### **CASE NO. 22278**

# APPLICATION OF TAP ROCK RESOURCES, LLC FOR COMPULSORY POOLING, <u>EDDY COUNTY, NEW MEXICO</u>

# EXHIBITS (Poert I)

- A. Application and Proposed Notice
- B. Landman's Affidavit
- C. Geologist's Affidavit
- D. Affidavit of Notice
- E. Pooling Checklist

# STATE OF NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES OIL CONSERVATION DIVISION

APPLICATION OF TAP ROCK OPERATING, LLC
FOR A STANDARD HORIZONTAL SPACING
AND PRORATION UNIT AND COMPULSORY POOLING,
EDDY COUNTY, NEW MEXICO
Case N

Case No. 22278

### **AFFIDAVIT OF EMILY LANGE**

I, being duly sworn on oath, state the following:

- 1. I am over the age of 18, and I have personal knowledge of the matters stated herein.
- 2. I am employed as a petroleum geologist for Tap Rock Operating, LLC ("Tap Rock"), and I am familiar with the subject applications and the geology involved.
- 3. This affidavit is submitted in connection with the filing by Tap Rock of the above-referenced compulsory pooling applications pursuant to 19.15.4.12.A(1) NMAC.
- 4. I have previously testified before the New Mexico Oil Conservation Division as an expert witness in petroleum geology matters. My credentials as a petroleum geologist have been accepted by the Division and made a matter of record.
- 5. **Exhibit 7** is a Project Locator Map depicting the location of the Horizontal Spacing Unit ("HSU") within the Delaware Basin. Within Sections 25 & 36 of 26S 30E, are the Nailed It Fed Com #121H, #122H, #151H, #152H and #155H wells (the "Wells").
- 6. **Exhibit 8** is a Gun Barrel Diagram showing the planned Bone Spring horizontal spacing for the Wells. This diagram shows the projected development of the five Bone Spring Wells. A nearby type log has been included (for log descriptions, see **Exhibit 10** below) to show approximate depths and reservoir quality of the selected landing zones.

EXHIBIT C

- 7. **Exhibit 9** is a Bone Spring Structure Map. This map shows the location of the Nailed It Fed Com W/2 HSU outlined by the red box. The surface/bottom hole locations of the Wells are shown, zoomed in, to the right. The map is the top of the Second Bone Spring Sand formation in sub-sea vertical depth. The contour intervals are 25 feet each. There is a monoclinal dip down to the east. The orientation of the Wells will each be approximately along strike. Offset horizontal wells, that have targeted similar intervals within the Second and Third Bone Spring formations, are highlighted by gray and blue circles, respectively. The wells controlling the structure map have the sub-sea vertical depth posted in red. The subsequent cross-section from A-A' (**Exhibit 10**) is also identified to locate our closest control on the reservoir properties for the Wells. I do not observe any faulting, pinch-outs, or other geologic impediments or hazards to developing this targeted interval with a horizontal well.
- 8. Exhibit 10 is a Bone Spring Stratigraphic Cross Section (flattened near the top of the Second Bone Spring Carbonate formation). For each well, track 1 has a gamma ray log with interpreted color fill for lithology and scaled from 0 to 150 api units. For gamma ray, the blue colors indicate carbonates, yellow to orange are sandstone/siltstones, and the darker browns are shale facies. Track 2 has the deep resistivity log, scaled from 2 ohmm to 2000 ohmm. The pink shading cutoff is at 20 ohmm or less to help identify the more siliciclastic rocks. Track 3 is the porosity track and contains the blue neutron porosity curve and the red density porosity curve, both scaled from 25% to 0%. The gray shading is separation of neutron and density porosity curves and represents increasing clay content with increasing separation. The purple shading on the density porosity curve highlights anything greater than 8% porosity. This cutoff indicates the best rock properties for reservoir evaluation. The cross-section identifies the key tops used to evaluate

reservoirs and landing targets for the Wells. Tan colored circles on the depth track of Track 1 show the landing target intervals for the Wells.

- 9. **Exhibit 11** is an Isopach Map of the target interval (Top of Second Bone Spring Sand to Top of Third Bone Spring Sand). This map shows the location of the Nailed It Fed Com W/2 outlined by the red box. The surface/bottom hole locations of the Wells are shown, zoomed in, to the right. The anticipated gross thickness of the interval is 1,250 feet throughout the HSU. The contour intervals are 20'. Offset horizontal wells, that have targeted similar intervals within the Second and Third Bone Spring formations, are highlighted by gray and blue circles, respectively. The location of the previous cross-section from A-A' is also shown on this map.
  - 10. Based on my geologic study of the area, I conclude the following:
    - a. The horizontal spacing and proration unit is justified from a geologic standpoint.
    - b. There are no structural impediments or faulting that will interfere with horizontal development.
    - c. Each quarter section in the HSU will contribute more or less equally to production.
    - d. The preferred well orientation in this area is south-north. This is because the inferred orientation of the maximum horizontal stress is roughly northwest-southeast.
- 11. **Exhibit 12** shows a Simplified Wellbore Diagram for each of the Wells in the HSU and demonstrate that the first and last take points for each Well will be standard.
- 12. The Exhibits to this Affidavit were prepared by me, or compiled from Tap Rock's company business records.

- 13. The granting of this Application is in the interests of conservation and the prevention of waste.
  - 14. The foregoing is correct and complete to the best of my knowledge and belief.

FURTHER AFFIANT SAYETH NAUGHT

EMILY LANGE

STATE OF COLORADO ) )ss COUNTY OF JEFFERSON)

Subscribed to and sworn before me this and day of November, 2021.

Taylor J Hindes
NOTARY PUBLIC
STATE OF COLORADO

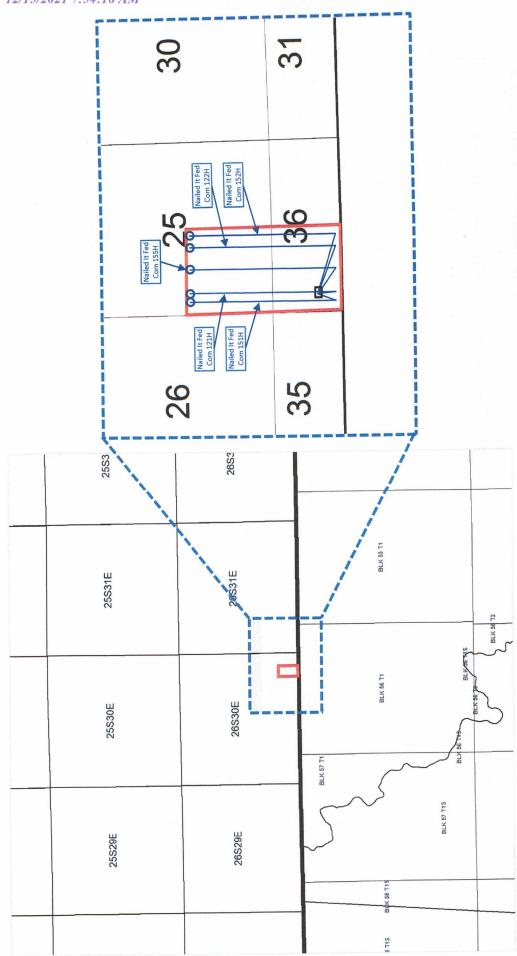
NOTARY ID 20114037710
MY COMMISSION EXPIRES June 10, 2024

Notary Public Stindes

My Commission expires June 10, 2034

Exhibit 7 Case No. 22278





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Project Locator Map - Nailed It



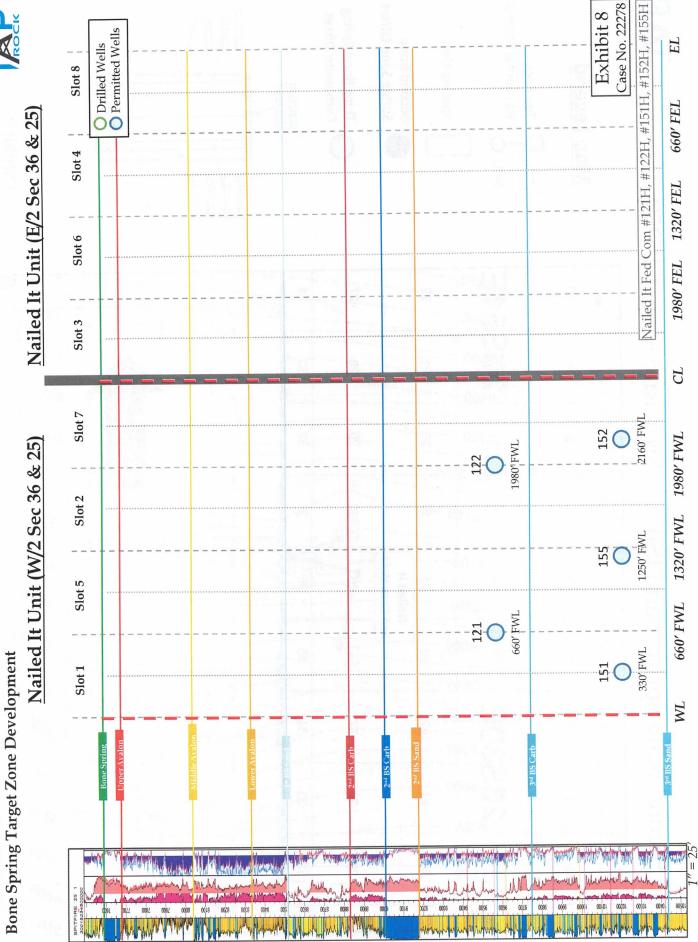
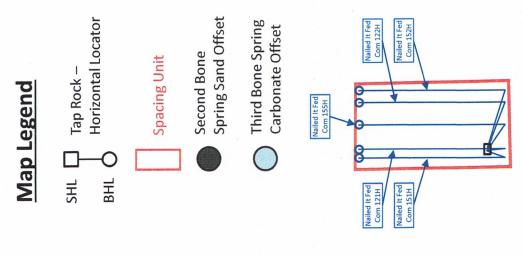
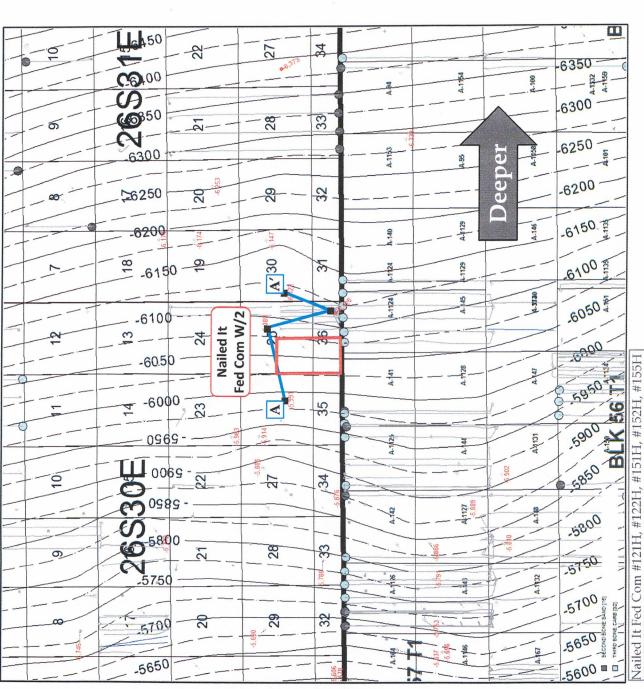
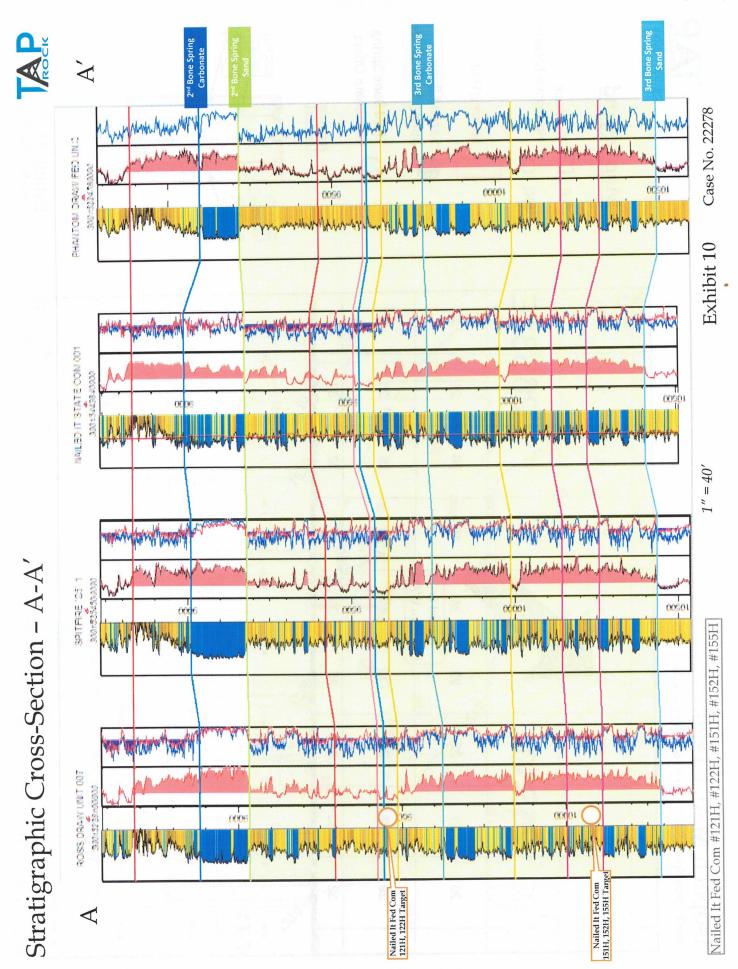


Exhibit 9 Case No. 22278

Top Second Bone Spring Sand [Subsea Structure Map; CI=25']







Horizontal Locator

Tap Rock -

Spring Sand Offset

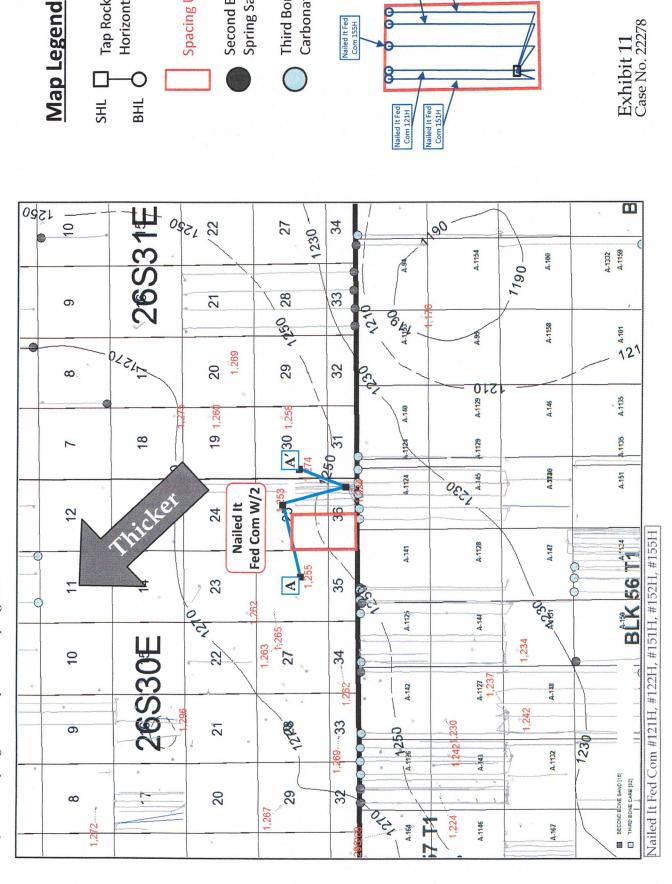
Second Bone

Spacing Unit

Third Bone Spring Carbonate Offset

Nailed It Fed Com 155H

Top 2nd Bone Spring Sand - Top 3rd Bone Spring Sand Isopach Map; CI=20'



# Nailed It Fed Com 121H (0.85-mile S-N Lateral)



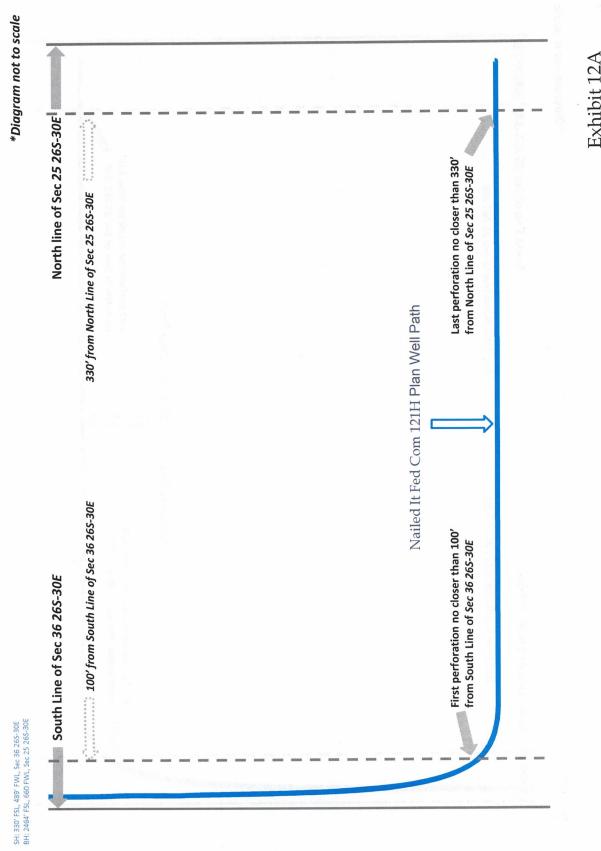


Exhibit 12A

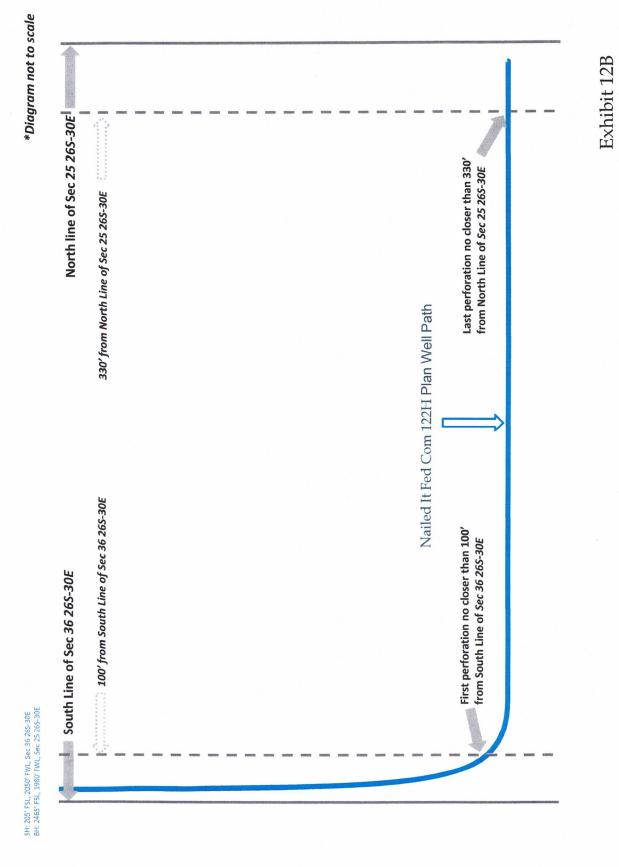
Case No. 22278

Case No. 22278

Nailed It Fed Com #121H, #122H, #151H, #152H, #155H

# Nailed It Fed Com 122H (0.85-mile S-N Lateral)





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# Nailed It Fed Com 151H (0.85-mile S-N Lateral)



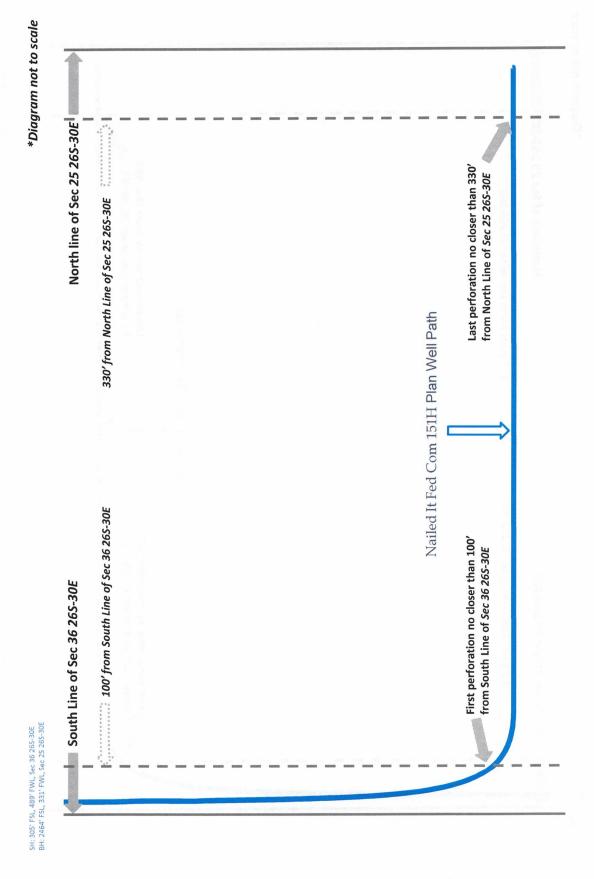


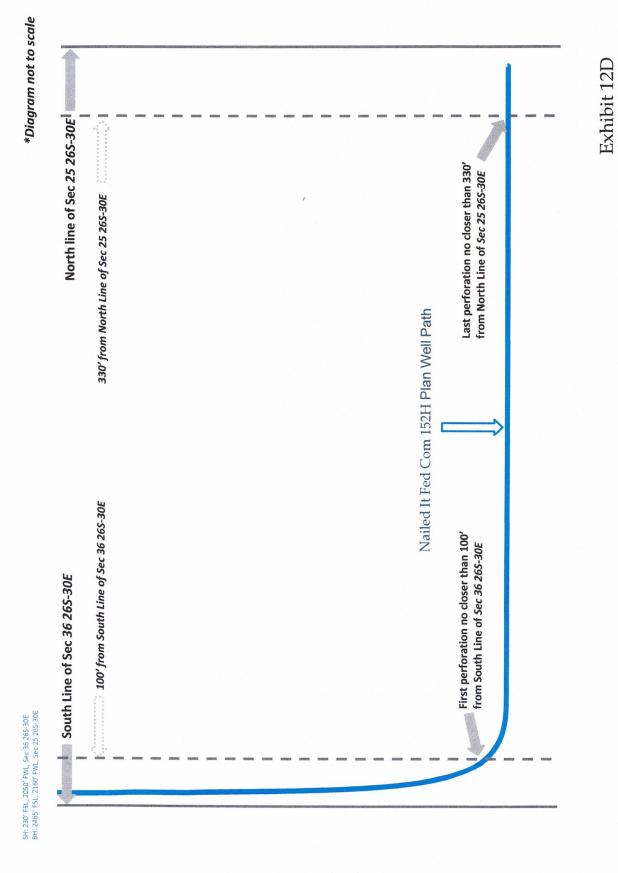
Exhibit 12C

Case No. 22278

Case No. 22278

# Nailed It Fed Com 152H (0.85-mile S-N Lateral)



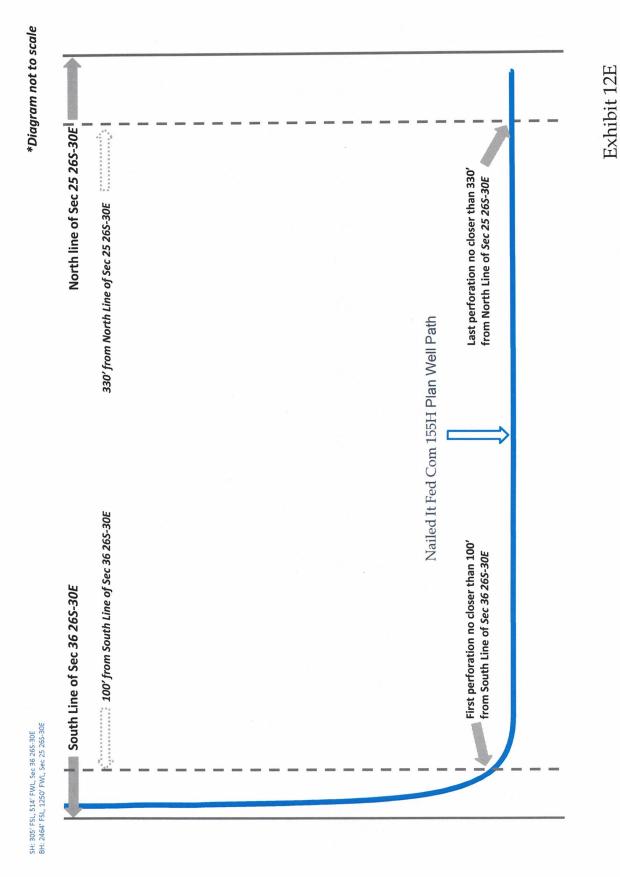


Nailed It Fed Com #121H, #122H, #151H, #152H, #155H

Case No. 22278

# Nailed It Fed Com 155H (0.85-mile S-N Lateral)





### STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

APPLICATIONS OF TAP ROCK RESOURCES, LLC FOR COMPULSORY POOLING, LEA COUNTY, **NEW MEXICO.** 

Case Nos. 22278 and 22279

SELF-AFFIRMED	<b>STATEMENT</b>	<b>OF NOTICE</b>
---------------	------------------	------------------

COUNTY OF SANTA FE STATE OF NEW MEXICO	) ss.
James Bruce deposes	and states:
1. I am over the a	age of 18, and have personal know

- vledge of the matters stated herein.
- 2. I am an attorney for Tap Rock Resources, LLC.
- Tap Rock Resources, LLC has conducted a good faith, diligent effort to find the names and correct addresses of the interest owners entitled to receive notice of the applications filed herein.
- Notice of the applications was provided to the interest owners, at their last known addresses, by certified mail. Copies of the notice letter and certified return receipts are attached hereto as Attachment A.
  - 5. Applicant has complied with the notice provisions of Division Rules.
- I understand that this Self-Affirmed Statement will be used as written testimony in this case. I affirm that my testimony in paragraphs 1 through 5 above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date handwritten next to my signature below.

Date: 14/4/21

JAMES BRUCE ATTORNEY AT LAW

POST OFFICE BOX 1056 SANTA FE, NEW MEXICO 87504

369 MONTEZUMA, NO. 213 SANTA FE, NEW MEXICO 87501

(505) 982-2043 (Phone) (505) 660-6612 (Cell) (505) 982-2151 (Fax)

jamesbruc@aol.com

November 15, 2021

### CERTIFIED MAIL - RETURN RECEIPT REQUESTED

To: Persons on Exhibits A and B

Ladies and gentlemen:

Enclosed are copies of the following applications for compulsory pooling, filed with the New Mexico Oil Conservation Division by Tap Rock Resources, LLC:

- 1. Case No. 22278, regarding Bone Spring wells in the SW/4 of Section 25 and the W/2 of Section 36;
- 2. Case No. 22279, regarding Bone Spring wells in the SE/4 of Section 25 and the E/2 of Section 36;

all in Township 26 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.

These matters are scheduled for hearing at 8:15 a.m. on Thursday, December 16, 2021. During the COVID-19 Public Health Emergency, state buildings are closed to the public and the hearing will be conducted remotely. To determine the location of the hearing or to participate in an electronic hearing, go to <a href="mailto:emnrd.state.nm.us/OCD/hearings">emnrd.state.nm.us/OCD/hearings</a> or see the instructions posted on the Division's website, <a href="http://emnrd.state.nm.us/OCD/announcements.html">http://emnrd.state.nm.us/OCD/announcements.html</a>. You are not required to attend this hearing, but as an owner of an interest who may be affected by the applications, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from contesting these matters at a later date.

A party appearing in a Division case is required by Division Rules to file a Pre-Hearing Statement no later than Thursday, December 9, 2021. This statement may be filed online with the Division at <u>ocd.hearings@state.nm.us</u>, and should include: The name of the party and his or her attorney; a concise statement of the case; the name(s) of the witness(es) the party will call to testify at the hearing; the approximate time the party will need to present his or her case; and

ATTACHMENT

identification of any procedural matters that need to be resolved prior to the hearing. The Pre-Hearing Statement must also be provided to the undersigned.

Very truly yours,

James Bruce

Attorney for Tap Rock Resources, LLC

EXHIBIT A (w/2)

SW/4 Section 25, Township 26 South, Range 30 East, Eddy County, NM - ORRI ONLY

Tap Rock Minerals, LP 523 Park Point Dr., Suite 200 Golden, CO 80401

NW/4 Section 36, Township 26 South, Range 30 East, Eddy County, NM - ORRI ONLY

Randall S. Cate P.O. Box 8329 Horseshoe Bay, TX 78657

Patrick J. Tower 1904 Western Dr. Midland, TX 79705

Lots 3 and 4 Section 36, Township 26 South, Range 30 East, Eddy County, NM - WI OWNER

Chevron USA, Inc. 6301 Deauville Blvd. Midland, TX 79706

EXHIBIT  $\beta$  ( $\xi'/2$ )

SE/4 Section 25, Township 26 South, Range 30 East, Eddy County, NM - ORRI Only

Tap Rock Minerals, LP 523 Park Point Dr., Suite 200 Golden, CO 80401

NF/4 and Lot 1 Section 36, Township 26 South, Range 30 East, Eddy County, NM – ORRI Only

Randall S. Cate P.O. Box 8329 Horseshoe Bay, TX 78657

Patrick J. Tower 1904 Western Dr. Midland, TX 79705

Lot 2 Section 36, Township 26 South, Range 30 East, Eddy County, NM - WI Owner

Chevron USA, Inc. 6301 Deauville Blvd. Midland, TX 79706

U.S. Postal Service"  CERTIFIED MAIL® RECFIPT	For delivery information, visit our website at www.usps.com	7 10	Total Postage and Fees  Total Postage and Fees  Chevron USA, Inc.  Sent 70 Midland, TX 79706  Street and Apt. No. or PO Box no.	PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	
COMPLETE THIS SECTION ON DELIVERY	X Plane Addressee  B. Received by Printed Name) C. Date of Delivery	D. is delivery address different from item 1? ☐ Yes if YES, enter delivery address below: ☐ No		2   Signature Confirmation   Signature Confi	
SENDER: COMPLETE IMS SECTION	<ul> <li>Complete items 1, 2, 3.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	Article Addressed to:     Patrick J. Tower     1904 Western Dr.     1904 Western Typy     1904 Western Typy     1904 Western Typy	64149	2. / TOZO 2450 0002 1364 0626 PS Form 3811, July 2015 PSN 7530-02-000-9053	

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U.S. Postal Service™	Complete items 1, 2, and 3.	A. Signature
CERTIFIED MAIL® RECEIPT	<ul> <li>Firit your name and address on the reverse so that we can return the card to you.</li> </ul>	X A Addressee
For delivery information visit our website at a new reas some	<ul> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	B. Becelved by (Printed Name) C. Date of Delivery
OTTION OF THE CONTRACT OF THE	1. Article Addressed to:	D. Is delivery address different from item ? □ Ves  "If YES, enter delivery address helow." □ No.
Certified Mail Fee		
\$ Extra Services & Fees (check box, add fee as appropriate)    Return Receipt (hardcopy) \$   Theturn Receipt (electronic) \$   Certified Mail Restricted Delivery \$	Chevron USA, Inc. 6301 Deauville Blvd. Midland, TX 79706	
49 49		
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Total Postage and Fees	9590 9402 5019 9063 1641 56	Restricted Delivery
Sent To Patrick J. Tower	2. Article Mumber Transfer from any in 121 -11	] [
Street and Apt. No., or PO Midland, TX 79705	3290	5730 Signature Confirmation Signature Confirmation in stricted Delivery Restricted Delivery
City, State, ZIP+4®	PS Form 3811, July 2015 PSN 7530-02-000-9053	(over \$500)
DS Form 3800 April 2045 post ages as a second secon		Idealin receipt

1050 2450 0002 1364 0626

A. Signature  A. Signature  X. A. M. M. M. M. M. De Livery  X. A. Signature  De Localization of Delivery address different from item 1?    D. Is delivery address below:    X. No    X. A. Signature  X. A. Signature  De Localization of Delivery address below:    X. No    X. A. Signature  X. Signature	Ce Type  Gignature Gignatu			
SENDER: COMPLETE THIS SECTION  Complete items 1,, and 3.  Complete items 1,, and 3.  Entity your name and address on the reverse so that we can return the card to you.  Attach this card to the back of the mailpiece, or on the front if space permits.  Tap Rock Minerals, LP 523 Park Point Dr., Suite 200 Golden, CO 80401	2. 7020 2402 5019 9063 1641 70 1 Certified Mail Restricted Delivery Collection of Collection Collection of Collection Col	U.S. Postal Service"  CERTIFIED MAIL® RECEROT  Domestic Mail Only  For delivery information, visit our website at twww.usps.com.	Strate Services & Fees (check box, add fee as appropriate)   Ratura Services & Fees (check box, add fee as appropriate)   Return Receipt (feetchorie)	Sent To Tap Rock Minerals, LP Tul Street and Apt. No. or PG 523 Park Point Dr., Suite 200 Golden, CO 80401

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FAQs >

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Remove X

Your item was picked up at the post office at 9:09 am on December 9, 2021 in HORSESHOE BAY, TX 78657.

## **⊘** Delivered, Individual Picked Up at Post Office

December 9, 2021 at 9:09 am HORSESHOE BAY, TX 78657 Feedback



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**Tracking Number:** 70202450000213640619

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### **Tracking History**

^

December 9, 2021, 9:09 am

Delivered, Individual Picked Up at Post Office

HORSESHOE BAY, TX 78657

Your item was picked up at the post office at 9:09 am on December 9, 2021 in HORSESHOE BAY, TX 78657.

Reminder to Schedule Redelivery of your item

November 26, 2021, 8:54 am Available for Pickup HORSESHOE BAY, TX 78657 November 25, 2021 In Transit to Next Facility

November 23, 2021, 10:18 pm Departed USPS Regional Facility AUSTIN TX DISTRIBUTION CENTER

November 23, 2021, 6:32 pm Arrived at USPS Regional Facility AUSTIN TX DISTRIBUTION CENTER

November 20, 2021, 8:50 am Departed USPS Facility ALBUQUERQUE, NM 87101

November 19, 2021, 10:26 pm Arrived at USPS Facility ALBUQUERQUE, NM 87101

**Product Information** 

See Less ^

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**FAQs** 

# COMPULSORY POOLING APPLICATION CHECKLIST

ALL INFORMATION IN THE ADDLICA	TION MUST BE SUPPORTED BY SIGNED AFFIDAVITS		
	22278		
Case:	STATE OF THE PROPERTY OF THE P		
Date	December 16, 2021		
Applicant	Tap Rock Resources, LLC		
Designated Operator & OGRID	Tap Rock Operating, LLC/OGRID No. 372043		
(affiliation if applicable)	The operator is the operating entity for applicant		
Applicant's Counsel:	James Bruce		
Case Title:	Application of Tap Rock Resources, LLC for Compulsory Pooling, Eddy County, New Mexico		
Entries of Appearance/Intervenors:			
Well Family	Nailed It Wells		
Formation/Pool			
Formation Name(s) or Vertical Extent:	Bone Spring formation		
Primary Product (Oil or Gas):	Oil		
Pooling this vertical extent:	Entire Bone Spring formation		
Pool Name and Pool Code:	WC-015 G-06 S242630A; Bone Spring (Pool Code 98319)		
Well Location Setback Rules:	Statewide rules and current horizontal well rules		
Spacing Unit Size:	Quarter-quarter sections/40 acres		
Spacing Unit			
Type (Horizontal/Vertical)	Horizontal		
Size (Acres)	240 acres		
Building Blocks:	40 acres		
Orientation:	South-North		
Description: TRS/County	SW/4 §25 and W/2 §36-26S-30E, NMPM, Eddy County		
Standard Horizontal Well Spacing Unit	Yes		
(Y/N), If No, describe			
Other Situations	- F		
Depth Severance: Y/N. If yes, description	No EXHIBIT		
Proximity Tracts: If yes, description	No		
Proximity Defining Well: if yes, description	Nailed It Fed. Com. Well No. 155H		
Applicant's Ownership in Each Tract	Exhibits B-2 and B-4		
Well(s)	EATHERS D-Z GIIU D-4		
Name & API (if assigned), surface and	Nailed It Fed. Com. Well No. 121H		
bottom hole location, footages,	Nailed It Fed. Com. Well No. 121H		
completion target, orientation,	API No. 30-015-Pending		
completion target, orientation,	SHL: 330 FSL & 489 FWL §36 BHL: 2464 FSL & 660 FWL §25		
standard)	FTP: 100 FSL & 660 FWL §36		
Staridal aj	LTP: 2464 FSL & 660 FWL §25		
	Formation: Bone Spring/TVD 9522 feet/MD 14472 feet		
	Tromation. Done Spring/170 5322 reet/1810 14472 reet		

Exhibit B-2

Land Ownership Schematic of the

Spacing Unit

Received by OCD: 12/15/2021 7:54:16 AM	Page 29 of 29
Received by OCD: 12/15/2021 7:54:16 AM Tract List (including lease numbers and	
owners)	Exhibits B-2 and B-3
Pooled Parties (including ownership	
type)	Exhibits B-3 and B-4
Unlocatable Parties to be Pooled	None
Ownership Depth Severance (including	
percentage above & below)	None
Joinder	AND THE CONTROL OF TH
Sample Copy of Proposal Letter	Exhibit B-5
List of Interest Owners (i.e. Exhibit A of	
JOA)	Exhibit B-3
Classic Control with New Joined	
Chronology of Contact with Non-Joined	Euleikia D. C.
Working Interests	Exhibit B-6
Overhead Rates In Proposal Letter	
Cost Estimate to Drill and Complete	Exhibit B-5
Cost Estimate to Equip Well	Exhibit B-5
Cost Estimate for Production Facilities	Exhibit B-5
Geology	
Summary (including special	
considerations)	Exhibit C
Spacing Unit Schematic	Exhibit C-7
Gunbarrel/Lateral Trajectory Schematic	Exhibit C-8
Well Orientation (with rationale)	Standup/Exhibit C
Target Formation	Bone Spring
HSU Cross Section	Exhibit C-10
Depth Severance Discussion	Not Applicable
Forms, Figures and Tables	
C-102	Exhibit B-1
Tracts	Exhibit B-2
Summary of Interests, Unit	
Recapitulation (Tracts)	Exhibits B-2 and B-3
General Location Map (including basin)	Exhibit C-7
Well Bore Location Map	Exhibits C-7, 8, and 9
Structure Contour Map - Subsea Depth	Exhibit C-9
Cross Section Location Map (including	
wells)	Exhibit C-9
Cross Section (including Landing Zone)	Exhibit C-10
Additional Information	
CERTIFICATION: I hereby certify that the	
information provided in this checklist is	
complete and accurate.	

James Bruce

December 14, 2021

ruce

**Printed Name** (Attorney or Party

Signed Name (Attorney or Party

Representative):

Representative):

Date: