

**Before the Oil Conservation Division
Examiner Hearing May 16, 2019**

*Case No. 20163: Ned Pepper 18 TB Federal Com 4H
&*

Case No. 20164: Ned Pepper 18 TB Federal Com 1H



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

**APPLICATION OF MARATHON
OIL PERMIAN LLC FOR APPROVAL
OF A NON-STANDARD SPACING UNIT
AND COMPULSORY POOLING,
LEA COUNTY, NEW MEXICO.**

CASE NO. 20163

APPLICATION

Marathon Oil Permian LLC ("Marathon"), OGRID Number 372098, through its undersigned attorneys, hereby makes an application to the Oil Conservation Division pursuant to the provisions of NMSA (1978), Section 70-2-17, for an order: (1) approving the creation of a non-standard 160-acre, more or less, spacing unit covering the E/2 W/2 of Section 18, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico from +/- 11,051' MD as shown in the logs for the Government "L" No. 1 well (API No. 30-025-25604) to the base of the Bone Spring formation; and (2) pooling all uncommitted mineral interests in the proposed spacing unit. In support of this application, Marathon states as follows:

1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
2. Marathon seeks to dedicate the E/2 W/2 of Section 18, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico from +/- 11,051' MD as shown in the logs for the Government "L" No. 1 well (API No. 30-025-25604) to the base of the Bone Spring formation to form a 160-acre, more or less, spacing unit.

3. Marathon plans to drill the **Ned Pepper Federal 24 34 18 TB 4H** well to a depth sufficient to test the Bone Spring formation. This well will be horizontally drilled and will comply with the Division's setback requirements.

4. Marathon sought, but has been unable to obtain a voluntary agreement from all interest owners in the proposed depths within the Bone Spring formation underlying the proposed spacing unit to participate in the drilling of the well or to otherwise commit their interests to the well.

5. The creation of a spacing unit and pooling of the proposed depths in the Bone Spring formation underlying the proposed unit will prevent the drilling of unnecessary wells, prevent waste and protect correlative rights.

6. Marathon further requests that it be allowed one (1) year between the time the well is drilled and completion of the well.

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division on January 10, 2019, and after notice and hearing as required by law, the Division enter its order:

A. Approving the creation of a 160-acre, more or less, non-standard spacing unit covering the E/2 W/2 of Section 18, Township 24South, Range 34 East, NMPM, Lea County, New Mexico covering depths from +/- 11,051' MD as shown in the logs for the Government "L" No. 1 well (API No. 30-025-25604) to the base of the Bone Spring formation;

B. Pooling all mineral interests in the proposed depths within the Bone Spring formation underlying this spacing unit;

C. Designating Marathon as operator of this unit and the well to be drilled thereon;

D. Authorizing Marathon to recover its costs of drilling, equipping and completing this well;

E. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;

F. Setting a 200% charge for the risk involved in drilling and completing the well in the event a working interest owner elects not to participate in the well.

G. Allowing a period of one (1) year between when the well is drilled and when the well is completed under the order.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS
& SISK, P.A.

By: Deana M. Bennett

Deana M. Bennett
Post Office Box 2168
500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
Attorney for Applicant

CASE NO. _____: Application of Marathon Oil Permian LLC for a non-standard spacing unit and compulsory pooling, Lea County, New Mexico. Applicant seeks an order from the Division: (1) approving the creation of a non-standard 160-acre, more or less, spacing unit covering the E/2 W/2 of Section 18, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico from +/- 11,051' MD as shown in the logs for the Government "L" No. 1 well (API No. 30-025-25604) to the base of the Bone Spring formation; and (2) pooling all uncommitted mineral interests in the proposed spacing unit. This proposed spacing unit will be dedicated to the **Ned Pepper Federal 24 34 18 TB 4H** well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 20 miles northwest of Jal, New Mexico.

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

**APPLICATION OF MARATHON
OIL PERMIAN LLC FOR APPROVAL
OF A NON-STANDARD SPACING UNIT
AND COMPULSORY POOLING,
LEA COUNTY, NEW MEXICO.**

CASE NO. 20164

APPLICATION

Marathon Oil Permian LLC ("Marathon"), OGRID Number 372098, through its undersigned attorneys, hereby makes an application to the Oil Conservation Division pursuant to the provisions of NMSA (1978), Section 70-2-17, for an order: (1) approving the creation of a non-standard 160-acre, more or less, spacing unit covering the W/2 W/2 of Section 18, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico from +/- 11,051' MD as shown in the logs for the Government "L" No. 1 well (API No. 30-025-25604) to the base of the Bone Spring formation; and (2) pooling all uncommitted mineral interests in the proposed spacing unit. In support of this application, Marathon states as follows:

1. Marathon is an interest owner in the subject lands and has a right to drill a well thereon.
2. Marathon seeks to dedicate the W/2 W/2 of Section 18, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico from +/- 11,051' MD as shown in the logs for the Government "L" No. 1 well (API No. 30-025-25604) to the base of the Bone Spring formation to form a 160-acre, more or less, spacing unit.

3. Marathon plans to drill the **Ned Pepper Federal 24 34 18 TB 1H** well to a depth sufficient to test the Bone Spring formation. This well will be horizontally drilled and will comply with the Division's setback requirements.

4. Marathon sought, but has been unable to obtain a voluntary agreement from all interest owners in the proposed depths within the Bone Spring formation underlying the proposed spacing unit to participate in the drilling of the well or to otherwise commit their interests to the well.

5. The creation of a spacing unit and pooling of the proposed depths in the Bone Spring formation underlying the proposed unit will prevent the drilling of unnecessary wells, prevent waste and protect correlative rights.

6. Marathon further requests that it be allowed one (1) year between the time the well is drilled and completion of the well.

WHEREFORE, Marathon requests this application be set for hearing before an Examiner of the Oil Conservation Division on January 10, 2019, and after notice and hearing as required by law, the Division enter its order:

A. Approving the creation of a 160-acre, more or less, non-standard spacing unit covering the W/2 W/2 of Section 18, Township 24South, Range 34 East, NMPM, Lea County, New Mexico covering depths from +/- 11,051' MD as shown in the logs for the Government "L" No. 1 well (API No. 30-025-25604) to the base of the Bone Spring formation;

B. Pooling all mineral interests in the proposed depths within the Bone Spring formation underlying this spacing unit;

C. Designating Marathon as operator of this unit and the well to be drilled thereon;

D. Authorizing Marathon to recover its costs of drilling, equipping and completing this well;

E. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;

F. Setting a 200% charge for the risk involved in drilling and completing the well in the event a working interest owner elects not to participate in the well.

G. Allowing a period of one (1) year between when the well is drilled and when the well is completed under the order.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS
& SISK, P.A.

By: Deana M. Bennett

Deana M. Bennett
Post Office Box 2168
500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
Attorney for Applicant

CASE NO. _____: Application of Marathon Oil Permian LLC for a non-standard spacing unit and compulsory pooling, Lea County, New Mexico. Applicant seeks an order from the Division: (1) approving the creation of a non-standard 160-acre, more or less, spacing unit covering the W/2 W/2 of Section 18, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico from +/- 11,051' MD as shown in the logs for the Government "L" No. 1 well (API No. 30-025-25604) to the base of the Bone Spring formation; and (2) pooling all uncommitted mineral interests in the proposed spacing unit. This proposed spacing unit will be dedicated to the **Ned Pepper Federal 24 34 18 TB 1H** well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 20 miles northwest of Jal, New Mexico.

Exhibit 1

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

**APPLICATION OF MARATHON OIL PERMIAN LLC FOR COMPUSLORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. 20163

**APPLICATION OF MARATHON OIL PERMIAN LLC FOR COMPUSLORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. 20164

AFFIDAVIT

STATE OF TEXAS)
) ss.
COUNTY OF MIDLAND)

Ryan Gyllenband, being duly sworn, deposes and states:

1. I am over the age of 18, I am a landman for Marathon Oil Permian I.L.C and have personal knowledge of the matters stated herein. I have been qualified by the Oil Conservation Division ("Division") as an expert petroleum landman.

2. I submit the following information pursuant to NMAC 19.15.4.12.A(1) in support of the above referenced compulsory pooling applications.

3. The purpose of these applications is to force pool working interest owners into the horizontal spacing unit described below, and in the wells to be drilled in the unit.

4. No opposition is expected because the interest owners being pooled have been contacted regarding the proposed wells, but have failed or refused to voluntarily commit their interests in the wells.

5. In Case No. 20163, Marathon seeks an order from the Division pooling all uncommitted mineral interests within a Bone Spring spacing unit covering the E/2 W/2 of Section 18, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico from +/- 11,051' MD as shown in the logs for the Government "L" No. 1 well (API No. 30-025-25604) to the base of the Bone Spring formation.

6. This proposed spacing unit will be dedicated to the Ned Pepper 18 TB Federal Com 4H well, to be horizontally drilled.

7. In Case No. 20164, Marathon Applicant seeks an order from the Division pooling all uncommitted mineral interest owners within a Bone Spring spacing unit covering the W/2 W/2 of Section 18, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico from +/- 11,051' MD as shown in the logs for the Government "L" No. 1 well (API No. 30-025-25604) to the base of the Bone Spring formation.

8. This proposed spacing unit will be dedicated to the Ned Pepper 18 TB Federal 1H well, to be horizontally drilled.

9. I have conducted a diligent search of the public records in the county where the wells are located, and conducted phone directory and computer searches to locate contact information for parties entitled to notification, and mailed all parties well proposals, including an Authorization for Expenditure.

10. In my opinion, Marathon has made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed wells.

11. Lease tract maps outlining the units being pooled are attached hereto as **Exhibit A-1** and **A-2**. The parties being pooled and the percent of their interests are also included as part of **Exhibit A1** and **A-2**.

12. There is a depth severance within the Bone Spring formation.
13. The depth severance was created by a depth release clause in an oil and gas lease when the lease expired as to depths 100' below the deepest depth drilled in certain wells. The language creating the depth severance is provided in **Exhibit B**.
14. Marathon requests that the orders for these spacing units identify the spacing units as being from +/- 11,051' MD to the base of the Bone Spring formation. Ownership is uniform across this interval.
15. Marathon provided notice to all working interest owners underlying these spacing units, both above and below the depth severance.
16. In other words, Marathon provided notice to all working interest owners whether or not they have interests at issue in the depth Marathon proposes to drill.
17. Attached as **Exhibit C** are proposed C-102s for the wells. The wells will develop the Red Hills Bone Spring, North pool, pool code 96434, which is an oil pool.
18. The wells will comply with the Division's set back requirements.
19. Marathon was required to change the well names by the Bureau of Land Management which is why the C-102s have a different well name than the application. Marathon requests that the order use the well names as identified on the C-102s.
20. **Exhibit D** is an example of the proposal letters sent to working interest owners.
21. **Exhibit E** contains the Authorization for Expenditure for the proposed wells. The estimated cost of the wells set forth therein is fair and reasonable, and is comparable to the costs of other wells of similar depths and length drilled in this area of New Mexico.
22. Marathon requests overhead and administrative rates of \$7,000/month for drilling a well and \$700/month for a producing well. These rates are fair, and comparable to the rates

charged by other operators for wells of this type in this area of Southeastern, New Mexico. Marathon requests that these rates be adjusted periodically as provided in the COPAS Accounting Procedure.

23. Marathon requests the maximum cost plus 200% risk charge be assessed against non-consenting working interest owners.

24. Marathon requests that it be designated operator of the wells.

25. Marathon requests that it be allowed a period of one (1) year between when the wells are drilled and when the first well is completed under the order.

26. The parties Marathon is seeking to pool were notified of this hearing.

27. Marathon requests that overriding royalty interest owners be pooled.

28. **Exhibit F** is an affidavit of notice prepared by counsel for Marathon that shows the parties who were notified of this hearing, the status of whether they received notice, and an affidavit of publication from the Hobbs News Sun newspaper, showing that notice of this hearing was published on May 1, 2019.

29. The attachments to this affidavit were prepared by me, or compiled from company business records, or were prepared at my direction.

30. I attest that the information provided herein is correct and complete to the best of my knowledge and belief.

31. The granting of these applications is in the interests of conservation and the prevention of waste.

[Signature page follows]

Ryan Gyllenband
Ryan Gyllenband

SUBSCRIBED AND SWORN to before me this 14th day of May, 2019 by Ryan Gyllenband on behalf of Marathon Oil Permian LLC.

Jessica Gorman
Notary Public

My commission expires: 1/23/2023

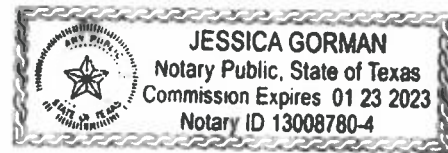


Exhibit A

Exhibit "A" Lease Tract Map
Ned Pepper 18 TB Federal Com 4H
E/2 W/2 of Section 18, 24S-34E – 160 acres

- Tract 1: Fed Acreage
- Tract 2: Fee Acreage
- Tract 3: Fee Acreage

12

7

8



13

18

17

24

19

20

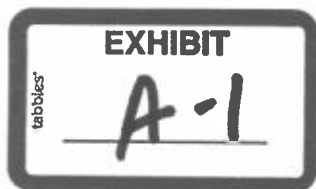


Exhibit "A" Summary of Interests
Ned Pepper 18 TB Federal Com 4H
E/2 W/2 of Section 18, 24S-34E – 160 acres

Committed Working Interest:

Marathon Oil Permian LLC
Joel Talley

61.004770%
0.441321%

61.446092%

Uncommitted Working Interest:

COG Operating, LLC
MRC Permian Company
Energen Resources Corporation

34.166439%
1.947346%
0.782299%

36.896084%

Unleased Mineral Interest:

Estate of Cloma Mize Perkins
Foundation Minerals, LLC
Mavros Minerals, LLC
Estate of R.S. Cinco Rogers
Oak Valley Mineral and Land, LP

0.441321%
0.346863%
0.294834%
0.522777%
0.052030%

1.657824%

Exhibit "A" Lease Tract Map
Ned Pepper 18 TB Federal Com 1H
W/2 W/2 of Section 18, 24S-34E – 160 acres

- Tract 1: Fed Acreage
- Tract 2: Fee Acreage
- Tract 3: Fee Acreage

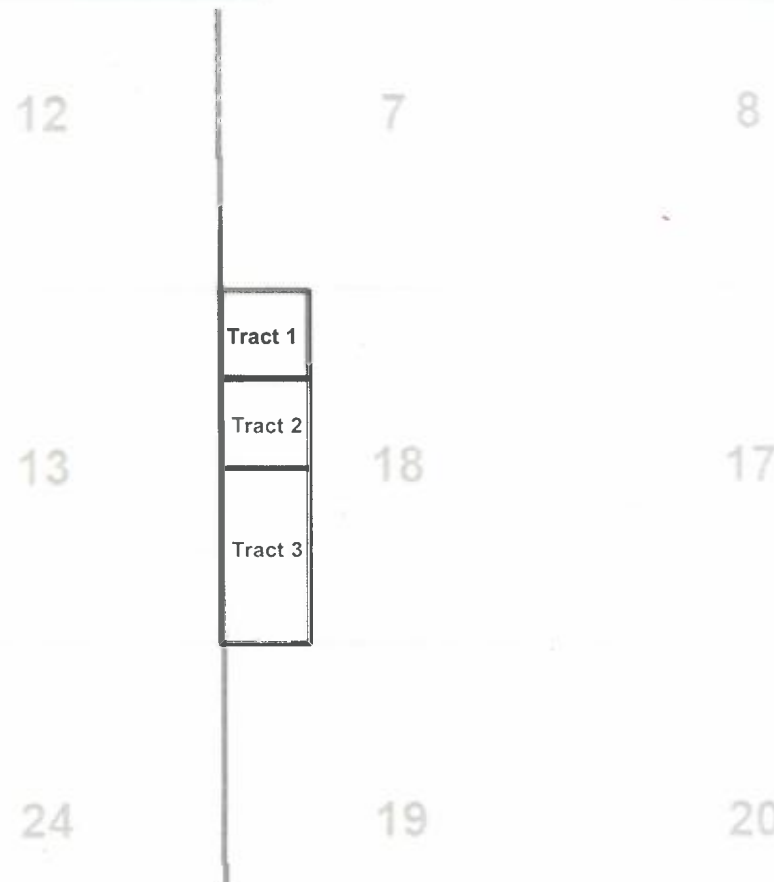


Exhibit "A" Summary of Interests
Ned Pepper 18 TB Federal Com 1H
W/2 W/2 of Section 18, 24S-34E – 160 acres

Committed Working Interest:

Marathon Oil Permian LLC
Joel Talley

61.162083%
0.442459%

61.604542%

Uncommitted Working Interest:

COG Operating, LLC
Energen Resources Corporation

36.473197%
0.784317%

37.257484%

Unleased Mineral Interest:

Estate of Cloma Mize Perkins
Foundation Minerals, LLC
Mavros Minerals, LLC
Oak Valley Mineral and Land, LP

0.442459%
0.347757%
0.295594%
0.052164%

1.137974%

Exhibit B

Exhibit "B" Depth Severance – Bone Spring
Ned Pepper 18 TB Federal Com 1H, Ned Pepper 18 TB Federal Com 4H

14. Continuous Development: Notwithstanding anything contained herein to the contrary, at the expiration of the primary term hereof, this lease shall terminate as to all lands which are not included within a proration unit or project area established by the New Mexico Oil Conservation Commission for wells producing in paying quantities in order to obtain a maximum production allowable per well, unless lessee is engaged in drilling operations or lessee has completed a well within one hundred eighty (180) days of the expiration of the primary term either as a dry hole or a producer. If lessee is, at the expiration of the primary term, engaged in the actual drilling operations or lessee has completed a well within one hundred eighty (180) days of the expiration of the primary term either as a dry hole or a producer, this lease shall remain in full force and effect as to all lands covered hereby for so long as operations continue to completion or abandonment and for so long thereafter as operations for drilling are conducted with no more than one hundred eighty (180) days elapsing between the completion or abandonment of one well and the commencement of actual drilling operations of another well. After the expiration of the primary term or the continuous drilling program, whichever occurs last, lessee shall release all acreage not dedicated to a producing proration unit or project area for wells producing in paying quantities in order to obtain a maximum production allowable per well as prescribed by the New Mexico Oil Conservation Commission, as well as all depths and horizons which are at least one hundred feet (100') below the "stratigraphic equivalent of the deepest depth drilled by lessee and capable of producing in paying quantities" in each well which is included within the boundaries of a producing proration unit or project area. A well shall be determined to be completed on the day lessee files the applicable completion report with the appropriate agency, and a well shall be determined to be commenced when such well is spud.



Exhibit C

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 96434	³ Pool Name RED HILLS BONE SPRING, NORTH
⁴ Property Code	⁵ Property Name NED PEPPER 18 TB FEDERAL COM	⁶ Well Number 4H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN, LLC	⁹ Elevation 3,563'

" Surface Location

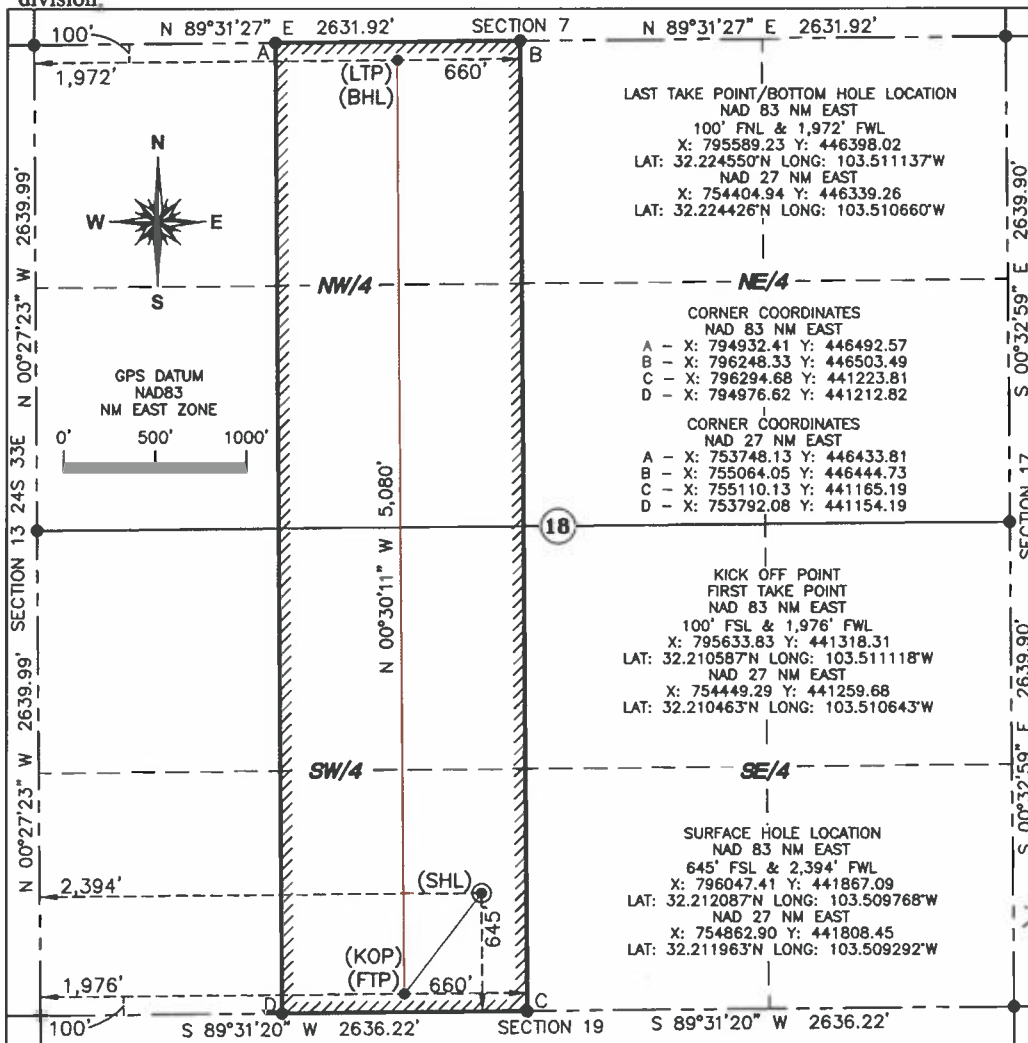
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	18	24-S	34-E		645'	SOUTH	2,394'	WEST	LEA

" Bottom 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
C	18	24-S	34-E		100'	NORTH	1,972'	WEST	LEA

¹² Dedicated Acres 160	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.



" OPERATOR 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.

Signature _____ Date _____

Printed Name _____

E-mail Address _____

" SURVEYOR 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 and correct to the best of my belief.

4/9/19
Date of Survey

Signature and Seal of Professional Surveyor _____

20450
Certificate Number



District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 96434	³ Pool Name RED HILLS BONE SPRING, NORTH
⁴ Property Code	⁵ Property Name NED PEPPER 18 TB FEDERAL COM	⁶ Well Number 1H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN, LLC	⁹ Elevation 3,567'

¹⁰ Surface Location

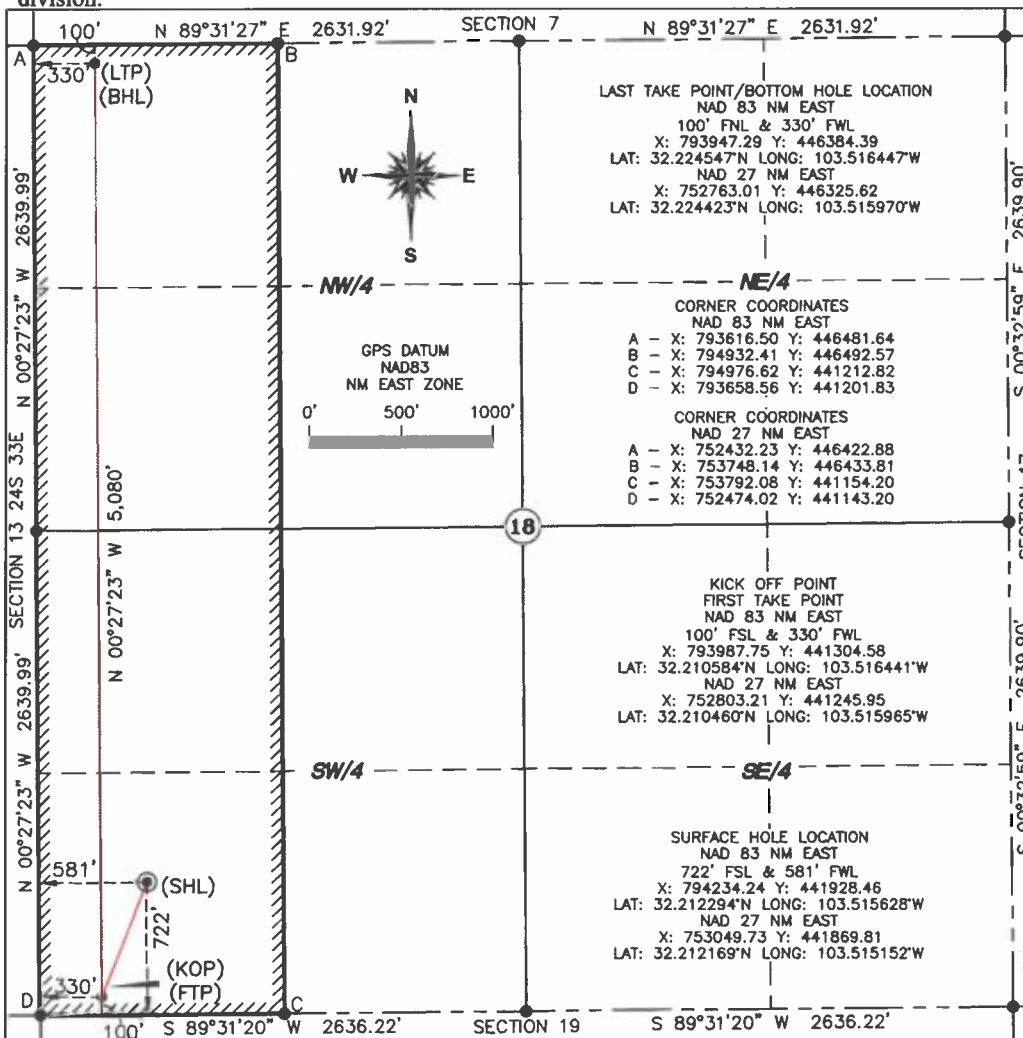
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	18	24-S	34-E		722'	SOUTH	581'	WEST	LEA

¹¹ Bottom 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	18	24-S	34-E		100'	NORTH	330'	WEST	LEA

¹² Dedicated Acres 160	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.



¹⁷ OPERATOR 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.

Signature _____ Date _____

Printed Name _____

E-mail Address _____

¹⁸ SURVEYOR 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 and correct to the best of my belief.

4/9/19
Date of Survey

Signature and Seal of Professional Surveyor _____

20450
Certificate Number

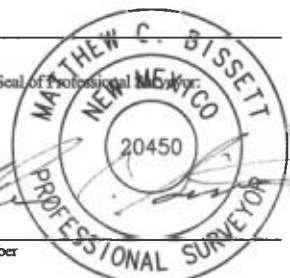


Exhibit D

Steven Martinez
Land Agent for Marathon Oil Permian LLC



T-O Land & Minerals, Inc., Agent
25465 Scenic Loop Rd.
San Antonio, Texas 78255
Telephone: 210.826-3000
Email: smartinez@t-oland.com

April 13, 2018

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED
7018 0040 0000 3767 7882

Energizer Resources Corporation
605 Richard Arrington Jr. Blvd. North
Birmingham, AL 35203

Re: Ned Pepper 1H, 2H, 4H, 6H, 7H, 9H, 12H, 15H & 18H Well Proposals
Section 18, T24S-R34E
Lea County, New Mexico

Dear Energizer Resources Corporation:

Marathon Oil Permian LLC ("Marathon") proposes the drilling of the following wells located in Section 18, 24S-34E, Lea County, New Mexico, all to be drilled from two surface pad location.

- Ned Pepper Federal 24-34-18 TB 1H with a proposed surface hole location in the SW/4 of Section 18, 24S-34E, and a proposed bottom hole location in the NW/4 NW/4 of Section 18, 24S-34E. The well will have a targeted interval located in the 3rd Bone Springs Formation (~16,842' TVD) with a treated lateral length of approximately 4,610'. The total estimated drilling and completion cost is \$6,934,817 as shown in the attached AFE.
- Ned Pepper Federal 24-34-18 WA 2H with a proposed surface hole location in the SW/4 of Section 18, 24S-34E, and a proposed bottom hole location in the NW/4 NW/4 of Section 18, 24S-34E. The well will have a targeted interval located in the Wolfcamp A Formation (~17,123' TVD) with a treated lateral length of approximately 4,610'. The total estimated drilling and completion cost is \$7,077,917 as shown in the attached AFE.
- Ned Pepper Federal 24-34-18 TB 4H with a proposed surface hole location in the SW/4 of Section 18, 24S-34E, and a proposed bottom hole location in the NE/4 NW/4 of Section 18, 24S-34E. The well will have a targeted interval located in the 3rd Bone Springs Formation (~16,842' TVD) with a treated lateral length of approximately 4,618'. The total estimated drilling and completion cost is \$6,934,817 as shown in the attached AFE.
- Ned Pepper Federal 24-34-18 WXY 6H with a proposed surface hole location in the SW/4 of Section 18, 24S-34E, and a proposed bottom hole location in the NW/4 of Section 18, 24S-34E. The well will have a targeted interval located in the Wolfcamp XY Formation (~17,638' TVD) with a treated lateral length of approximately 4,614'. The total estimated drilling and completion cost is \$7,196,667 as shown in the attached AFE.
- Ned Pepper Federal 24-34-18 TB 7H with a proposed surface hole location in the SE/4 of Section 18, 24S-34E, and a proposed bottom hole location in the NE/4 of Section 18, 24S-34E. The well will have a targeted interval located in the 3rd Bone Springs Formation (~17,438' TVD) with a treated lateral length of approximately 4,626'. The total estimated drilling and completion cost is \$7,196,667 as shown in the attached AFE.
- Ned Pepper Federal 24-34-18 WA 9H with a proposed surface hole location in the SW/4 of Section 18, 24S-34E, and a proposed bottom hole location in the NE/4 NW/4 of Section 18, 24S-34E. The well will have a targeted interval located in the Wolfcamp A Formation (~17,123' TVD) with a treated lateral length of approximately 4,618'. The total estimated drilling and completion cost is \$7,077,917 as shown in the attached AFE.



- Ned Pepper Federal 24-34-18 WXY 12H with a proposed surface hole location in the SE/4 of Section 18, 24S-34E, and a proposed bottom hole location in the NW/4 NE/4 of Section 18, 24S-34E. The well will have a targeted interval located in the Wolfcamp XY Formation (~16,985 TVD) with a treated lateral length of approximately 4,622'. The total estimated drilling and completion cost is \$7,169,948 as shown in the attached AFE.
- Ned Pepper Federal 24-34-18 WA 15H with a proposed surface hole location in the SE/4 of Section 18, 24S-34E, and a proposed bottom hole location in the NE/4 of Section 18, 24S-34E. The well will have a targeted interval located in the Wolfcamp A Formation (~17,123' TVD) with a treated lateral length of approximately 4,626'. The total estimated drilling and completion cost is \$7,175,348 as shown in the attached AFE.
- Ned Pepper Federal 24-34-18 WXY 18H with a proposed surface hole location in the SE/4 of Section 18, 24S-34E, and a proposed bottom hole location in the NE/4 NE/4 of Section 18, 24S-34E. The well will have a targeted interval located in the Wolfcamp XY Formation (~16,985 TVD) with a treated lateral length of approximately 4,629'. The total estimated drilling and completion cost is \$7,169,948 as shown in the attached AFE.

These proposed locations and target depths are subject to change depending on any surface or subsurface concerns encountered. The AFEs represent an estimate of the costs that will be incurred to drill and complete the wells, but those electing to participate in the wells are responsible for their proportionate share of the actual costs incurred.

Marathon proposes drilling the wells under the terms of the 1989 AAPL JOA and if you are interested in participating a form of this JOA will be sent to you following this proposal. The JOA will have the following general provisions:

- 100%/300%/300% non-consent penalty
- \$7,000/\$700 drilling and producing rates
- Contract area of Section 18, 24S-34E, covering all depths

Our title records indicate that you own 0.783208% WI in the proposed unit.

If your election is to participate in the drilling and completion of the wells, please sign and return a copy of this letter along with the enclosed AFE within thirty (30) days of receipt of this proposal.

If you do not wish to participate, Marathon proposes to acquire your interest via term assignment at the following terms:

This term assignment offer terminates on May 15, 2018 and is subject to due diligence and title verification satisfactory to Marathon.

Should you have any questions regarding this or other matters, please do not hesitate to contact me via the phone number or email address listed above.

Sincerely,

Steven Martinez
Land Agent for Marathon Oil Permian, LLC

_____ Energen Resources Corporation elects to participate in the drilling, completing, and equipping of the Ned Pepper Federal 24-34-18 TB 1H.

_____ Energen Resources Corporation elects NOT to participate in the drilling, completing, and equipping of the Ned Pepper Federal 24-34-18 TB 1H.

_____ Energen Resources Corporation elects to participate in the drilling, completing, and equipping of the Ned Pepper Federal 24-34-18 WA 2H.

_____ Energen Resources Corporation elects NOT to participate in the drilling, completing, and equipping of the Ned Pepper Federal 24-34-18 WA 2H.

_____ Energen Resources Corporation elects to participate in the drilling, completing, and equipping of the Ned Pepper Federal 24-34-18 TB 4H.

_____ Energen Resources Corporation elects NOT to participate in the drilling, completing, and equipping of the Ned Pepper Federal 24-34-18 TB 4H.

_____ Energen Resources Corporation elects to participate in the drilling, completing, and equipping of Ned Pepper Federal 24-34-18 WXY 6H.

_____ Energen Resources Corporation elects NOT to participate in the drilling, completing, and equipping of the Ned Pepper Federal 24-34-18 WXY 6H.

_____ Energen Resources Corporation elects to participate in the drilling, completing, and equipping of Ned Pepper Federal 24-34-18 TB 7H.

_____ Energen Resources Corporation elects NOT to participate in the drilling, completing, and equipping of the Ned Pepper Federal 24-34-18 TB 7H.

_____ Energen Resources Corporation elects to participate in the drilling, completing, and equipping of Ned Pepper Federal 24-34-18 WA 9H.

_____ Energen Resources Corporation elects NOT to participate in the drilling, completing, and equipping of the Ned Pepper Federal 24-34-18 WA 9H.

_____ Energen Resources Corporation elects to participate in the drilling, completing, and equipping of Ned Pepper Federal 24-34-18 WXY 12H.

_____ Energen Resources Corporation elects NOT to participate in the drilling, completing, and equipping of the Ned Pepper Federal 24-34-18 WXY 12H.

_____ Energen Resources Corporation elects to participate in the drilling, completing, and equipping of Ned Pepper Federal 24-34-18 WA 15H.

_____ Energen Resources Corporation elects NOT to participate in the drilling, completing, and equipping of the Ned Pepper Federal 24-34-18 WA 15H.

_____ Energen Resources Corporation elects to participate in the drilling, completing, and equipping of Ned Pepper Federal 24-34-18 WXY 18H.

_____ Energen Resources Corporation elects NOT to participate in the drilling, completing, and equipping of the Ned Pepper Federal 24-34-18 WXY 18H.

Energen Resources Corporation

By: _____

Print Name: _____

Title: _____

Date: _____

Exhibit E

MARATHON OIL PERMIAN LLC
 AUTHORITY FOR EXPENDITURE
 DETAIL OF ESTIMATED WELL COSTS

DATE 1/8/2018
 DRILLING & LOCATION PREPARED BY JACOB BEATY
 COMPLETION PREPARED BY JOSH SHANNON
 FACILITIES PREPARED BY MATT HENSCHEN
 ARTIFICIAL LIFT PREPARED BY TOMMY MAZAL

Asset Team	PERMIAN			
Field	0	FORMATION: 3RD BONE SPRINGS	WILDCAT	EXPLORATION
Lease/Facility	NED PEPPER 18 TB FEDERAL COM 4H		DEVELOPMENT	RECOMPLETION
Location	LEA COUNTY		X EXPLOITATION	WORKOVER
Prospect	RED HILLS			

Est Total Depth	<u>16,842</u>	Est Drilling Days	<u>20.9</u>	Est Completion Days	<u>5.5</u>
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LOCATION COST - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	28,000
7001250	Land Broker Fees and Services	36,000
TOTAL LOCATION COST - INTANGIBLE		64,000

DRILLING COST - TANGIBLE

7012050	Conductor Pipe	28,000
7012050	Surface Casing	34,000
7012050	Intermediate Casing 1	144,000
7012050	Intermediate Casing 2	-
7012050	Production Casing	253,000
7012050	Drill Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Drilling Wellhead Equipment	70,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	-
TOTAL DRILLING - TANGIBLE		608,000

DRILLING COST - INTANGIBLE

7019200	Drilling Rig Mob/Demob	26,000
7019220	Drilling Rig - day work/footage	418,000
7019040	Directional Drilling Services	171,750
7019020	Cement and Cementing Service Surface	20,000
7019020	Cement and Cementing Service Intermediate 1	25,000
7019020	Cement and Cementing Service Intermediate 2	45,000
7019020	Cement and Cementing Service Production	45,000
7019140	Mud Fluids & Services	64,500
7012310	Solids Control equipment	37,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	64,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7019000	Well Logging Services	-
7019150	Mud Logging/geosteering	17,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110	Casing inspection/cleaning	15,000
7019110	Drill pipe/collar inspection services	10,000
7016180	Freight - truck	25,000
7001460	Water hauling and disposal (includes soil farming)	135,000
7001440	Vacuum Trucks	20,000
7000030	Contract Labor - general	30,000
7018150	Rental Tools and Equipment (surface rentals)	83,600
7018150	Rig Equipment and Misc.	6,270
7001110	Telecommunications Services	10,000
7001120	Consulting Services	98,230
7001400	Safety and Environmental	10,000
7018120	Rental Buildings (trailers)	-
7019310	Coring (sidewalls & analysis)	-
7011010	8% Contingency & Taxes	171,388
TOTAL DRILLING - INTANGIBLE		\$1,705,738

TOTAL DRILLING COST

\$2,313,738

COMPLETION - TANGIBLE

7012580	Tubing	75,000
7012040	Tubing Accessories (nipple, wireline entry)	15,000
7012550	Wellhead Equip	20,000
7012560	Packers - Completion Equipment	38,850
TOTAL COMPLETION - TANGIBLE		\$148,850



MARATHON OIL PERMIAN LLC
 AUTHORITY FOR EXPENDITURE
 DETAIL OF ESTIMATED WELL COSTS

DATE 1/8/2018

Asset Team PERMIAN
 Field 0 FORMATION: 3RD BONE SPRINGS
 Lease/Facility NED PEPPER 18 T8 FEDERAL COM 4H

COMPLETION - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	20,000
7019220	Drilling Rig During Completion	20,000
7019140	Mud Fluids & Services	-
7019030	Coiled Tubing Services (3 runs)	140,000
7019240	Snubbing Services	25,000
7019270	Pulling/Swab Units	10,000
7016350	Fuel (from drlg)	-
7019010	Casing Crew and Services	-
7019020	Cement and Cementing Services	-
7019080	Well Testing Services (flow hand & equip)	71,000
7019320	Fracturing Services	1,860,000
7019330	Perforating	124,000
7019360	Wireline Services	-
7001460	Water Hauling & Disposal (frac fluids)	550,000
7016180	Freight - Truck (haul pipe; drlg & compl)	40,000
7018150	BOP Rental & Testing	-
7018150	Rental Tools and Equipment (Incl drlg; lghtplant,hydra-walk)	-
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	45,000
7000030	Contract Labor - general	75,000
7001110	Telecommunications Services	25,000
7001400	Safety and Environmental	-
7001120	Consulting Services	30,000
7018150	Zipper Manifold	57,600
7019300	Frack Stack Rentals	39,000
7016190	Freight (Transportation Services)	-
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000
7018120	Rental Buildings (trailers)	55,000
7000030	Contract Labor - Pumping (pump-down pumps)	42,000
7011010	8% Contingency & Taxes	264,928
TOTAL COMPLETION - INTANGIBLE		\$3,593,528

TOTAL COMPLETION COST

\$3,742,378

SURFACE EQUIPMENT - TANGIBLE

7012350	Misc. Piping, Fittings & Valves	69,412
7006640	Company Labor & Burden	-
7000030	Contract Labor - General	58,315
7001110	Telecommunication equip (Telemetry)	-
7012410	Line Pipe & Accessories	23,758
7012270	Miscellaneous Materials (containment system)	37,163
7008060	SCADA	-
7016180	Freight - truck	-
7001190	Contract Engineering	29,116
7012290	Metering and Instrumentation	234,427
7012290	I&E Materials	-
7012200	Gas Treating	-
7012200	Dehydration	-
7012010	Compressor	-
7012350	Power	-
7012610	Vapor Recovery Unit	-
7012440	Separator & other pressure vessels	71,228
7012500	Tanks	198,995
7012100	Heater Treater	10,398
7012640	Flare & Accessories	20,963
7000010	Electrical Labor	23,293
7000010	Mechanical Labor	-
7012480	Rod Pumping unit & Pad	-
7012180	Pumping Unit Engine	-
7012350	Electrical Power (electrical cooperative construction costs)	18,634
TOTAL SURFACE EQUIPMENT - TANGIBLE		\$735,701

TOTAL SURFACE EQUIPMENT COST

\$ 735,701

ARTIFICIAL LIFT

7006640	Company Labor	3,000
7012180	Gas Lift Equipment	23,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	-
7012140	Elect Sub Pumps (ESP)	-
7019350	Well Services-Well/Wellhead Services	22,500
7012270	Materials & Supplies-Tangible	25,000
7012550	Surface Wellhead Equipment	3,000
7012390	Pig Launchers/Receivers & Rel Equip	-
7011010	8% Contingency & Taxes	2,500
TOTAL ARTIFICIAL LIFT		79,000

TOTAL ARTIFICIAL LIFT COST

\$ 79,000

SUMMARY OF ESTIMATED DRILLING WELL COSTS

TOTAL COST

TOTAL LOCATION COST	\$ 64,000
TOTAL DRILLING COST	\$ 2,313,738
TOTAL COMPLETIONS COST	\$ 3,742,378
TOTAL SURFACE EQUIPMENT COST	\$ 735,701
TOTAL ARTIFICIAL LIFT COST	\$ 79,000
GRAND TOTAL COST	\$6,934,817

MARATHON OIL PERMIAN LLC
AUTHORITY FOR EXPENDITURE
DETAIL OF ESTIMATED WELL COSTS

DATE 1/8/2018
DRILLING & LOCATION PREPARED BY JACOB BEATY
COMPLETION PREPARED BY JOSH SHANNON
FACILITIES PREPARED BY MATT HENSCHEN
ARTIFICIAL LIFT PREPARED BY TOMMY MAZAL

Asset Team	PERMIAN		
Field	0	FORMATION: 3RD BONE SPRINGS	WILDCAT
Lease/Facility	NED PEPPER 18 TB FEDERAL COM 1H		DEVELOPMENT
Location	LEA COUNTY		X EXPLOITATION
Prospect	RED HILLS		WORKOVER

Est Total Depth	16,842	Est Drilling Days		Est Completion Days	5.5
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LOCATION COST - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access	28,000
7001250	Land Broker Fees and Services	36,000
TOTAL LOCATION COST - INTANGIBLE		64,000

DRILLING COST - TANGIBLE

7012050	Conductor Pipe	28,000
7012050	Surface Casing	34,000
7012050	Intermediate Casing 1	144,000
7012050	Intermediate Casing 2	-
7012050	Production Casing	253,000
7012050	Drig Liner Hanger, Tieback Eq & Csg Accessories	55,000
7012550	Drilling Wellhead Equipment	70,000
7012040	Casing & Tubing Access	24,000
7012270	Miscellaneous MRO Materials	-
TOTAL DRILLING - TANGIBLE		608,000

DRILLING COST - INTANGIBLE

7019200	Drilling Rig Mob/Demob	26,000
7019220	Drilling Rig - day work/footage	418,000
7019040	Directional Drilling Services	171,750
7019020	Cement and Cementing Service	20,000
7019020	Cement and Cementing Service	25,000
7019020	Cement and Cementing Service	45,000
7019020	Cement and Cementing Service	45,000
7019140	Mud Fluids & Services	64,500
7012310	Solids Control equipment	37,000
7012020	Bits	70,000
7019010	Casing Crew and Services	30,000
7016350	Fuel (Rig)	64,000
7019140	Fuel (Mud)	18,000
7001460	Water (non potable)	25,000
7019000	Well Logging Services	-
7019150	Mud Logging/geosteering	17,000
7019250	Stabilizers, Hole Openers, Underreamers (DH rentals)	15,000
7019110	Casing Inspection/cleaning	15,000
7019110	Drill pipe/collar inspection services	10,000
7016180	Freight - truck	25,000
7001460	Water hauling and disposal (includes soil farming)	135,000
7001440	Vacuum Trucks	20,000
7000030	Contract Labor - general	30,000
7018150	Rental Tools and Equipment (surface rentals)	83,600
7018150	Rig Equipment and Misc.	6,270
7001110	Telecommunications Services	10,000
7001120	Consulting Services	98,230
7001400	Safety and Environmental	10,000
7018320	Rental Buildings (trailers)	-
7019310	Coring (sidewalls & analysis)	-
7011010	8% Contingency & Taxes	171,388
TOTAL DRILLING - INTANGIBLE		\$1,705,738

TOTAL DRILLING COST	\$2,313,738
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COMPLETION - TANGIBLE

7012580	Tubing	75,000
7012040	Tubing Accessories (nipple, wireline entry)	15,000
7012550	Wellhead Equip	20,000
7012560	Packers - Completion Equipment	38,850
TOTAL COMPLETION - TANGIBLE		\$148,850

MARATHON OIL PERMIAN LLC
AUTHORITY FOR EXPENDITURE
DETAIL OF ESTIMATED WELL COSTS

DATE 1/8/2018

Asset Team PERMIAN
Field 0 FORMATION: 3RD BONE SPRINGS
Lease/Facility NED PEPPER 18 TB FEDERAL COM 1H

COMPLETION - INTANGIBLE

GL CODE	DESCRIPTION	ESTIMATED COST
7001270	Location and Access (dress location after rig move, set anchors)	20,000
7019220	Drilling Rig During Completion	20,000
7019140	Mud Fluids & Services	-
7019030	Coiled Tubing Services (3 runs)	140,000
7019240	Snubbing Services	25,000
7019270	Pulling/Swab Units	10,000
7016350	Fuel (from drlg)	-
7019010	Casing Crew and Services	-
7019020	Cement and Cementing Services	-
7019080	Well Testing Services (flow hand & equlp)	71,000
7019320	Fracturing Services	1,860,000
7019330	Perforating	124,000
7019360	Wireline Services	-
7001460	Water Hauling & Disposal (frac fluids)	550,000
7016180	Freight - Truck (haul pipe; drlg & compl)	40,000
7018150	BOP Rental & Testing	-
7018150	Rental Tools and Equipment (Incl drlg; lghtplant,hydra-walk)	-
7018150	CT Downhole Rental Equipment (ie. Bit, BHA)	45,000
7000030	Contract Labor - general	75,000
7001110	Telecommunications Services	25,000
7001400	Safety and Environmental	-
7001120	Consulting Services	30,000
7018150	Zipper Manifold	57,600
7019300	Frack Stack Rentals	39,000
7016190	Freight (Transportation Services)	-
7018150	Equipment Rental (w/o operator, frac tanks, lightplants)	100,000
7018120	Rental Buildings (trailers)	55,000
7000030	Contract Labor - Pumping (pump-down pumps)	42,000
7011010	8% Contingency & Taxes	264,928
TOTAL COMPLETION - INTANGIBLE		\$3,593,528

TOTAL COMPLETION COST

\$3,742,378

SURFACE EQUIPMENT - TANGIBLE

7012350	Misc. Piping, Fittings & Valves	69,412
7006640	Company Labor & Burden	-
7000030	Contract Labor - General	58,315
7001110	Telecommunication equlp (Telemetry)	-
7012410	Line Pipe & Accessories	23,758
7012270	Miscellaneous Materials (containment system)	37,163
7008060	SCADA	-
7016180	Freight - truck	-
7001190	Contract Engineering	29,116
7012290	Metering and Instrumentation	234,427
7012290	I&E Materials	-
7012200	Gas Treating	-
7012200	Dehydration	-
7012010	Compressor	-
7012350	Power	-
7012610	Vapor Recovery Unit	-
7012440	Separator & other pressure vessels	71,228
7012500	Tanks	138,995
7012100	Heater Treater	10,398
7012640	Flare & Accessories	20,963
7000010	Electrical Labor	23,293
7000010	Mechanical Labor	-
7012480	Rod Pumping unit & Pad	-
7012180	Pumping Unit Engine	-
7012350	Electrical Power (electrical cooperative construction costs)	18,634
TOTAL SURFACE EQUIPMENT - TANGIBLE		\$735,701

TOTAL SURFACE EQUIPMENT COST

\$ 735,701

ARTIFICIAL LIFT

7006640	Company Labor	3,000
7012180	Gas Lift Equipment	23,000
7012480	Rod Pumping, Sucker Rods & Rod Pump	-
7012140	Elect Sub Pumps (ESP)	-
7019350	Well Services-Well/Wellhead Services	22,500
7012270	Materials & Supplies-Tangible	25,000
7012550	Surface Wellhead Equipment	3,000
7012390	Pig Launchers/Receivers & Rel Equip	-
7011010	8% Contingency & Taxes	2,500
TOTAL ARTIFICIAL LIFT		79,000

TOTAL ARTIFICIAL LIFT COST

\$ 79,000

SUMMARY OF ESTIMATED DRILLING WELL COSTS

TOTAL COST

TOTAL LOCATION COST	\$ 64,000
TOTAL DRILLING COST	\$ 2,313,738
TOTAL COMPLETIONS COST	\$ 3,742,378
TOTAL SURFACE EQUIPMENT COST	\$ 735,701
TOTAL ARTIFICIAL LIFT COST	\$ 79,000

GRAND TOTAL COST

\$6,934,817

Exhibit F

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

**APPLICATION OF MARATHON OIL PERMIAN LLC FOR COMPUSLORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. 20163


**APPLICATION OF MARATHON OIL PERMIAN LLC FOR COMPUSLORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. 20164

AFFIDAVIT

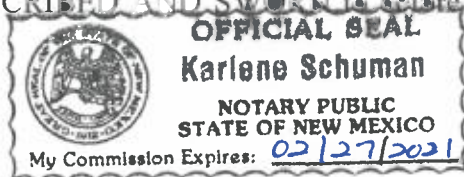
STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

Deana M. Bennett, attorney in fact and authorized representative of Marathon Oil Permian LLC, the Applicant herein, being first duly sworn, upon oath, states that the above-referenced Applications were provided under a notice letter and that proof of receipt is attached hereto.



Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 14th day of May, 2019 by Deana M. Bennett.





Notary Public

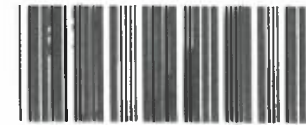
My commission expires: _____



Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED MAIL
04/03/2019



Firm Mailing Book ID: 164236

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0057 6489 21	COG Operating, LLC 600 W. Illinois Avenue Midland TX 79701	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
2	9314 8699 0430 0057 6489 38	COG Production, LLC 600 W. Illinois Avenue Midland TX 79701	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
3	9314 8699 0430 0057 6489 45	Energen Resources Corporation 605 Richard Arrington Jr. Blvd. North Birmingham AL 35203	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
4	9314 8699 0430 0057 6489 52	Jetstream Oil & Gas Partners, LP 105 Nursery Ln, Suite 220 Fort Worth TX 76114	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
5	9314 8699 0430 0057 6489 69	Joel Talley 600 N. Marienfeld, Suite 807 Midland TX 79701	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
6	9314 8699 0430 0057 6489 76	Foundation Minerals, LLC P.O. Box 50820 Midland TX 79701	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
7	9314 8699 0430 0057 6489 83	Mavros Minerals, LLC P.O. Box 50820 Midland TX 79701	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
8	9314 8699 0430 0057 6489 90	Oak Valley Mineral and Land, LP P.O. Box 50820 Midland TX 79701	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
9	9314 8699 0430 0057 6490 03	Sam L. Shackleford 1096 Mechem Dr., Suite G-16 Ruidoso NM 88345	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
10	9314 8699 0430 0057 6490 10	Doug J. Schutz P.O. Box 973 Santa Fe NM 87504	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
11	9314 8699 0430 0057 6490 27	EOG Resources, Inc. 5509 Champions Drive Midland TX 79706	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
12	9314 8699 0430 0057 6490 34	Devon Energy Production Co. LP 333 W Sheridan Ave. Oklahoma City OK 73102	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
13	9314 8699 0430 0057 6490 41	Energex LLC 4425 98th Street, Suite 200 Lubbock TX 79424	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
14	9314 8699 0430 0057 6490 58	Kaiser-Francis Oil Company 616 Cypress Creek Pkwy, Suite 525 Houston TX 77090	\$1.30	\$3.50	\$1.60	\$0.00	81363-0167 Ned Notice
Totals:			\$18.20	\$49.00	\$22.40	\$0.00	
			Grand Total:			\$89.60	

List Number of Pieces
Listed by Sender

Total Number of Pieces
Received at Post Office

Postmaster:
Name of receiving employee

Dated:

Transaction Report Details - CertifiedPro.net

Firm Mail Book ID= 164236

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USPS Article Number	Date Created	Name 1	Address	City	State	Zip	Postage	Fees	Service Options	Mail Delivery Date
9314869904300057649058	2019-04-03 12:25 PM	Kaiser-Francis Oil Company	616 Cypress Creek Pkwy, Suite 525	Houston	TX	77090	1.30	5.10	Return Receipt - Electronic, Certified Mail	04-08-2019
9314869904300057649041	2019-04-03 12:25 PM	Energex LLC	4425 98th Street, Suite 200	Lubbock	TX	79424	1.30	5.10	Return Receipt - Electronic, Certified Mail	
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9314869904300057649027	2019-04-03 12:25 PM	EOG Resources, Inc.	5509 Champions Drive	Midland	TX	79706	1.30	5.10	Return Receipt - Electronic, Certified Mail	04-08-2019
9314869904300057649010	2019-04-03 12:25 PM	Doug J. Schutz	P.O. Box 973	Santa Fe	NM	87504	1.30	5.10	Return Receipt - Electronic, Certified Mail	04-15-2019
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9314869904300057648952	2019-04-03 12:25 PM	Jetstream Oil & Gas Partners, LP	105 Nursery Ln, Suite 220	Fort Worth	TX	76114	1.30	5.10	Return Receipt - Electronic, Certified Mail	04-12-2019
9314869904300057648945	2019-04-03 12:25 PM	Energen Resources Corporation	605 Richard Arrington Jr. Blvd. North	Birmingham	AL	35203	1.30	5.10	Return Receipt - Electronic, Certified Mail	04-09-2019
9314869904300057648938	2019-04-03 12:25 PM	COG Production, LLC	600 W. Illinois Avenue	Midland	TX	79701	1.30	5.10	Return Receipt - Electronic, Certified Mail	04-08-2019
9314869904300057648921	2019-04-03 12:25 PM	COG Operating, LLC	600 W. Illinois Avenue	Midland	TX	79701	1.30	5.10	Return Receipt - Electronic, Certified Mail	04-08-2019

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
May 01, 2019
and ending with the issue dated
May 01, 2019.



Publisher

Sworn and subscribed to before me this
1st day of May 2019.

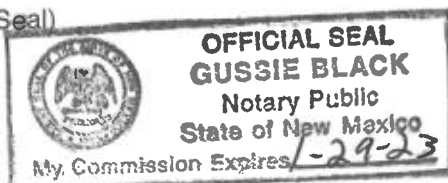


Business Manager

My commission expires

January 29, 2028

(Seal)



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL

LEGAL

LEGAL

LEGAL NOTICE MAY 1, 2019

CASE NO. 20169: Notice to all affected parties, as well as the heirs and devisees of COG Operating, LLC; COG Production, LLC; Energen Resources Corporation; Jetstream Oil & Gas Partners, LP; Joel Talley; Foundation Minerals, LLC; Mavros Minerals, LLC; Oak Valley Mineral and Land, LP; Estate of Cloma Mize Perkins; Estate of R.S. Cinco Rogers; Sam L. Shackelford; Doug J. Schutz; EOG Resources, Inc.; Devon Energy Production Co. LP; Energex, LLC; Kaiser-Francis Oil Company; of Marathon Oil Permian LLC's Amended Application for a spacing unit and compulsory pooling, Lea County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on May 16, 2019 to consider this application. Applicant seeks an order from the Division: (1) approving the creation of a 320-acre, more or less, spacing unit covering the W/2 of Section 18, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico underlying the Wolfcamp formation; and (2) pooling all uncommitted mineral interests in the proposed spacing unit. This proposed spacing unit will be dedicated to the Ned Pepper Federal 24 34 18 WA 2H, Ned Pepper Federal 24 34 18 WXY 6H, and Ned Pepper Federal 24 34 18 WA 9H wells, to be horizontally drilled. The producing area for the wells will be orthodox. Also to be considered will be the approval of Marathon's allocation formula, the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the wells, and a 200% charge for risk involved in drilling said wells, and allowing a one year period between when the first well is drilled and when completion operations are commenced for the first well drilled. Said area is located approximately 20 miles northwest of Jal, New Mexico.

CASE NO. 20163: Notice to all affected parties, as well as the heirs and devisees of COG Operating, LLC; COG Production, LLC; Energen Resources Corporation; Jetstream Oil & Gas Partners, LP; Joel Talley; Foundation Minerals, LLC; Mavros Minerals, LLC; Oak Valley Mineral and Land, LP; Estate of Cloma Mize Perkins; Estate of R.S. Cinco Rogers; Sam L. Shackelford; Doug J. Schutz; EOG Resources, Inc.; Devon Energy Production Co. LP; Energex, LLC; Kaiser-Francis Oil Company; of Marathon Oil Permian LLC's Application for a non-standard spacing unit and compulsory pooling, Lea County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on May 16, 2019 to consider this application. Applicant seeks an order from the Division: (1) approving the creation of a non-standard 160-acre, more or less, spacing unit covering the E/2 W/2 of Section 18, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico from +/- 11,051' MD as shown in the logs for the Government "L" No. 1 well (API No. 30-025-25604) to the base of the Bone Spring formation; and (2) pooling all uncommitted mineral interests in the proposed spacing unit. This proposed spacing unit will be dedicated to the Ned Pepper Federal 24 34 18 TB 4H well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 20 miles northwest of Jal, New Mexico.

CASE NO. 20164: Notice to all affected parties, as well as the heirs and devisees of COG Operating, LLC; COG Production, LLC; Energen Resources Corporation; Jetstream Oil & Gas Partners, LP; Joel Talley; Foundation Minerals, LLC; Mavros Minerals, LLC; Oak Valley Mineral and Land, LP; Estate of Cloma Mize Perkins; Estate of R.S. Cinco Rogers; Sam L. Shackelford; Doug J. Schutz; EOG Resources, Inc.; Devon Energy Production Co. LP; Energex, LLC; Kaiser-Francis Oil Company; of Marathon Oil Permian LLC's Amended Application for a non-standard spacing unit and compulsory pooling, Lea County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on May 16, 2019 to consider this application. Applicant seeks an order from the Division: (1) approving the creation of a non-standard 160-acre, more or less, spacing unit covering the W/2 W/2 of Section 18, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico from +/- 11,051' MD as shown in the logs for the Government "L" No. 1 well (API No. 30-025-25604) to the base of the Bone Spring formation; and (2) pooling all uncommitted mineral interests in the proposed spacing unit. This proposed spacing unit will be dedicated to the Ned Pepper Federal 24 34 18 TB 1H well, to be horizontally drilled. The producing area for this well will be orthodox. Also to be considered will be the cost of drilling and completing said well, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Marathon as operator of the well, and a 200% charge for risk involved in drilling said well, and allowing a one year period between when the well is drilled and when the well is completed. Said area is located approximately 20 miles northwest of Jal, New Mexico. #34095

01104570

00227642

DOLORES SERNA
MODRALL, SPERLING, ROEHL, HARRIS &
P. O. BOX 2168
ALBUQUERQUE, NM 87103-2168

Exhibit 2

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

**APPLICATION OF MARATHON OIL PERMIAN LLC FOR COMPUSLORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. 20163

**APPLICATION OF MARATHON OIL PERMIAN LLC FOR COMPUSLORY
POOLING, LEA COUNTY, NEW MEXICO.**

CASE NO. 20164

AFFIDAVIT

STATE OF TEXAS)
) ss.
COUNTY OF HARRIS)

Ethan Perry, being duly sworn, deposes and states:

1. I am over the age of 18, I am a geologist for Marathon Oil Permian LLC, and have personal knowledge of the matters stated herein. I have been qualified by the Oil Conservation Division ("Division") as an expert petroleum geologist.

2. **Exhibit G** is a structure map of the top of the Wolfcamp formation.

3. The proposed project area for the wells is identified by a black-dashed box. The proposed Bone Spring horizontal locations are identified by a blue line, and the proposed Bone Spring wells are numbered 2 and 4.

4. Exhibit G shows that the structure dips from north to south.

5. Exhibit G also identifies three wells in the vicinity of the proposed wells, and has a line of cross-section running from A to A'.

6. **Exhibit H** is a stratigraphic cross section hung on the Top Wolfcamp. The well logs on the cross-section give a representative sample of the Bone Spring formation in the area. The target zone for the wells is the Third Bone Spring, identified by the words "Producing Zone" and the shaded area across the cross section, along with a red arrow. That zone is continuous across the proposed units.

7. **Exhibit I** is a Gross Interval Isochore of the Third Bone Spring Sand. The formation is relatively uniform across the proposed well units.

8. **Exhibit J** shows the depth severance. The depth severance is at +/- 11,051' MD as shown in the logs for the Government "L" No. 1 well.

9. **Exhibit K** is a slide that shows assumed maximum values for the hydraulic fracture and stimulated rock volume.

10. Exhibit K models the maximum value for the fracture height in this formation without any fracture barriers, and shows that under those circumstances, the fracture height would not go above 11,051' MD.

11. In my opinion, this exhibit demonstrates that the wells would not obtain hydrocarbons from above 11,051' MD.

12. In addition, in this area, there is a thick, relatively low porosity Third Bone Spring Carbonate interval, which will significantly reduce the fractured height and the propped stimulated rock volume.

13. In my opinion, the geologic properties in this area makes it even less likely that these wells would obtain hydrocarbons from above 11,051' MD.

14. In my opinion, I conclude from the maps that:

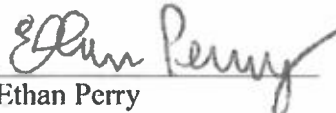
- a. The horizontal spacing unit is justified from a geologic standpoint.

- b. There are no structural impediments or faulting that will interfere with horizontal development.
- c. Each quarter quarter section in the unit will contribute more or less equally to production.
- d. The wells would not obtain hydrocarbons from above 11,051' MD.

15. The preferred well orientation in this area is north-south. This is because the orientation of the maximum horizontal stress orientation is roughly east-west.

16. The granting of these applications is in the interests of conservation and the prevention of waste.

[Signature page follows]


Ethan Perry

SUBSCRIBED AND SWORN to before me this 14th day of May, 2019 by Ethan Perry,
on behalf of Marathon Oil Permian LLC.


Notary Public

My commission expires: 1/23/2023

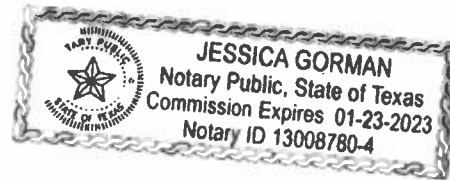
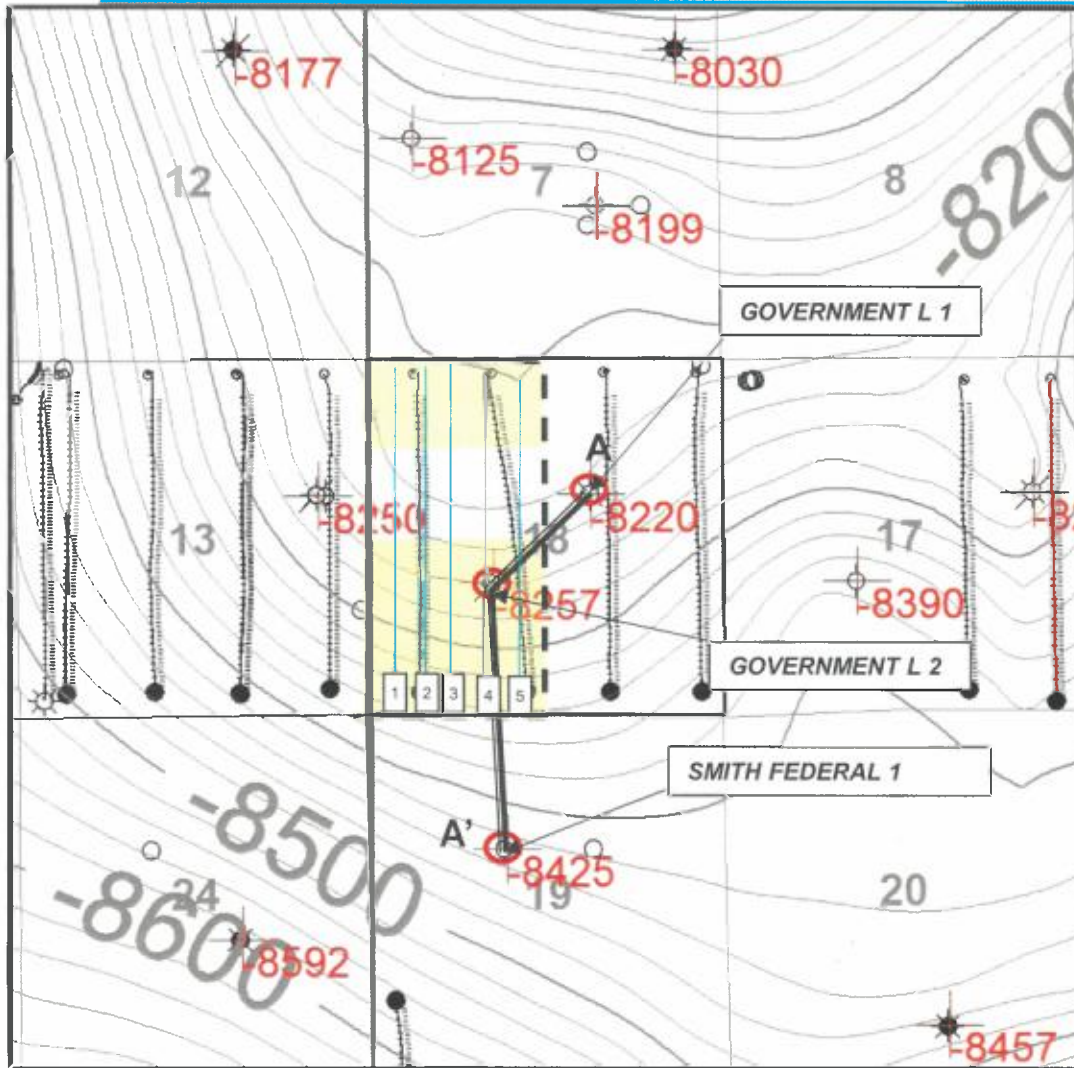


Exhibit G

Ned Pepper 18 TB Federal Com 1H and 4H

Structure Map – Top of Wolfcamp (SSTVD)



Map Legend



MRO – Horizontal Location



No Offsetting TB Producers



MRO Acreage



Project Area

C.I. = 20'

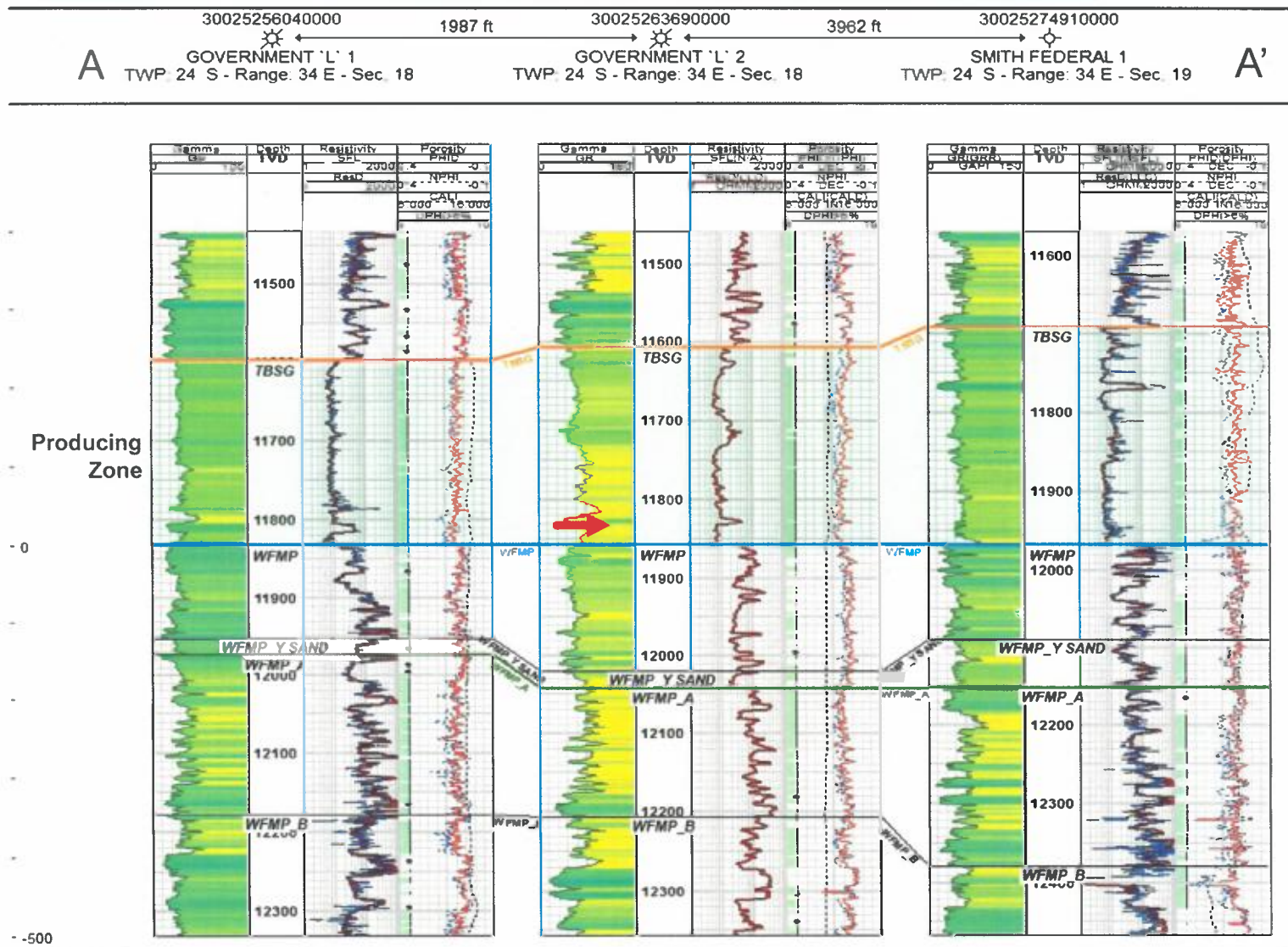
1 mile



Exhibit H

Ned Pepper 18 TB Federal Com 1H and 4H

Stratigraphic Cross Section (Top Wolfcamp Datum)



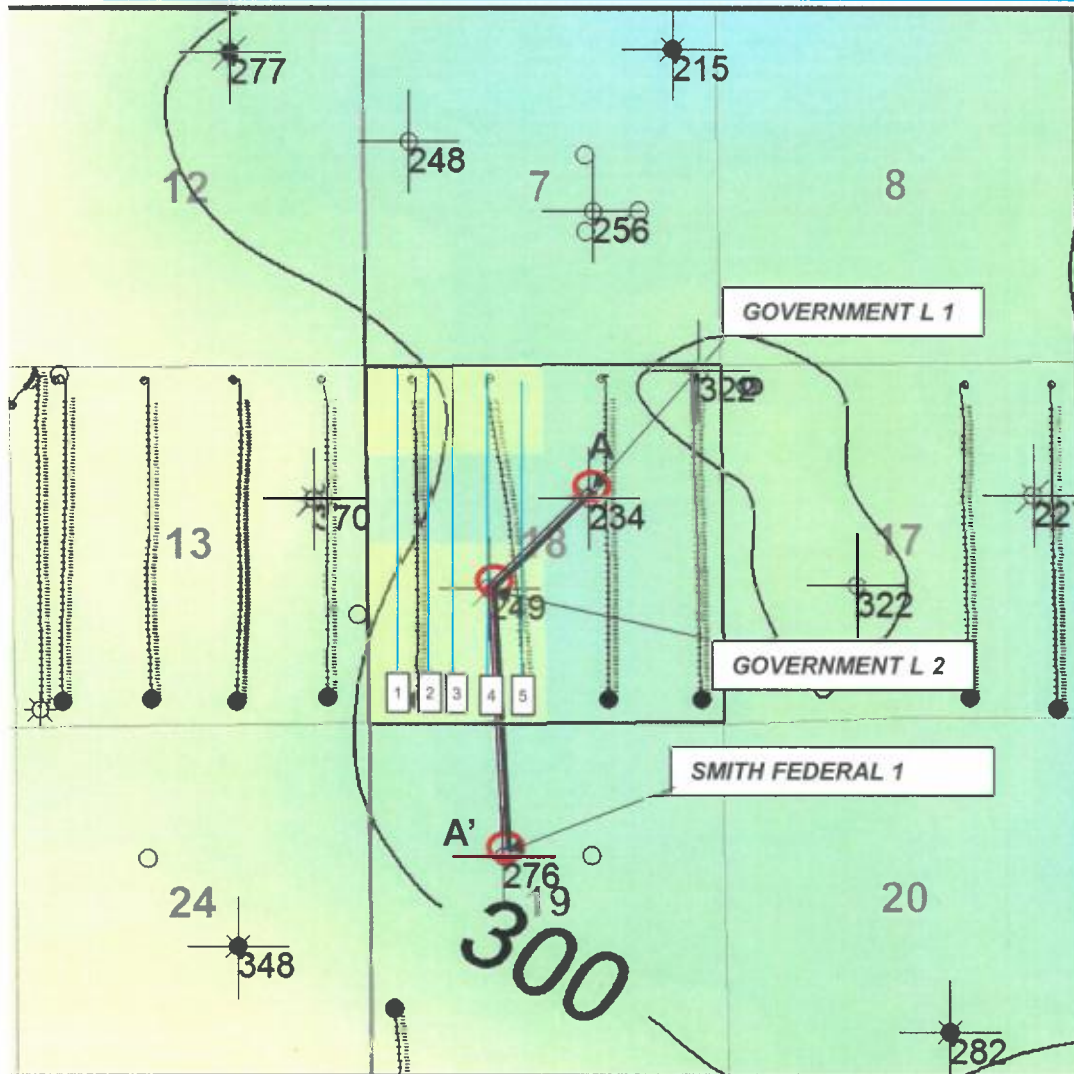
EXHIBIT

H

Exhibit I

Ned Pepper 18 TB Federal Com 1H and 4H

Gross Sand Isochore – Third Bone Spring Sand



Map Legend



MRO – Horizontal Location



No Offsetting TB Producers



MRO Acreage



Project Area

C.I. = 100'

1 mile



- 1 Ned Pepper WA Federal Com 2H
- 2 Ned Pepper TB Federal Com 1H
- 3 Ned Pepper WXY Federal Com 6H
- 4 Ned Pepper TB Federal Com 4H
- 5 Ned Pepper WA Federal Com 9H

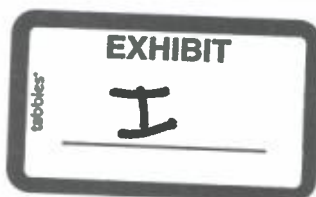
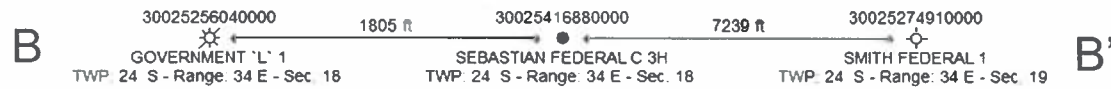


Exhibit J

Ned Pepper Depth Severances

100' below Sebastian 3H Target Depth = +/- 11051' MD in Government 'L' 1



SHL ~40' structurally shallower than Government 'L' 1; drilled ~100' down structure

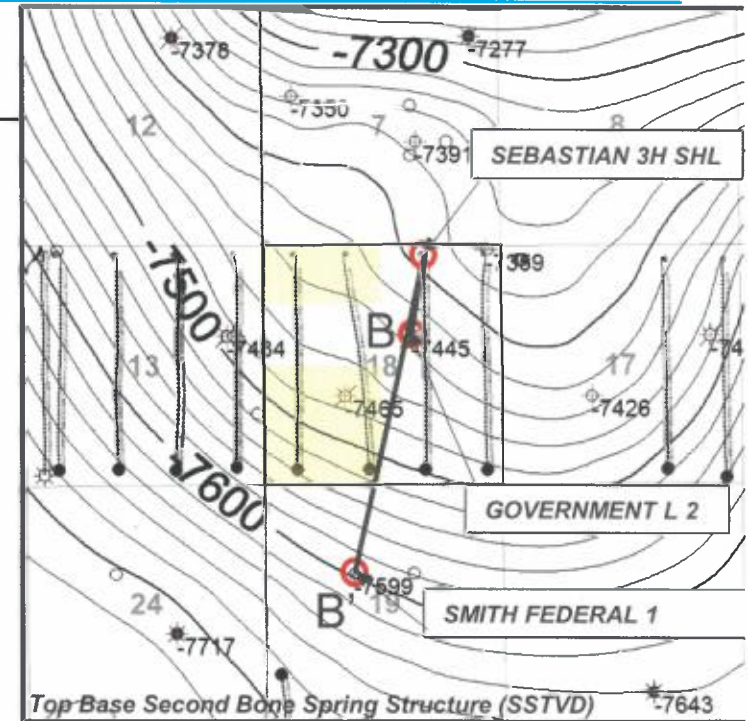
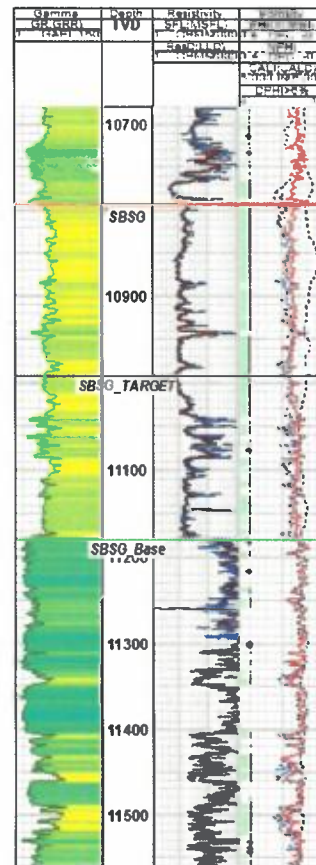
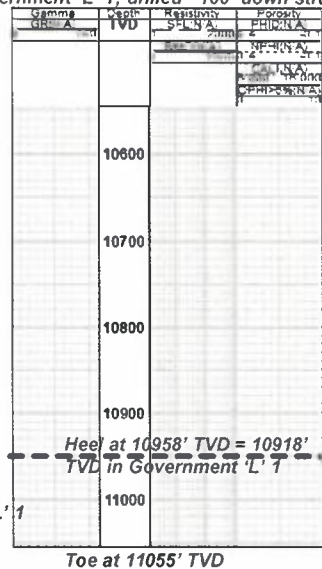
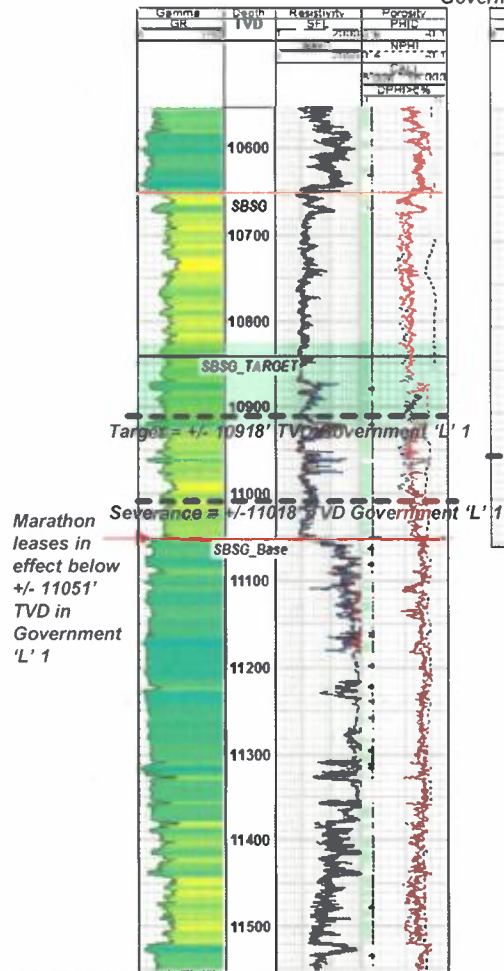


Exhibit K

Ned Pepper Depth Severances

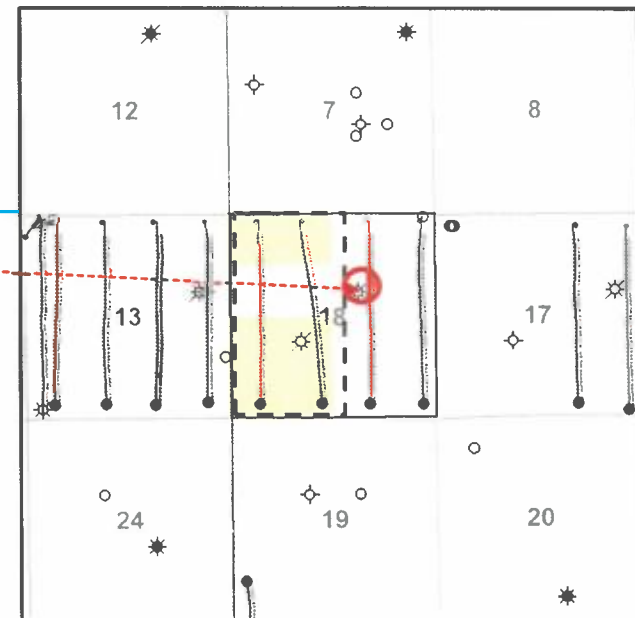
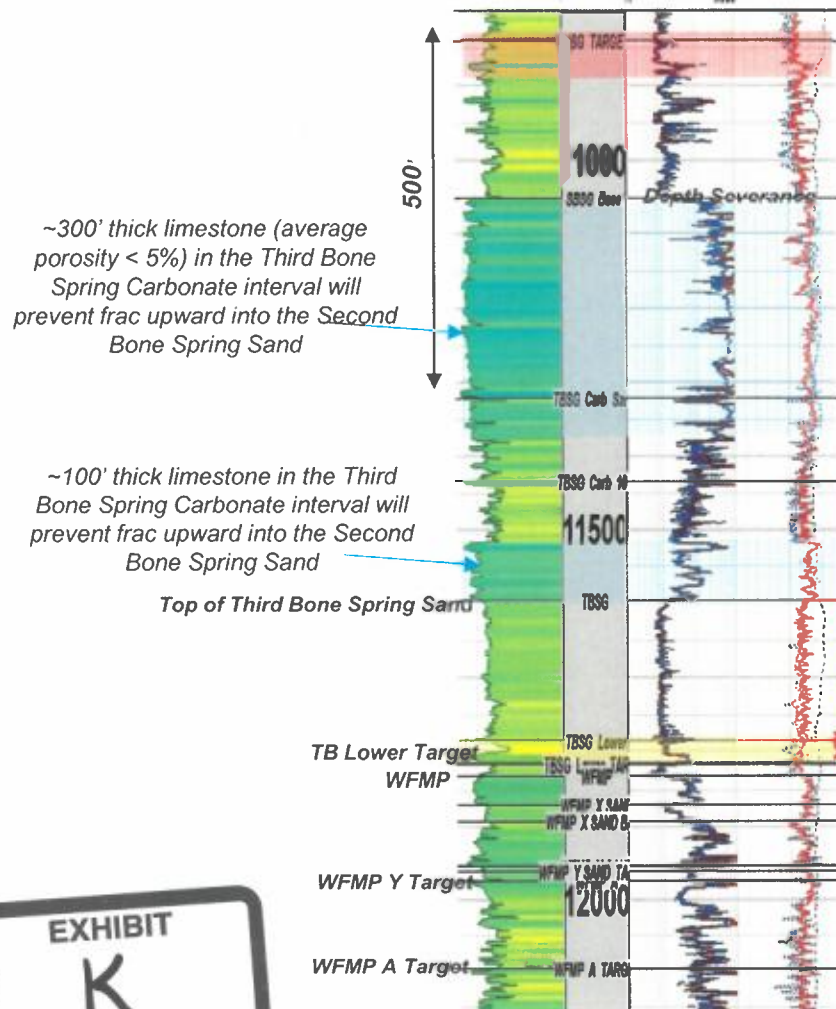
TBSG Carbonate Frac Barrier

Sebastian SB target zone

Ned Pepper TB target zone

Government 'L' 1

Correlation	Depth	Resistivity	Porosity
GR	MD	SFL	PHI
0	150	1	1
		20000 A	NPH
		Residual	
		CHMM	
		20000 A	
		Residual	
		1	



350' Hydraulic Frac Height
200' Propped SRV

Ned Pepper TB 1H/4H Target

