

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

Form C-101
August 1, 2011

Permit 288705

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401		2. OGRID Number 372043
		3. API Number 30-015-47671
4. Property Code 329796	5. Property Name SCHLITZ FEDERAL COM	6. Well No. 211H

7. Surface Location

UL - Lot M	Section 16	Township 25S	Range 26E	Lot Idn M	Feet From 645	N/S Line S	Feet From 1001	E/W Line W	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot D	Section 9	Township 25S	Range 26E	Lot Idn D	Feet From 200	N/S Line N	Feet From 660	E/W Line W	County Eddy
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9. Pool Information

PURPLE SAGE;WOLFCAMP (GAS)	98220
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Additional Well Information

11. Work Type New Well	12. Well Type GAS	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3429
16. Multiple N	17. Proposed Depth 18978	18. Formation Wolfcamp	19. Contractor	20. Spud Date 12/1/2020
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	570	587	0
Int1	12.25	9.625	40	1900	599	0
Int2	8.75	7.625	29.7	8174	440	0
Prod	6.75	5.5	20	18978	1053	7474

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	5000	TBD

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.

OIL CONSERVATION DIVISION

Signature:

Printed Name: Electronically filed by Christian Combs

Approved By: Kurt Simmons

Title: Regulatory Manager

Title: Petroleum Specialist - A

Email Address: ccombs@taprk.com

Approved Date: 11/17/2020

Expiration Date: 11/17/2022

Date: 11/11/2020

Phone: 720-360-4028

Conditions of Approval Attached

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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-		² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code	⁵ Property Name SCHLITZ FED COM		⁶ Well Number 211H
⁷ OGRID No. 372043	⁸ Operator Name TAP ROCK OPERATING, LLC.		⁹ Elevation 3429'

¹⁰Surface Location

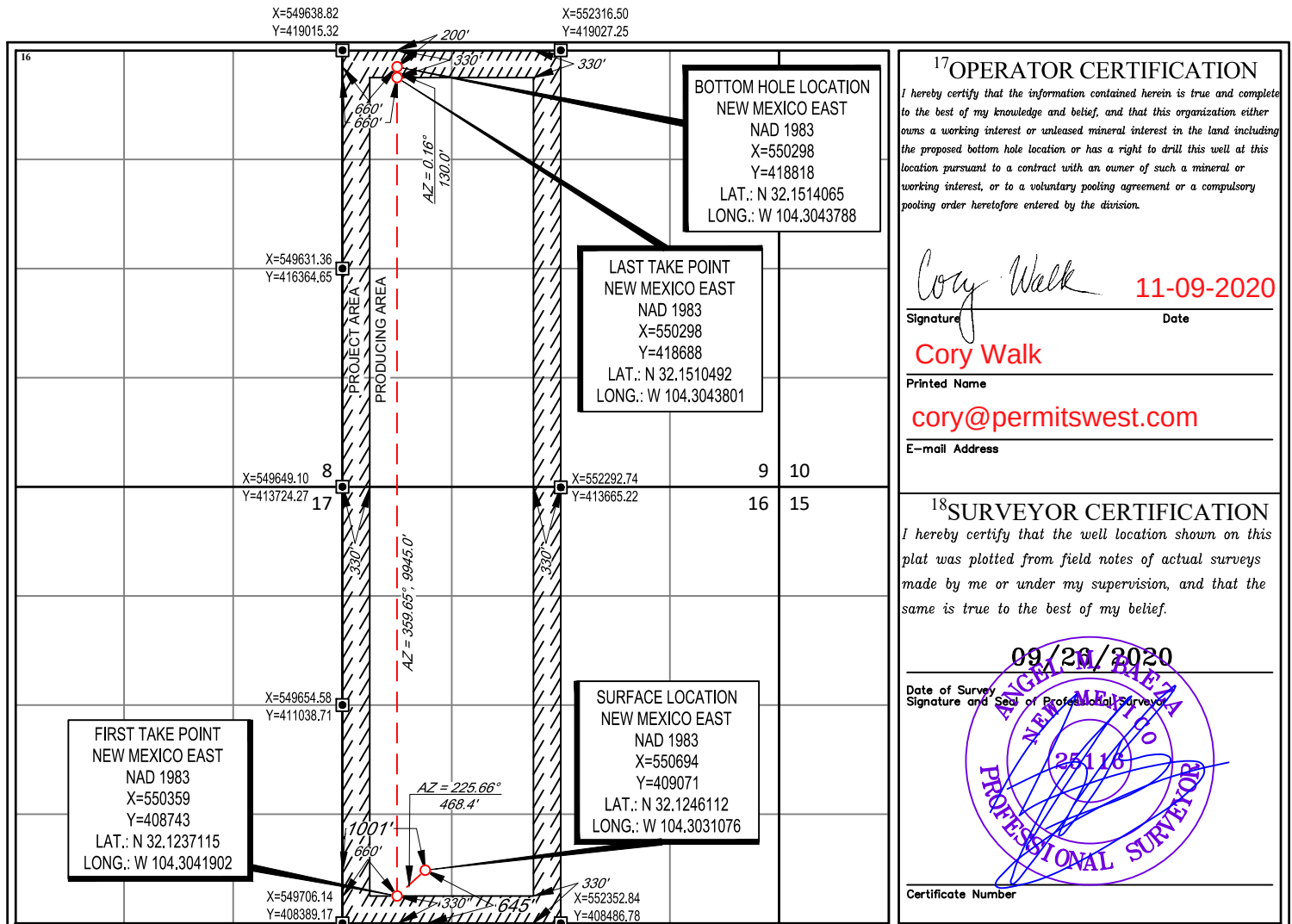
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	16	25-S	26-E	-	645'	SOUTH	1001'	WEST	EDDY

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
D	9	25-S	26-E	-	200'	NORTH	660'	WEST	EDDY

¹² Dedicated Acres 640	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.

¹⁷OPERATOR CERTIFICATION

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

Cory Walk **11-09-2020**
Signature Date

Cory Walk

Printed Name

cory@permitswest.com

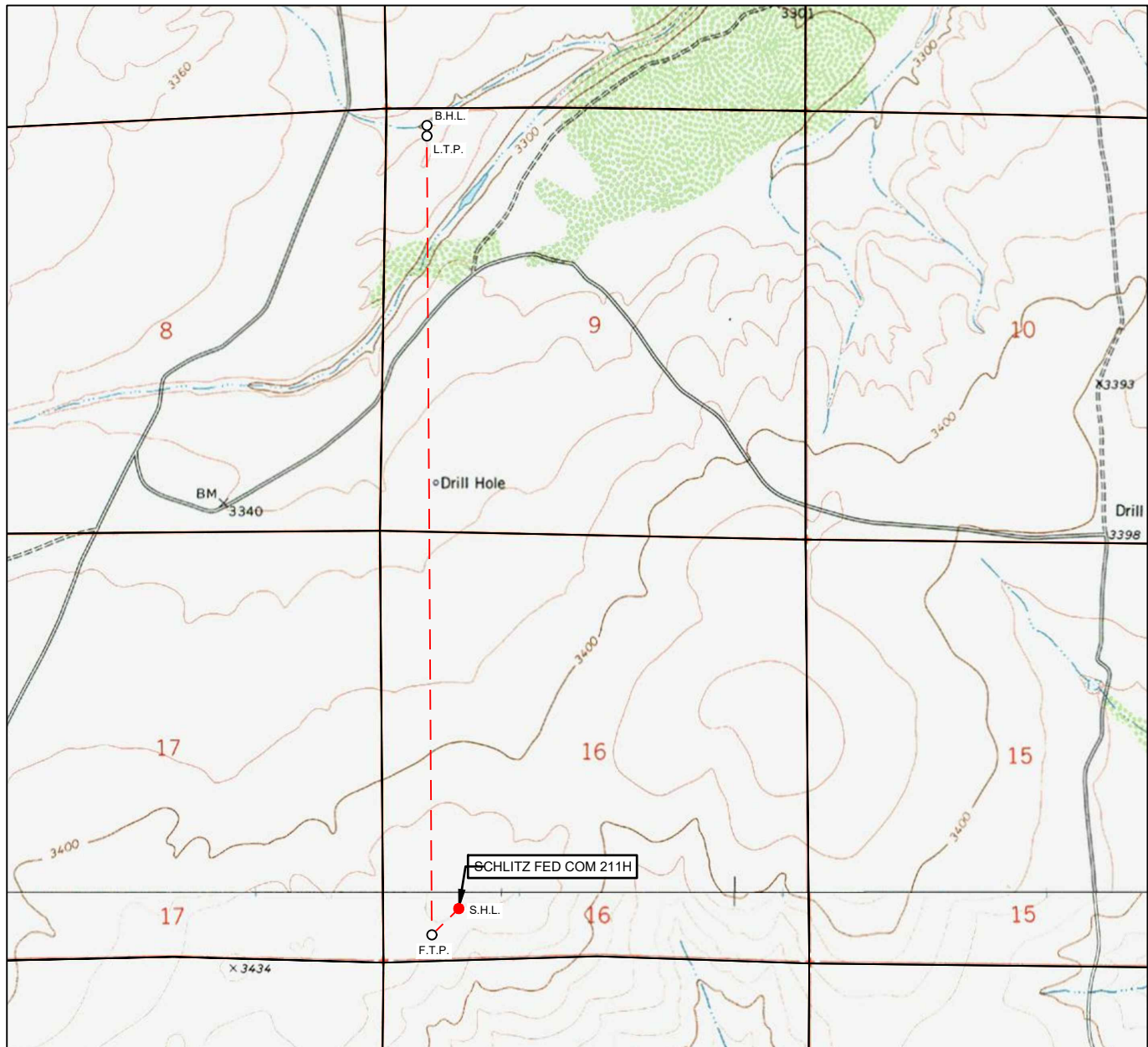
E-mail Address

¹⁸SURVEYOR CERTIFICATION

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

09/20/2020
Date of Survey
Signature and Seal of Professional Surveyor
ANGIE M. BAEZA
PROFESSIONAL SURVEYOR
Certificate Number

LOCATION & ELEVATION VERIFICATION MAP

LEASE NAME & WELL NO.: SCHLITZ FED COM 211H

SECTION 16 TWP 25-S RGE 26-E SURVEY N.M.P.M.
 COUNTY EDDY STATE NM ELEVATION 3429'
 DESCRIPTION 645' FSL & 1001' FWL

LATITUDE N 32.1246112 LONGITUDE W 104.3031076

SCALE: 1" = 2000'
 0' 1000' 2000'

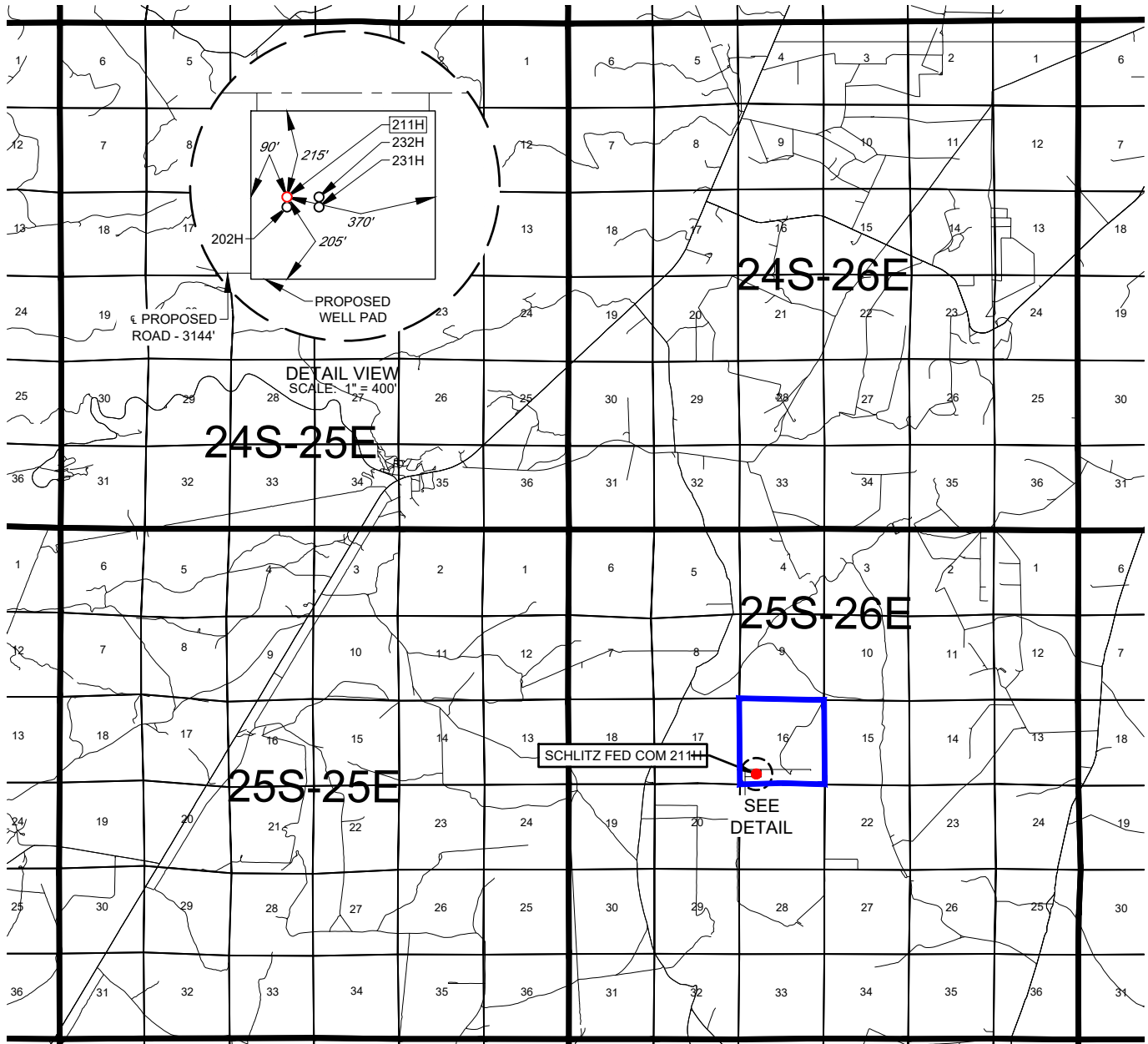
THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF 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.: SCHLITZ FED COM 211HSECTION 16 TWP 25-S RGE 26-E SURVEY N.M.P.M.COUNTY EDDY STATE NMDESCRIPTION 645' FSL & 1001' FWL

DISTANCE & DIRECTION

FROM INT. OF BLACK RIVER VILLAGE RD.. & US-180 W/US-62 W. GO
 SOUTHWEST ON US-180 W/US-62 W ± 1.5 MILES, THENCE SOUTHEAST (LEFT)
 ON MEANS RD. ± 1.9 MILES, THENCE EAST (LEFT) ON CREOSOTE RD. ± 194
 FEET, THENCE SOUTH (RIGHT) ON MEANS RD. ± 4.8 MILES, THENCE EAST
 (LEFT) ON A LEASE RD. ± 1.1 MILES, THENCE NORTH (RIGHT) ON A PROPOSED
 RD. ± 3144 FEET TO A POINT ± 210 FEET SOUTHWEST OF THE LOCATION.

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.

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 MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.



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

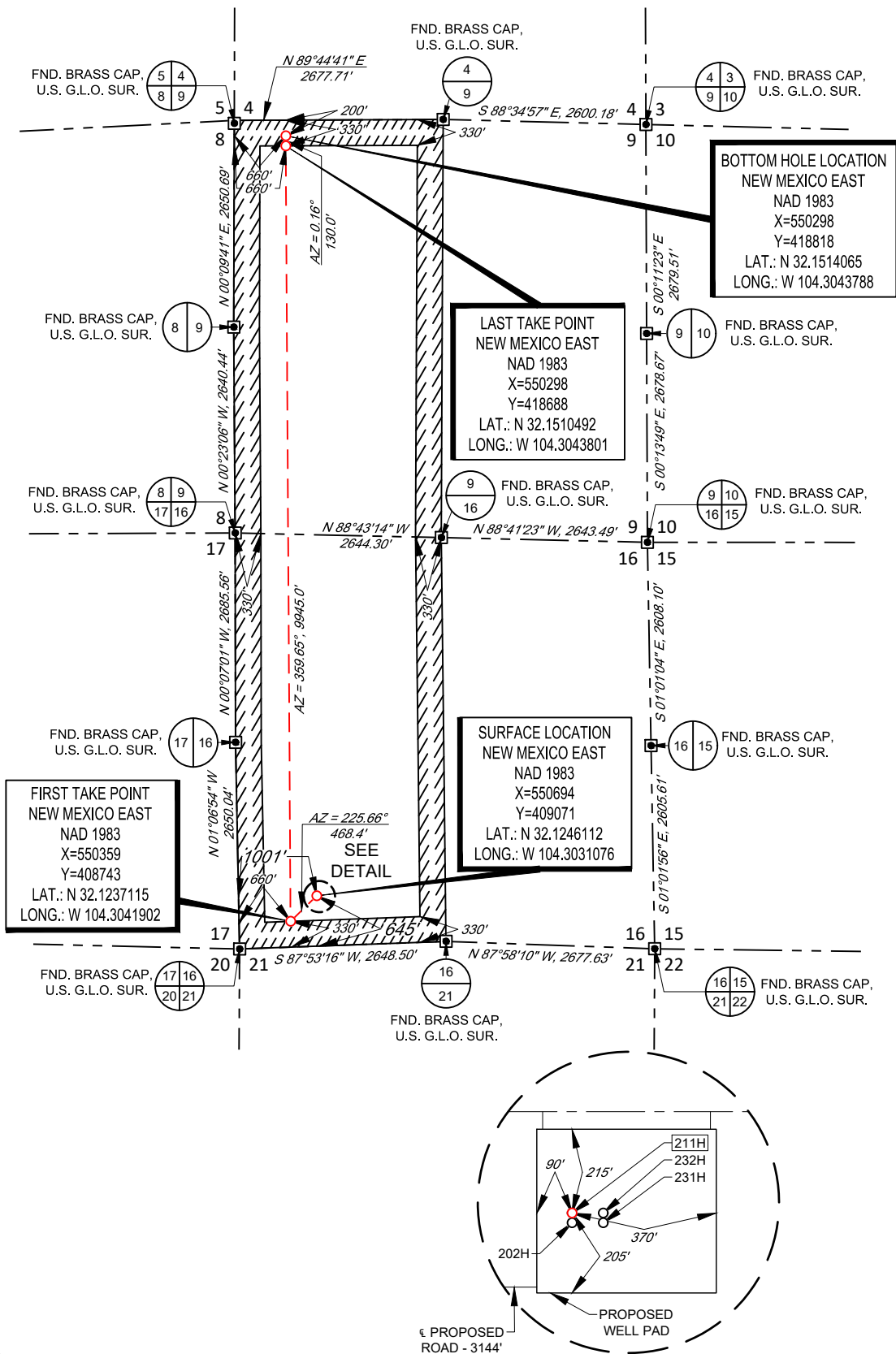


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TAP
ROCK
EXHIBIT 2A

SECTION 16, TOWNSHIP 25-S, RANGE 26-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



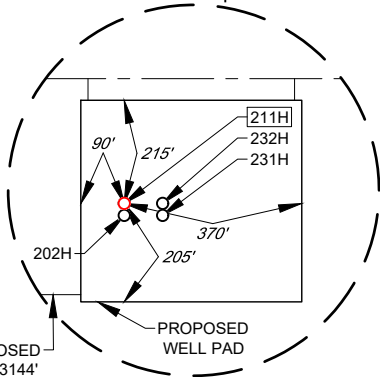
SCALE: 1" = 2000'
0' 1000' 2000'

LEASE NAME & WELL NO.: SCHLITZ FED COM 211H

SECTION 16 TWP 25-S RGE 26-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM
DESCRIPTION 645' FSL & 1001' FWL

DISTANCE & DIRECTION
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SOUTHWEST ON US-180 W/US-62 W ±1.5 MILES, THENCE SOUTHEAST (LEFT)
ON MEANS RD. ±1.9 MILES, THENCE EAST (LEFT) ON CREOSOTE RD. ±194
FEET, THENCE SOUTH (RIGHT) ON MEANS RD. ±4.8 MILES, THENCE EAST
(LEFT) ON A LEASE RD. ±1.1 MILES, THENCE NORTH (RIGHT) ON A PROPOSED
RD. ±3144 FEET TO A POINT ±210 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.



DETAIL VIEW
SCALE: 1" = 400'



Angel M. Baeza, P.S. No. 25116
September 30, 2020

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
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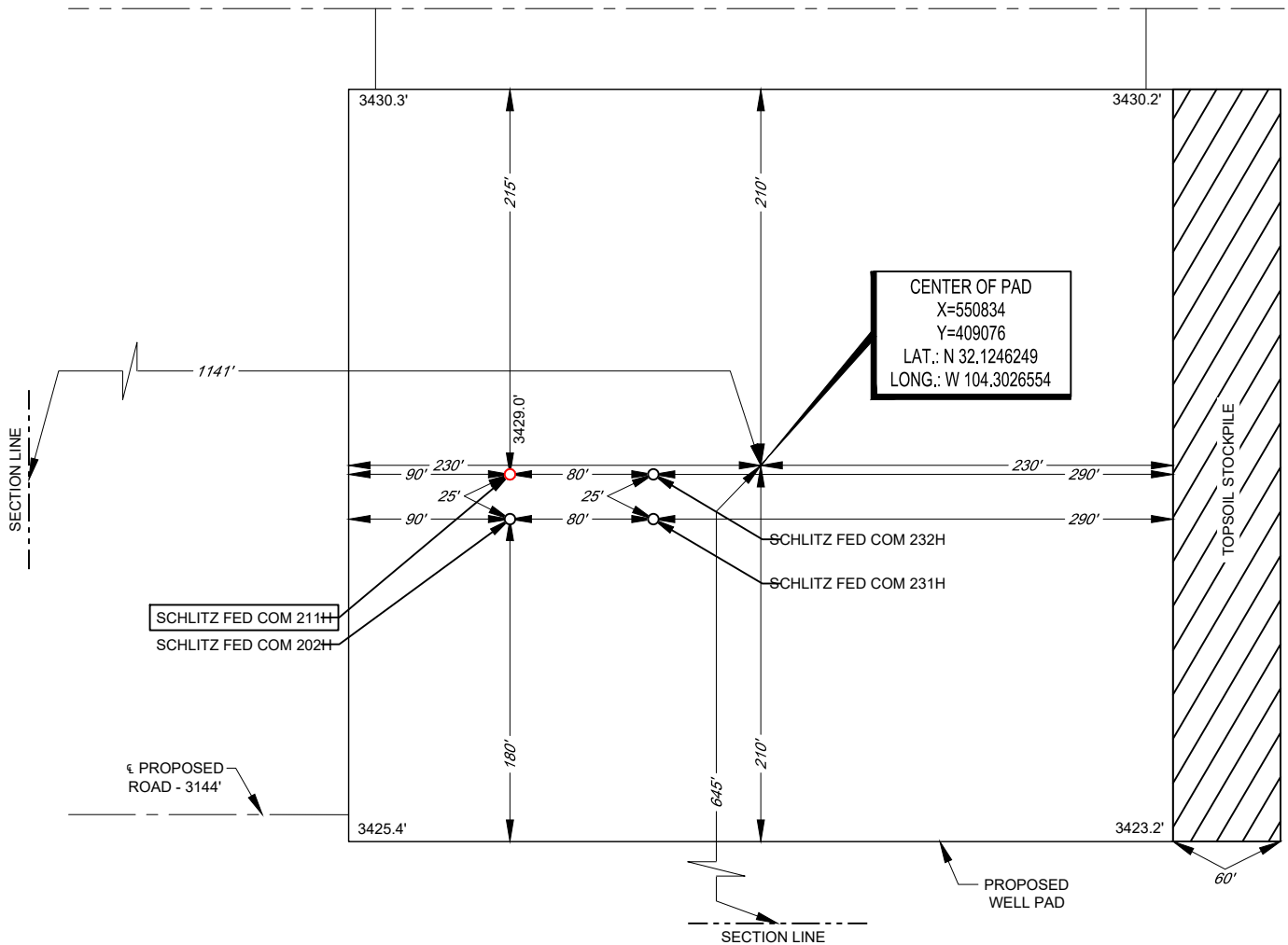
EXHIBIT 2B



SECTION 16, TOWNSHIP 25-S, RANGE 26-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'

LEGEND
----- SECTION LINE
----- PROPOSED ROAD



LEASE NAME & WELL NO.: SCHLITZ FED COM 211H
211H LATITUDE N 32.1246112 211H LONGITUDE W 104.3031076

CENTER OF PAD IS 645' FSL & 1141' FWL



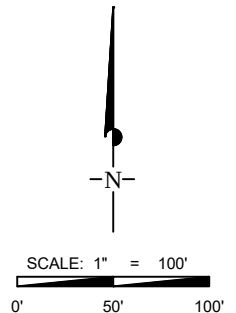
Angel M. Baeza, P.S. No. 25116

September 30, 2020

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.

ORIGINAL DOCUMENT SIZE: 8.5" X 11"



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Energy, Minerals and Natural Resources
Oil Conservation Division
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Santa Fe, NM 87505

GAS CAPTURE PLAN

Date: 11/17/2020

☒ Original

Operator & OGRID No.: [372043] TAP ROCK OPERATING, LLC

☐ Amended - Reason for
Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
SCHLITZ FEDERAL COM #211H	30-015-47671	M-16-25S-26E	0645S 1001W	2500	Flared	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to LUCID ENERGY DELAWARE, LLC and will be connected to LUCID ENERGY DELAWARE, LLC High/Low Pressure gathering system located in Eddy County, New Mexico. It will require 10500' of pipeline to connect the facility to High/Low Pressure gathering system. TAP ROCK OPERATING, LLC provides (periodically) to LUCID ENERGY DELAWARE, LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, TAP ROCK OPERATING, LLC and LUCID ENERGY DELAWARE, LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at LUCID ENERGY DELAWARE, LLC Processing Plant located in Sec. 13, Twn. 24S, Rng. 33E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on LUCID ENERGY DELAWARE, LLC system at that time. Based on current information, it is TAP ROCK OPERATING, LLC's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Comments

Permit 288705

PERMIT COMMENTS

Operator Name and Address: TAP ROCK OPERATING, LLC [372043] 523 Park Point Drive Golden, CO 80401		API Number: 30-015-47671
		Well: SCHLITZ FEDERAL COM #211H

Created By	Comment	Comment Date
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Santa Fe, NM 87505

Form APD Conditions

Permit 288705

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: TAP ROCK OPERATING, LLC [372043] 523 Park Point Drive Golden, CO 80401	API Number: 30-015-47671
	Well: SCHLITZ FEDERAL COM #211H

OCD Reviewer	Condition
ksimmons	Will require a directional survey with the C-104
ksimmons	Cement is required to circulate on both surface and intermediate1 strings of casing
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system
kpickford	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
kpickford	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days
kpickford	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water

TAP ROCK RESOURCES

EDDY COUNTY

SEC 16-T25S-R26E

SCHLITZ FED COM 211H

ORIGINAL WELLBORE

Plan: PROPOSAL 1

Standard Planning Report

13 October, 2020



Project: EDDY COUNTY
Site: SEC 16-T25S-R26E
Well: SCHLITZ FED COM 211H
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL 1

PROJECT DETAILS: EDDY COUNTY

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level



Azimuths to Grid North
True North: -0.02°
Magnetic North: 6.94°

Magnetic Field
Strength: 47429.2nT
Dip Angle: 59.72°
Date: 10/8/2020
Model: IGRF2020

WELL DETAILS: SCHLITZ FED COM 211H

+N/-S	+E/-W	Northing	Easting	3429.00	Latitude	Longitude	Slot
0.00	0.00	409070.87	550694.42		32.1246112°N	104.3031076°W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	
3	3585.92	8.79	211.45	3583.62	-38.26	-23.40	1.50	211.45	-37.18	
4	7658.49	8.79	211.45	7608.38	-569.12	-348.05	0.00	0.00	-552.99	
5	8244.41	0.00	0.00	8192.00	-607.38	-371.45	1.50	180.00	-590.17	
6	8274.41	0.00	0.00	8222.00	-607.38	-371.45	0.00	0.00	-590.17	
7	9174.49	90.00	359.64	8795.00	-34.38	-375.05	10.00	359.64	-17.58	
8	9574.49	90.00	359.64	8794.99	365.61	-377.56	0.00	0.00	382.12	
9	10217.15	90.00	350.00	8794.99	1004.90	-435.52	1.50	-90.01	1023.36	
10	11067.15	90.00	350.00	8794.99	1841.99	-583.12	0.00	0.00	1866.21	
11	11842.74	90.00	1.63	8794.99	2614.18	-639.60	1.50	90.00	2640.15	SCHLITZ FED 211H PBHL
12	18978.84	90.00	1.63	8795.00	9747.38	-436.14	0.00	0.00	9757.13	SCHLITZ FED 211H PBHL

FORMATION TOP DETAILS

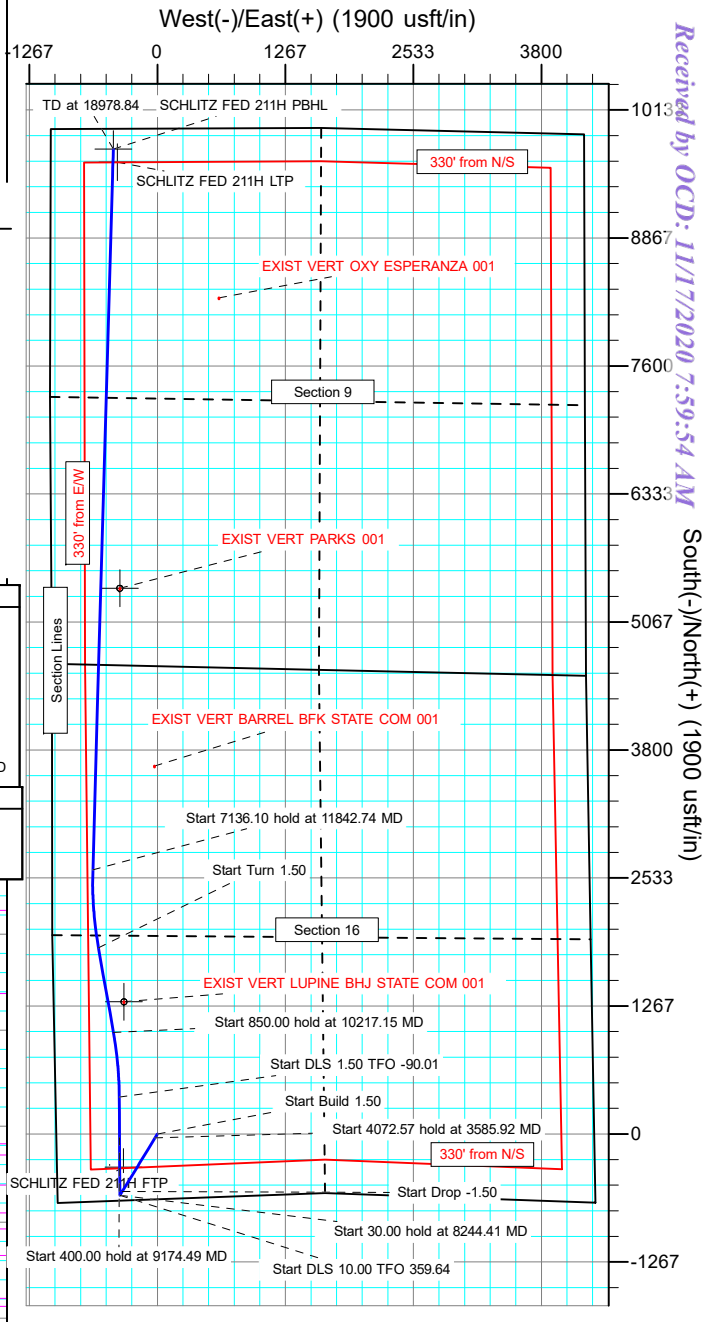
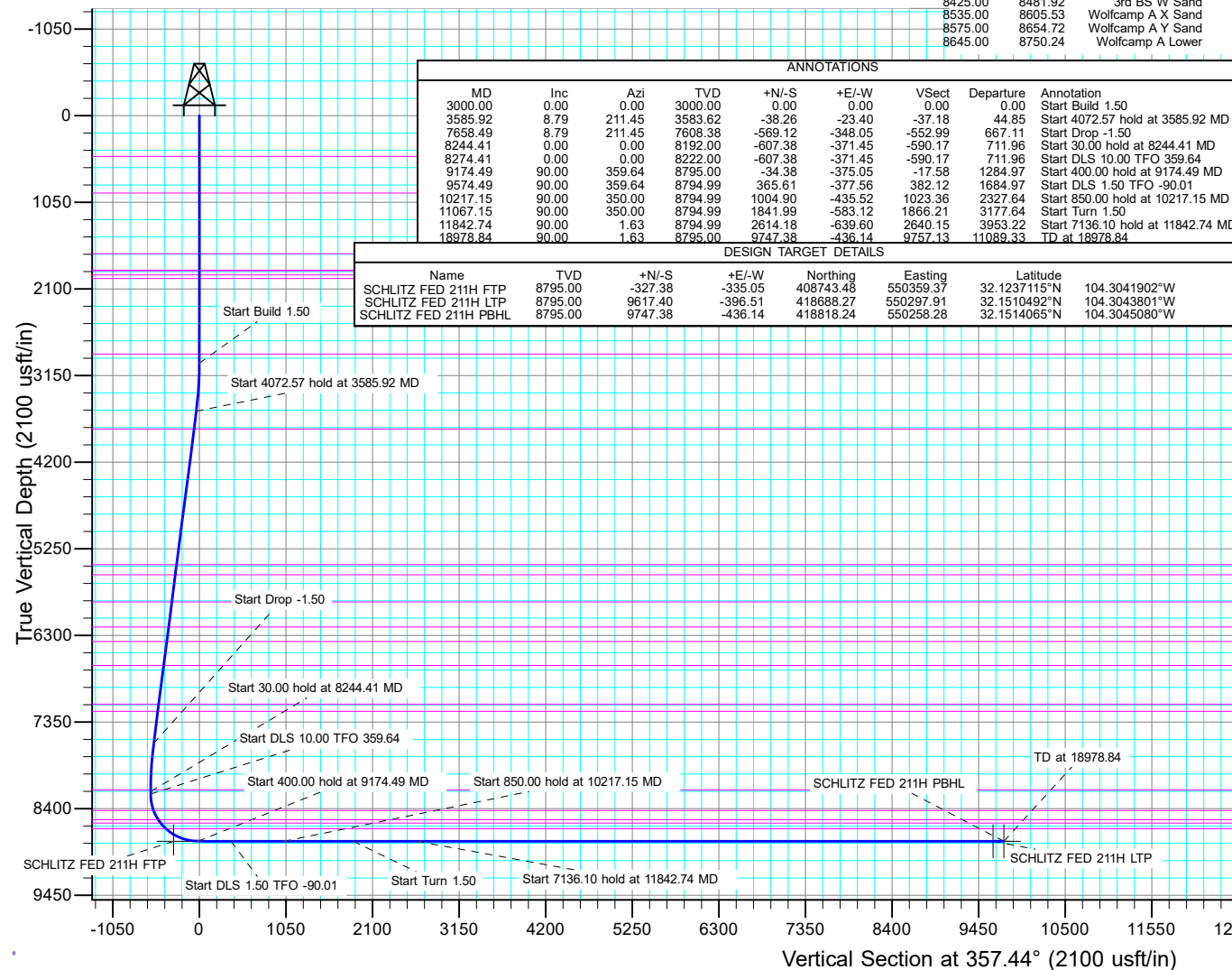
TVDPath	MDPath	Formation
495.00	495.00	Rustler Anhydrite
940.00	940.00	Top Salt
1675.00	1675.00	Base Salt
1875.00	1875.00	Delaware Mountain Gp
1880.00	1880.00	Lamar
1930.00	1930.00	Bell Canyon
1975.00	1975.00	Ramsey Sand
2890.00	2890.00	Cherry Canyon
3800.00	3804.87	Brushy Canyon
5445.00	5469.41	Bone Spring Lime
5565.00	5590.84	Upper Avalon
5895.00	5924.76	Middle Avalon
6200.00	6233.38	Lower Avalon
6375.00	6410.46	1st Bone Spring Sand
6665.00	6703.91	2nd Bone Spring Carb
7135.00	7179.49	2nd Bone Spring Sand
7220.00	7265.50	3rd Bone Spring Carb
8175.00	8227.41	3rd Bone Spring Sand
8425.00	8481.92	3rd BS W Sand
8535.00	8605.53	Wolfcamp A X Sand
8575.00	8654.72	Wolfcamp A Y Sand
8645.00	8750.24	Wolfcamp A Lower

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	Start Build 1.50
3585.92	8.79	211.45	3583.62	-38.26	-23.40	-37.18	44.85	Start 4072.57 hold at 3585.92 MD
7658.49	8.79	211.45	7608.38	-569.12	-348.05	-552.99	667.11	Start Drop -1.50
8244.41	0.00	0.00	8192.00	-607.38	-371.45	-590.17	711.96	Start 30.00 hold at 8244.41 MD
8274.41	0.00	0.00	8222.00	-607.38	-371.45	-590.17	711.96	Start DLS 10.00 TFO 359.64
9174.49	90.00	359.64	8795.00	-34.38	-375.05	-17.58	1284.97	Start 400.00 hold at 9174.49 MD
9574.49	90.00	359.64	8794.99	365.61	-377.56	382.12	1684.97	Start DLS 1.50 TFO -90.01
10217.15	90.00	350.00	8794.99	1004.90	-435.52	1023.36	2327.64	Start 850.00 hold at 10217.15 MD
11067.15	90.00	350.00	8794.99	1841.99	-583.12	1866.21	3177.64	Start Turn 1.50
11842.74	90.00	1.63	8794.99	2614.18	-639.60	2640.15	3953.22	Start 7136.10 hold at 11842.74 MD
18978.84	90.00	1.63	8795.00	9747.38	-436.14	9757.13	11089.33	TD at 18978.84

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SCHLITZ FED 211H FTP	8795.00	-327.38	-335.05	408743.48	550359.37	32.1237115°N	104.3041902°W
SCHLITZ FED 211H LTP	8795.00	9617.40	-396.51	418688.27	550297.91	32.1510492°N	104.3043801°W
SCHLITZ FED 211H PBHL	8795.00	9747.38	-436.14	418818.24	550258.28	32.1514065°N	104.3045080°W



Received by OCD: 11/17/2020 7:59:54 AM

South(-)/North(+) (1900 usft/in)

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well SCHLITZ FED COM 211H
Company:	TAP ROCK RESOURCES	TVD Reference:	KB 25.5 @ 3454.50usft
Project:	EDDY COUNTY	MD Reference:	KB 25.5 @ 3454.50usft
Site:	SEC 16-T25S-R26E	North Reference:	Grid
Well:	SCHLITZ FED COM 211H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Project	EDDY COUNTY		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		SEC 16-T25S-R26E			
Site Position:		Northing:	408,486.78 usft	Latitude:	32.1230042°N
From:	Map	Easting:	552,352.84 usft	Longitude:	104.2977510°W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in		

Well	SCHLITZ FED COM 211H					
Well Position	+N/-S	0.00 usft	Northing:	409,070.86 usft	Latitude:	32.1246112°N
	+E/-W	0.00 usft	Easting:	550,694.42 usft	Longitude:	104.3031076°W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,429.00 usft
Grid Convergence:		0.02 °				

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	10/8/2020	6.95	59.72	47,429.23793585

Design	PROPOSAL 1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	357.44	

Plan Survey Tool Program	Date	10/13/2020			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	18,978.84	PROPOSAL 1 (ORIGINAL WELL	MWD	
			OWSG MWD - Standard		

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well SCHLITZ FED COM 211H
Company:	TAP ROCK RESOURCES	TVD Reference:	KB 25.5 @ 3454.50usft
Project:	EDDY COUNTY	MD Reference:	KB 25.5 @ 3454.50usft
Site:	SEC 16-T25S-R26E	North Reference:	Grid
Well:	SCHLITZ FED COM 211H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,585.92	8.79	211.45	3,583.62	-38.26	-23.40	1.50	1.50	0.00	211.45	
7,658.49	8.79	211.45	7,608.38	-569.12	-348.05	0.00	0.00	0.00	0.00	
8,244.41	0.00	0.00	8,192.00	-607.38	-371.45	1.50	-1.50	0.00	180.00	
8,274.41	0.00	0.00	8,222.00	-607.38	-371.45	0.00	0.00	0.00	0.00	
9,174.49	90.00	359.64	8,795.00	-34.38	-375.05	10.00	10.00	-0.04	359.64	
9,574.49	90.00	359.64	8,794.99	365.61	-377.56	0.00	0.00	0.00	0.00	
10,217.15	90.00	350.00	8,794.99	1,004.90	-435.52	1.50	0.00	-1.50	-90.01	
11,067.15	90.00	350.00	8,794.99	1,841.99	-583.12	0.00	0.00	0.00	0.00	
11,842.74	90.00	1.63	8,794.99	2,614.18	-639.60	1.50	0.00	1.50	90.00	SCHLITZ FED 211H F
18,978.84	90.00	1.63	8,795.00	9,747.38	-436.14	0.00	0.00	0.00	0.00	SCHLITZ FED 211H F

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well SCHLITZ FED COM 211H
Company:	TAP ROCK RESOURCES	TVD Reference:	KB 25.5 @ 3454.50usft
Project:	EDDY COUNTY	MD Reference:	KB 25.5 @ 3454.50usft
Site:	SEC 16-T25S-R26E	North Reference:	Grid
Well:	SCHLITZ FED COM 211H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
495.00	0.00	0.00	495.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler Anhydrite									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
940.00	0.00	0.00	940.00	0.00	0.00	0.00	0.00	0.00	0.00
Top Salt									
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,675.00	0.00	0.00	1,675.00	0.00	0.00	0.00	0.00	0.00	0.00
Base Salt									
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,875.00	0.00	0.00	1,875.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware Mountain Gp									
1,880.00	0.00	0.00	1,880.00	0.00	0.00	0.00	0.00	0.00	0.00
Lamar									
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,930.00	0.00	0.00	1,930.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon									
1,975.00	0.00	0.00	1,975.00	0.00	0.00	0.00	0.00	0.00	0.00
Ramsey Sand									
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,890.00	0.00	0.00	2,890.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyon									
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50									
3,100.00	1.50	211.45	3,099.99	-1.12	-0.68	-1.09	1.50	1.50	0.00
3,200.00	3.00	211.45	3,199.91	-4.47	-2.73	-4.34	1.50	1.50	0.00
3,300.00	4.50	211.45	3,299.69	-10.05	-6.14	-9.76	1.50	1.50	0.00
3,400.00	6.00	211.45	3,399.27	-17.85	-10.92	-17.35	1.50	1.50	0.00
3,500.00	7.50	211.45	3,498.57	-27.88	-17.05	-27.09	1.50	1.50	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well SCHLITZ FED COM 211H
Company:	TAP ROCK RESOURCES	TVD Reference:	KB 25.5 @ 3454.50usft
Project:	EDDY COUNTY	MD Reference:	KB 25.5 @ 3454.50usft
Site:	SEC 16-T25S-R26E	North Reference:	Grid
Well:	SCHLITZ FED COM 211H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,585.92	8.79	211.45	3,583.62	-38.26	-23.40	-37.18	1.50	1.50	0.00
Start 4072.57 hold at 3585.92 MD									
3,600.00	8.79	211.45	3,597.54	-40.10	-24.52	-38.96	0.00	0.00	0.00
3,700.00	8.79	211.45	3,696.37	-53.13	-32.49	-51.63	0.00	0.00	0.00
3,800.00	8.79	211.45	3,795.19	-66.17	-40.47	-64.29	0.00	0.00	0.00
3,804.87	8.79	211.45	3,800.00	-66.80	-40.85	-64.91	0.00	0.00	0.00
Brushy Canyon									
3,900.00	8.79	211.45	3,894.02	-79.20	-48.44	-76.96	0.00	0.00	0.00
4,000.00	8.79	211.45	3,992.84	-92.24	-56.41	-89.62	0.00	0.00	0.00
4,100.00	8.79	211.45	4,091.67	-105.27	-64.38	-102.29	0.00	0.00	0.00
4,200.00	8.79	211.45	4,190.49	-118.31	-72.35	-114.95	0.00	0.00	0.00
4,300.00	8.79	211.45	4,289.32	-131.34	-80.32	-127.62	0.00	0.00	0.00
4,400.00	8.79	211.45	4,388.15	-144.38	-88.30	-140.29	0.00	0.00	0.00
4,500.00	8.79	211.45	4,486.97	-157.41	-96.27	-152.95	0.00	0.00	0.00
4,600.00	8.79	211.45	4,585.80	-170.45	-104.24	-165.62	0.00	0.00	0.00
4,700.00	8.79	211.45	4,684.62	-183.48	-112.21	-178.28	0.00	0.00	0.00
4,800.00	8.79	211.45	4,783.45	-196.52	-120.18	-190.95	0.00	0.00	0.00
4,900.00	8.79	211.45	4,882.28	-209.55	-128.15	-203.61	0.00	0.00	0.00
5,000.00	8.79	211.45	4,981.10	-222.59	-136.13	-216.28	0.00	0.00	0.00
5,100.00	8.79	211.45	5,079.93	-235.62	-144.10	-228.94	0.00	0.00	0.00
5,200.00	8.79	211.45	5,178.75	-248.66	-152.07	-241.61	0.00	0.00	0.00
5,300.00	8.79	211.45	5,277.58	-261.69	-160.04	-254.28	0.00	0.00	0.00
5,400.00	8.79	211.45	5,376.40	-274.73	-168.01	-266.94	0.00	0.00	0.00
5,469.41	8.79	211.45	5,445.00	-283.77	-173.54	-275.73	0.00	0.00	0.00
Bone Spring Lime									
5,500.00	8.79	211.45	5,475.23	-287.76	-175.98	-279.61	0.00	0.00	0.00
5,590.84	8.79	211.45	5,565.00	-299.60	-183.22	-291.11	0.00	0.00	0.00
Upper Avalon									
5,600.00	8.79	211.45	5,574.06	-300.80	-183.95	-292.27	0.00	0.00	0.00
5,700.00	8.79	211.45	5,672.88	-313.83	-191.93	-304.94	0.00	0.00	0.00
5,800.00	8.79	211.45	5,771.71	-326.87	-199.90	-317.60	0.00	0.00	0.00
5,900.00	8.79	211.45	5,870.53	-339.90	-207.87	-330.27	0.00	0.00	0.00
5,924.76	8.79	211.45	5,895.00	-343.13	-209.84	-333.40	0.00	0.00	0.00
Middle Avalon									
6,000.00	8.79	211.45	5,969.36	-352.94	-215.84	-342.93	0.00	0.00	0.00
6,100.00	8.79	211.45	6,068.19	-365.97	-223.81	-355.60	0.00	0.00	0.00
6,200.00	8.79	211.45	6,167.01	-379.01	-231.78	-368.27	0.00	0.00	0.00
6,233.38	8.79	211.45	6,200.00	-383.36	-234.45	-372.49	0.00	0.00	0.00
Lower Avalon									
6,300.00	8.79	211.45	6,265.84	-392.04	-239.76	-380.93	0.00	0.00	0.00
6,400.00	8.79	211.45	6,364.66	-405.07	-247.73	-393.60	0.00	0.00	0.00
6,410.46	8.79	211.45	6,375.00	-406.44	-248.56	-394.92	0.00	0.00	0.00
1st Bone Spring Sand									
6,500.00	8.79	211.45	6,463.49	-418.11	-255.70	-406.26	0.00	0.00	0.00
6,600.00	8.79	211.45	6,562.31	-431.14	-263.67	-418.93	0.00	0.00	0.00
6,700.00	8.79	211.45	6,661.14	-444.18	-271.64	-431.59	0.00	0.00	0.00
6,703.91	8.79	211.45	6,665.00	-444.69	-271.95	-432.09	0.00	0.00	0.00
2nd Bone Spring Carb									
6,800.00	8.79	211.45	6,759.97	-457.21	-279.61	-444.26	0.00	0.00	0.00
6,900.00	8.79	211.45	6,858.79	-470.25	-287.59	-456.92	0.00	0.00	0.00
7,000.00	8.79	211.45	6,957.62	-483.28	-295.56	-469.59	0.00	0.00	0.00
7,100.00	8.79	211.45	7,056.44	-496.32	-303.53	-482.26	0.00	0.00	0.00
7,179.49	8.79	211.45	7,135.00	-506.68	-309.87	-492.32	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well SCHLITZ FED COM 211H
Company:	TAP ROCK RESOURCES	TVD Reference:	KB 25.5 @ 3454.50usft
Project:	EDDY COUNTY	MD Reference:	KB 25.5 @ 3454.50usft
Site:	SEC 16-T25S-R26E	North Reference:	Grid
Well:	SCHLITZ FED COM 211H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2nd Bone Spring Sand									
7,200.00	8.79	211.45	7,155.27	-509.35	-311.50	-494.92	0.00	0.00	0.00
7,265.50	8.79	211.45	7,220.00	-517.89	-316.72	-503.22	0.00	0.00	0.00
3rd Bone Spring Carb									
7,300.00	8.79	211.45	7,254.10	-522.39	-319.47	-507.59	0.00	0.00	0.00
7,400.00	8.79	211.45	7,352.92	-535.42	-327.44	-520.25	0.00	0.00	0.00
7,500.00	8.79	211.45	7,451.75	-548.46	-335.42	-532.92	0.00	0.00	0.00
7,600.00	8.79	211.45	7,550.57	-561.49	-343.39	-545.58	0.00	0.00	0.00
7,658.49	8.79	211.45	7,608.38	-569.12	-348.05	-552.99	0.00	0.00	0.00
Start Drop -1.50									
7,700.00	8.17	211.45	7,649.43	-574.34	-351.24	-558.06	1.50	-1.50	0.00
7,800.00	6.67	211.45	7,748.59	-585.35	-357.98	-568.76	1.50	-1.50	0.00
7,900.00	5.17	211.45	7,848.06	-594.14	-363.35	-577.31	1.50	-1.50	0.00
8,000.00	3.67	211.45	7,947.76	-600.71	-367.37	-583.69	1.50	-1.50	0.00
8,100.00	2.17	211.45	8,047.63	-605.05	-370.03	-587.91	1.50	-1.50	0.00
8,200.00	0.67	211.45	8,147.59	-607.16	-371.32	-589.96	1.50	-1.50	0.00
8,227.41	0.26	211.45	8,175.00	-607.35	-371.43	-590.14	1.50	-1.50	0.00
3rd Bone Spring Sand									
8,244.41	0.00	0.00	8,192.00	-607.38	-371.45	-590.17	1.50	-1.50	873.83
Start 30.00 hold at 8244.41 MD									
8,274.41	0.00	0.00	8,222.00	-607.38	-371.45	-590.17	0.00	0.00	0.00
Start DLS 10.00 TFO 359.64									
8,300.00	2.56	359.64	8,247.58	-606.81	-371.45	-589.60	10.00	10.00	0.00
8,350.00	7.56	359.64	8,297.37	-602.40	-371.48	-585.19	10.00	10.00	0.00
8,400.00	12.56	359.64	8,346.59	-593.67	-371.54	-576.47	10.00	10.00	0.00
8,450.00	17.56	359.64	8,394.86	-580.69	-371.62	-563.49	10.00	10.00	0.00
8,481.92	20.75	359.64	8,425.00	-570.22	-371.68	-553.03	10.00	10.00	0.00
3rd BS W Sand									
8,500.00	22.56	359.64	8,441.81	-563.54	-371.73	-546.36	10.00	10.00	0.00
8,550.00	27.56	359.64	8,487.09	-542.37	-371.86	-525.21	10.00	10.00	0.00
8,600.00	32.56	359.64	8,530.35	-517.34	-372.02	-500.19	10.00	10.00	0.00
8,605.53	33.11	359.64	8,535.00	-514.34	-372.03	-497.20	10.00	10.00	0.00
Wolfcamp A X Sand									
8,650.00	37.56	359.64	8,571.27	-488.63	-372.20	-471.51	10.00	10.00	0.00
8,654.72	38.03	359.64	8,575.00	-485.74	-372.21	-468.61	10.00	10.00	0.00
Wolfcamp A Y Sand									
8,700.00	42.56	359.64	8,609.53	-456.46	-372.40	-439.36	10.00	10.00	0.00
8,750.00	47.56	359.64	8,644.84	-421.09	-372.62	-404.01	10.00	10.00	0.00
8,750.24	47.56	359.64	8,645.00	-420.91	-372.62	-403.83	0.00	0.00	0.00
Wolfcamp A Lower									
8,800.00	52.56	359.64	8,676.93	-382.77	-372.86	-365.72	10.05	10.05	0.00
8,850.00	57.55	359.64	8,705.56	-341.80	-373.12	-324.78	10.00	10.00	0.00
8,900.00	62.55	359.64	8,730.51	-298.48	-373.39	-281.50	10.00	10.00	0.00
8,950.00	67.55	359.64	8,751.59	-253.16	-373.68	-236.21	10.00	10.00	0.00
9,000.00	72.55	359.64	8,768.64	-206.18	-373.97	-189.26	10.00	10.00	0.00
9,050.00	77.55	359.64	8,781.53	-157.89	-374.27	-141.00	10.00	10.00	0.00
9,100.00	82.55	359.64	8,790.17	-108.66	-374.58	-91.80	10.00	10.00	0.00
9,150.00	87.55	359.64	8,794.48	-58.86	-374.90	-42.04	10.00	10.00	0.00
9,174.49	90.00	359.64	8,795.00	-34.38	-375.05	-17.58	10.00	10.00	0.00
Start 400.00 hold at 9174.49 MD									
9,200.00	90.00	359.64	8,795.00	-8.87	-375.21	7.91	0.00	0.00	0.00
9,300.00	90.00	359.64	8,795.00	91.13	-375.84	107.84	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well SCHLITZ FED COM 211H
Company:	TAP ROCK RESOURCES	TVD Reference:	KB 25.5 @ 3454.50usft
Project:	EDDY COUNTY	MD Reference:	KB 25.5 @ 3454.50usft
Site:	SEC 16-T25S-R26E	North Reference:	Grid
Well:	SCHLITZ FED COM 211H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,400.00	90.00	359.64	8,795.00	191.13	-376.47	207.77	0.00	0.00	0.00
9,500.00	90.00	359.64	8,794.99	291.13	-377.10	307.69	0.00	0.00	0.00
9,574.49	90.00	359.64	8,794.99	365.61	-377.56	382.12	0.00	0.00	0.00
Start DLS 1.50 TFO -90.01									
9,600.00	90.00	359.26	8,794.99	391.12	-377.81	407.62	1.50	0.00	-1.50
9,700.00	90.00	357.76	8,794.99	491.09	-380.41	507.60	1.50	0.00	-1.50
9,800.00	90.00	356.26	8,794.99	590.95	-385.63	607.60	1.50	0.00	-1.50
9,900.00	90.00	354.76	8,794.99	690.64	-393.47	707.54	1.50	0.00	-1.50
10,000.00	90.00	353.26	8,794.99	790.09	-403.91	807.35	1.50	0.00	-1.50
10,100.00	90.00	351.76	8,794.99	889.23	-416.95	906.98	1.50	0.00	-1.50
10,200.00	90.00	350.26	8,794.99	988.00	-432.58	1,006.35	1.50	0.00	-1.50
10,217.15	90.00	350.00	8,794.99	1,004.90	-435.52	1,023.36	1.50	0.00	-1.50
Start 850.00 hold at 10217.15 MD									
10,300.00	90.00	350.00	8,794.99	1,086.49	-449.90	1,105.51	0.00	0.00	0.00
10,400.00	90.00	350.00	8,794.99	1,184.97	-467.27	1,204.67	0.00	0.00	0.00
10,500.00	90.00	350.00	8,794.99	1,283.45	-484.63	1,303.83	0.00	0.00	0.00
10,600.00	90.00	350.00	8,794.99	1,381.93	-502.00	1,402.99	0.00	0.00	0.00
10,700.00	90.00	350.00	8,794.99	1,480.41	-519.36	1,502.15	0.00	0.00	0.00
10,800.00	90.00	350.00	8,794.99	1,578.89	-536.73	1,601.30	0.00	0.00	0.00
10,900.00	90.00	350.00	8,794.99	1,677.37	-554.09	1,700.46	0.00	0.00	0.00
11,000.00	90.00	350.00	8,794.99	1,775.85	-571.46	1,799.62	0.00	0.00	0.00
11,067.15	90.00	350.00	8,794.99	1,841.99	-583.12	1,866.21	0.00	0.00	0.00
Start Turn 1.50									
11,100.00	90.00	350.49	8,794.99	1,874.36	-588.68	1,898.80	1.50	0.00	1.50
11,200.00	90.00	351.99	8,794.99	1,973.19	-603.91	1,998.21	1.50	0.00	1.50
11,300.00	90.00	353.49	8,794.99	2,072.39	-616.54	2,097.87	1.50	0.00	1.50
11,400.00	90.00	354.99	8,794.99	2,171.88	-626.57	2,197.71	1.50	0.00	1.50
11,500.00	90.00	356.49	8,794.99	2,271.60	-633.99	2,297.67	1.50	0.00	1.50
11,600.00	90.00	357.99	8,794.99	2,371.48	-638.80	2,397.66	1.50	0.00	1.50
11,700.00	90.00	359.49	8,794.99	2,471.45	-641.00	2,497.64	1.50	0.00	1.50
11,800.00	90.00	0.99	8,794.99	2,571.45	-640.58	2,597.51	1.50	0.00	1.50
11,842.74	90.00	1.63	8,794.99	2,614.18	-639.60	2,640.15	1.50	0.00	1.50
Start 7136.10 hold at 11842.74 MD									
11,900.00	90.00	1.63	8,794.99	2,671.42	-637.96	2,697.26	0.00	0.00	0.00
12,000.00	90.00	1.63	8,794.99	2,771.37	-635.11	2,796.99	0.00	0.00	0.00
12,100.00	90.00	1.63	8,794.99	2,871.33	-632.26	2,896.73	0.00	0.00	0.00
12,200.00	90.00	1.63	8,794.99	2,971.29	-629.41	2,996.46	0.00	0.00	0.00
12,300.00	90.00	1.63	8,794.99	3,071.25	-626.56	3,096.19	0.00	0.00	0.00
12,400.00	90.00	1.63	8,794.99	3,171.21	-623.71	3,195.92	0.00	0.00	0.00
12,500.00	90.00	1.63	8,794.99	3,271.17	-620.86	3,295.65	0.00	0.00	0.00
12,600.00	90.00	1.63	8,794.99	3,371.13	-618.01	3,395.39	0.00	0.00	0.00
12,700.00	90.00	1.63	8,794.99	3,471.09	-615.15	3,495.12	0.00	0.00	0.00
12,800.00	90.00	1.63	8,794.99	3,571.05	-612.30	3,594.85	0.00	0.00	0.00
12,900.00	90.00	1.63	8,794.99	3,671.01	-609.45	3,694.58	0.00	0.00	0.00
13,000.00	90.00	1.63	8,794.99	3,770.97	-606.60	3,794.31	0.00	0.00	0.00
13,100.00	90.00	1.63	8,794.99	3,870.93	-603.75	3,894.05	0.00	0.00	0.00
13,200.00	90.00	1.63	8,794.99	3,970.89	-600.90	3,993.78	0.00	0.00	0.00
13,300.00	90.00	1.63	8,794.99	4,070.85	-598.05	4,093.51	0.00	0.00	0.00
13,400.00	90.00	1.63	8,794.99	4,170.81	-595.20	4,193.24	0.00	0.00	0.00
13,500.00	90.00	1.63	8,794.99	4,270.76	-592.35	4,292.97	0.00	0.00	0.00
13,600.00	90.00	1.63	8,794.99	4,370.72	-589.49	4,392.71	0.00	0.00	0.00
13,700.00	90.00	1.63	8,794.99	4,470.68	-586.64	4,492.44	0.00	0.00	0.00
13,800.00	90.00	1.63	8,794.99	4,570.64	-583.79	4,592.17	0.00	0.00	0.00
13,900.00	90.00	1.63	8,794.99	4,670.60	-580.94	4,691.90	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well SCHLITZ FED COM 211H
Company:	TAP ROCK RESOURCES	TVD Reference:	KB 25.5 @ 3454.50usft
Project:	EDDY COUNTY	MD Reference:	KB 25.5 @ 3454.50usft
Site:	SEC 16-T25S-R26E	North Reference:	Grid
Well:	SCHLITZ FED COM 211H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
14,000.00	90.00	1.63	8,794.99	4,770.56	-578.09	4,791.63	0.00	0.00	0.00
14,100.00	90.00	1.63	8,794.99	4,870.52	-575.24	4,891.37	0.00	0.00	0.00
14,200.00	90.00	1.63	8,794.99	4,970.48	-572.39	4,991.10	0.00	0.00	0.00
14,300.00	90.00	1.63	8,794.99	5,070.44	-569.54	5,090.83	0.00	0.00	0.00
14,400.00	90.00	1.63	8,794.99	5,170.40	-566.69	5,190.56	0.00	0.00	0.00
14,500.00	90.00	1.63	8,794.99	5,270.36	-563.84	5,290.29	0.00	0.00	0.00
14,600.00	90.00	1.63	8,794.99	5,370.32	-560.98	5,390.03	0.00	0.00	0.00
14,700.00	90.00	1.63	8,794.99	5,470.28	-558.13	5,489.76	0.00	0.00	0.00
14,800.00	90.00	1.63	8,794.99	5,570.24	-555.28	5,589.49	0.00	0.00	0.00
14,900.00	90.00	1.63	8,794.99	5,670.20	-552.43	5,689.22	0.00	0.00	0.00
15,000.00	90.00	1.63	8,794.99	5,770.16	-549.58	5,788.95	0.00	0.00	0.00
15,100.00	90.00	1.63	8,794.99	5,870.11	-546.73	5,888.69	0.00	0.00	0.00
15,200.00	90.00	1.63	8,794.99	5,970.07	-543.88	5,988.42	0.00	0.00	0.00
15,300.00	90.00	1.63	8,794.99	6,070.03	-541.03	6,088.15	0.00	0.00	0.00
15,400.00	90.00	1.63	8,794.99	6,169.99	-538.18	6,187.88	0.00	0.00	0.00
15,500.00	90.00	1.63	8,794.99	6,269.95	-535.32	6,287.61	0.00	0.00	0.00
15,600.00	90.00	1.63	8,794.99	6,369.91	-532.47	6,387.35	0.00	0.00	0.00
15,700.00	90.00	1.63	8,794.99	6,469.87	-529.62	6,487.08	0.00	0.00	0.00
15,800.00	90.00	1.63	8,794.99	6,569.83	-526.77	6,586.81	0.00	0.00	0.00
15,900.00	90.00	1.63	8,794.99	6,669.79	-523.92	6,686.54	0.00	0.00	0.00
16,000.00	90.00	1.63	8,794.99	6,769.75	-521.07	6,786.27	0.00	0.00	0.00
16,100.00	90.00	1.63	8,794.99	6,869.71	-518.22	6,886.01	0.00	0.00	0.00
16,200.00	90.00	1.63	8,794.99	6,969.67	-515.37	6,985.74	0.00	0.00	0.00
16,300.00	90.00	1.63	8,794.99	7,069.63	-512.52	7,085.47	0.00	0.00	0.00
16,400.00	90.00	1.63	8,794.99	7,169.59	-509.66	7,185.20	0.00	0.00	0.00
16,500.00	90.00	1.63	8,794.99	7,269.55	-506.81	7,284.93	0.00	0.00	0.00
16,600.00	90.00	1.63	8,794.99	7,369.50	-503.96	7,384.67	0.00	0.00	0.00
16,700.00	90.00	1.63	8,794.99	7,469.46	-501.11	7,484.40	0.00	0.00	0.00
16,800.00	90.00	1.63	8,794.99	7,569.42	-498.26	7,584.13	0.00	0.00	0.00
16,900.00	90.00	1.63	8,794.99	7,669.38	-495.41	7,683.86	0.00	0.00	0.00
17,000.00	90.00	1.63	8,794.99	7,769.34	-492.56	7,783.59	0.00	0.00	0.00
17,100.00	90.00	1.63	8,794.99	7,869.30	-489.71	7,883.33	0.00	0.00	0.00
17,200.00	90.00	1.63	8,794.99	7,969.26	-486.86	7,983.06	0.00	0.00	0.00
17,300.00	90.00	1.63	8,794.99	8,069.22	-484.01	8,082.79	0.00	0.00	0.00
17,400.00	90.00	1.63	8,794.99	8,169.18	-481.15	8,182.52	0.00	0.00	0.00
17,500.00	90.00	1.63	8,794.99	8,269.14	-478.30	8,282.25	0.00	0.00	0.00
17,600.00	90.00	1.63	8,794.99	8,369.10	-475.45	8,381.99	0.00	0.00	0.00
17,700.00	90.00	1.63	8,794.99	8,469.06	-472.60	8,481.72	0.00	0.00	0.00
17,800.00	90.00	1.63	8,794.99	8,569.02	-469.75	8,581.45	0.00	0.00	0.00
17,900.00	90.00	1.63	8,794.99	8,668.98	-466.90	8,681.18	0.00	0.00	0.00
18,000.00	90.00	1.63	8,794.99	8,768.94	-464.05	8,780.91	0.00	0.00	0.00
18,100.00	90.00	1.63	8,794.99	8,868.89	-461.20	8,880.65	0.00	0.00	0.00
18,200.00	90.00	1.63	8,794.99	8,968.85	-458.35	8,980.38	0.00	0.00	0.00
18,300.00	90.00	1.63	8,794.99	9,068.81	-455.49	9,080.11	0.00	0.00	0.00
18,400.00	90.00	1.63	8,794.99	9,168.77	-452.64	9,179.84	0.00	0.00	0.00
18,500.00	90.00	1.63	8,794.99	9,268.73	-449.79	9,279.57	0.00	0.00	0.00
18,600.00	90.00	1.63	8,794.99	9,368.69	-446.94	9,379.31	0.00	0.00	0.00
18,700.00	90.00	1.63	8,794.99	9,468.65	-444.09	9,479.04	0.00	0.00	0.00
18,800.00	90.00	1.63	8,794.99	9,568.61	-441.24	9,578.77	0.00	0.00	0.00
18,900.00	90.00	1.63	8,794.99	9,668.57	-438.39	9,678.50	0.00	0.00	0.00
18,978.84	90.00	1.63	8,795.00	9,747.38	-436.14	9,757.13	0.00	0.00	0.00
TD at 18978.84									

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well SCHLITZ FED COM 211H
Company:	TAP ROCK RESOURCES	TVD Reference:	KB 25.5 @ 3454.50usft
Project:	EDDY COUNTY	MD Reference:	KB 25.5 @ 3454.50usft
Site:	SEC 16-T25S-R26E	North Reference:	Grid
Well:	SCHLITZ FED COM 211H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SCHLITZ FED 211H PBI - plan hits target center - Point	0.00	0.00	8,795.00	9,747.38	-436.14	418,818.24	550,258.28	32.1514066°N	104.3045080°W
SCHLITZ FED 211H LTF - plan misses target center by 43.32usft at 18850.05usft MD (8794.99 TVD, 9618.64 N, -439.81 E) - Point	0.00	0.00	8,795.00	9,617.40	-396.51	418,688.27	550,297.91	32.1510492°N	104.3043801°W
SCHLITZ FED 211H FTI - plan misses target center by 80.37usft at 8900.78usft MD (8730.87 TVD, -297.79 N, -373.40 E) - Point	0.00	0.00	8,795.00	-327.38	-335.05	408,743.48	550,359.38	32.1237115°N	104.3041902°W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
495.00	495.00	Rustler Anhydrite				
940.00	940.00	Top Salt				
1,675.00	1,675.00	Base Salt				
1,875.00	1,875.00	Delaware Mountain Gp				
1,880.00	1,880.00	Lamar				
1,930.00	1,930.00	Bell Canyon				
1,975.00	1,975.00	Ramsey Sand				
2,890.00	2,890.00	Cherry Canyon				
3,804.87	3,800.00	Brushy Canyon				
5,469.41	5,445.00	Bone Spring Lime				
5,590.84	5,565.00	Upper Avalon				
5,924.76	5,895.00	Middle Avalon				
6,233.38	6,200.00	Lower Avalon				
6,410.46	6,375.00	1st Bone Spring Sand				
6,703.91	6,665.00	2nd Bone Spring Carb				
7,179.49	7,135.00	2nd Bone Spring Sand				
7,265.50	7,220.00	3rd Bone Spring Carb				
8,227.41	8,175.00	3rd Bone Spring Sand				
8,481.92	8,425.00	3rd BS W Sand				
8,605.53	8,535.00	Wolfcamp A X Sand				
8,654.72	8,575.00	Wolfcamp A Y Sand				
8,750.24	8,645.00	Wolfcamp A Lower				

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well SCHLITZ FED COM 211H
Company:	TAP ROCK RESOURCES	TVD Reference:	KB 25.5 @ 3454.50usft
Project:	EDDY COUNTY	MD Reference:	KB 25.5 @ 3454.50usft
Site:	SEC 16-T25S-R26E	North Reference:	Grid
Well:	SCHLITZ FED COM 211H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,000.00	3,000.00	0.00	0.00	Start Build 1.50
3,585.92	3,583.62	-38.26	-23.40	Start 4072.57 hold at 3585.92 MD
7,658.49	7,608.38	-569.12	-348.05	Start Drop -1.50
8,244.41	8,192.00	-607.38	-371.45	Start 30.00 hold at 8244.41 MD
8,274.41	8,222.00	-607.38	-371.45	Start DLS 10.00 TFO 359.64
9,174.49	8,795.00	-34.38	-375.05	Start 400.00 hold at 9174.49 MD
9,574.49	8,794.99	365.61	-377.56	Start DLS 1.50 TFO -90.01
10,217.15	8,794.99	1,004.90	-435.52	Start 850.00 hold at 10217.15 MD
11,067.15	8,794.99	1,841.99	-583.12	Start Turn 1.50
11,842.74	8,794.99	2,614.18	-639.60	Start 7136.10 hold at 11842.74 MD
18,978.84	8,795.00	9,747.38	-436.14	TD at 18978.84