Rec'd 3/25/20 Printed

Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM138850

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
NAILED IT FED COM
218H 327308

2. Name of Operator
TAP ROCK OPERATING LLC

9. API Well No.
30-015-46924

3a. Address	3b. Phone No. *(include area code)*	10. Field and Pool, or Exploratory
602 Park Point Drive Suite 200, Golden, CO 80401	(720) 460-3316	PURPLE SAGE WOLFCAMP/null

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface LOT 1 / 741 FSL / 563 FEL / LAT 32.0002197 / LONG -103.8279363
At proposed prod. zone NESE / 2466 FSL / 638 FEL / LAT 32.0128141 / LONG -103.8281909

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 36/T26S/R30E/NMP

14. Distance in miles and direction from nearest town or post office*	12. County or Parish	13. State
20 miles	EDDY	NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
563 feet	320	288.4

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
25 feet	11266 feet / 15550 feet	FED: NMB001443

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3044 feet	01/01/2020	30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	Brian Wood / Ph: (720) 460-3316	09/03/2019

Title
President

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575) 234-5959	02/24/2020

Title	Office
Assistant Field Manager Lands & Minerals	Carlsbad Field Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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.

APPROVED WITH CONDITIONS

Approval Date: 02/24/2020

(Continued on page 2)

*(Instructions on page 2)

RWP 3-25-20

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Continued on page 3)

AFMSS

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

Operator Certification Data Report

02/27/2020

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: Brian Wood **Signed on:** 09/02/2019

Title: President

Street Address: 37 Verano Looop

City: Santa Fe **State:** NM **Zip:** 87508

Phone: (505)466-8120

Email address: afmss@permitswest.com

Field Representative

Representative Name:

Street Address:

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

Phone:

Email address:

AFMSS

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

Application Data Report

02/27/2020

APD ID: 10400046843 **Submission Date:** 09/03/2019

Operator Name: TAP ROCK OPERATING LLC

Well Name: NAILED IT FED COM **Well Number:** 218H

Well Type: CONVENTIONAL GAS WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400046843 **Tie to previous NOS?** N **Submission Date:** 09/03/2019

BLM Office: CARLSBAD **User:** Brian Wood **Title:** President

Federal/Indian APD: FED **Is the first lease penetrated for production Federal or Indian?** FED

Lease number: NMNM138850 **Lease Acres:** 320

Surface access agreement in place? **Allotted?** **Reservation:**

Agreement in place? NO **Federal or Indian agreement:**

Agreement number:

Agreement name:

Keep application confidential? N

Permitting Agent? YES **APD Operator:** TAP ROCK OPERATING LLC

Operator letter of designation:

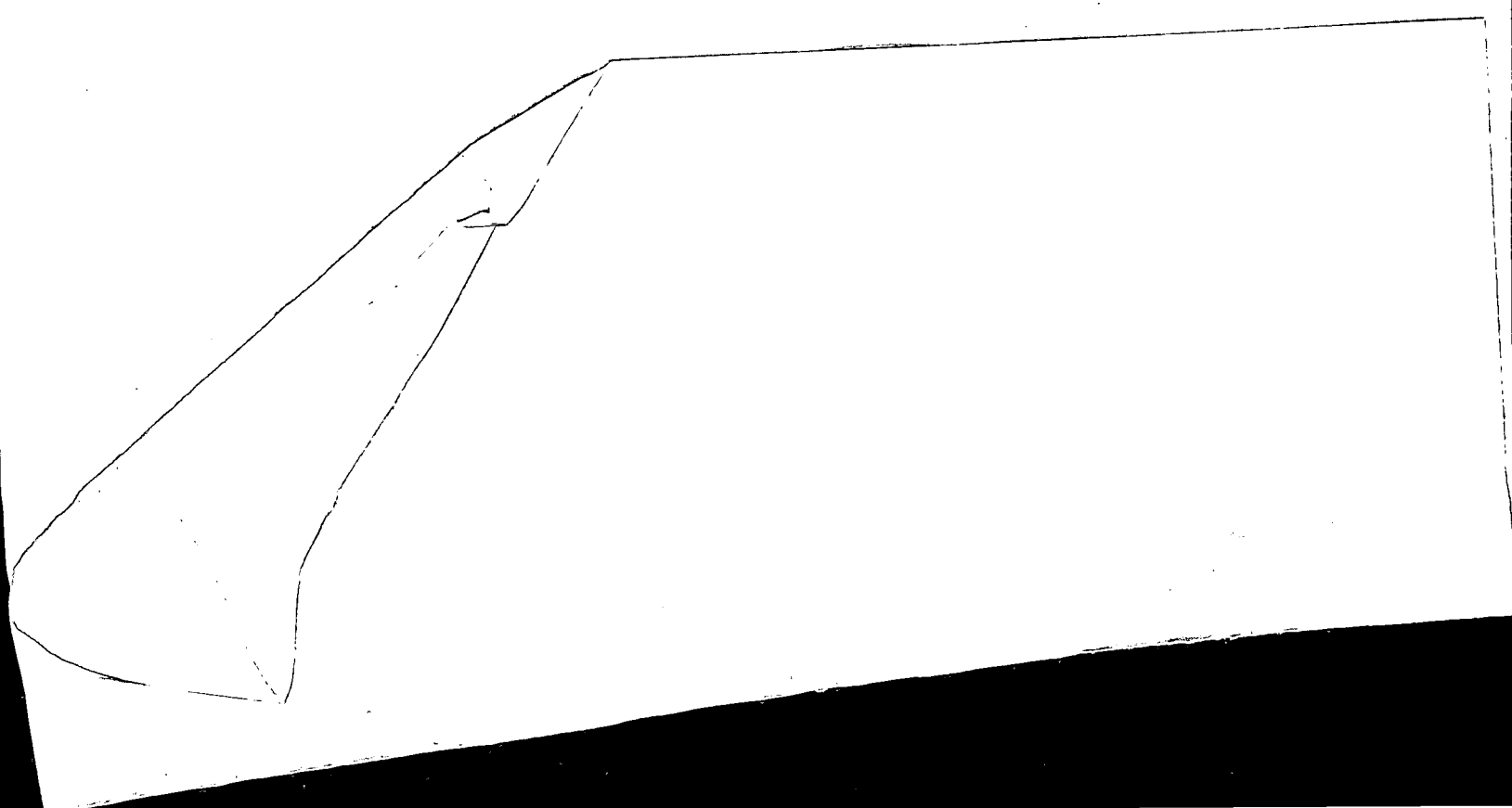
Operator Info

Operator Organization Name: TAP ROCK OPERATING LLC

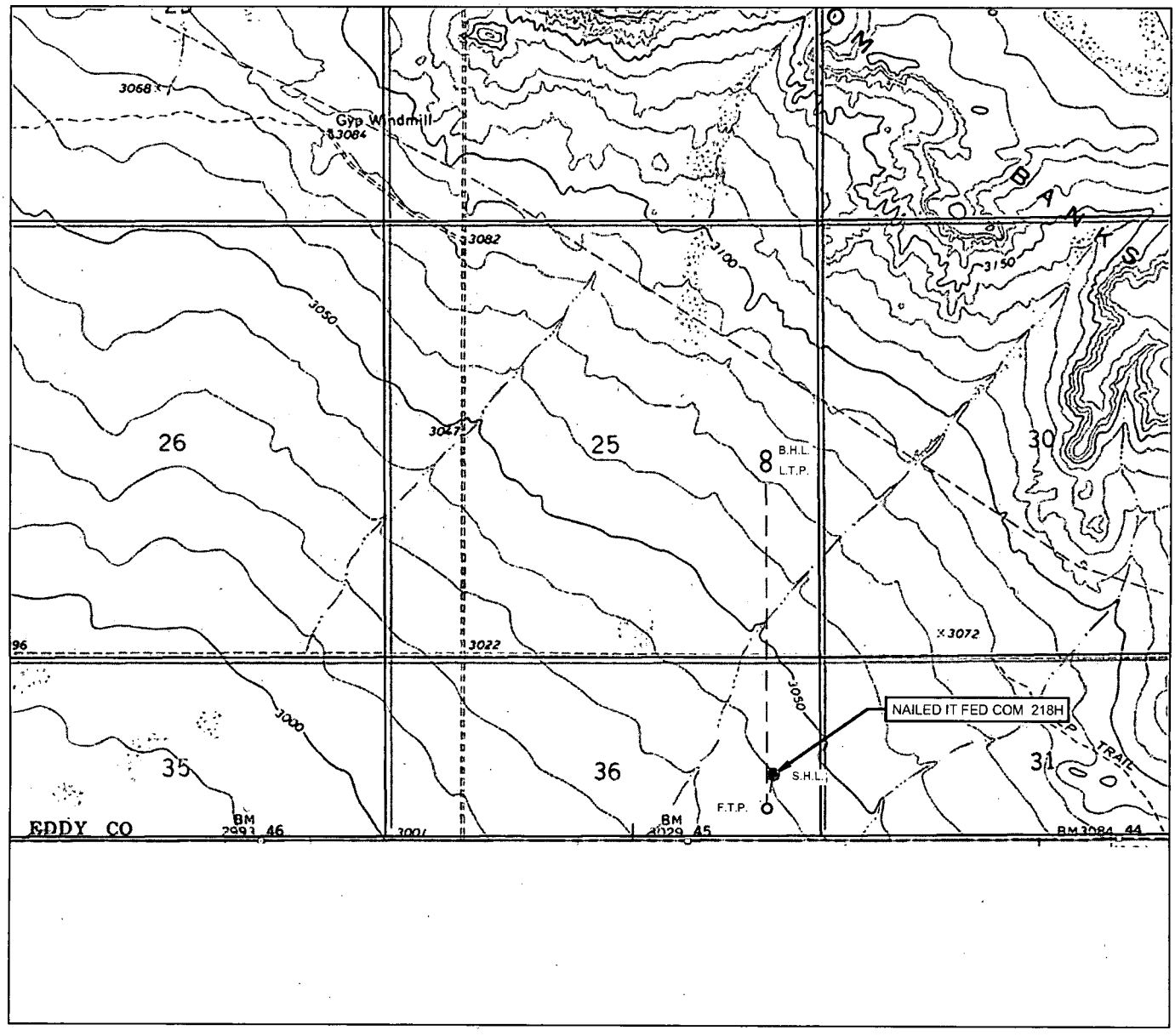
Operator Name: TAP ROCK OPERATING LLC

Well Name: NAILED IT FED COM **Well Number:** 218H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
EXIT Leg #1	2466	FSL	638	FEL	26S	30E	25	Aliquot NESE	32.0128141	-103.8281909	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 138850	-8222	15550	11266	Y
BHL Leg #1	2466	FSL	638	FEL	26S	30E	25	Aliquot NESE	32.0128141	-103.8281909	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 138850	-8222	15550	11266	Y



LOCATION & ELEVATION VERIFICATION MAP



TAP ROCK

LEASE NAME & WELL NO.: NAILED IT FED COM 218H

SECTION 36 TWP 26-S RGE 30-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM ELEVATION 3044'
DESCRIPTION 741' FSL & 563' FEL

LATITUDE N 32.0021973 LONGITUDE W 103.8279363

-N-

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

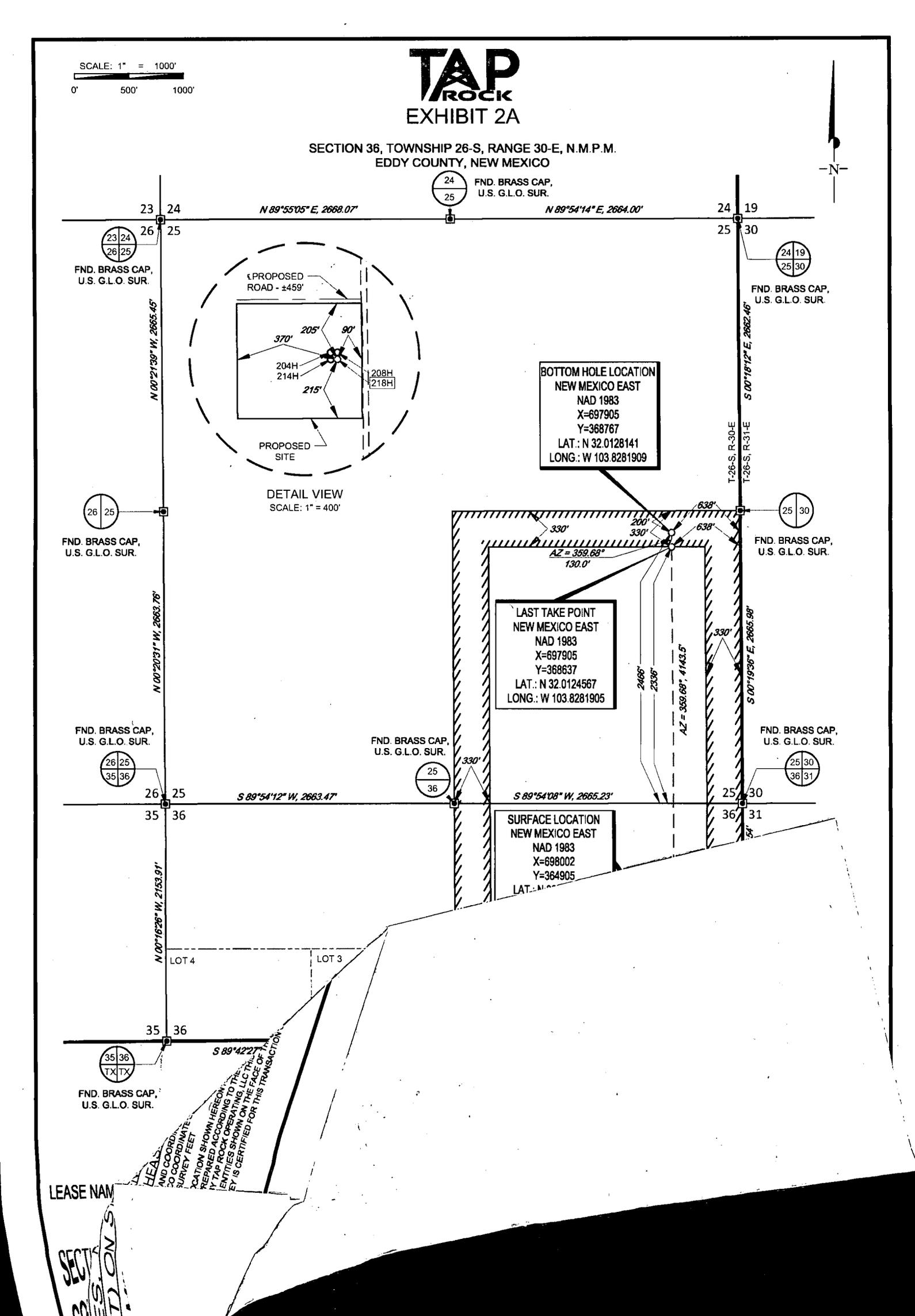
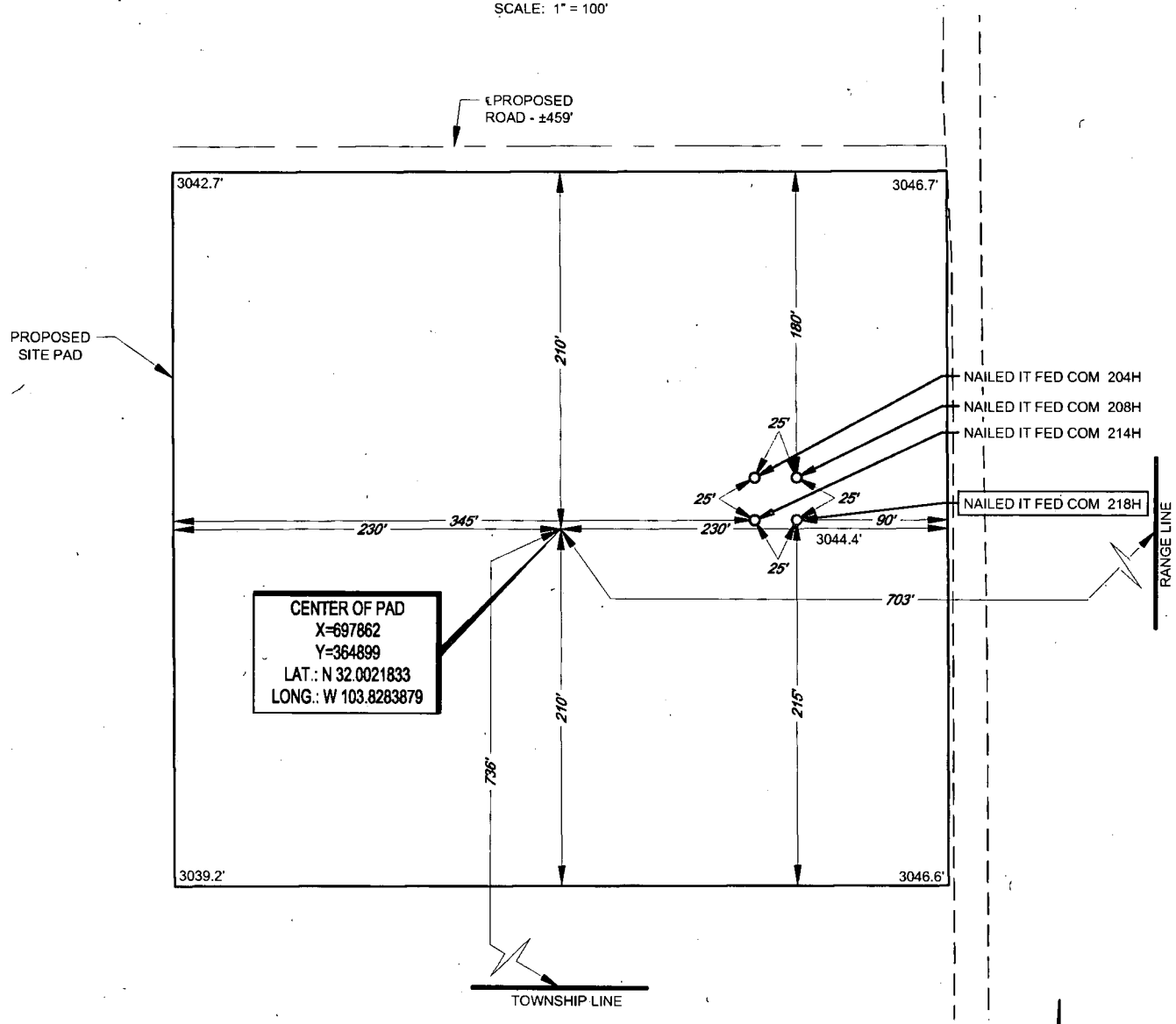

SCALE: 1" = 1000'
0' 500' 1000'
TAP ROCK
EXHIBIT 2A
SECTION 36, TOWNSHIP 26-S, RANGE 30-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO
N
FND. BRASS CAP, U.S. G.L.O. SUR.
N 89°55'05" E, 2668.07'
N 89°54'14" E, 2664.00'
N 00°21'39" W, 2665.45'
S 00°18'12" E, 2662.46'
PROPOSED ROAD - ±459'
205'
90'
370'
204H
214H
208H
218H
215'
PROPOSED SITE
DETAIL VIEW
SCALE: 1" = 400'
BOTTOM HOLE LOCATION
NEW MEXICO EAST
NAD 1983
X=697905
Y=368767
LAT.: N 32.0128141
LONG.: W 103.8281909
T-26-S, R-30-E
T-26-S, R-31-E
638'
200'
330'
AZ = 359.68°
130.0'
LAST TAKE POINT
NEW MEXICO EAST
NAD 1983
X=697905
Y=368637
LAT.: N 32.0124567
LONG.: W 103.8281905
2466'
2336'
AZ = 359.68°, 4143.5'
N 00°20'31" W, 2663.76'
S 00°19'36" E, 2665.98'
S 89°54'12" W, 2663.47'
S 89°54'08" W, 2665.23'
SURFACE LOCATION
NEW MEXICO EAST
NAD 1983
X=698002
Y=364905
N 00°16'26" W, 2153.91'
LOT 4
LOT 3
S 89°42'27"
LEASE NAM

EXHIBIT 2B

TAP ROCK

SECTION 36, TOWNSHIP 26-S, RANGE 30-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'



LEASE NAME & WELL NO.: NAILED IT FED COM 218H

218H LATITUDE N 32.0021973 218H LONGITUDE W 103.8279363

CENTER OF PAD IS 736' FSL & 703' FEL

N

SCALE: 1" = 100'

0' 50' 100'

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 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. 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"

Drilling Plan Data Report
02/27/2020

APD ID: 10400046843
Submission Date: 09/03/2019
Operator Name: TAP ROCK OPERATING LLC
Well Name: NAILED IT FED COM
Well Number: 218H
Well Type: CONVENTIONAL GAS WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
528227	QUATERNARY	3044	0	0	OTHER : None	NONE	N
528228	RUSTLER	2185	859	859	ANHYDRITE	OTHER : Salt	N
528229	SALADO	1633	1411	1411	SALT	OTHER : Salt	N
528230	BASE OF SALT	-406	3450	3463	SALT	OTHER : Salt	N
528231	LAMAR	-618	3662	3677	LIMESTONE	NONE	N
528232	BELL CANYON	-637	3681	3700	SANDSTONE	NATURAL GAS, OIL	N
528233	CHERRY CANYON	-1831	4875	4902	SANDSTONE	NATURAL GAS, OIL	N
528234	BRUSHY CANYON	-2784	5828	5865	SANDSTONE	NATURAL GAS, OIL	N
528235	BONE SPRING	-4533	7577	7620	LIMESTONE	NATURAL GAS, OIL	N
528236	BONE SPRING 1ST	-5478	8522	8566	SANDSTONE	NATURAL GAS, OIL	N
528237	BONE SPRING 2ND	-5828	8872	8915	SANDSTONE	NATURAL GAS, OIL	N
528238	BONE SPRING 3RD	-6712	9756	9800	SANDSTONE	NATURAL GAS, OIL	N
528239	WOLFCAMP	-7771	10815	10860	OTHER : Shale	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Operator Name: TAP ROCK OPERATING LLC

Well Name: NAILED IT FED COM **Well Number:** 218H

Pressure Rating (PSI): 5M **Rating Depth:** 15000

Equipment: A 15,000, 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.

Requesting Variance? YES

Variance request: 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. Tap Rock requests a variance to run 7-5/8" BTC casing inside 9-5/8" BTC casing will be less than the 0.422" stand off regulation. Through conversations with BLM representatives, Tap Rock has received approval for this design as long as the 7-5/8" flush casing was run throughout the entire 300' cement tie back section between 9-5/8" and 7-5/8" casing. 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. Three wells on the pad will have surface casing set by the spudder rig as a part of this operation. 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.

Testing Procedure: After surface casing is set and the BOP is nippled 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.

Choke Diagram Attachment:

Nailed_Choke_032918_20190902154436.pdf

BOP Diagram Attachment:

5M_BOP_Stack_20200201091034.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF

Operator Name: TAP ROCK OPERATING LLC

Well Name: NAILED IT FED COM **Well Number:** 218H

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	940	0	940	3044	2104	940	J-55	54.5	BUTT	1.13	1.15	DRY	1.6	DRY	1.6
2	INTERMEDIATE	8.75	7.625	NEW	API	N	0	3425	0	3409	3009	-365	3425	P-110	29.7	BUTT	1.13	1.15	DRY	1.6	DRY	1.6
3	INTERMEDIATE	12.25	9.625	NEW	API	N	0	3725	0	3709	3009	-665	3725	J-55	40	BUTT	1.13	1.15	DRY	1.6	DRY	1.6
4	PRODUCTION	6.75	5.5	NEW	API	N	0	10420	0	10376	3009	-7332	10420	P-110	20	OTHER - TXP	1.13	1.15	DRY	1.6	DRY	1.6
5	INTERMEDIATE	8.75	7.625	NEW	API	Y	3425	10620	3409	10576	-365	-7532	7195	P-110	29.7	OTHER - W-513	1.13	1.15	DRY	1.6	DRY	1.6
6	PRODUCTION	6.75	5.0	NEW	API	Y	10420	15550	10376	10376	-7332	-7332	5130	P-110	18	OTHER - W-521	1.13	1.13	DRY	1.6	DRY	1.6

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Nailed_Casing_Design_Assumptions_20190902154523.pdf

Operator Name: TAP ROCK OPERATING LLC

Well Name: NAILED IT FED COM **Well Number:** 218H

Casing Attachments

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Nailed_Casing_Design_Assumptions_20190902154647.pdf

Casing ID: 3 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Nailed_Casing_Design_Assumptions_20190902154555.pdf

Casing ID: 4 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Nailed_Casing_Design_Assumptions_20190902154809.pdf

Nailed_5.5in_TXP_Casing_Spec_20190902154819.PDF

Operator Name: TAP ROCK OPERATING LLC

Well Name: NAILED IT FED COM **Well Number:** 218H

Casing Attachments

Casing ID: 5 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Nailed_7.625in_W513_Casing_Spec_20190902154733.pdf

Casing Design Assumptions and Worksheet(s):

Nailed_Casing_Design_Assumptions_20190902154743.pdf

Casing ID: 6 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Nailed_5in_W521_Casing_Spec_20190902154858.pdf

Casing Design Assumptions and Worksheet(s):

Nailed_Casing_Design_Assumptions_20190902154909.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	0	0	0	0	0	0	None	None
SURFACE	Tail		0	940	967	1.35	14.8	1306	100	Class C	5% NCl + LCM
PRODUCTION	Lead		0	0	0	0	0	0	0	None	0
PRODUCTION	Tail		9920	15550	462	1.71	14.2	789	25	Class H	Fluid Loss + Dispersant + Retarder + LCM
INTERMEDIATE	Lead		0	0	0	0	0	0	0	None	None

Operator Name: TAP ROCK OPERATING LLC

Well Name: NAILED IT FED COM **Well Number:** 218H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		0	0	0	0	0	0	0	None	None
INTERMEDIATE	Lead		0	2980	706	2.18	12.7	1540	65	Class C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
INTERMEDIATE	Tail		2980	3725	289	1.33	14.8	385	65	Class C	5% NaCl + LCM
INTERMEDIATE	Lead		3425	9620	293	2.87	11.5	840	35	TXI	Fluid Loss + Dispersant + Retarder + LCM
INTERMEDIATE	Tail		9620	10620	107	1.27	15	136	35	Class H	Fluid Loss + Dispersant + Retarder + LCM

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: 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.

Describe the mud monitoring system utilized: Electronic Pason mud monitor system complying with Onshore Order 1 will be used.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	940	OTHER : Fresh water spud mud	8.3	8.3							
940	3725	OTHER : Brine Water	10	10							
3725	10620	OTHER : Fresh water/cut brine	9	9							

Operator Name: TAP ROCK OPERATING LLC

Well Name: NAILED IT FED COM **Well Number:** 218H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
10620	15550	OIL-BASED MUD	11.5	11.5							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

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 9.625 casing shoe to TD.

CBL w/ CCL from as far as gravity will let it fall to TOC.

List of open and cased hole logs run in the well:

GAMMA RAY LOG,CEMENT BOND LOG,

Coring operation description for the well:

No DSTs or cores are planned at this time.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6730 **Anticipated Surface Pressure:** 4253

Anticipated Bottom Hole Temperature(F): 160

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Nailed_Slot4_H2S_Plan_20190902155248.pdf

Operator Name: TAP ROCK OPERATING LLC

Well Name: NAILED IT FED COM **Well Number:** 218H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

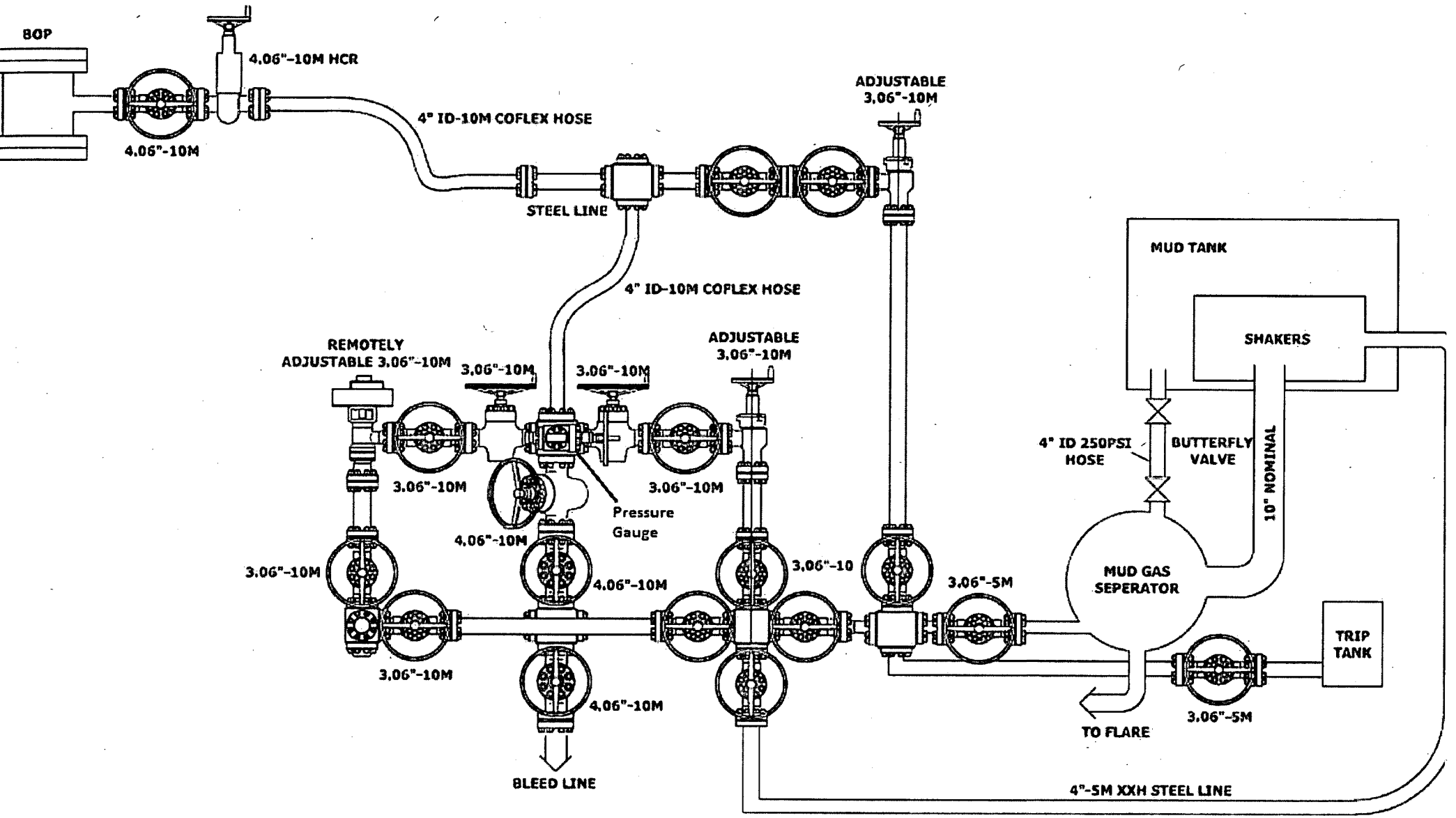
Nailed_218H_Horizontal_Plan_20190902155310.pdf

Other proposed operations facets description:

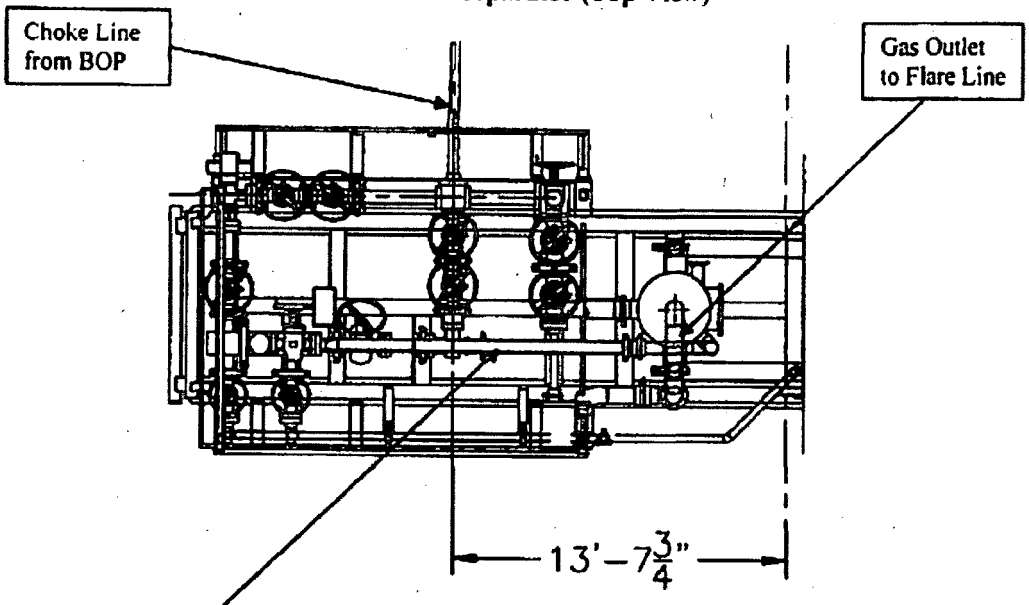
Other proposed operations facets attachment:

CoFlex_Certs_20190902155418.pdf
Nailed_218H_Anticollision_Report_20190902155454.pdf
Nailed_218H_Drill_Plan_v2_013120_20200201091120.pdf
Wellhead_4T_012720_20200201091134.pdf

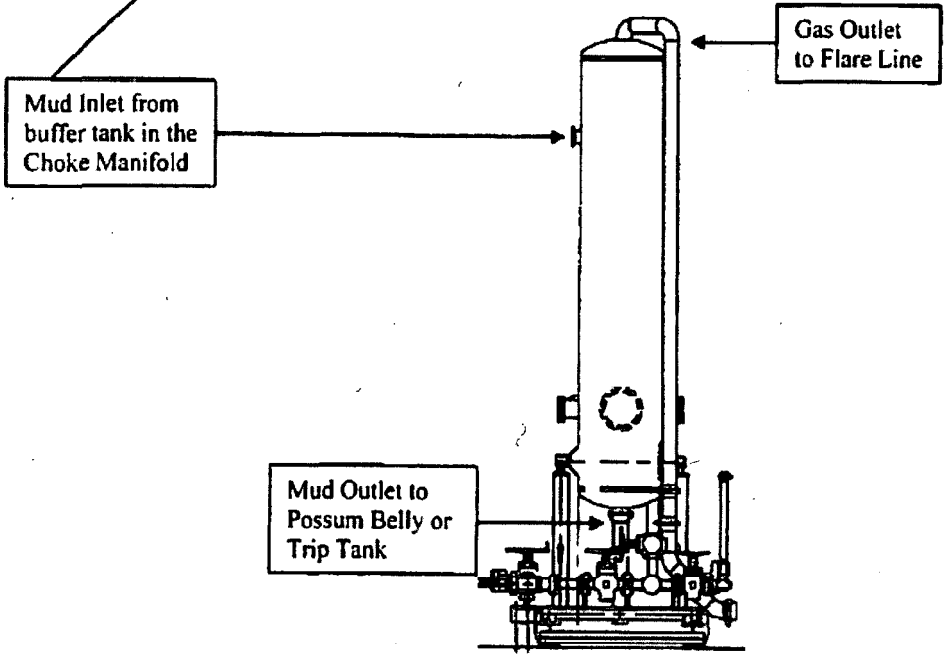
Other Variance attachment:


BOP
4.06"-10M HCR
4.06"-10M
4" ID-10M COFLEX HOSE
ADJUSTABLE
3.06"-10M
STEEL LINE
4" ID-10M COFLEX HOSE
REMOTELY
ADJUSTABLE 3.06"-10M
3.06"-10M
3.06"-10M
ADJUSTABLE
3.06"-10M
3.06"-10M
3.06"-10M
Pressure
Gauge
4.06"-10M
3.06"-10M
4.06"-10M
3.06"-10
3.06"-5M
3.06"-10M
4.06"-10M
BLEED LINE
MUD TANK
SHAKERS
4" ID 250PSI
HOSE
BUTTERFLY
VALVE
10" NOMINAL
MUD GAS
SEPERATOR
TRIP
TANK
3.06"-5M
TO FLARE
4"-5M XXH STEEL LINE

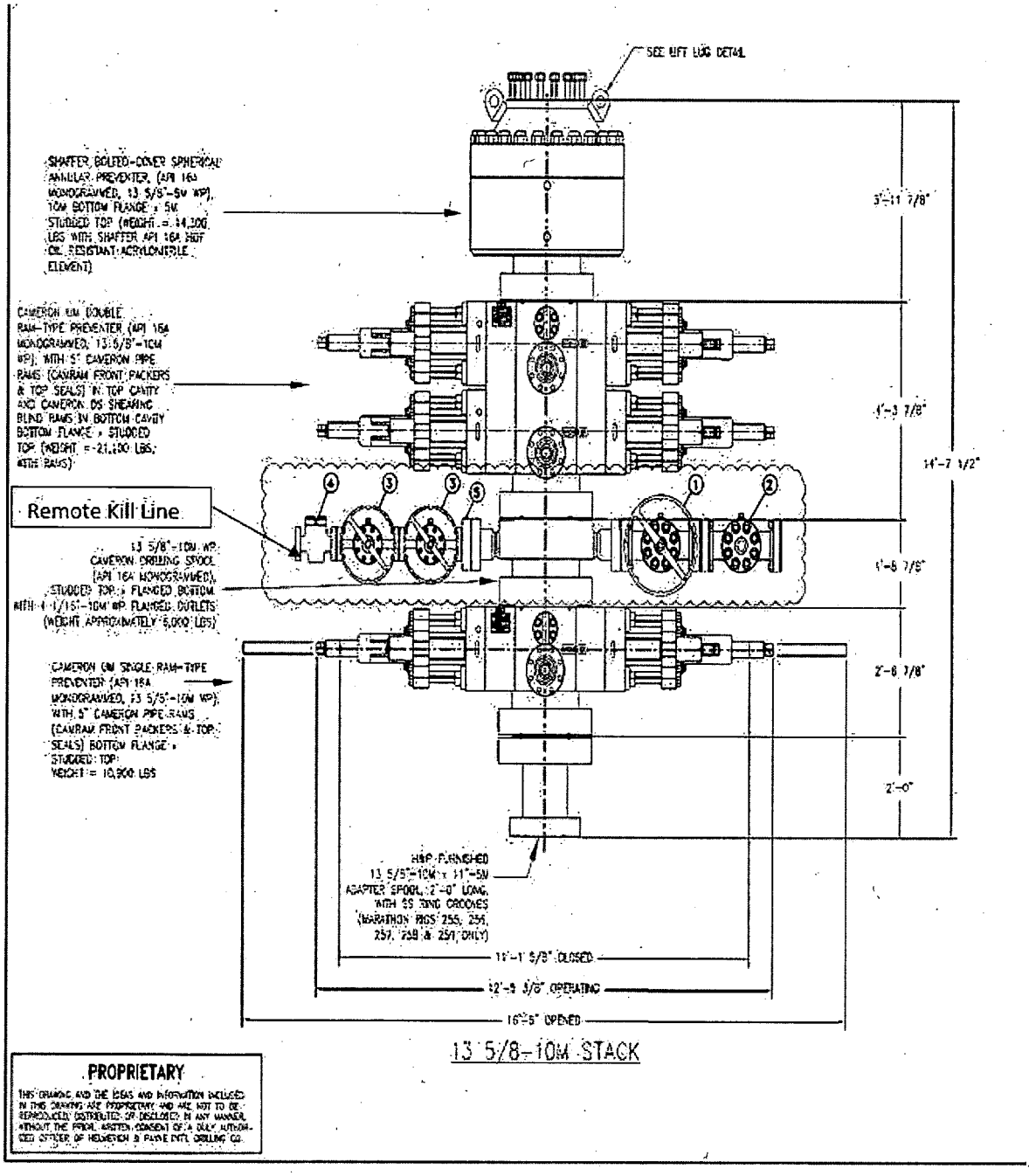
Choke Manifold – Gas Separator (Top View)



Choke Manifold – Gas Separator (Side View)

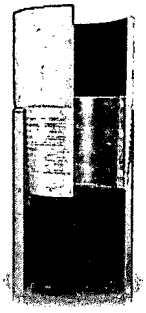


5,000 psi BOP Stack



Wedge 513®

Printed on: 01/30/2018



Outside Diameter	**7.625** in.	**Min. Wall Thickness**	**87.5%**	**(*) Grade P110**	
Wall Thickness	**0.375** in.	**Connection OD Option**	**REGULAR**	**COUPLING**	**PIPE BODY**
Grade	**P110***	**Drift**	**API Standard**	Body: **White** 1st Band: - 2nd Band: -	1st Band: **White** 2nd Band: - 3rd Band: -
		Type	**Casing**	3rd Band: -	4th Band: -

GEOMETRY					
Nominal OD	**7.625** in.	Nominal Weight	**29.70** lbs/ft	Drift	**6.75** in.
Nominal ID	**6.875** in.	Wall Thickness	**0.375** in.	Plain End Weight	**29.06** lbs/ft
OD Tolerance	**API**				
PERFORMANCE					
Body Yield Strength	**940** x1000 lbs	Internal Yield	**9470** psi	SMYS	**110000** psi
Collapse	**5350** psi				
GEOMETRY					
Connection OD	**7.625** in.	Connection ID	**6.800** in.	Make-up Loss	**4.420** in.
Threads per in	**3.29**	Connection OD Option	**REGULAR**		
PERFORMANCE					
Tension Efficiency	**60.0** %	Joint Yield Strength	**564.000** x1000 lbs	Internal Pressure Capacity	**9470.000** psi
Compression Efficiency	**75.2** %	Compression Strength	**706.880** x1000 lbs	Max. Allowable Bending	**39.6** °/100 ft
External Pressure Capacity	**5350.000** psi				
MAKE-UP TORQUES					
Minimum	**9000** ft-lbs	Optimum	**10800** ft-lbs	Maximum	**15800** ft-lbs
OPERATION LIMIT TORQUES					
Operating Torque	**47000** ft-lbs	Yield Torque	**70000** ft-lbs		

Notes

This connection is fully interchangeable with:

Wedge 523® - 7.625 in. - 29.7 lbs/ft

Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Wedge 521®

Printed on: 05/22/2018

Outside Diameter	**5.000** in.	**Min. Wall Thickness**	**87.5%**	**(*) Grade P110-IC**	
Wall Thickness	**0.362** in.	**Connection OD Option**	**REGULAR**	**COUPLING**	**PIPE BODY**
Grade	**P110-IC***	**Drift**	**API Standard**	Body: **White** 1st Band: - 2nd Band: -	1st Band: **White** 2nd Band: **Pale Green** 3rd Band: -
		Type	**Casing**	3rd Band: -	4th Band: -

GEOMETRY					
Nominal OD	**5.000** in.	Nominal Weight	**18.00** lbs/ft	Drift	**4.151** in.
Nominal ID	**4.276** in.	Wall Thickness	**0.362** in.	Plain End Weight	**17.95** lbs/ft
OD Tolerance	**API**				
PERFORMANCE					
Body Yield Strength	**580** x1000 lbs	Internal Yield	**13940** psi	SMYS	**110000** psi
Collapse	**14840** psi				
GEOMETRY					
Connection OD	**5.359** in.	Connection ID	**4.226** in.	Make-up Loss	**3.620** in.
Threads per in	**3.36**	Connection OD Option	**REGULAR**		
PERFORMANCE					
Tension Efficiency	**73.8** %	Joint Yield Strength	**428.040** x1000 lbs	Internal Pressure Capacity	**13940.000** psi
Compression Efficiency	**88.7** %	Compression Strength	**514.460** x1000 lbs	Max. Allowable Bending	**74.5** °/100 ft
External Pressure Capacity	**14840.000** psi				
MAKE-UP TORQUES					
Minimum	**6100** ft-lbs	Optimum	**7300** ft-lbs	Maximum	**10700** ft-lbs
OPERATION LIMIT TORQUES					
Operating Torque	**17300** ft-lbs	Yield Torque	**26000** ft-lbs		

Notes

This connection is fully interchangeable with:

Wedge 521® - 5 in. - 13 / 15 lbs/ft

Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Casing Design Assumptions

- Gas gravity 0.7
- Pore pressure gradient .468 psi/ft above the Wolfcamp, .676 psi/ft Wolfcamp and below
- .676 psi/ft fracture gradient above the Wolfcamp, .832 psi/ft Wolfcamp and below.
- 60°F average surface temperature and 1.5°/100ft temperature gradient
- Cementing loads based on slurries listed in Cement table, and post cement static loading
- Strings landed at neutral weight
- Gas kicks assumed at each casing shoe
- External pressure calculated with fluid gradients and pore pressure
- Production string load tested with completion fluid density and rate
- Tubing leak tested in production scenario

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- Tubing leak tested in production scenario

5.5", 20#, P-110, TXP connection (modified buttress connection that provides a torque rating of nearly 24000ft-lbs)

TXP® BTC

SHARE | EXPORT DATA | PRINT

Outside Diameter	5.500 in.	Min. Wall Thickness	87.5%
Wall Thickness	0.361 in.	Drift	API Standard
Grade	P110	Type	Casing
		Connection OD Option	REGULAR

Clear Filters | Compare | Request Info

CONNECTION INFORMATION
- Blanking Dimensions
- Connection's Page
- Brochure
- Datasheet Manual

PIPE BODY DATA

GEOMETRY

Nominal OD	5.500 in.	Nominal Weight	20 lbs/ft	Drift	4.653 in.
Nominal ID	4.778 in.	Wall Thickness	0.361 in.	Plain End Weight	19.83 lbs/ft
OD Tolerance	API				

PERFORMANCE

Body Yield Strength	641 x1000 lbs	Internal Yield	12640 psi	SMYS	110000 psi
Collapse	11100 psi				

CONNECTION DATA

GEOMETRY

Connection OD	6.100 in.	Coupling Length	9.450 in.	Connection ID	4.766 in.
Make-up Loss	4.204 in.	Threads per in	5	Connection OD Option	REGULAR

PERFORMANCE

Tension Efficiency	100.0 %	Joint Yield Strength	641.000 x1000 lbs	Internal Pressure Capacity [1]	12640.000 psi
Compression Efficiency	100 %	Compression Strength	641.000 x1000 lbs	Max. Allowable Bending	92 °/100 ft
External Pressure Capacity	11100.000 psi				

MAKE-UP TORQUES

Minimum	11270 ft-lbs	Optimum	12520 ft-lbs	Maximum	13770 ft-lbs

OPERATION LIMIT TORQUES

Operating Torque	21500 ft-lbs	Yield Torque	23900 ft-lbs		

Casing Design Assumptions

- Gas gravity 0.7
- Pore pressure gradient .468 psi/ft above the Wolfcamp, .676 psi/ft Wolfcamp and below
- .676 psi/ft fracture gradient above the Wolfcamp, .832 psi/ft Wolfcamp and below.
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TAP ROCK

Hydrogen Sulfide Drilling

Operations Plan

Tap Rock Resources

1 H2S safety instructions to the following:

- Characteristics of H2S
- Physical effects and hazards
- Principal and operation of H2S detectors, warning system and briefing areas
- Evacuation procedures, routes and first aid
- Proper use of safety equipment & life support systems
- Essential personnel meeting medical evaluation criteria will receive additional training on the proper use of 30min pressure demand air packs

2 H2S Detection and Alarm Systems:

- H2S sensor/detectors to be located on the drilling rig floor, in the base of the sub structure / cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may be placed as deemed necessary
- An audio alarm system will be installed on the derrick floor and in the doghouse

3 Windsocks and / Wind Streamers:

- Windsocks at mud pit area should be high enough to be visible
- Windsock on the rig floor and / top of doghouse should be high enough to be visible

4 Condition Flags and Signs:

- Warning sign on access road to location
- Flags to be displayed on sign at entrance to location
    - Green Flag – Normal Safe Operation Condition
    - Yellow Flag – Potential Pressure and Danger
    - Red Flag – Danger (H2S present in dangerous concentrations) Only H2S trained personnel admitted on location

5 Well Control Equipment:

- See Drilling Operations Plan Schematics

6 Communication:

- While working under masks chalkboards will be used for communications
- Hand signals will be used where chalk board is inappropriate
- Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

7 Drilling Stem Testing:

- No DST cores are planned at this time

8 Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubulars good and other mechanical equipment

9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary

11 Emergency Contacts

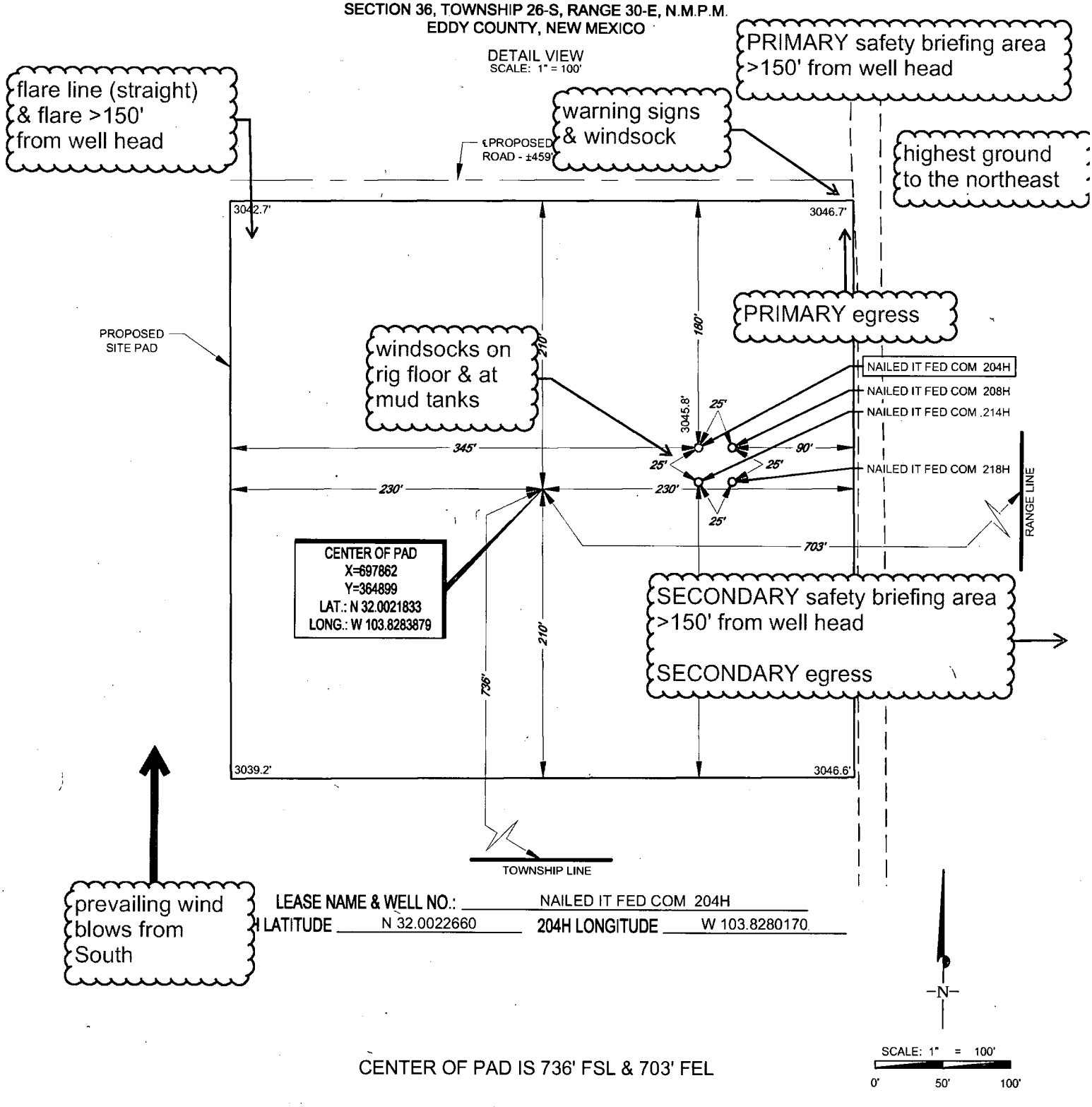
Emergency Contacts		
Carlsbad Police Department	575.887.7551	911
Carlsbad Medical Center	575.887.4100	911
Eddy County Fire Service	575.628.5450	911
Eddy County Sherriff	575.887.7551	911
Lea County Fire Service	575.391.2983	911
Lea County Sherriff	575.396.3611	911
Jal Police Department	575.395.2121	911
Jal Fire Department	575.395.2221	911
Tap Rock Resources	720.772.5090	

EXHIBIT 2B

TAP ROCK

SECTION 36, TOWNSHIP 26-S, RANGE 30-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'



LEASE NAME & WELL NO.: NAILED IT FED COM 204H

204H LATITUDE N 32.0022660 204H LONGITUDE W 103.8280170

CENTER OF PAD IS 736' FSL & 703' FEL

SCALE: 1" = 100'

0' 50' 100'

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

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. 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.

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

ORIGINAL DOCUMENT SIZE: 8.5" X 11"

TAP ROCK RESOURCES

INTREPID

Azimuths to Grid North:
True North: -0.27°
Magnetic North: 6.56°

Magnetic Field
Strength: 47567.3nT
Dip Angle: 59.79°
Date: 07/22/2019
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.56°

Tap Rock Resources, LLC
Project: Eddy County, NM (NAD 83 NME)
Site: (Nailed It) Sec-36_T-26-S_R-30-E
Well: Nailed It Fed Com #218H
Wellbore: OWB
Design: Plan #1
Lat: 32° 0' 7.910 N
Long: 103° 49' 40.567 W
Pad GL: 3044.0
KB: KB @ 3070.0usft

WELL DETAILS: Nailed It Fed Com #218H

3044.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	364905.00	698002.00	32° 0' 7.910 N	103° 49' 40.567 W

SECTION DETAILS

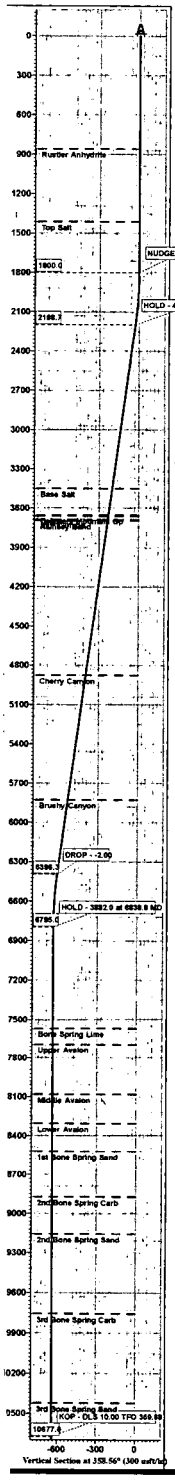
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
1800.0	0.00	0.00	1800.0	0.0	0.0	0.00	0.00	0.0	NUDGE - Build 2.00
2200.0	8.00	186.38	2198.7	-27.7	-3.1	2.00	186.38	-27.6	HOLD - 4238.9 at 2200.0 MD
6439.9	8.00	186.38	6396.3	-613.9	-68.6	0.00	0.00	-612.0	DROP - -2.00
6838.8	0.00	0.00	6795.0	-641.6	-71.7	2.00	180.00	-639.6	HOLD - 3882.0 at 6838.8 MD
10720.8	0.00	0.00	10677.0	-641.6	-71.7	0.00	0.00	-639.6	KOP - DLS 10.00 TFO 359.88
11618.5	89.77	359.68	11250.0	-71.0	-74.9	10.00	359.88	-69.1	EOC - 3933.1 hold at 11618.5 MD
15551.6	89.77	359.68	11266.0	3862.0	-97.0	0.00	0.00	3863.2	TD at 15551.6

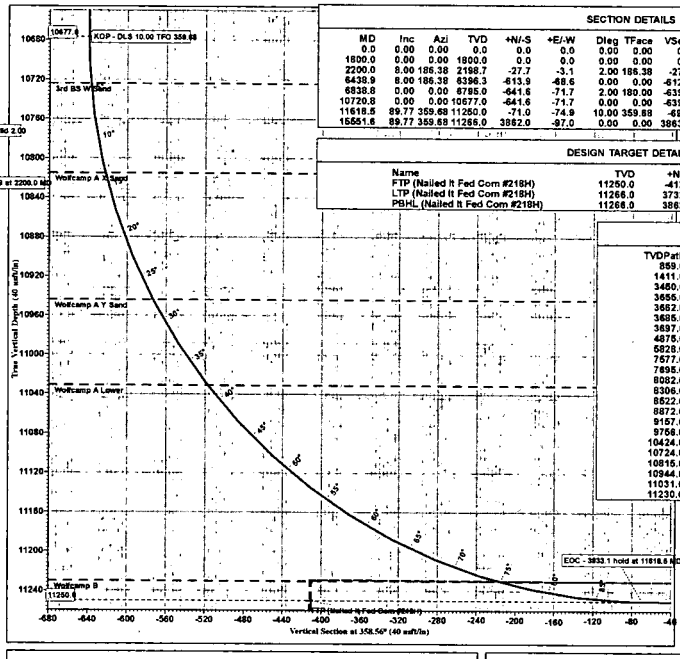
DESIGN TARGET DETAILS

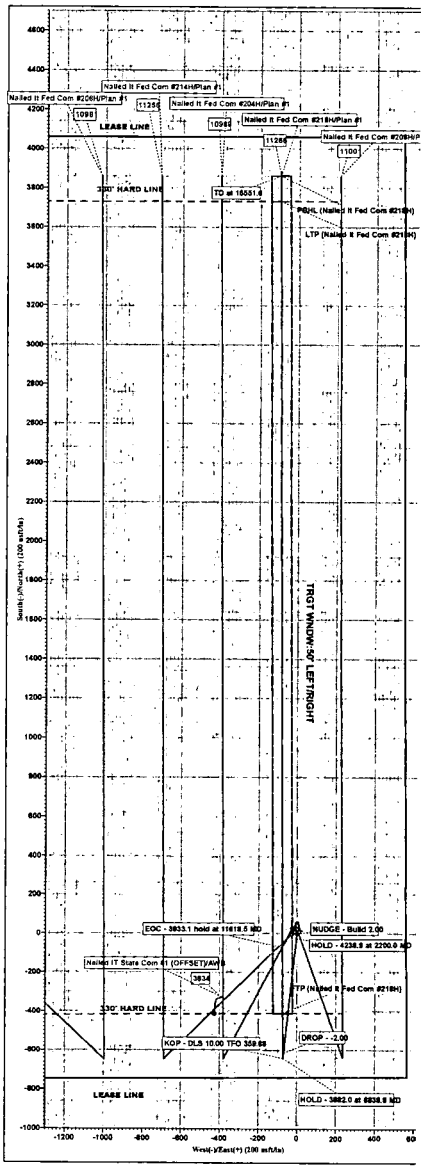
Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (Nailed It Fed Com #218H)	11250.0	-412.0	-73.0	364493.00	697928.00
LTP (Nailed It Fed Com #218H)	11266.0	3732.0	-97.0	368637.00	697905.00
PBHL (Nailed It Fed Com #218H)	11266.0	3862.0	-97.0	368767.00	697905.00

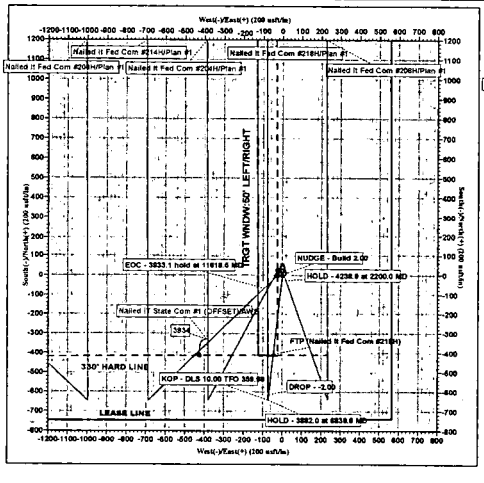
FORMATIONS

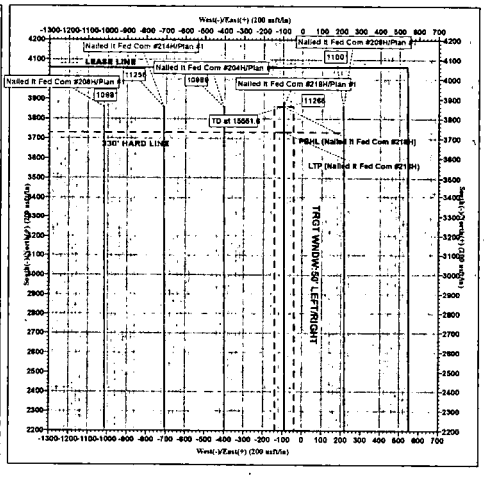
TVDPath	MDPath	Formation
859.0	859.0	Rustler Anhydrite
1411.0	1411.0	Top Salt
3460.0	3463.6	Base Salt
3656.0	3670.6	Delaware Mountain Gp
3682.0	3677.7	Lamar
3685.0	3700.9	Bell Canyon
3697.0	3713.0	Ramsey Sand
4875.0	4902.6	Cherry Canyon
5828.0	5865.0	Brushy Canyon
7577.0	7620.8	Bone Spring Lime
7695.0	7738.8	Upper Avalon
8082.0	8126.8	Middle Avalon
8306.0	8349.8	Lower Avalon
8522.0	8565.8	1st Bone Spring Sand
8872.0	8916.8	2nd Bone Spring Carb
9157.0	9200.8	2nd Bone Spring Sand
9758.0	9799.8	3rd Bone Spring Carb
10424.0	10467.8	3rd Bone Spring Sand
10734.0	10767.8	3rd BS W Sand
10815.0	10860.2	Wolfcamp A X Sand
10944.0	10998.8	Wolfcamp A Y Sand
11031.0	11102.4	Wolfcamp A Lower
11230.0	11459.2	Wolfcamp B

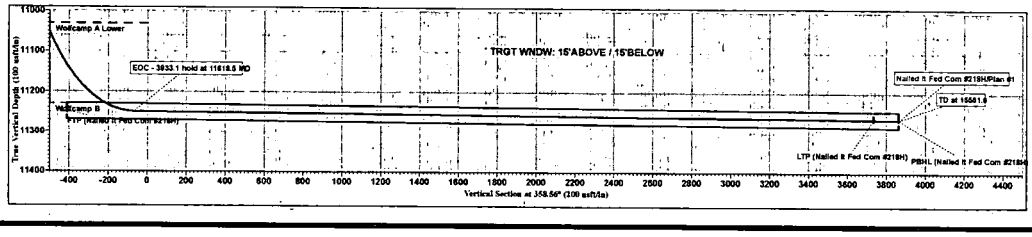












Tap Rock Resources, LLC

Eddy County, NM (NAD 83 NME)
(Nailed It) Sec-36_T-26-S_R-30-E
Nailed It Fed Com #218H

OWB

Plan: Plan #1

Standard Planning Report

23 July, 2019

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Nailed It Fed Com #218H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3070.0usft
Project:	Eddy County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3070.0usft
Site:	(Nailed It) Sec-36_T-26-S_R-30-E	**North Reference:**	Grid
Well:	Nailed It Fed Com #218H	**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 (Nailed It) Sec-36_T-26-S_R-30-E

Site Position:		**Northing:**	364,471.00 usft	**Latitude:**	32° 0' 3.820 N
From:	Map	**Easting:**	693,516.00 usft	**Longitude:**	103° 50' 32.687 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.26 °

Well Nailed It Fed Com #218H

Well Position	**+N/-S**	434.0 usft	**Northing:**	364,905.00 usft	**Latitude:**	32° 0' 7.910 N
	+E/-W	4,486.0 usft	**Easting:**	698,002.00 usft	**Longitude:**	103° 49' 40.567 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,044.0 usft

Wellbore OWB

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	07/22/19	6.83	59.79	47,567.34325060

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	358.56

Plan Survey Tool Program **Date** 07/23/19

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	15,551.6	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	
2,200.0	8.00	186.38	2,198.7	-27.7	-3.1	2.00	2.00	0.00	186.38	
6,438.9	8.00	186.38	6,396.3	-613.9	-68.6	0.00	0.00	0.00	0.00	
6,838.8	0.00	0.00	6,795.0	-641.6	-71.7	2.00	-2.00	0.00	180.00	
10,720.8	0.00	0.00	10,677.0	-641.6	-71.7	0.00	0.00	0.00	0.00	
11,618.5	89.77	359.68	11,250.0	-71.0	-74.9	10.00	10.00	-0.04	359.68	
15,551.6	89.77	359.68	11,266.0	3,862.0	-97.0	0.00	0.00	0.00	0.00	PBHL (Nailed It Fec

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Wellbore:	OWB		
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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
859.0	0.00	0.00	859.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler Anhydrite									
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
1,411.0	0.00	0.00	1,411.0	0.0	0.0	0.0	0.00	0.00	0.00
Top Salt									
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
NUDGE - Build 2.00									
1,900.0	2.00	186.38	1,900.0	-1.7	-0.2	-1.7	2.00	2.00	0.00
2,000.0	4.00	186.38	1,999.8	-6.9	-0.8	-6.9	2.00	2.00	0.00
2,100.0	6.00	186.38	2,099.5	-15.6	-1.7	-15.5	2.00	2.00	0.00
2,200.0	8.00	186.38	2,198.7	-27.7	-3.1	-27.6	2.00	2.00	0.00
HOLD - 4238.9 at 2200.0 MD									
2,300.0	8.00	186.38	2,297.7	-41.5	-4.6	-41.4	0.00	0.00	0.00
2,400.0	8.00	186.38	2,396.8	-55.4	-6.2	-55.2	0.00	0.00	0.00
2,500.0	8.00	186.38	2,495.8	-69.2	-7.7	-69.0	0.00	0.00	0.00
2,600.0	8.00	186.38	2,594.8	-83.0	-9.3	-82.8	0.00	0.00	0.00
2,700.0	8.00	186.38	2,693.8	-96.9	-10.8	-96.6	0.00	0.00	0.00
2,800.0	8.00	186.38	2,792.9	-110.7	-12.4	-110.3	0.00	0.00	0.00
2,900.0	8.00	186.38	2,891.9	-124.5	-13.9	-124.1	0.00	0.00	0.00
3,000.0	8.00	186.38	2,990.9	-138.3	-15.5	-137.9	0.00	0.00	0.00
3,100.0	8.00	186.38	3,089.9	-152.2	-17.0	-151.7	0.00	0.00	0.00
3,200.0	8.00	186.38	3,189.0	-166.0	-18.6	-165.5	0.00	0.00	0.00
3,300.0	8.00	186.38	3,288.0	-179.8	-20.1	-179.3	0.00	0.00	0.00
3,400.0	8.00	186.38	3,387.0	-193.7	-21.6	-193.1	0.00	0.00	0.00
3,463.6	8.00	186.38	3,450.0	-202.5	-22.6	-201.8	0.00	0.00	0.00
Base Salt									
3,500.0	8.00	186.38	3,486.1	-207.5	-23.2	-206.8	0.00	0.00	0.00
3,600.0	8.00	186.38	3,585.1	-221.3	-24.7	-220.6	0.00	0.00	0.00
3,670.6	8.00	186.38	3,655.0	-231.1	-25.8	-230.4	0.00	0.00	0.00
Delaware Mountain Gp									
3,677.7	8.00	186.38	3,662.0	-232.1	-25.9	-231.3	0.00	0.00	0.00
Lamar									
3,700.0	8.00	186.38	3,684.1	-235.2	-26.3	-234.4	0.00	0.00	0.00
3,700.9	8.00	186.38	3,685.0	-235.3	-26.3	-234.5	0.00	0.00	0.00
Bell Canyon									
3,713.0	8.00	186.38	3,697.0	-237.0	-26.5	-236.2	0.00	0.00	0.00

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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)
Ramsey Sand									
3,800.0	8.00	186.38	3,783.1	-249.0	-27.8	-248.2	0.00	0.00	0.00
3,900.0	8.00	186.38	3,882.2	-262.8	-29.4	-262.0	0.00	0.00	0.00
4,000.0	8.00	186.38	3,981.2	-276.6	-30.9	-275.8	0.00	0.00	0.00
4,100.0	8.00	186.38	4,080.2	-290.5	-32.5	-289.6	0.00	0.00	0.00
4,200.0	8.00	186.38	4,179.2	-304.3	-34.0	-303.4	0.00	0.00	0.00
4,300.0	8.00	186.38	4,278.3	-318.1	-35.5	-317.1	0.00	0.00	0.00
4,400.0	8.00	186.38	4,377.3	-332.0	-37.1	-330.9	0.00	0.00	0.00
4,500.0	8.00	186.38	4,476.3	-345.8	-38.6	-344.7	0.00	0.00	0.00
4,600.0	8.00	186.38	4,575.3	-359.6	-40.2	-358.5	0.00	0.00	0.00
4,700.0	8.00	186.38	4,674.4	-373.5	-41.7	-372.3	0.00	0.00	0.00
4,800.0	8.00	186.38	4,773.4	-387.3	-43.3	-386.1	0.00	0.00	0.00
4,900.0	8.00	186.38	4,872.4	-401.1	-44.8	-399.9	0.00	0.00	0.00
4,902.6	8.00	186.38	4,875.0	-401.5	-44.9	-400.2	0.00	0.00	0.00
Cherry Canyon									
5,000.0	8.00	186.38	4,971.5	-414.9	-46.4	-413.6	0.00	0.00	0.00
5,100.0	8.00	186.38	5,070.5	-428.8	-47.9	-427.4	0.00	0.00	0.00
5,200.0	8.00	186.38	5,169.5	-442.6	-49.5	-441.2	0.00	0.00	0.00
5,300.0	8.00	186.38	5,268.5	-456.4	-51.0	-455.0	0.00	0.00	0.00
5,400.0	8.00	186.38	5,367.6	-470.3	-52.5	-468.8	0.00	0.00	0.00
5,500.0	8.00	186.38	5,466.6	-484.1	-54.1	-482.6	0.00	0.00	0.00
5,600.0	8.00	186.38	5,565.6	-497.9	-55.6	-496.4	0.00	0.00	0.00
5,700.0	8.00	186.38	5,664.6	-511.7	-57.2	-510.2	0.00	0.00	0.00
5,800.0	8.00	186.38	5,763.7	-525.6	-58.7	-523.9	0.00	0.00	0.00
5,865.0	8.00	186.38	5,828.0	-534.6	-59.7	-532.9	0.00	0.00	0.00
Brushy Canyon									
5,900.0	8.00	186.38	5,862.7	-539.4	-60.3	-537.7	0.00	0.00	0.00
6,000.0	8.00	186.38	5,961.7	-553.2	-61.8	-551.5	0.00	0.00	0.00
6,100.0	8.00	186.38	6,060.8	-567.1	-63.4	-565.3	0.00	0.00	0.00
6,200.0	8.00	186.38	6,159.8	-580.9	-64.9	-579.1	0.00	0.00	0.00
6,300.0	8.00	186.38	6,258.8	-594.7	-66.5	-592.9	0.00	0.00	0.00
6,400.0	8.00	186.38	6,357.8	-608.6	-68.0	-606.7	0.00	0.00	0.00
6,438.9	8.00	186.38	6,396.3	-613.9	-68.6	-612.0	0.00	0.00	0.00
DROP - -2.00									
6,500.0	6.78	186.38	6,456.9	-621.7	-69.5	-619.8	2.00	-2.00	0.00
6,600.0	4.78	186.38	6,556.4	-631.7	-70.6	-629.8	2.00	-2.00	0.00
6,700.0	2.78	186.38	6,656.2	-638.3	-71.3	-636.3	2.00	-2.00	0.00
6,800.0	0.78	186.38	6,756.2	-641.4	-71.7	-639.4	2.00	-2.00	0.00
6,838.8	0.00	0.00	6,795.0	-641.6	-71.7	-639.6	2.00	-2.00	0.00
HOLD - 3882.0 at 6838.8 MD									
6,900.0	0.00	0.00	6,856.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
7,000.0	0.00	0.00	6,956.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
7,100.0	0.00	0.00	7,056.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
7,200.0	0.00	0.00	7,156.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
7,300.0	0.00	0.00	7,256.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
7,400.0	0.00	0.00	7,356.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
7,500.0	0.00	0.00	7,456.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
7,600.0	0.00	0.00	7,556.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
7,620.8	0.00	0.00	7,577.0	-641.6	-71.7	-639.6	0.00	0.00	0.00
Bone Spring Lime									
7,700.0	0.00	0.00	7,656.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
7,738.8	0.00	0.00	7,695.0	-641.6	-71.7	-639.6	0.00	0.00	0.00
Upper Avalon									

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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)
7,800.0	0.00	0.00	7,756.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
7,900.0	0.00	0.00	7,856.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
8,000.0	0.00	0.00	7,956.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
8,100.0	0.00	0.00	8,056.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
8,125.8	0.00	0.00	8,082.0	-641.6	-71.7	-639.6	0.00	0.00	0.00
Middle Avalon									
8,200.0	0.00	0.00	8,156.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
8,300.0	0.00	0.00	8,256.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
8,349.8	0.00	0.00	8,306.0	-641.6	-71.7	-639.6	0.00	0.00	0.00
Lower Avalon									
8,400.0	0.00	0.00	8,356.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
8,500.0	0.00	0.00	8,456.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
8,565.8	0.00	0.00	8,522.0	-641.6	-71.7	-639.6	0.00	0.00	0.00
1st Bone Spring Sand									
8,600.0	0.00	0.00	8,556.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
8,700.0	0.00	0.00	8,656.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
8,800.0	0.00	0.00	8,756.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
8,900.0	0.00	0.00	8,856.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
8,915.8	0.00	0.00	8,872.0	-641.6	-71.7	-639.6	0.00	0.00	0.00
2nd Bone Spring Carb									
9,000.0	0.00	0.00	8,956.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
9,100.0	0.00	0.00	9,056.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
9,200.0	0.00	0.00	9,156.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
9,200.8	0.00	0.00	9,157.0	-641.6	-71.7	-639.6	0.00	0.00	0.00
2nd Bone Spring Sand									
9,300.0	0.00	0.00	9,256.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
9,400.0	0.00	0.00	9,356.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
9,500.0	0.00	0.00	9,456.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
9,600.0	0.00	0.00	9,556.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
9,700.0	0.00	0.00	9,656.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
9,799.8	0.00	0.00	9,756.0	-641.6	-71.7	-639.6	0.00	0.00	0.00
3rd Bone Spring Carb									
9,800.0	0.00	0.00	9,756.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
9,900.0	0.00	0.00	9,856.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
10,000.0	0.00	0.00	9,956.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
10,100.0	0.00	0.00	10,056.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
10,200.0	0.00	0.00	10,156.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
10,300.0	0.00	0.00	10,256.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
10,400.0	0.00	0.00	10,356.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
10,467.8	0.00	0.00	10,424.0	-641.6	-71.7	-639.6	0.00	0.00	0.00
3rd Bone Spring Sand									
10,500.0	0.00	0.00	10,456.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
10,600.0	0.00	0.00	10,556.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
10,700.0	0.00	0.00	10,656.2	-641.6	-71.7	-639.6	0.00	0.00	0.00
10,720.8	0.00	0.00	10,677.0	-641.6	-71.7	-639.6	0.00	0.00	0.00
KOP - DLS 10.00 TFO 359.68									
10,750.0	2.92	359.68	10,706.1	-640.9	-71.7	-638.9	10.00	10.00	0.00
10,767.9	4.71	359.68	10,724.0	-639.7	-71.7	-637.7	10.00	10.00	0.00
3rd BS W Sand									
10,800.0	7.92	359.68	10,755.9	-636.2	-71.7	-634.2	10.00	10.00	0.00
10,850.0	12.92	359.68	10,805.1	-627.1	-71.8	-625.1	10.00	10.00	0.00
10,860.2	13.94	359.68	10,815.0	-624.8	-71.8	-622.8	10.00	10.00	0.00
Wolfcamp A X Sand									

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Nailed It Fed Com #218H
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Project:	Eddy County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3070.0usft
Site:	(Nailed It) Sec-36_T-26-S_R-30-E	**North Reference:**	Grid
Well:	Nailed It Fed Com #218H	**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)
10,900.0	17.92	359.68	10,853.3	-613.9	-71.9	-611.9	10.00	10.00	0.00
10,950.0	22.92	359.68	10,900.1	-596.4	-72.0	-594.4	10.00	10.00	0.00
10,998.6	27.78	359.68	10,944.0	-575.6	-72.1	-573.6	10.00	10.00	0.00
Wolfcamp A Y Sand									
11,000.0	27.92	359.68	10,945.2	-575.0	-72.1	-573.0	10.00	10.00	0.00
11,050.0	32.92	359.68	10,988.4	-549.7	-72.2	-547.7	10.00	10.00	0.00
11,100.0	37.92	359.68	11,029.1	-520.7	-72.4	-518.7	10.00	10.00	0.00
11,102.4	38.16	359.68	11,031.0	-519.2	-72.4	-517.2	10.00	10.00	0.00
Wolfcamp A Lower									
11,150.0	42.92	359.68	11,067.1	-488.3	-72.6	-486.3	10.00	10.00	0.00
11,200.0	47.92	359.68	11,102.2	-452.7	-72.8	-450.7	10.00	10.00	0.00
11,250.0	52.92	359.68	11,134.1	-414.2	-73.0	-412.2	10.00	10.00	0.00
11,300.0	57.92	359.68	11,162.4	-373.0	-73.2	-371.1	10.00	10.00	0.00
11,350.0	62.92	359.68	11,187.1	-329.5	-73.5	-327.6	10.00	10.00	0.00
11,400.0	67.92	359.68	11,207.9	-284.1	-73.7	-282.2	10.00	10.00	0.00
11,450.0	72.92	359.68	11,224.7	-237.0	-74.0	-235.1	10.00	10.00	0.00
11,469.2	74.83	359.68	11,230.0	-218.6	-74.1	-216.7	10.00	10.00	0.00
Wolfcamp B									
11,500.0	77.92	359.68	11,237.3	-188.6	-74.2	-186.7	10.00	10.00	0.00
11,550.0	82.92	359.68	11,245.6	-139.3	-74.5	-137.4	10.00	10.00	0.00
11,600.0	87.92	359.68	11,249.6	-89.5	-74.8	-87.6	10.00	10.00	0.00
11,618.5	89.77	359.68	11,250.0	-71.0	-74.9	-69.1	10.00	10.00	0.00
EOC - 3933.1 hold at 11618.5 MD									
11,700.0	89.77	359.68	11,250.3	10.5	-75.4	12.4	0.00	0.00	0.00
11,800.0	89.77	359.68	11,250.7	110.5	-75.9	112.3	0.00	0.00	0.00
11,900.0	89.77	359.68	11,251.1	210.5	-76.5	212.3	0.00	0.00	0.00
12,000.0	89.77	359.68	11,251.5	310.5	-77.0	312.3	0.00	0.00	0.00
12,100.0	89.77	359.68	11,251.9	410.5	-77.6	412.3	0.00	0.00	0.00
12,200.0	89.77	359.68	11,252.3	510.5	-78.2	512.3	0.00	0.00	0.00
12,300.0	89.77	359.68	11,252.7	610.5	-78.7	612.2	0.00	0.00	0.00
12,400.0	89.77	359.68	11,253.1	710.5	-79.3	712.2	0.00	0.00	0.00
12,500.0	89.77	359.68	11,253.5	810.5	-79.9	812.2	0.00	0.00	0.00
12,600.0	89.77	359.68	11,254.0	910.5	-80.4	912.2	0.00	0.00	0.00
12,700.0	89.77	359.68	11,254.4	1,010.4	-81.0	1,012.2	0.00	0.00	0.00
12,800.0	89.77	359.68	11,254.8	1,110.4	-81.5	1,112.1	0.00	0.00	0.00
12,900.0	89.77	359.68	11,255.2	1,210.4	-82.1	1,212.1	0.00	0.00	0.00
13,000.0	89.77	359.68	11,255.6	1,310.4	-82.7	1,312.1	0.00	0.00	0.00
13,100.0	89.77	359.68	11,256.0	1,410.4	-83.2	1,412.1	0.00	0.00	0.00
13,200.0	89.77	359.68	11,256.4	1,510.4	-83.8	1,512.1	0.00	0.00	0.00
13,300.0	89.77	359.68	11,256.8	1,610.4	-84.4	1,612.0	0.00	0.00	0.00
13,400.0	89.77	359.68	11,257.2	1,710.4	-84.9	1,712.0	0.00	0.00	0.00
13,500.0	89.77	359.68	11,257.6	1,810.4	-85.5	1,812.0	0.00	0.00	0.00
13,600.0	89.77	359.68	11,258.0	1,910.4	-86.0	1,912.0	0.00	0.00	0.00
13,700.0	89.77	359.68	11,258.4	2,010.4	-86.6	2,012.0	0.00	0.00	0.00
13,800.0	89.77	359.68	11,258.9	2,110.4	-87.2	2,111.9	0.00	0.00	0.00
13,900.0	89.77	359.68	11,259.3	2,210.4	-87.7	2,211.9	0.00	0.00	0.00
14,000.0	89.77	359.68	11,259.7	2,310.4	-88.3	2,311.9	0.00	0.00	0.00
14,100.0	89.77	359.68	11,260.1	2,410.4	-88.8	2,411.9	0.00	0.00	0.00
14,200.0	89.77	359.68	11,260.5	2,510.4	-89.4	2,511.9	0.00	0.00	0.00
14,300.0	89.77	359.68	11,260.9	2,610.4	-90.0	2,611.8	0.00	0.00	0.00
14,400.0	89.77	359.68	11,261.3	2,710.4	-90.5	2,711.8	0.00	0.00	0.00
14,500.0	89.77	359.68	11,261.7	2,810.4	-91.1	2,811.8	0.00	0.00	0.00
14,600.0	89.77	359.68	11,262.1	2,910.4	-91.7	2,911.8	0.00	0.00	0.00

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Site:	(Nailed It) Sec-36_T-26-S_R-30-E	**North Reference:**	Grid
Well:	Nailed It Fed Com #218H	**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)
14,700.0	89.77	359.68	11,262.5	3,010.4	-92.2	3,011.8	0.00	0.00	0.00
14,800.0	89.77	359.68	11,262.9	3,110.4	-92.8	3,111.7	0.00	0.00	0.00
14,900.0	89.77	359.68	11,263.3	3,210.4	-93.3	3,211.7	0.00	0.00	0.00
15,000.0	89.77	359.68	11,263.7	3,310.4	-93.9	3,311.7	0.00	0.00	0.00
15,100.0	89.77	359.68	11,264.2	3,410.4	-94.5	3,411.7	0.00	0.00	0.00
15,200.0	89.77	359.68	11,264.6	3,510.4	-95.0	3,511.7	0.00	0.00	0.00
15,300.0	89.77	359.68	11,265.0	3,610.4	-95.6	3,611.6	0.00	0.00	0.00
15,400.0	89.77	359.68	11,265.4	3,710.4	-96.1	3,711.6	0.00	0.00	0.00
15,500.0	89.77	359.68	11,265.8	3,810.4	-96.7	3,811.6	0.00	0.00	0.00
15,551.6	89.77	359.68	11,266.0	3,862.0	-97.0	3,863.2	0.00	0.00	0.00
TD at 15551.6									

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
FTP (Nailed It Fed Co	0.00	0.00	11,250.0	-412.0	-73.0	364,493.00	697,929.00	32° 0' 3.836 N	103° 49' 41.437 W
- plan misses target center by 95.1usft at 11309.3usft MD (11167.3 TVD, -365.1 N, -73.3 E)									
- Point									
LTP (Nailed It Fed Co	0.00	0.00	11,266.0	3,732.0	-97.0	368,637.00	697,905.00	32° 0' 44.847 N	103° 49' 41.491 W
- plan misses target center by 0.9usft at 15421.6usft MD (11265.5 TVD, 3732.0 N, -96.3 E)									
- Point									
PBHL (Nailed It Fed C	0.23	359.68	11,266.0	3,862.0	-97.0	368,767.00	697,905.00	32° 0' 46.133 N	103° 49' 41.484 W
- plan hits target center									
- Rectangle (sides W100.0 H4,275.0 D40.0)									

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Site:	(Nailed It) Sec-36_T-26-S_R-30-E	**North Reference:**	Grid
Well:	Nailed It Fed Com #218H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
859.0	859.0	Rustler Anhydrite			
1,411.0	1,411.0	Top Salt			
3,463.6	3,450.0	Base Salt			
3,670.6	3,655.0	Delaware Mountain Gp			
3,677.7	3,662.0	Lamar			
3,700.9	3,685.0	Bell Canyon			
3,713.0	3,697.0	Ramsey Sand			
4,902.6	4,875.0	Cherry Canyon			
5,865.0	5,828.0	Brushy Canyon			
7,620.8	7,577.0	Bone Spring Lime			
7,738.8	7,695.0	Upper Avalon			
8,125.8	8,082.0	Middle Avalon			
8,349.8	8,306.0	Lower Avalon			
8,565.8	8,522.0	1st Bone Spring Sand			
8,915.8	8,872.0	2nd Bone Spring Carb			
9,200.8	9,157.0	2nd Bone Spring Sand			
9,799.8	9,756.0	3rd Bone Spring Carb			
10,467.8	10,424.0	3rd Bone Spring Sand			
10,767.9	10,724.0	3rd BS W Sand			
10,860.2	10,815.0	Wolfcamp A X Sand			
10,998.6	10,944.0	Wolfcamp A Y Sand			
11,102.4	11,031.0	Wolfcamp A Lower			
11,469.2	11,230.0	Wolfcamp B			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,800.0	1,800.0	0.0	0.0	NUDGE - Build 2.00
2,200.0	2,198.7	-27.7	-3.1	HOLD - 4238.9 at 2200.0 MD
6,438.9	6,396.3	-613.9	-68.6	DROP - -2.00
6,838.8	6,795.0	-641.6	-71.7	HOLD - 3882.0 at 6838.8 MD
10,720.8	10,677.0	-641.6	-71.7	KOP - DLS 10.00 TFO 359.68
11,618.5	11,250.0	-71.0	-74.9	EOC - 3933.1 hold at 11618.5 MD
15,551.6	11,266.0	3,862.0	-97.0	TD at 15551.6