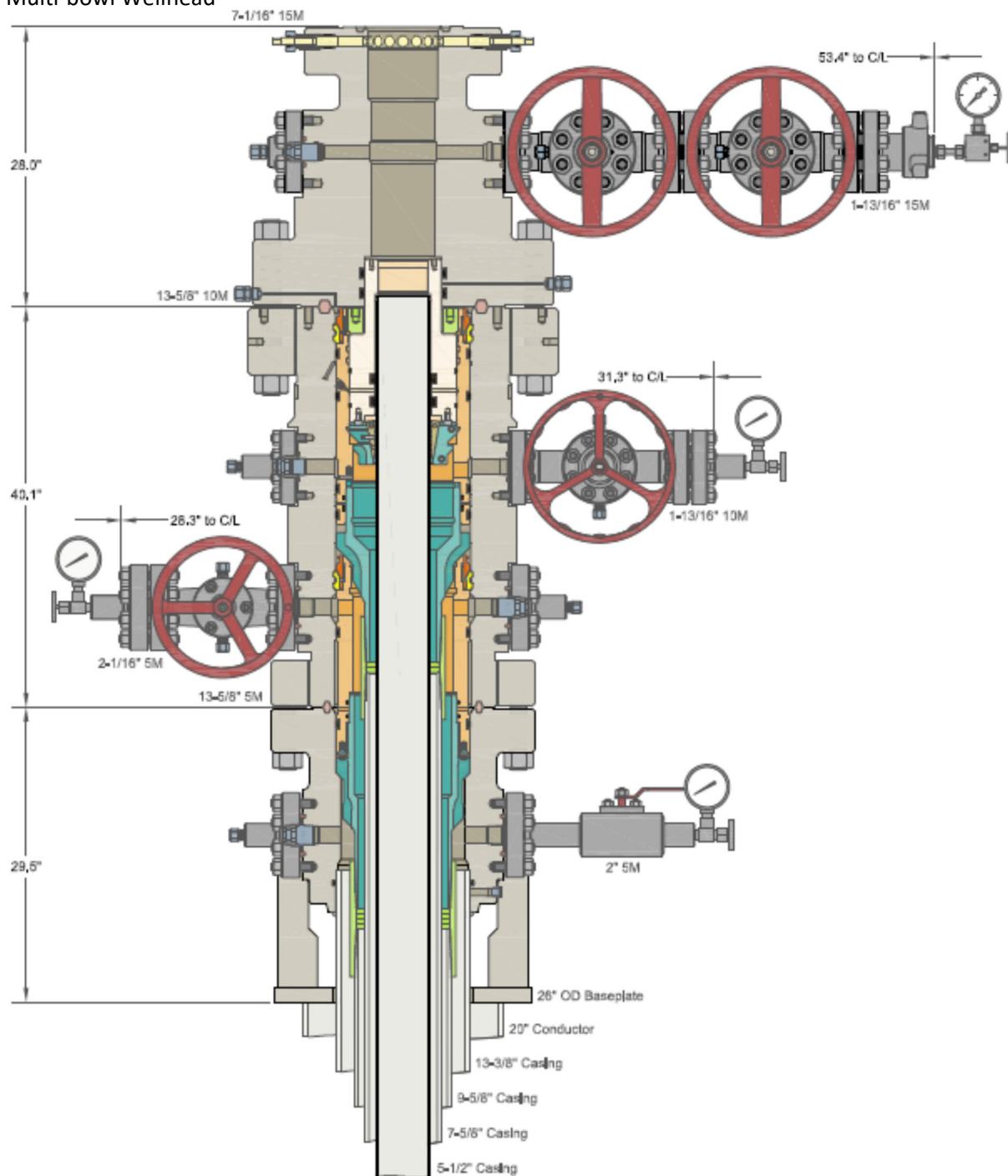






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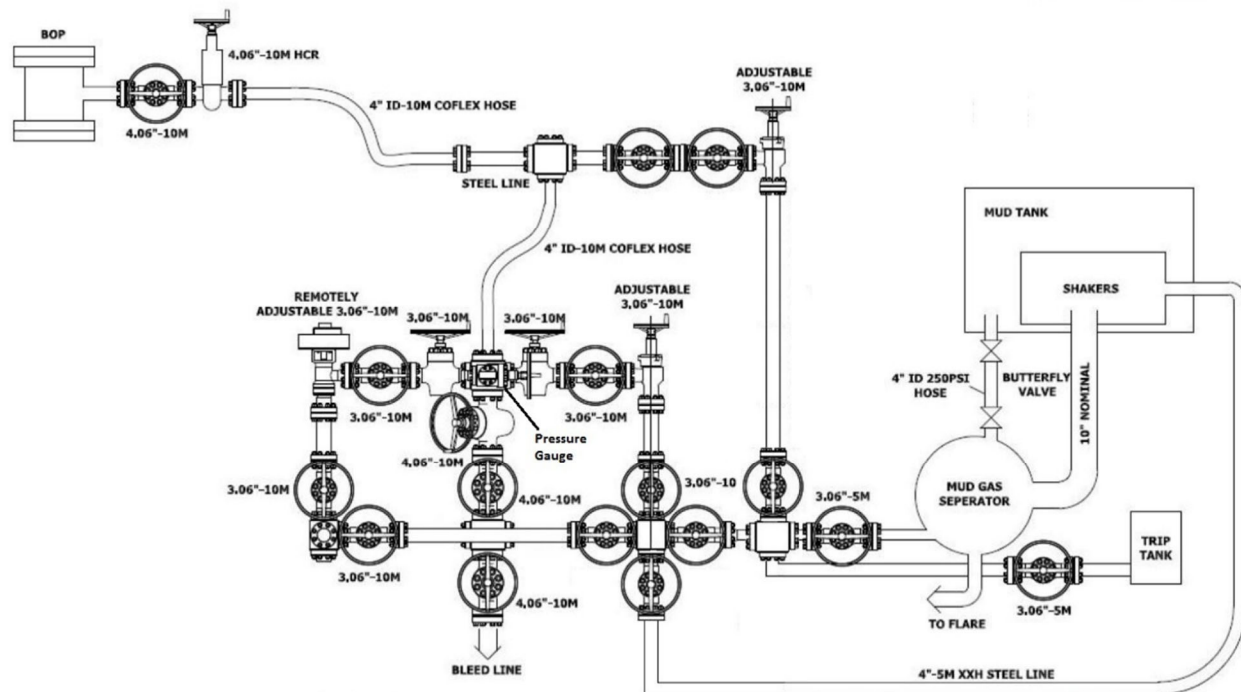
Multi-bowl Wellhead





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10M Choke Layout



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

COMMENTS

Action 62485

COMMENTS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 62485
	Action Type: [C-103] NOI Change of Plans (C-103A)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 11/23/2021	11/23/2021
jagarcia	Approved, John Garcia, Petroleum Engineer	11/24/2021

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CONDITIONS

Action 62485

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 62485
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	NSL Will require an administrative order for non-standard location prior to placing the well on production.	11/23/2021
kpickford	Adhere to previous NMOCD Conditions of Approval	11/23/2021