

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

**IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION DIVISION FOR
THE PURPOSE OF CONSIDERING:**

**APPLICATION OF MEWBOURNE OIL COMPANY
FOR COMPULSORY POOLING,
EDDY COUNTY, NEW MEXICO.**

Case No. 20112

VERIFIED STATEMENT OF RAYMOND WINKELJOHN

Raymond Winkeljohn, being duly sworn upon his oath, deposes and states:

1. I am a landman for Mewbourne Oil Company ("Mewbourne"), and have personal knowledge of the matters stated herein. I have been qualified by the Division as an expert petroleum landman.
2. Pursuant to NMAC 19.15.4.12.A(1), the following information is submitted in support of the compulsory pooling application filed herein:
 - (a) The purpose of this application is to force pool working interest owners into the Wolfcamp horizontal spacing unit described below, and in wells to be drilled in the unit.
 - (b) No opposition is expected because the interest owners being pooled have been contacted regarding the proposed well, but have simply refused to voluntarily commit their interests to the well.
 - (c) A plat outlining the unit being pooled is attached hereto as Attachment A. Mewbourne seeks an order approving a 640.00-acre horizontal spacing unit in the Wolfcamp formation comprised of the E/2 of Section 36, Township 25 South, Range 29 East, and the E/2 of Section 1, Township 26 South, Range 29 East, NMPM. Mewbourne further seeks the pooling of all mineral interests in the Wolfcamp formation underlying the unit. The unit will be dedicated to the Buffalo Trace 1/36 W1PA Fed Com #1H and the Buffalo Trace 1/36 W1PA Fed Com #2H, horizontal wells with a first take point in Unit P of Section 1 and a final take point in Unit A of Section 36.
 - (d) The parties being pooled and their interests are set forth in Attachment B. Their current and correct addresses are also set forth.
 - (e) Attachment C contains a summary of contacts with the interest owners, together with copies of the proposal letters sent to them.

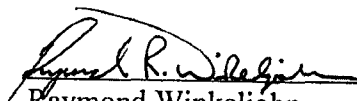


- (f) Mewbourne has made a good faith effort to obtain the voluntary joinder of the working interest owners in the proposed well.
- (g) Mewbourne has the right to pool the overriding royalty owners in the well unit.
- (h) Attachment D is the Authorization for Expenditure for the proposed well. The estimated cost of the well set forth therein is fair and reasonable, and is comparable to the costs of other wells of similar depth and length drilled in this area of Eddy County.
- (i) Mewbourne requests overhead and administrative rates of \$8000/month for a drilling well and \$800/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 portion of Eddy County. They are also the rates set forth in the Joint Operating Agreement for the well unit. Mewbourne requests that these rates be adjusted periodically as provided in the COPAS Accounting Procedure.
- (j) Mewbourne requests that the maximum cost plus 200% risk charge be assessed against non-consenting working interest owners.
- (k) Applicant requests that it be designated operator of the well.
- (l) The attachments to this affidavit were prepared by me or under my supervision, or compiled from company business records.
- (m) The granting of this application is in the interests of conservation and the prevention of waste.

VERIFICATION

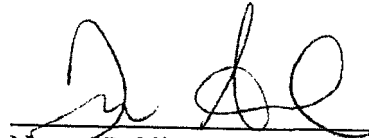
STATE OF TEXAS)
) ss.
COUNTY OF MIDLAND)

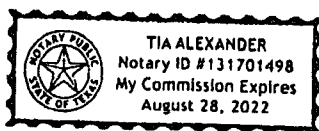
Raymond Winkeljohn, being duly sworn upon his oath, deposes and states that: He is a landman for Mewbourne Oil Company; he is authorized to make this verification on its behalf; he has read the foregoing statement, and knows the contents thereof; and the same is true and correct to the best of his knowledge, information, and belief.


Raymond Winkeljohn

SUBSCRIBED AND SWORN TO before me this 9th day of January 2019 by
Raymond Winkeljohn.

My Commission Expires: 8-28-22

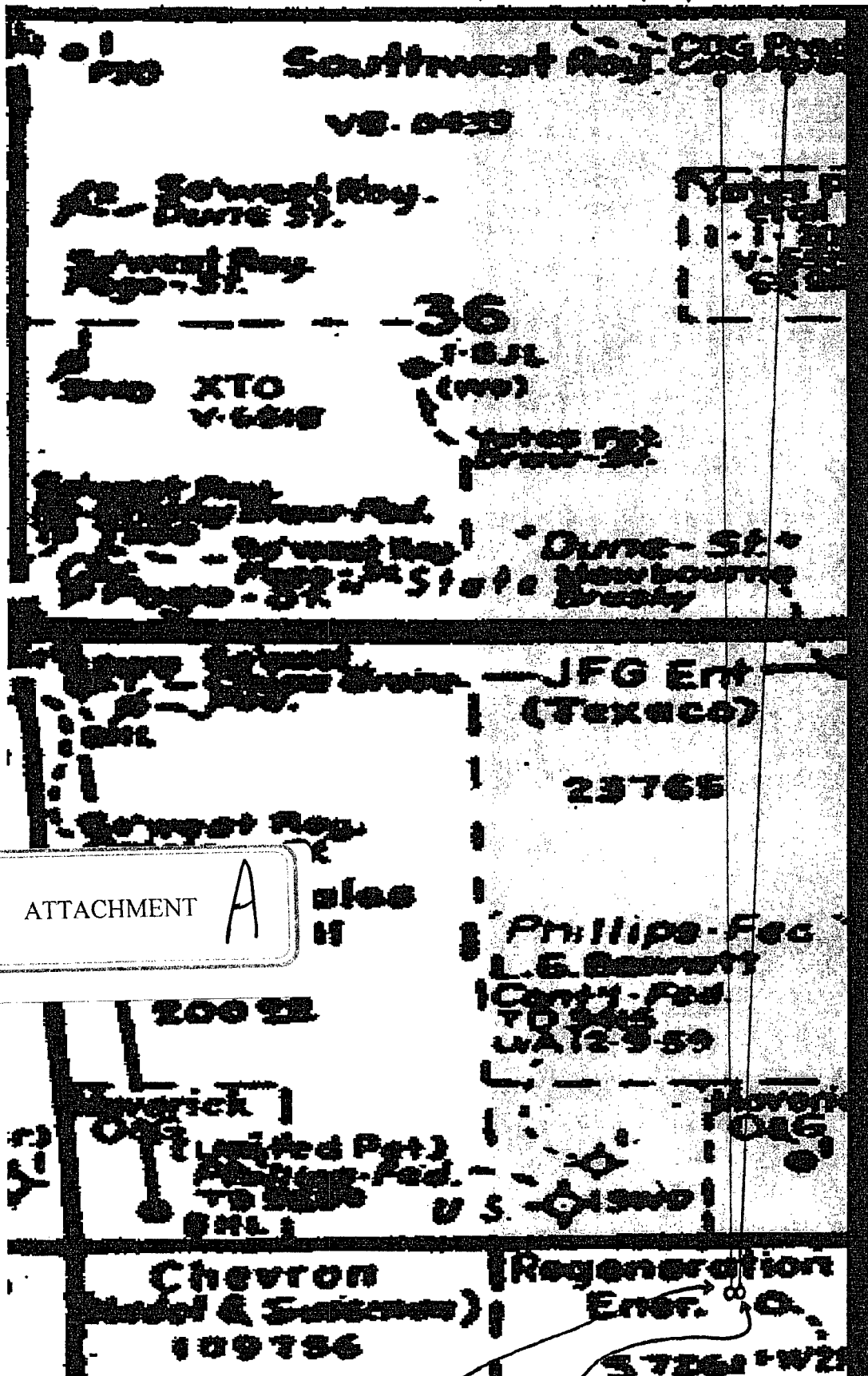

Notary Public



Buffalo Trace 1/36 Wells

Section 36 (E2), T25S, R29E, Eddy Co. NM

Section 1 (E2), T26S, R29E, Eddy Co. NM



Buffalo Trace 1/36 WIPA Federal Com #1H
Buffalo Trace 1/36 WIPA Federal Com #2H

**NM OIL CONSERVATION
ARTESIA DISTRICT**

Form C-102

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

RECEIVED

Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-43914		² Pool Code 98220		³ Pool Name PURPLE SAGE WOLFCAMP	
⁴ Property Code 322234		⁵ Property Name BUFFALO TRACE 1/38 WIPA FEDERAL COM			⁶ Well Number 1H
⁷ OGRID NO. 14744		⁸ Operator Name MEWBOURNE OIL COMPANY			⁹ Elevation 3042'

¹⁰ Surface Location

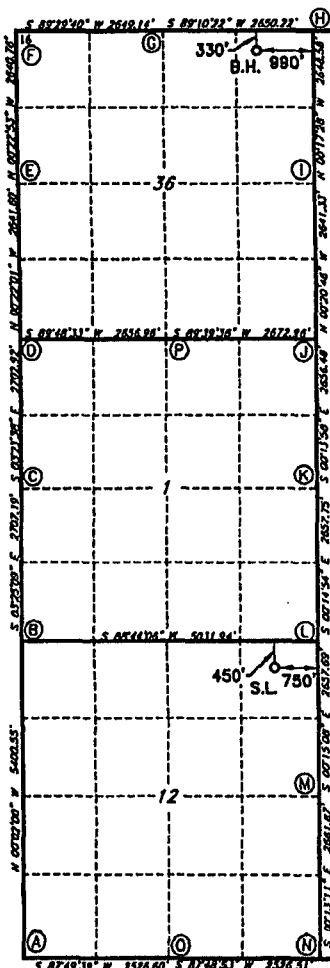
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
A	12	26S	29E		450	NORTH	750	EAST	EDDY

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
A	36	25S	29E		330	NORTH	990	EAST	EDDY

¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
---	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



GEODETIC DATA
NAD 83 GRID - NM EAST
SURFACE LOCATION
N: 386926.4 - E: 665768.2
LAT: 32.0631040° N
LONG: 103.9316547° W
BOTTOM HOLE
N: 397685.1 - E: 665470.9
LAT: 32.0926816° N
LONG: 103.9324852° W

CORNER DATA
NAD 83 GRID - NM EAST

A: FOUND BRASS CAP "1940"
N: 381882.4 - E: 661489.4
B: FOUND BRASS CAP "1940"
N: 387281.8 - E: 661486.2
C: FOUND BRASS CAP "1940"
N: 389983.6 - E: 661324.8
D: FOUND BRASS CAP "1940"
N: 392681.2 - E: 661164.8
E: FOUND BRASS CAP "1940"
N: 395334.5 - E: 661152.0
F: FOUND 5/8" REBAR
N: 397988.6 - E: 661141.0
G: FOUND BRASS CAP "1940"
N: 398004.2 - E: 663799.3
H: FOUND BRASS CAP "1940"
N: 398021.4 - E: 666458.5
I: FOUND BRASS CAP "1940"
N: 395364.5 - E: 666476.0
J: FOUND BRASS CAP "1940"
N: 392705.9 - E: 666493.5
K: FOUND BRASS CAP "1940"
N: 390050.0 - E: 666504.3
L: FOUND 1/2" REBAR
N: 387392.8 - E: 666515.9
M: FOUND BRASS CAP "1940"
N: 384735.7 - E: 666527.5
N: FOUND BRASS CAP "1940"
N: 382074.4 - E: 666537.7
O: FOUND BRASS CAP "1940"
N: 381978.1 - E: 664013.6
P: FOUND BRASS CAP "1940"
N: 392690.0 - E: 663821.2

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 *Bradley Bishop* Date **8-15-18**

Printed Name **BRADLEY BISHOP**

B-email Address **BBISHOP@MEWBOURNE.COM**

B-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.

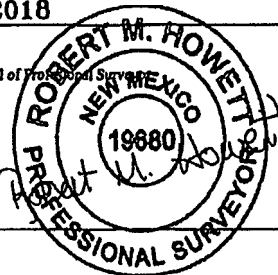
4-20-2018

Date of Survey

Signature and Seal of Professional Surveyor

19680

Certificate Number



RRC-Job No.: **LS1804504**

RWP 8-14-18

District I
1635 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720
District III
1000 Rio Brazos Road, Amos, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
12211 S. St. Francis Dr., Santa Fe, NM 87503
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico **NM OIL CONSERVATION** Form C-102
Energy, Minerals & Natural Resources Department **ARTESIA DISTRICT** Revised August 1, 2011
OIL CONSERVATION DIVISION Submit one copy to appropriate District Office
1220 South St. Francis Dr.
Santa Fe, NM 87505

DEC 13 2018

RECEIVED

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-45536		² Pool Code 98220		³ Pool Name PURPLE SAGE - WOLFCAMP GAS	
⁴ Property Code 322234		⁵ Property Name BUFFALO TRACE 1/36 W1PA FEDERAL COM			⁶ Well Number 2H
¹⁰ GRID NO. 14744		⁸ Operator Name MEWBOURNE OIL COMPANY			⁹ Elevation 3038'

¹⁰ Surface Location

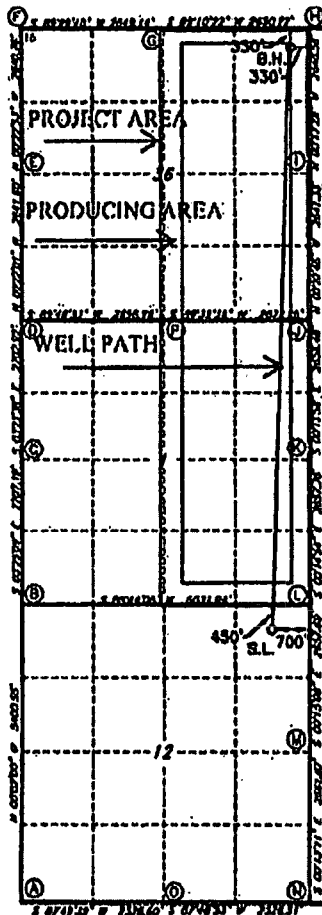
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	12	26S	29E		450	NORTH	700	EAST	EDDY

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
A	36	25S	29E		330	NORTH	330	EAST	EDDY

¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
---	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



GEODETIC DATA
NAD 83 GRID - NM EAST

SURFACE LOCATION
N: 388927.6 - E: 665818.2

LAT: 32.0831088° N
LONG: 103.9314932° W

BOTTOM HOLE
N: 397689.4 - E: 666130.8

LAT: 32.0826886° N
LONG: 103.9303545° W

CORNER DATA
NAD 83 GRID - NM EAST

A: FOUND BRASS CAP "1940" N: 381882.4 - E: 661489.4
B: FOUND BRASS CAP "1940" N: 387281.8 - E: 661486.2
C: FOUND BRASS CAP "1940" N: 388983.6 - E: 661324.8
D: FOUND BRASS CAP "1940" N: 392681.2 - E: 661164.8
E: FOUND BRASS CAP "1940" N: 395334.5 - E: 661152.0
F: FOUND 5/8" REBAR N: 397688.6 - E: 661141.0
G: FOUND BRASS CAP "1940" N: 398004.2 - E: 663799.3
H: FOUND BRASS CAP "1940" N: 398021.4 - E: 666458.5
I: FOUND BRASS CAP "1940" N: 395384.5 - E: 666476.0
J: FOUND BRASS CAP "1940" N: 392709.9 - E: 666493.5
K: FOUND BRASS CAP "1940" N: 390050.0 - E: 666504.3
L: FOUND 1/2" REBAR N: 387392.8 - E: 666515.9
M: FOUND BRASS CAP "1940" N: 384735.7 - E: 666527.5
N: FOUND BRASS CAP "1940" N: 382074.4 - E: 666537.7
O: FOUND BRASS CAP "1940" N: 381878.1 - E: 664013.6
P: FOUND BRASS CAP "1940" N: 392690.0 - E: 663821.2

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 hereinafter entered by the division.

Bradley Bishop 5-2-18
Signature Date

BRADLEY BISHOP

Printed Name

BBISHOP@MEWBOURNE.COM

Email Address

¹⁸ SURVEYOR CERTIFICATION

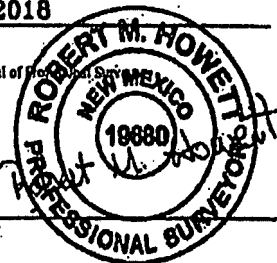
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

4-20-2018

Date of Survey

Signature and Seal of Professional Surveyor

19880
Certificate Number



RRG-Job No.: LS1804503

RW 12-13-18

TRACT OWNERSHIP
Buffalo Trace 1/36 W1PA Fed Com #1H
Buffalo Trace 1/36 W1PA Fed Com #2H
Section 36 (E/2), T25S, R29E
Section 1 (E/2), T26S, R29E
Eddy County, New Mexico

Section 36: E/2, Section 1: E/2:
Wolfcamp formation:

	<u>% Leasehold Interest</u>
Mewbourne Oil Company, et al 500 West Texas, Ste. 1020 Midland, Texas 79701	95.000000%
*EOG Y Resources, Inc. 5509 Champions Drive Midland, Texas 79706	2.5000000%
*EOG M Resources, Inc. 5509 Champions Drive Midland, Texas 79706	1.250000%
*EOG A Resources, Inc. 5509 Champions Drive Midland, Texas 79706	1.250000%
**EOG Resources, Inc. 5509 Champions Drive Midland, Texas 79706	(5.000000%) Collectively via merger 100.000000%

*** Total interest being pooled: 5.000000%**

****We have been verbally notified that EOG Y, M & A have merged with EOG Resources, Inc. However, we have not seen the merger document yet to confirm.**

ATTACHMENT *B*

Summary of Communications
Buffalo Trace 1/36 W1PA Fed Com #1H
Buffalo Trace 1/36 W1PA Fed Com #1H

EOG Y Resources, Inc.

- 1) 4/9/2018: Mailed well proposal letters with AFEs via certified mail. Receipt attached.
- 2) 8/8/2018: Sent email to Chuck Moran with EOG inquiring about EOG election in the Buffalo Trace wells.
- 3) 8/27/2018: Send follow up email asking about JOA evaluation status.
- 4) 9/10/2018: Email conversation regarding well timing.
- 5) 10/1/2018: Sent email requesting a status update on the wells.
- 6) 10/15/2018: Email conversation between Chuck and I regarding participation in the wells.
- 7) 11/26/2018: Had a meeting with Chuck discussing other prospects and this one.
- 8) 11/27/2018: Re-Sent JOA to Chuck for evaluation.
- 9) 12/10-12/13/2018: Email correspondence regarding a status update. He is working on getting approval for the JOA.
- 10) 12/18/2018: Email chain regarding well timing.
- 11) 1/4/2018: Phone calls and email chain regarding JOA execution. The JOA is routing for approval/execution.
- 12) 1/7-1/8/2018: Multiple phone calls and emails. We are just waiting to receive the executed JOA and AFEs.
- 13) 1/8/2018: Still waiting to receive executed JOA and AFEs.

EOG A Resources, Inc.

1. Same conversations as EOG Y above.

EOG M Resources, Inc.

1. Same conversations as EOG Y above.

ATTACHMENT

C

MEWBOURNE OIL COMPANY

500 West Texas, Suite 1020
Midland, Texas 79701
Phone (432) 682-3715
Fax (432) 685-4170

April 9, 2018

Via: Certified Mail

EOG Y Resources, Inc.
5509 Champions Drive
Midland, Texas 79706
Attn: Chuck Moran

Re: Buffalo Trace 1/36 WIPA Fed Com #1H
450' FNL & 750' FEL (SL) (Section 12)
330' FNL & 990' FEL (BHL) (Section 36)
Section 1, T26S, R29E
Section 36, T25S, R29E
Eddy County, New Mexico

Ladies and Gentlemen:

Mewbourne Oil Company ("Mewbourne") as Operator hereby proposes to form a 1280.00 acre Working Interest Unit ("WIU") covering all of the above captioned section 1 and all of the above captioned section 36 for oil and gas production. The targeted interval for the proposed unit is the Wolfcamp formation. Apparently EOG Y Resources, Inc., ("EOG Y") owns a 40.00% interest in the SE/4NE/4 (40 gross acres) of the referenced Section 36. Accordingly, EOG Y would own 1.250000% working interest in the proposed WIU. (16.00 net acres / 1280.00 gross acres = 1.250000% interest in the WIU)

Mewbourne as Operator hereby proposes to drill the captioned well at the above referenced surface location (SL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 10,504 feet subsurface to evaluate the Wolfcamp Formation. The proposed well will have a measured depth (MD) of approximately 21,047 feet. The E/2 of section 1 and the E/2 of section 36 will be dedicated to the proration unit of the well.

Regarding the above, enclosed for your further handling is our AFE dated March 28, 2018 for the captioned proposed well. Also, enclosed is a copy of our proposed Operating Agreement dated April 15, 2018 and an extra set of signature pages. In the event your firm elects to participate in the proposed well, please execute the enclosed AFE and extra set of signature pages and return to me within thirty (30) days.

Should you have any questions regarding the above, please email me at rwinkeljohn@mewbourne.com or call me at (432) 682-3715.

Sincerely,

MEWBOURNE OIL COMPANY



Ray Winkeljohn
Landman

MEWBOURNE OIL COMPANY

500 West Texas, Suite 1020

Midland, Texas 79701

Phone (432) 682-3715

Fax (432) 685-4170

April 9, 2018

Via: Certified Mail

EOG Y Resources, Inc.

5509 Champions Drive

Midland, Texas 79706

Attn: Chuck Moran

Re: Buffalo Trace 1/36 W1PA Fed Com #2H
450' FNL & 700' FEL (SL) (Section 12)
330' FNL & 330' FEL (BHL) (Section 36)
Section 1, T26S, R29E
Section 36, T25S, R29E
Eddy County, New Mexico

Ladies and Gentlemen:

Mewbourne Oil Company ("Mewbourne") as Operator hereby proposes to form a 1280.00 acre Working Interest Unit ("WIU") covering all of the above captioned section 1 and all of the above captioned section 36 for oil and gas production. The targeted interval for the proposed unit is the Wolfcamp formation. Apparently EOG Y Resources, Inc., ("EOG Y") owns a 40.00% interest in the SE/4NE/4 (40 gross acres) of the referenced Section 36. Accordingly, EOG Y would own 1.250000% working interest in the proposed WIU. (16.00 net acres / 1280.00 gross acres = 1.250000% interest in the WIU)

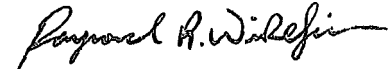
Mewbourne as Operator hereby proposes to drill the captioned well at the above referenced surface location (SL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 10,686 feet subsurface to evaluate the Wolfcamp Formation. The proposed well will have a measured depth (MD) of approximately 21,241 feet. The E/2 of section 1 and the E/2 of section 36 will be dedicated to the proration unit of the well.

Regarding the above, enclosed for your further handling is our AFE dated March 27, 2018 for the captioned proposed well. Also, enclosed is a copy of our proposed Operating Agreement dated April 15, 2018 and an extra set of signature pages. In the event your firm elects to participate in the proposed well, please execute the enclosed AFE and extra set of signature pages and return to me within thirty (30) days.

Should you have any questions regarding the above, please email me at rwinkeljohn@mewbourne.com or call me at (432) 682-3715.

Sincerely,

MEWBOURNE OIL COMPANY



Ray Winkeljohn

Landman

MEWBOURNE OIL COMPANY

500 West Texas, Suite 1020

Midland, Texas 79701

Phone (432) 682-3715

Fax (432) 685-4170

April 9, 2018

Via: Certified Mail

EOG A Resources, Inc.
5509 Champions Drive
Midland, Texas 79706
Attn: Chuck Moran

Re: Buffalo Trace 1/36 W1PA Fed Com #1H
450' FNL & 750' FEL (SL) (Section 12)
330' FNL & 990' FEL (BHL) (Section 36)
Section 1, T26S, R29E
Section 36, T25S, R29E
Eddy County, New Mexico

Ladies and Gentlemen:

Mewbourne Oil Company ("Mewbourne") as Operator hereby proposes to form a 1280.00 acre Working Interest Unit ("WIU") covering all of the above captioned section 1 and all of the above captioned section 36 for oil and gas production. The targeted interval for the proposed unit is the Wolfcamp formation. Apparently EOG A Resources, Inc., ("EOG A") owns a 20.00% interest in the SE/4NE/4 (40 gross acres) of the referenced Section 36. Accordingly, EOG A would own 0.625000% working interest in the proposed WIU. ($8.00 \text{ net acres} / 1280.00 \text{ gross acres} = 0.625000\%$ interest in the WIU)

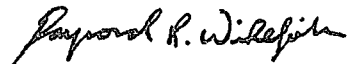
Mewbourne as Operator hereby proposes to drill the captioned well at the above referenced surface location (SL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 10,504 feet subsurface to evaluate the Wolfcamp Formation. The proposed well will have a measured depth (MD) of approximately 21,047 feet. The E/2 of section 1 and the E/2 of section 36 will be dedicated to the proration unit of the well.

Regarding the above, enclosed for your further handling is our AFE dated March 28, 2018 for the captioned proposed well. Also, enclosed is a copy of our proposed Operating Agreement dated April 15, 2018 and an extra set of signature pages. In the event your firm elects to participate in the proposed well, please execute the enclosed AFE and extra set of signature pages and return to me within thirty (30) days.

Should you have any questions regarding the above, please email me at rwinkeljohn@mewbourne.com or call me at (432) 682-3715.

Sincerely,

MEWBOURNE OIL COMPANY



Ray Winkeljohn
Landman

MEWBOURNE OIL COMPANY

500 West Texas, Suite 1020

Midland, Texas 79701

Phone (432) 682-3715

Fax (432) 685-4170

April 9, 2018

Via: Certified Mail

EOG A Resources, Inc.

5509 Champions Drive

Midland, Texas 79706

Attn: Chuck Moran

Re: Buffalo Trace 1/36 W1PA Fed Com #2H
450' FNL & 700' FEL (SL) (Section 12)
330' FNL & 330' FEL (BHL) (Section 36)
Section 1, T26S, R29E
Section 36, T25S, R29E
Eddy County, New Mexico

Ladies and Gentlemen:

Mewbourne Oil Company ("Mewbourne") as Operator hereby proposes to form a 1280.00 acre Working Interest Unit ("WIU") covering all of the above captioned section 1 and all of the above captioned section 36 for oil and gas production. The targeted interval for the proposed unit is the Wolfcamp formation. Apparently EOG A Resources, Inc., ("EOG A") owns a 20.00% interest in the SE/4NE/4 (40 gross acres) of the referenced Section 36. Accordingly, EOG A would own 0.625000% working interest in the proposed WIU. (8.00 net acres / 1280.00 gross acres = 0.625000% interest in the WIU)

Mewbourne as Operator hereby proposes to drill the captioned well at the above referenced surface location (SL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 10,686 feet subsurface to evaluate the Wolfcamp Formation. The proposed well will have a measured depth (MD) of approximately 21,241 feet. The E/2 of section 1 and the E/2 of section 36 will be dedicated to the proration unit of the well.

Regarding the above, enclosed for your further handling is our AFE dated March 27, 2018 for the captioned proposed well. Also, enclosed is a copy of our proposed Operating Agreement dated April 15, 2018 and an extra set of signature pages. In the event your firm elects to participate in the proposed well, please execute the enclosed AFE and extra set of signature pages and return to me within thirty (30) days.

Should you have any questions regarding the above, please email me at rwinkeljohn@mewbourne.com or call me at (432) 682-3715.

Sincerely,

MEWBOURNE OIL COMPANY



Ray Winkeljohn

Landman

MEWBOURNE OIL COMPANY

500 West Texas, Suite 1020

Midland, Texas 79701

Phone (432) 682-3715

Fax (432) 685-4170

April 9, 2018

Via: Certified Mail

EOG M Resources, Inc.

5509 Champions Drive

Midland, Texas 79706

Attn: Chuck Moran

Re: Buffalo Trace 1/36 W1PA Fed Com #1H
450' FNL & 750' FEL (SL) (Section 12)
330' FNL & 990' FEL (BHL) (Section 36)
Section 1, T26S, R29E
Section 36, T25S, R29E
Eddy County, New Mexico

Ladies and Gentlemen:

Mewbourne Oil Company ("Mewbourne") as Operator hereby proposes to form a 1280.00 acre Working Interest Unit ("WIU") covering all of the above captioned section 1 and all of the above captioned section 36 for oil and gas production. The targeted interval for the proposed unit is the Wolfcamp formation. Apparently EOG M Resources, Inc., ("EOG M") owns a 20.00% interest in the SE/4NE/4 (40 gross acres) of the referenced Section 36. Accordingly, EOG M would own 0.625000% working interest in the proposed WIU. (8.00 net acres / 1280.00 gross acres = 0.625000% interest in the WIU)

Mewbourne as Operator hereby proposes to drill the captioned well at the above referenced surface location (SL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 10,504 feet subsurface to evaluate the Wolfcamp Formation. The proposed well will have a measured depth (MD) of approximately 21,047 feet. The E/2 of section 1 and the E/2 of section 36 will be dedicated to the proration unit of the well.

Regarding the above, enclosed for your further handling is our AFE dated March 28, 2018 for the captioned proposed well. Also, enclosed is a copy of our proposed Operating Agreement dated April 15, 2018 and an extra set of signature pages. In the event your firm elects to participate in the proposed well, please execute the enclosed AFE and extra set of signature pages and return to me within thirty (30) days.

Should you have any questions regarding the above, please email me at rwinkeljohn@mewbourne.com or call me at (432) 682-3715.

Sincerely,

MEWBOURNE OIL COMPANY



Ray Winkeljohn

Landman

MEWBOURNE OIL COMPANY

500 West Texas, Suite 1020

Midland, Texas 79701

Phone (432) 682-3715

Fax (432) 685-4170

April 9, 2018

Via: Certified Mail

EOG M Resources, Inc.

5509 Champions Drive

Midland, Texas 79706

Attn: Chuck Moran

Re: Buffalo Trace 1/36 WIPA Fed Com #2H
450' FNL & 700' FEL (SL) (Section 12)
330' FNL & 330' FEL (BHL) (Section 36)
Section 1, T26S, R29E
Section 36, T25S, R29E
Eddy County, New Mexico

Ladies and Gentlemen:

Mewbourne Oil Company ("Mewbourne") as Operator hereby proposes to form a 1280.00 acre Working Interest Unit ("WIU") covering all of the above captioned section 1 and all of the above captioned section 36 for oil and gas production. The targeted interval for the proposed unit is the Wolfcamp formation. Apparently EOG M Resources, Inc., ("EOG M") owns a 20.00% interest in the SE/4NE/4 (40 gross acres) of the referenced Section 36. Accordingly, EOG M would own 0.625000% working interest in the proposed WIU. ($8.00 \text{ net acres} / 1280.00 \text{ gross acres} = 0.625000\% \text{ interest in the WIU}$)

Mewbourne as Operator hereby proposes to drill the captioned well at the above referenced surface location (SL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 10,686 feet subsurface to evaluate the Wolfcamp Formation. The proposed well will have a measured depth (MD) of approximately 21,241 feet. The E/2 of section 1 and the E/2 of section 36 will be dedicated to the proration unit of the well.

Regarding the above, enclosed for your further handling is our AFE dated March 27, 2018 for the captioned proposed well. Also, enclosed is a copy of our proposed Operating Agreement dated April 15, 2018 and an extra set of signature pages. In the event your firm elects to participate in the proposed well, please execute the enclosed AFE and extra set of signature pages and return to me within thirty (30) days.

Should you have any questions regarding the above, please email me at rwinkeljohn@mewbourne.com or call me at (432) 682-3715.

Sincerely,

MEWBOURNE OIL COMPANY



Ray Winkeljohn

Landman

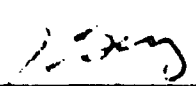


Date: April 16, 2018

Simple Certified:

The following is in response to your April 16, 2018 request for delivery information on your Certified Mail™/RRE item number 9402810699945030590315. The delivery record shows that this item was delivered on April 16, 2018 at 7:36 am in MIDLAND, TX 79702. The scanned image of the recipient information is provided below.

Signature of Recipient :

Signature	
Address	

Address of Recipient :

Address	2267
---------	------

Thank you for selecting the Postal Service for your mailing needs.

If you require additional assistance, please contact your local Post Office or postal representative.

Sincerely,
United States Postal Service

Attn: Mr. Chuck Moran
EOG A Resources Inc
5509 CHAMPIONS DR
MIDLAND, TX 79706
Reference #: BUFFALO TRACE 1/36 W1PA No1H RW
Item ID: BUFFALO TRACE 1 36 W1PA No1H

MEWBOURNE OIL COMPANY

AUTHORIZATION FOR EXPENDITURE

Well Name: Buffalo Trace 1-36 WIPA Fed Com #1H		Prospect: Wolfcamp	
Location: SL: 450' FNL & 750' FEL (12); BHL: 330' FNL & 990' FEL (36)		County: Eddy ST: NM	
Sec: 12	BK: 	Survey: 	TWP: 26S RNG: 29E Prop. TVD: 10504' TMD: 21047'

INTANGIBLE COSTS 0180		CODE	TCP	CODE	CC
Regulatory Permits & Surveys		0180-0100	\$20,000	0180-0200	
Location / Road / Site / Preparation		0180-0105	\$50,000	0180-0205	\$25,000
Location / Restoration		0180-0106	\$200,000	0180-0206	\$30,000
Daywork / Turnkey / Footage Drilling 36 days drtg / 4 days comp @ \$20,000/d		0180-0110	\$769,000	0180-0210	\$85,400
Fuel 1500 gal/day @ 2.63/gal		0180-0114	\$171,100	0180-0214	\$520,000
Mud, Chemical & Additives		0180-0120	\$223,000	0180-0220	
Horizontal Drilling Services				0180-0222	\$220,000
Cementing		0180-0125	\$95,000	0180-0225	\$30,000
Logging & Wireline Services		0180-0130	\$2,000	0180-0230	\$495,000
Casing / Tubing / Snubbing Service		0180-0134	\$20,000	0180-0234	\$90,000
Mud Logging		0180-0137	\$20,000		
Stimulation 63 Stg 26.1 MM gal / 26.1 MM lb				0180-0241	\$3,850,000
Stimulation Rentals & Other				0180-0242	\$150,000
Water & Other		0180-0145	\$50,000	0180-0245	\$750,000
Bits		0180-0148	\$90,000	0180-0248	\$4,000
Inspection & Repair Services		0180-0150	\$40,000	0180-0250	\$5,000
Misc. Air & Pumping Services		0180-0154		0180-0254	\$10,000
Testing & Flowback Services		0180-0158	\$15,000	0180-0258	\$30,000
Completion / Workover Rig				0180-0260	\$10,500
Rig Mobilization		0180-0164	\$120,000		
Transportation		0180-0165	\$20,000	0180-0265	\$20,000
Welding Services		0180-0168	\$5,000	0180-0268	\$15,000
Contract Services & Supervision		0180-0170	\$58,500	0180-0270	\$39,000
Directional Services Includes Vertical Control		0180-0175	\$320,000		
Equipment Rental		0180-0180	\$275,600	0180-0280	\$30,000
Well / Lease Legal		0180-0184	\$5,000	0180-0284	
Well / Lease Insurance		0180-0185	\$6,300	0180-0285	
Intangible Supplies		0180-0188	\$8,000	0180-0288	\$10,000
Damages		0180-0190	\$5,000	0180-0290	
ROW & Easements		0180-0192		0180-0292	\$1,000
Pipeline Interconnect				0180-0293	
Company Supervision		0180-0195	\$187,200	0180-0295	\$124,800
Overhead Fixed Rate		0180-0196	\$10,000	0180-0296	\$20,000
Well Abandonment		0180-0198		0180-0298	
Contingencies 10% (TCP) 10% (CC)		0180-0199	\$278,800	0180-0299	\$856,500
TOTAL			\$3,066,500		\$7,221,200

TANGIBLE COSTS 0181		CODE	TCP	CODE	CC
Casing (19.1" - 30")		0181-0793			
Casing (10.1" - 19.0") 855' - 13 3/8" 54.5# J-55 ST&C @ \$35.90/ft		0181-0794	\$32,800		
Casing (8.1" - 10.0") 3300' - 9 5/8" 40# N-80 LT&C @ \$27.61/ft		0181-0795	\$97,400		
Casing (6.1" - 8.0") 10700' - 7" 29# P-110 LT&C @ \$27.76/ft		0181-0796	\$317,300		
Casing (4.1" - 6.0") 11331' - 4 1/2" 13.5# P-110 BPN @ \$13.66/ft				0181-0797	\$165,400
Tubing 9900' - 2 7/8" 6.5# L-80 EUE 8rd @ \$4.74/ft				0181-0798	\$50,200
Drilling Head		0181-0860	\$40,000		
Tubing Head & Upper Section				0181-0870	\$30,000
Horizontal Completion Tools Completion Liner Hanger				0181-0871	\$70,000
Sucker Rods				0181-0875	
Subsurface Equipment				0181-0880	
Artificial Lift Systems Gas Lift Valves				0181-0884	\$15,000
Pumping Unit				0181-0885	
Surface Pumps & Prime Movers 1/2 VRU/SWD Pump/Circ Pump				0181-0886	\$35,000
Tanks - Oil 3 - 750 bbl				0181-0890	\$55,000
Tanks - Water 3 - 750 bbl				0181-0891	\$60,000
Separation / Treating Equipment 30"x10"x1k# 3 ph/36"x15"x1k# Hor 3ph/Gun bbl				0181-0895	\$45,000
Heater Treaters, Line Heaters 8"x20"x75# HT				0181-0897	\$23,000
Metering Equipment				0181-0898	\$14,000
Line Pipe & Valves - Gathering 1/2 1 Mile Gas & 2 Mile 12" Wtr				0181-0900	\$215,500
Fittings / Valves & Accessories				0181-0906	\$60,000
Cathodic Protection				0181-0908	\$8,000
Electrical Installation				0181-0909	\$50,000
Equipment Installation				0181-0910	\$35,000
Pipeline Construction 1/2 1 Mile Gas & 2 Mile 12" Wtr				0181-0920	\$110,000
TOTAL			\$487,600		\$1,041,100
SUBTOTAL			\$3,554,000		\$8,262,300
TOTAL WELL COST			\$11,816,300		

Extra Expense Insurance

☐ I elect to be covered by Operator's Extra Expense Insurance and pay my proportionate share of the premium.
Operator has secured Extra Expense Insurance covering costs of well control, clean up and redrilling as estimated in Line Item 0180-0185.

☐ I elect to purchase my own well control insurance policy.

If neither box is checked above, non-operating working interest owner elects to be covered by Operator's well control insurance.

Prepared by: R. Terrell Date: 3/23/2018

Company Approval: M. White Date: 3/28/2018

Joint Owner Interest: _____ Amount: _____

Joint Owner Name: _____ Signature: _____

ATTACHMENT

MEWBOURNE OIL COMPANY
AUTHORIZATION FOR EXPENDITURE

Well Name: Buffalo Trace 1-36 W1PA Fed Com #2H		Prospect: Wolfcamp	
Location: SL: 450' FNL & 700' FEL (12); BHL: 330' FNL & 330' FEL (36)		County: Eddy	ST: NM
Sec: 12	Bik: 	Survey: 	TWP: 26S RNG: 29E Prop. TVD: 10686' TMD: 21241'

INTANGIBLE COSTS 0180		CODE	TCP	CODE	CC
Regulatory Permits & Surveys		0180-0100	\$20,000	0180-0200	
Location / Road / Site / Preparation		0180-0105	\$50,000	0180-0205	\$25,000
Location / Restoration		0180-0108	\$200,000	0180-0206	\$30,000
Daywork / Turnkey / Footage Drilling	36 days drlg / 4 days comp @ \$20,000/d	0180-0110	\$769,000	0180-0210	\$85,400
Fuel	1500 gal/day @ 2.63/gal	0180-0114	\$171,100	0180-0214	\$520,000
Mud, Chemical & Additives		0180-0120	\$225,000	0180-0220	
Horizontal Drillout Services				0180-0222	\$220,000
Cementing		0180-0125	\$95,000	0180-0225	\$30,000
Logging & Wireline Services		0180-0130	\$2,000	0180-0230	\$495,000
Casing / Tubing / Snubbing Service		0180-0134	\$20,000	0180-0234	\$90,000
Mud Logging		0180-0137	\$20,000		
Stimulation	63 Stg 26.1 MM gal / 26.1 MM lb			0180-0241	\$3,850,000
Stimulation Rentals & Other				0180-0242	\$150,000
Water & Other		0180-0145	\$50,000	0180-0245	\$750,000
Bits		0180-0148	\$90,000	0180-0248	\$4,000
Inspection & Repair Services		0180-0150	\$40,000	0180-0250	\$5,000
Misc. Air & Pumping Services		0180-0154		0180-0254	\$10,000
Testing & Flowback Services		0180-0158	\$15,000	0180-0258	\$30,000
Completion / Workover Rig				0180-0260	\$10,500
Rig Mobilization		0180-0164	\$120,000		
Transportation		0180-0165	\$20,000	0180-0265	\$20,000
Welding Services		0180-0168	\$5,000	0180-0268	\$15,000
Contract Services & Supervision		0180-0170	\$58,500	0180-0270	\$39,000
Directional Services	Includes Vertical Control	0180-0175	\$320,000		
Equipment Rental		0180-0180	\$275,600	0180-0280	\$30,000
Well / Lease Legal		0180-0184	\$5,000	0180-0284	
Well / Lease Insurance		0180-0185	\$6,400	0180-0285	
Intangible Supplies		0180-0188	\$8,000	0180-0288	\$10,000
Damages		0180-0190	\$5,000	0180-0290	
ROW & Easements		0180-0192		0180-0292	\$1,000
Pipeline Interconnect				0180-0293	
Company Supervision		0180-0195	\$187,200	0180-0295	\$124,800
Overhead Fixed Rate		0180-0196	\$10,000	0180-0296	\$20,000
Well Abandonment		0180-0198		0180-0298	
Contingencies	10% (TCP) 10% (CC)	0180-0199	\$278,800	0180-0299	\$656,500
TOTAL			\$3,066,600		\$7,221,200

TANGIBLE COSTS 0181		CODE	TCP	CODE	CC
Casing (19.1" - 30")		0181-0793			
Casing (10.1" - 19.0")	855' - 13 3/8" 54.5# J-55 ST&C @ \$35.90/l	0181-0794	\$32,800		
Casing (8.1" - 10.0")	3300' - 9 5/8" 40# N-80 LT&C @ \$27.61/l	0181-0795	\$97,400		
Casing (6.1" - 8.0")	10800' - 7" 29# P-110 LT&C @ \$27.76/l	0181-0796	\$320,200		
Casing (4.1" - 6.0")	11328' - 4 1/2" 13.5# P-110 BPN @ \$13.66/l			0181-0797	\$165,300
Tubing	10000' - 2 7/8" 6.5# L-80 EUE 8rd @ \$4.74/l			0181-0798	\$50,700
Drilling Head		0181-0860	\$40,000		
Tubing Head & Upper Section				0181-0870	\$30,000
Horizontal Completion Tools	Completion Liner Hanger			0181-0871	\$70,000
Sucker Rods				0181-0875	
Subsurface Equipment				0181-0880	
Artificial Lift Systems	Gas Lift Valves			0181-0884	\$15,000
Pumping Unit				0181-0885	
Surface Pumps & Prime Movers	1/2 VRU/SWD Pump/Circ Pump			0181-0886	\$35,000
Tanks - Oil	3 - 750 bbl			0181-0890	\$55,000
Tanks - Water	3 - 750 bbl			0181-0891	\$60,000
Separation / Treating Equipment	30"x10"x1k# 3 ph/36"x15"x1k# Hor 3ph/Gun bbl			0181-0895	\$45,000
Heater Treaters, Line Heaters	8"x20"x75# HT			0181-0897	\$23,000
Metering Equipment				0181-0898	\$14,000
Line Pipe & Valves - Gathering	1/2 1 Mile Gas & 2 Mile 12" Wtr			0181-0900	\$215,500
Fittings / Valves & Accessories				0181-0906	\$60,000
Cathodic Protection				0181-0908	\$8,000
Electrical Installation				0181-0909	\$50,000
Equipment Installation				0181-0910	\$35,000
Pipeline Construction	1/2 1 Mile Gas & 2 Mile 12" Wtr			0181-0920	\$110,000
TOTAL			\$490,400		\$1,041,500
SUBTOTAL			\$3,557,000		\$8,262,700
TOTAL WELL COST			\$11,819,700		

Extra Expense Insurance

- ☐ I elect to be covered by Operator's Extra Expense Insurance and pay my proportionate share of the premium.
Operator has secured Extra Expense Insurance covering costs of well control, clean up and redrilling as estimated in Line Item 0180-0185.
- ☐ I elect to purchase my own well control insurance policy.

If neither box is checked above, non-operating working interest owner elects to be covered by Operator's well control insurance.

Prepared by: <u>R. Terrell</u>	Date: <u>3/23/2018</u>
Company Approval: <u><i>M. White</i></u>	Date: <u>3/27/2018</u>
Joint Owner Interest: _____ Amount: _____	Signature: _____
Joint Owner Name: _____	

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

**APPLICATION OF MEWBOURNE OIL COMPANY
FOR COMPULSORY POOLING, EDDY COUNTY,
NEW MEXICO.**

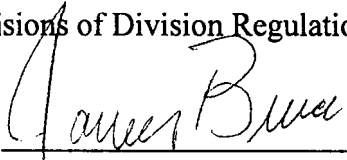
Case No. 20112

AFFIDAVIT OF NOTICE

COUNTY OF SANTA FE)
) ss.
STATE OF NEW MEXICO)

James Bruce, being duly sworn upon his oath, deposes and states:

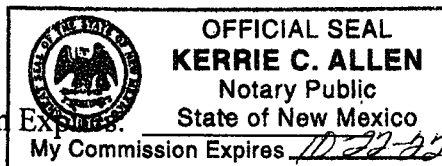
1. I am over the age of 18, and have personal knowledge of the matters stated herein.
2. I am an attorney for Mewbourne Oil Company.
3. Mewbourne Oil Company has conducted a good faith, diligent effort to find the names and correct addresses of the interest owners entitled to receive notice of the application filed herein.
4. Notice of the application 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 Regulations.

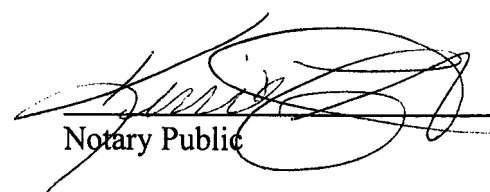


James Bruce

SUBSCRIBED AND SWORN TO before me this 9th day of January, 2019 by
James Bruce.

My Commission Expires





Notary Public

EXHIBIT

2

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)

jamesbruce@aol.com

December 19, 2018

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

To: Persons on Exhibit A

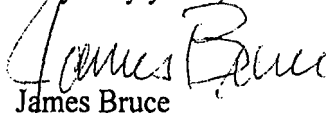
Ladies and gentlemen:

Enclosed is a copy of an application for compulsory pooling, filed with the New Mexico Oil Conservation Division by Mewbourne Oil Company, regarding two Wolfcamp wells in the E/2 of Section 1, Township 26 South, Range 29 East, NMPM and the E/2 of Section 36, Township 25 South, Range 29 East, NMPM, Eddy County, New Mexico.

This matter is scheduled for hearing at 8:15 a.m. on Thursday, January 10, 2019, in Porter Hall at the Division's offices at 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. You are not required to attend this hearing, but as an owner of an interest who may be affected by the application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from contesting this matter at a later date.

A party appearing in a Division case is required by Division Regulations to file a Pre-Hearing Statement no later than Thursday, January 3, 2019. This statement must be filed with the Division's Santa Fe office at the above address, and should include: The names of the party and his or her attorney; a concise statement of the case; the names of the witnesses the party will call to testify at the hearing; the approximate time the party will need to present its case; and identification of any procedural matters that need to be resolved prior to the hearing

Very truly yours,


James Bruce

Attorney for Mewbourne Oil Company

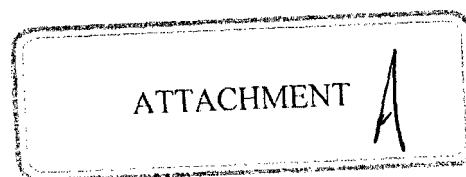


EXHIBIT A

EOG Y Resources, Inc.
EOG M Resources, Inc.
EOG A Resources, Inc.
5509 Champions Drive
Midland, Texas 79706

7018 1130 0001 5003 4332

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

- ☐ Return Receipt (hardcopy) \$ _____
- ☐ Return Receipt (electronic) \$ _____
- ☐ Certified Mail Restricted Delivery \$ _____
- ☐ Adult Signature Required \$ _____
- ☐ Adult Signature Restricted Delivery \$ _____

Postmark
Here

Postage

\$

Total Postage and Fees

\$

Sent To

Street and Apt. No., or PO Box

City, State, ZIP+4®

EOG Y Resources, Inc.
 EOG M Resources, Inc.
 EOG A Resources, Inc.
 5509 Champions Drive
 Midland, Texas 79706

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

**APPLICATION OF MEWBOURNE OIL COMPANY
FOR A COMPULSORY POOLING,
EDDY COUNTY, NEW MEXICO.**

Case No. 20112

VERIFIED STATEMENT OF TYLER HILL

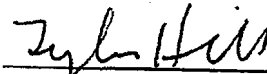
COUNTY OF MIDLAND)
) ss.
STATE OF TEXAS)

Tyler Hill, being duly sworn upon his oath, deposes and states:

1. I am over the age of 18, and have personal knowledge of the matters stated herein.
2. I am a geologist for Mewbourne Oil Company ("Mewbourne"), and I am familiar with the geological matters involved in this case. I have been qualified by the Division as an expert petroleum geologist.
3. The following geological plats are attached hereto:
 - (a) Attachment A is a structure map of the Wolfcamp formation, mapped on the top of the correlative Wolfcamp marker. It shows that structure dips to the east, and that the planned wellbores would drill along strike. It also shows a line of cross-section, A-A'.
 - (b) Attachment B is a north-south cross section. The well logs on the cross-section give a representative sample of the Wolfcamp formation in this area. The target zone for the wells is the Upper Wolfcamp Shale, and that zone is continuous across the well unit.
4. I conclude from the maps that:
 - (a) The horizontal spacing unit is justified from a geologic standpoint.
 - (b) Each quarter-quarter section in the unit will contribute more or less equally to production.
 - (c) There is no faulting or other geologic impediment on the area which will affect the drilling of the subject wells.
5. Attachment C contains information from other wells drilled in the immediate area. There are numerous upper Wolfcamp shale wells, and the preference is for standup units. The completed wells in the area are commercial.



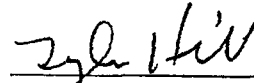
6. Attachment D is the Survey Calculation Report. The producing interval of the proposed well will be orthodox.


Tyler Hill

VERIFICATION

STATE OF TEXAS)
) ss.
COUNTY OF MIDLAND)

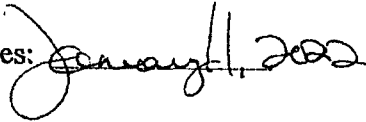
Tyler Hill, being duly sworn upon his oath, deposes and states that: He is a geologist for Mewbourne Oil Company; he is authorized to make this verification on its behalf; he has read the foregoing statement, and knows the contents thereof; and the same is true and correct to the best of his knowledge, information, and belief.



Tyler Hill

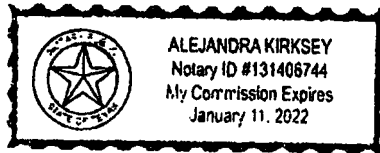
SUBSCRIBED AND SWORN TO before me this 9th day of January, 2019 by Tyler Hill.

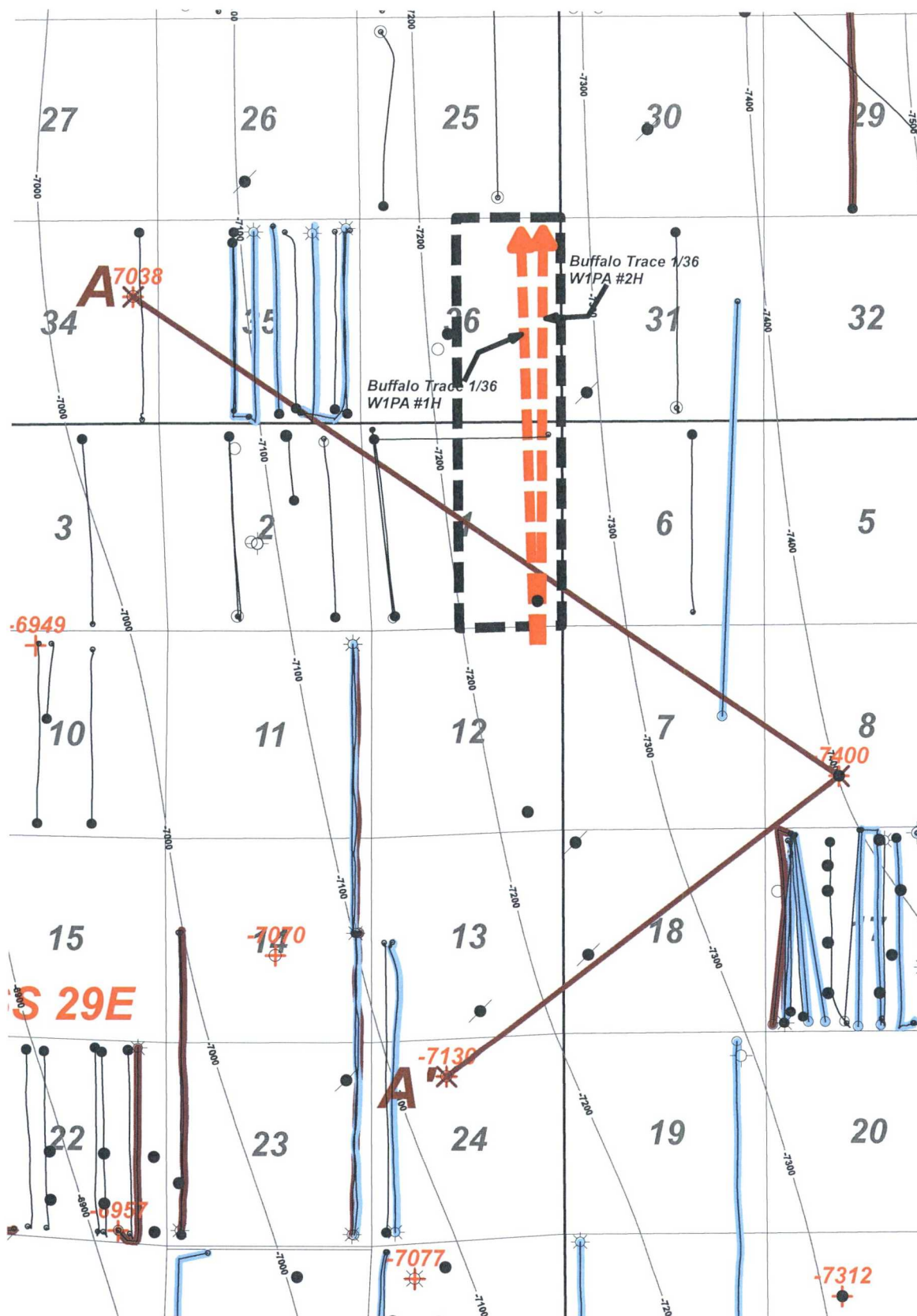
My Commission Expires:


January 11, 2022



Notary Public





A

ATTACHMENT



Horizontal Activity

- Wolfcamp A Shale
- Wolfcamp D Shale

1 inch = 4000 feet



Mewbourne Oil Company		
Buffalo Trace 1/36 WIPA Fed Com #1H Horizontal Activity Map Structure top WFMP (C.I. 100')		
Author: T. Hill	County: Eddy	Date: 4 January, 2019
Scale: 1.0"=4500'		

Buffalo Trace 1/36

A

A'

INEXCO
BISON WALLOW UNIT 1
C SE NE
Datum=3002.00
Reference=KB
TWP: 25 S - Range 29 E - Sec. 34

XTO ENERGY INC
YATES 8 FEDERAL 2
1347 FSU/1963 FWL
Datum=3084.00
Reference=KB
TWP: 26 S - Range 30 E - Sec. 8

FULLER PETROLEUM INC
BRUSHY DRW DEP FDR 1
990 FUL/1993 FWL
Datum=2995.00
Reference=KB
TWP: 26 S - Range 29 E - Sec. 24

34H

8N

24C

0 WFMP
WFMP Sd X
WFMP Sd Y
WFMP Sh A

WFMP 0
WFMP Sd X
WFMP Sd Y
WFMP Sh A

Buffalo Trace 1/36 W1PA Fed Com #1H

Buffalo Trace 1/36 W1PA Fed Com #2H

-500 WFMP Sh B

WFMP Sh B

WFMP Sh C

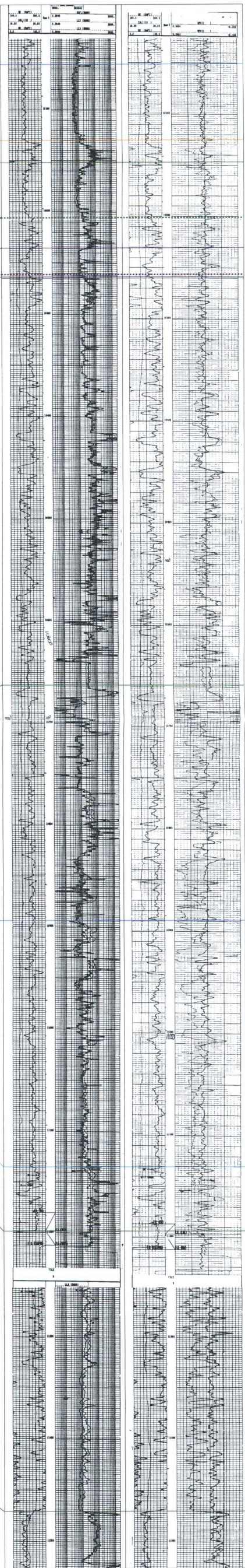
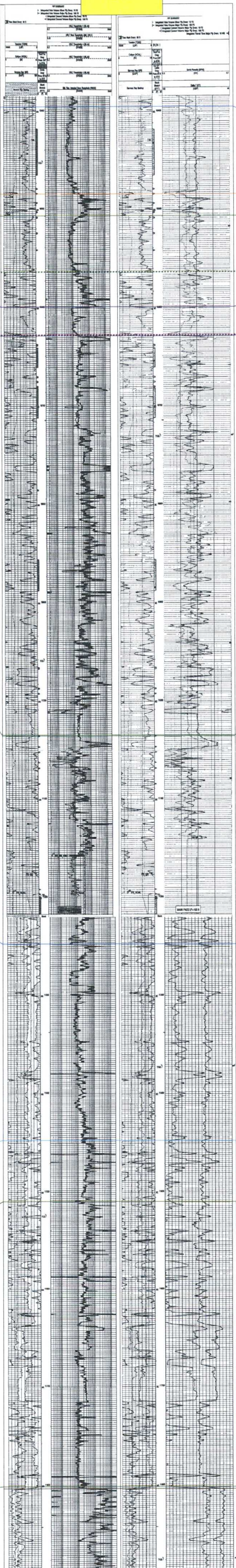
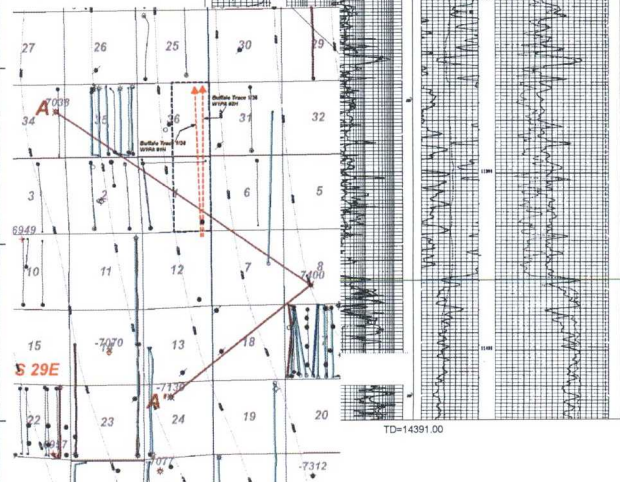
WFMP Sh C

-1000

WFMP Sh D

-1000

WFMP Sh D



Buffalo Trace 1/36 W1PA Fed Com #1
Buffalo Trace 1/36 W1PA Fed Com #2
Cross Section Exhibit (A-A')

ATTACHMENT

3



Mewbourne Oil Company

Eddy County, N.M. Nad (83)

Section 1-36-W1PA Fed Com 1H

Buffalo Trace 1 36 W1PA Fed Com 1H

Original Hole

Plan: Plan#2

Standard Planning Report - Geographic

18 December, 2018

ATTACHMENT

D

STRYKER
DIRECTIONAL

Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Buffalo Trace 1 36 W1PA Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	3042 + 27 @ 3069.0usft (Patterson 562)
Project:	Eddy County, N.M. Nad (83)	MD Reference:	3042 + 27 @ 3069.0usft (Patterson 562)
Site:	Section 1-36-W1PA Fed Com 1H	North Reference:	Grid
Well:	Buffalo Trace 1 36 W1PA Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#2		

Project	Eddy County, N.M. Nad (83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Section 1-36-W1PA Fed Com 1H		
Site Position:		Northing:	386,801.16 usft
From:	Map	Easting:	665,768.48 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 3' 45.935 N
		Longitude:	103° 55' 53.959 W
		Grid Convergence:	0.21 °

Well	Buffalo Trace 1 36 W1PA Fed Com 1H		
Well Position	+N/-S	0.0 usft	Northing: 386,801.16 usft
	+E/-W	0.0 usft	Easting: 665,768.48 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	27.0 usft
		Latitude:	32° 3' 45.935 N
		Longitude:	103° 55' 53.959 W
		Ground Level:	3,042.0 usft

Wellbore	Original Hole		
-----------------	---------------	--	--

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/12/18	6.95	59.84	47,654.58339628

Design	Plan#2		
---------------	--------	--	--

Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	27.0	0.0	0.0	358.43

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	
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,643.0	3.65	322.21	3,642.9	6.1	-4.7	1.50	1.50	0.00	322.21	
9,569.3	3.65	322.21	9,557.1	303.9	-235.7	0.00	0.00	0.00	0.00	
9,812.3	0.00	0.00	9,800.0	310.0	-240.4	1.50	-1.50	0.00	180.00	B.B.2 Buffalo Trace
9,928.3	0.00	0.00	9,916.0	310.0	-240.4	0.00	0.00	0.00	0.00	
10,828.3	90.00	359.69	10,489.0	882.9	-243.5	10.00	10.00	-0.03	359.69	
20,829.5	90.00	359.69	10,489.0	10,883.9	-297.6	0.00	0.00	0.00	0.00	PBHL Buffalo Trace

Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Buffalo Trace 1 36 W1PA Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	3042 + 27 @ 3069.0usft (Patterson 562)
Project:	Eddy County, N.M. Nad (83)	MD Reference:	3042 + 27 @ 3069.0usft (Patterson 562)
Site:	Section 1-36-W1PA Fed Com 1H	North Reference:	Grid
Well:	Buffalo Trace 1 36 W1PA Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
100.0	0.00	0.00	100.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
200.0	0.00	0.00	200.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
300.0	0.00	0.00	300.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
400.0	0.00	0.00	400.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
500.0	0.00	0.00	500.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
600.0	0.00	0.00	600.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
700.0	0.00	0.00	700.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
800.0	0.00	0.00	800.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
900.0	0.00	0.00	900.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
2,400.0	0.00	0.00	2,400.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
2,700.0	0.00	0.00	2,700.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
3,400.0	0.00	0.00	3,400.0	0.0	0.0	386,801.16	665,768.48	32° 3' 45.935 N	103° 55' 53.959 W	
3,500.0	1.50	322.21	3,500.0	1.0	-0.8	386,802.20	665,767.68	32° 3' 45.945 N	103° 55' 53.968 W	
3,600.0	3.00	322.21	3,599.9	4.1	-3.2	386,805.30	665,765.27	32° 3' 45.976 N	103° 55' 53.996 W	
3,643.0	3.65	322.21	3,642.9	6.1	-4.7	386,807.27	665,763.74	32° 3' 45.996 N	103° 55' 54.014 W	
3,700.0	3.65	322.21	3,699.7	9.0	-7.0	386,810.13	665,761.52	32° 3' 46.024 N	103° 55' 54.039 W	
3,800.0	3.65	322.21	3,799.5	14.0	-10.9	386,815.16	665,757.63	32° 3' 46.074 N	103° 55' 54.084 W	
3,900.0	3.65	322.21	3,899.3	19.0	-14.7	386,820.18	665,753.73	32° 3' 46.124 N	103° 55' 54.129 W	
4,000.0	3.65	322.21	3,999.1	24.0	-18.6	386,825.21	665,749.83	32° 3' 46.174 N	103° 55' 54.174 W	
4,100.0	3.65	322.21	4,098.9	29.1	-22.5	386,830.23	665,745.94	32° 3' 46.223 N	103° 55' 54.220 W	
4,200.0	3.65	322.21	4,198.7	34.1	-26.4	386,835.26	665,742.04	32° 3' 46.273 N	103° 55' 54.265 W	
4,300.0	3.65	322.21	4,298.5	39.1	-30.3	386,840.28	665,738.14	32° 3' 46.323 N	103° 55' 54.310 W	
4,400.0	3.65	322.21	4,398.3	44.1	-34.2	386,845.31	665,734.25	32° 3' 46.373 N	103° 55' 54.355 W	
4,500.0	3.65	322.21	4,498.1	49.2	-38.1	386,850.33	665,730.35	32° 3' 46.423 N	103° 55' 54.400 W	
4,600.0	3.65	322.21	4,597.9	54.2	-42.0	386,855.36	665,726.45	32° 3' 46.473 N	103° 55' 54.445 W	
4,700.0	3.65	322.21	4,697.7	59.2	-45.9	386,860.38	665,722.56	32° 3' 46.523 N	103° 55' 54.490 W	
4,800.0	3.65	322.21	4,797.5	64.2	-49.8	386,865.41	665,718.66	32° 3' 46.573 N	103° 55' 54.535 W	
4,900.0	3.65	322.21	4,897.3	69.3	-53.7	386,870.43	665,714.76	32° 3' 46.622 N	103° 55' 54.580 W	
5,000.0	3.65	322.21	4,997.1	74.3	-57.6	386,875.46	665,710.87	32° 3' 46.672 N	103° 55' 54.625 W	
5,100.0	3.65	322.21	5,096.9	79.3	-61.5	386,880.48	665,706.97	32° 3' 46.722 N	103° 55' 54.670 W	
5,200.0	3.65	322.21	5,196.7	84.3	-65.4	386,885.51	665,703.07	32° 3' 46.772 N	103° 55' 54.715 W	
5,300.0	3.65	322.21	5,296.5	89.4	-69.3	386,890.53	665,699.18	32° 3' 46.822 N	103° 55' 54.760 W	

Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Buffalo Trace 1 36 W1PA Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	3042 + 27 @ 3069.0usft (Patterson 562)
Project:	Eddy County, N.M. Nad (83)	MD Reference:	3042 + 27 @ 3069.0usft (Patterson 562)
Site:	Section 1-36-W1PA Fed Com 1H	North Reference:	Grid
Well:	Buffalo Trace 1 36 W1PA Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,400.0	3.65	322.21	5,396.3	94.4	-73.2	386,895.56	665,695.28	32° 3' 46.872 N	103° 55' 54.805 W
5,500.0	3.65	322.21	5,496.1	99.4	-77.1	386,900.58	665,691.38	32° 3' 46.922 N	103° 55' 54.850 W
5,600.0	3.65	322.21	5,595.9	104.4	-81.0	386,905.61	665,687.49	32° 3' 46.972 N	103° 55' 54.896 W
5,700.0	3.65	322.21	5,695.7	109.5	-84.9	386,910.63	665,683.59	32° 3' 47.021 N	103° 55' 54.941 W
5,800.0	3.65	322.21	5,795.5	114.5	-88.8	386,915.66	665,679.69	32° 3' 47.071 N	103° 55' 54.986 W
5,900.0	3.65	322.21	5,895.3	119.5	-92.7	386,920.68	665,675.80	32° 3' 47.121 N	103° 55' 55.031 W
6,000.0	3.65	322.21	5,995.1	124.5	-96.6	386,925.71	665,671.90	32° 3' 47.171 N	103° 55' 55.076 W
6,100.0	3.65	322.21	6,094.9	129.6	-100.5	386,930.73	665,668.00	32° 3' 47.221 N	103° 55' 55.121 W
6,200.0	3.65	322.21	6,194.7	134.6	-104.4	386,935.75	665,664.11	32° 3' 47.271 N	103° 55' 55.166 W
6,300.0	3.65	322.21	6,294.5	139.6	-108.3	386,940.78	665,660.21	32° 3' 47.321 N	103° 55' 55.211 W
6,400.0	3.65	322.21	6,394.3	144.6	-112.2	386,945.80	665,656.31	32° 3' 47.370 N	103° 55' 55.256 W
6,500.0	3.65	322.21	6,494.1	149.7	-116.1	386,950.83	665,652.42	32° 3' 47.420 N	103° 55' 55.301 W
6,600.0	3.65	322.21	6,593.9	154.7	-120.0	386,955.85	665,648.52	32° 3' 47.470 N	103° 55' 55.346 W
6,700.0	3.65	322.21	6,693.6	159.7	-123.9	386,960.88	665,644.62	32° 3' 47.520 N	103° 55' 55.391 W
6,800.0	3.65	322.21	6,793.4	164.7	-127.8	386,965.90	665,640.73	32° 3' 47.570 N	103° 55' 55.436 W
6,900.0	3.65	322.21	6,893.2	169.8	-131.6	386,970.93	665,636.83	32° 3' 47.620 N	103° 55' 55.481 W
7,000.0	3.65	322.21	6,993.0	174.8	-135.5	386,975.95	665,632.93	32° 3' 47.670 N	103° 55' 55.526 W
7,100.0	3.65	322.21	7,092.8	179.8	-139.4	386,980.98	665,629.04	32° 3' 47.720 N	103° 55' 55.572 W
7,200.0	3.65	322.21	7,192.6	184.8	-143.3	386,986.00	665,625.14	32° 3' 47.769 N	103° 55' 55.617 W
7,300.0	3.65	322.21	7,292.4	189.9	-147.2	386,991.03	665,621.24	32° 3' 47.819 N	103° 55' 55.662 W
7,400.0	3.65	322.21	7,392.2	194.9	-151.1	386,996.05	665,617.35	32° 3' 47.869 N	103° 55' 55.707 W
7,500.0	3.65	322.21	7,492.0	199.9	-155.0	387,001.08	665,613.45	32° 3' 47.919 N	103° 55' 55.752 W
7,600.0	3.65	322.21	7,591.8	204.9	-158.9	387,006.10	665,609.55	32° 3' 47.969 N	103° 55' 55.797 W
7,700.0	3.65	322.21	7,691.6	210.0	-162.8	387,011.13	665,605.66	32° 3' 48.019 N	103° 55' 55.842 W
7,800.0	3.65	322.21	7,791.4	215.0	-166.7	387,016.15	665,601.76	32° 3' 48.069 N	103° 55' 55.887 W
7,900.0	3.65	322.21	7,891.2	220.0	-170.6	387,021.18	665,597.86	32° 3' 48.119 N	103° 55' 55.932 W
8,000.0	3.65	322.21	7,991.0	225.0	-174.5	387,026.20	665,593.97	32° 3' 48.168 N	103° 55' 55.977 W
8,100.0	3.65	322.21	8,090.8	230.1	-178.4	387,031.23	665,590.07	32° 3' 48.218 N	103° 55' 56.022 W
8,200.0	3.65	322.21	8,190.6	235.1	-182.3	387,036.25	665,586.17	32° 3' 48.268 N	103° 55' 56.067 W
8,300.0	3.65	322.21	8,290.4	240.1	-186.2	387,041.28	665,582.28	32° 3' 48.318 N	103° 55' 56.112 W
8,400.0	3.65	322.21	8,390.2	245.1	-190.1	387,046.30	665,578.38	32° 3' 48.368 N	103° 55' 56.157 W
8,500.0	3.65	322.21	8,490.0	250.2	-194.0	387,051.33	665,574.48	32° 3' 48.418 N	103° 55' 56.202 W
8,600.0	3.65	322.21	8,589.8	255.2	-197.9	387,056.35	665,570.59	32° 3' 48.468 N	103° 55' 56.248 W
8,700.0	3.65	322.21	8,689.6	260.2	-201.8	387,061.38	665,566.69	32° 3' 48.517 N	103° 55' 56.293 W
8,800.0	3.65	322.21	8,789.4	265.2	-205.7	387,066.40	665,562.79	32° 3' 48.567 N	103° 55' 56.338 W
8,900.0	3.65	322.21	8,889.2	270.3	-209.6	387,071.43	665,558.90	32° 3' 48.617 N	103° 55' 56.383 W
9,000.0	3.65	322.21	8,989.0	275.3	-213.5	387,076.45	665,555.00	32° 3' 48.667 N	103° 55' 56.428 W
9,100.0	3.65	322.21	9,088.8	280.3	-217.4	387,081.48	665,551.10	32° 3' 48.717 N	103° 55' 56.473 W
9,200.0	3.65	322.21	9,188.6	285.3	-221.3	387,086.50	665,547.21	32° 3' 48.767 N	103° 55' 56.518 W
9,300.0	3.65	322.21	9,288.4	290.4	-225.2	387,091.52	665,543.31	32° 3' 48.817 N	103° 55' 56.563 W
9,400.0	3.65	322.21	9,388.2	295.4	-229.1	387,096.55	665,539.41	32° 3' 48.867 N	103° 55' 56.608 W
9,500.0	3.65	322.21	9,488.0	300.4	-233.0	387,101.57	665,535.52	32° 3' 48.916 N	103° 55' 56.653 W
9,569.3	3.65	322.21	9,557.1	303.9	-235.7	387,105.06	665,532.82	32° 3' 48.951 N	103° 55' 56.684 W
9,600.0	3.18	322.21	9,587.8	305.3	-236.8	387,106.50	665,531.70	32° 3' 48.965 N	103° 55' 56.697 W
9,700.0	1.68	322.21	9,687.7	308.7	-239.4	387,109.86	665,529.09	32° 3' 48.999 N	103° 55' 56.727 W
9,800.0	0.18	322.21	9,787.7	310.0	-240.4	387,111.15	665,528.09	32° 3' 49.011 N	103° 55' 56.739 W
9,812.3	0.00	0.00	9,800.0	310.0	-240.4	387,111.16	665,528.08	32° 3' 49.012 N	103° 55' 56.739 W
B.B.2 Buffalo Trace 1/36 W1PA Com 1H									
9,839.3	0.00	0.00	9,827.0	310.0	-240.4	387,111.16	665,528.08	32° 3' 49.012 N	103° 55' 56.739 W
B.B. Buffalo Trace 1/36 W1PA Fed Com 1H									
9,900.0	0.00	0.00	9,887.7	310.0	-240.4	387,111.16	665,528.08	32° 3' 49.012 N	103° 55' 56.739 W
9,928.3	0.00	0.00	9,916.0	310.0	-240.4	387,111.16	665,528.08	32° 3' 49.012 N	103° 55' 56.739 W
9,950.0	2.17	359.69	9,937.7	310.4	-240.4	387,111.57	665,528.08	32° 3' 49.016 N	103° 55' 56.739 W
10,000.0	7.17	359.69	9,987.5	314.5	-240.4	387,115.64	665,528.06	32° 3' 49.056 N	103° 55' 56.739 W

Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Buffalo Trace 1 36 W1PA Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	3042 + 27 @ 3069.0usft (Patterson 562)
Project:	Eddy County, N.M. Nad (83)	MD Reference:	3042 + 27 @ 3069.0usft (Patterson 562)
Site:	Section 1-36-W1PA Fed Com 1H	North Reference:	Grid
Well:	Buffalo Trace 1 36 W1PA Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,050.0	12.17	359.69	10,036.8	322.9	-240.5	387,124.03	665,528.01	32° 3' 49.139 N	103° 55' 56.739 W
10,100.0	17.17	359.69	10,085.1	335.5	-240.5	387,136.69	665,527.94	32° 3' 49.264 N	103° 55' 56.740 W
10,150.0	22.17	359.69	10,132.2	352.3	-240.6	387,153.51	665,527.85	32° 3' 49.431 N	103° 55' 56.740 W
10,200.0	27.17	359.69	10,177.6	373.2	-240.7	387,174.37	665,527.74	32° 3' 49.637 N	103° 55' 56.740 W
10,250.0	32.17	359.69	10,221.0	397.9	-240.9	387,199.11	665,527.61	32° 3' 49.882 N	103° 55' 56.741 W
10,300.0	37.17	359.69	10,262.2	426.4	-241.0	387,227.54	665,527.45	32° 3' 50.163 N	103° 55' 56.741 W
10,350.0	42.17	359.69	10,300.6	458.3	-241.2	387,259.45	665,527.28	32° 3' 50.479 N	103° 55' 56.742 W
10,400.0	47.17	359.69	10,336.2	493.4	-241.4	387,294.59	665,527.09	32° 3' 50.827 N	103° 55' 56.743 W
10,450.0	52.17	359.69	10,368.5	531.5	-241.6	387,332.69	665,526.88	32° 3' 51.204 N	103° 55' 56.744 W
10,500.0	57.17	359.69	10,397.4	572.3	-241.8	387,373.46	665,526.66	32° 3' 51.607 N	103° 55' 56.744 W
10,550.0	62.17	359.69	10,422.7	615.4	-242.1	387,416.61	665,526.43	32° 3' 52.034 N	103° 55' 56.745 W
10,600.0	67.17	359.69	10,444.1	660.6	-242.3	387,461.78	665,526.18	32° 3' 52.481 N	103° 55' 56.746 W
10,650.0	72.17	359.69	10,461.4	707.5	-242.5	387,508.65	665,525.93	32° 3' 52.945 N	103° 55' 56.747 W
10,700.0	77.17	359.69	10,474.7	755.7	-242.8	387,556.86	665,525.67	32° 3' 53.422 N	103° 55' 56.748 W
10,750.0	82.17	359.69	10,483.6	804.9	-243.1	387,606.03	665,525.40	32° 3' 53.909 N	103° 55' 56.749 W
10,800.0	87.17	359.69	10,488.3	854.6	-243.3	387,655.80	665,525.14	32° 3' 54.401 N	103° 55' 56.750 W
10,828.3	90.00	359.69	10,489.0	882.9	-243.5	387,684.11	665,524.98	32° 3' 54.682 N	103° 55' 56.750 W
10,845.2	90.00	359.69	10,489.0	899.8	-243.6	387,701.00	665,524.89	32° 3' 54.849 N	103° 55' 56.751 W
LP Buffalo Trace 1/36 W1PA Fed Com 1H									
10,900.0	90.00	359.69	10,489.0	954.6	-243.9	387,755.78	665,524.59	32° 3' 55.391 N	103° 55' 56.752 W
11,000.0	90.00	359.69	10,489.0	1,054.6	-244.4	387,855.78	665,524.05	32° 3' 56.381 N	103° 55' 56.754 W
11,100.0	90.00	359.69	10,489.0	1,154.6	-245.0	387,955.78	665,523.51	32° 3' 57.370 N	103° 55' 56.756 W
11,200.0	90.00	359.69	10,489.0	1,254.6	-245.5	388,055.78	665,522.97	32° 3' 58.360 N	103° 55' 56.758 W
11,300.0	90.00	359.69	10,489.0	1,354.6	-246.0	388,155.78	665,522.43	32° 3' 59.349 N	103° 55' 56.760 W
11,400.0	90.00	359.69	10,489.0	1,454.6	-246.6	388,255.78	665,521.89	32° 4' 0.339 N	103° 55' 56.762 W
11,500.0	90.00	359.69	10,489.0	1,554.6	-247.1	388,355.77	665,521.35	32° 4' 1.329 N	103° 55' 56.764 W
11,600.0	90.00	359.69	10,489.0	1,654.6	-247.7	388,455.77	665,520.81	32° 4' 2.318 N	103° 55' 56.766 W
11,700.0	90.00	359.69	10,489.0	1,754.6	-248.2	388,555.77	665,520.27	32° 4' 3.308 N	103° 55' 56.768 W
11,800.0	90.00	359.69	10,489.0	1,854.6	-248.8	388,655.77	665,519.73	32° 4' 4.297 N	103° 55' 56.770 W
11,900.0	90.00	359.69	10,489.0	1,954.6	-249.3	388,755.77	665,519.19	32° 4' 5.287 N	103° 55' 56.771 W
12,000.0	90.00	359.69	10,489.0	2,054.6	-249.8	388,855.77	665,518.65	32° 4' 6.277 N	103° 55' 56.773 W
12,100.0	90.00	359.69	10,489.0	2,154.6	-250.4	388,955.76	665,518.11	32° 4' 7.266 N	103° 55' 56.775 W
12,200.0	90.00	359.69	10,489.0	2,254.6	-250.9	389,055.76	665,517.57	32° 4' 8.256 N	103° 55' 56.777 W
12,300.0	90.00	359.69	10,489.0	2,354.6	-251.5	389,155.76	665,517.02	32° 4' 9.245 N	103° 55' 56.779 W
12,400.0	90.00	359.69	10,489.0	2,454.6	-252.0	389,255.76	665,516.48	32° 4' 10.235 N	103° 55' 56.781 W
12,500.0	90.00	359.69	10,489.0	2,554.6	-252.5	389,355.76	665,515.94	32° 4' 11.225 N	103° 55' 56.783 W
12,600.0	90.00	359.69	10,489.0	2,654.6	-253.1	389,455.76	665,515.40	32° 4' 12.214 N	103° 55' 56.785 W
12,700.0	90.00	359.69	10,489.0	2,754.6	-253.6	389,555.76	665,514.86	32° 4' 13.204 N	103° 55' 56.787 W
12,800.0	90.00	359.69	10,489.0	2,854.6	-254.2	389,655.75	665,514.32	32° 4' 14.194 N	103° 55' 56.789 W
12,900.0	90.00	359.69	10,489.0	2,954.6	-254.7	389,755.75	665,513.78	32° 4' 15.183 N	103° 55' 56.791 W
13,000.0	90.00	359.69	10,489.0	3,054.6	-255.2	389,855.75	665,513.24	32° 4' 16.173 N	103° 55' 56.793 W
13,100.0	90.00	359.69	10,489.0	3,154.6	-255.8	389,955.75	665,512.70	32° 4' 17.162 N	103° 55' 56.795 W
13,200.0	90.00	359.69	10,489.0	3,254.6	-256.3	390,055.75	665,512.16	32° 4' 18.152 N	103° 55' 56.797 W
13,300.0	90.00	359.69	10,489.0	3,354.6	-256.9	390,155.75	665,511.62	32° 4' 19.142 N	103° 55' 56.799 W
13,400.0	90.00	359.69	10,489.0	3,454.6	-257.4	390,255.75	665,511.08	32° 4' 20.131 N	103° 55' 56.801 W
13,500.0	90.00	359.69	10,489.0	3,554.6	-257.9	390,355.74	665,510.54	32° 4' 21.121 N	103° 55' 56.803 W
13,600.0	90.00	359.69	10,489.0	3,654.6	-258.5	390,455.74	665,510.00	32° 4' 22.110 N	103° 55' 56.805 W
13,700.0	90.00	359.69	10,489.0	3,754.6	-259.0	390,555.74	665,509.45	32° 4' 23.100 N	103° 55' 56.807 W
13,800.0	90.00	359.69	10,489.0	3,854.6	-259.6	390,655.74	665,508.91	32° 4' 24.090 N	103° 55' 56.809 W
13,900.0	90.00	359.69	10,489.0	3,954.6	-260.1	390,755.74	665,508.37	32° 4' 25.079 N	103° 55' 56.811 W
14,000.0	90.00	359.69	10,489.0	4,054.6	-260.6	390,855.74	665,507.83	32° 4' 26.069 N	103° 55' 56.813 W
14,100.0	90.00	359.69	10,489.0	4,154.6	-261.2	390,955.74	665,507.29	32° 4' 27.058 N	103° 55' 56.815 W
14,200.0	90.00	359.69	10,489.0	4,254.6	-261.7	391,055.73	665,506.75	32° 4' 28.048 N	103° 55' 56.817 W
14,300.0	90.00	359.69	10,489.0	4,354.6	-262.3	391,155.73	665,506.21	32° 4' 29.038 N	103° 55' 56.819 W

Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Buffalo Trace 1 36 W1PA Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	3042 + 27 @ 3069.0usft (Patterson 562)
Project:	Eddy County, N.M. Nad (83)	MD Reference:	3042 + 27 @ 3069.0usft (Patterson 562)
Site:	Section 1-36-W1PA Fed Com 1H	North Reference:	Grid
Well:	Buffalo Trace 1 36 W1PA Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
14,400.0	90.00	359.69	10,489.0	4,454.6	-262.8	391,255.73	665,505.67	32° 4' 30.027 N	103° 55' 56.821 W
14,500.0	90.00	359.69	10,489.0	4,554.6	-263.4	391,355.73	665,505.13	32° 4' 31.017 N	103° 55' 56.823 W
14,600.0	90.00	359.69	10,489.0	4,654.6	-263.9	391,455.73	665,504.59	32° 4' 32.007 N	103° 55' 56.825 W
14,700.0	90.00	359.69	10,489.0	4,754.6	-264.4	391,555.73	665,504.05	32° 4' 32.996 N	103° 55' 56.827 W
14,800.0	90.00	359.69	10,489.0	4,854.6	-265.0	391,655.73	665,503.51	32° 4' 33.986 N	103° 55' 56.829 W
14,900.0	90.00	359.69	10,489.0	4,954.6	-265.5	391,755.72	665,502.97	32° 4' 34.975 N	103° 55' 56.830 W
15,000.0	90.00	359.69	10,489.0	5,054.6	-266.1	391,855.72	665,502.43	32° 4' 35.965 N	103° 55' 56.832 W
15,100.0	90.00	359.69	10,489.0	5,154.6	-266.6	391,955.72	665,501.88	32° 4' 36.955 N	103° 55' 56.834 W
15,200.0	90.00	359.69	10,489.0	5,254.6	-267.1	392,055.72	665,501.34	32° 4' 37.944 N	103° 55' 56.836 W
15,300.0	90.00	359.69	10,489.0	5,354.6	-267.7	392,155.72	665,500.80	32° 4' 38.934 N	103° 55' 56.838 W
15,400.0	90.00	359.69	10,489.0	5,454.6	-268.2	392,255.72	665,500.26	32° 4' 39.923 N	103° 55' 56.840 W
15,500.0	90.00	359.69	10,489.0	5,554.6	-268.8	392,355.72	665,499.72	32° 4' 40.913 N	103° 55' 56.842 W
15,600.0	90.00	359.69	10,489.0	5,654.5	-269.3	392,455.71	665,499.18	32° 4' 41.903 N	103° 55' 56.844 W
15,700.0	90.00	359.69	10,489.0	5,754.5	-269.8	392,555.71	665,498.64	32° 4' 42.892 N	103° 55' 56.846 W
15,800.0	90.00	359.69	10,489.0	5,854.5	-270.4	392,655.71	665,498.10	32° 4' 43.882 N	103° 55' 56.848 W
15,900.0	90.00	359.69	10,489.0	5,954.5	-270.9	392,755.71	665,497.56	32° 4' 44.871 N	103° 55' 56.850 W
16,000.0	90.00	359.69	10,489.0	6,054.5	-271.5	392,855.71	665,497.02	32° 4' 45.861 N	103° 55' 56.852 W
16,100.0	90.00	359.69	10,489.0	6,154.5	-272.0	392,955.71	665,496.48	32° 4' 46.851 N	103° 55' 56.854 W
16,200.0	90.00	359.69	10,489.0	6,254.5	-272.5	393,055.70	665,495.94	32° 4' 47.840 N	103° 55' 56.856 W
16,300.0	90.00	359.69	10,489.0	6,354.5	-273.1	393,155.70	665,495.40	32° 4' 48.830 N	103° 55' 56.858 W
16,400.0	90.00	359.69	10,489.0	6,454.5	-273.6	393,255.70	665,494.86	32° 4' 49.820 N	103° 55' 56.860 W
16,500.0	90.00	359.69	10,489.0	6,554.5	-274.2	393,355.70	665,494.31	32° 4' 50.809 N	103° 55' 56.862 W
16,600.0	90.00	359.69	10,489.0	6,654.5	-274.7	393,455.70	665,493.77	32° 4' 51.799 N	103° 55' 56.864 W
16,700.0	90.00	359.69	10,489.0	6,754.5	-275.2	393,555.70	665,493.23	32° 4' 52.788 N	103° 55' 56.866 W
16,800.0	90.00	359.69	10,489.0	6,854.5	-275.8	393,655.70	665,492.69	32° 4' 53.778 N	103° 55' 56.868 W
16,900.0	90.00	359.69	10,489.0	6,954.5	-276.3	393,755.69	665,492.15	32° 4' 54.768 N	103° 55' 56.870 W
17,000.0	90.00	359.69	10,489.0	7,054.5	-276.9	393,855.69	665,491.61	32° 4' 55.757 N	103° 55' 56.872 W
17,100.0	90.00	359.69	10,489.0	7,154.5	-277.4	393,955.69	665,491.07	32° 4' 56.747 N	103° 55' 56.874 W
17,200.0	90.00	359.69	10,489.0	7,254.5	-278.0	394,055.69	665,490.53	32° 4' 57.736 N	103° 55' 56.876 W
17,300.0	90.00	359.69	10,489.0	7,354.5	-278.5	394,155.69	665,489.99	32° 4' 58.726 N	103° 55' 56.878 W
17,400.0	90.00	359.69	10,489.0	7,454.5	-279.0	394,255.69	665,489.45	32° 4' 59.716 N	103° 55' 56.880 W
17,500.0	90.00	359.69	10,489.0	7,554.5	-279.6	394,355.69	665,488.91	32° 5' 0.705 N	103° 55' 56.882 W
17,600.0	90.00	359.69	10,489.0	7,654.5	-280.1	394,455.68	665,488.37	32° 5' 1.695 N	103° 55' 56.884 W
17,700.0	90.00	359.69	10,489.0	7,754.5	-280.7	394,555.68	665,487.83	32° 5' 2.684 N	103° 55' 56.886 W
17,800.0	90.00	359.69	10,489.0	7,854.5	-281.2	394,655.68	665,487.29	32° 5' 3.674 N	103° 55' 56.887 W
17,900.0	90.00	359.69	10,489.0	7,954.5	-281.7	394,755.68	665,486.74	32° 5' 4.664 N	103° 55' 56.889 W
18,000.0	90.00	359.69	10,489.0	8,054.5	-282.3	394,855.68	665,486.20	32° 5' 5.653 N	103° 55' 56.891 W
18,100.0	90.00	359.69	10,489.0	8,154.5	-282.8	394,955.68	665,485.66	32° 5' 6.643 N	103° 55' 56.893 W
18,200.0	90.00	359.69	10,489.0	8,254.5	-283.4	395,055.68	665,485.12	32° 5' 7.633 N	103° 55' 56.895 W
18,300.0	90.00	359.69	10,489.0	8,354.5	-283.9	395,155.67	665,484.58	32° 5' 8.622 N	103° 55' 56.897 W
18,400.0	90.00	359.69	10,489.0	8,454.5	-284.4	395,255.67	665,484.04	32° 5' 9.612 N	103° 55' 56.899 W
18,500.0	90.00	359.69	10,489.0	8,554.5	-285.0	395,355.67	665,483.50	32° 5' 10.601 N	103° 55' 56.901 W
18,600.0	90.00	359.69	10,489.0	8,654.5	-285.5	395,455.67	665,482.96	32° 5' 11.591 N	103° 55' 56.903 W
18,700.0	90.00	359.69	10,489.0	8,754.5	-286.1	395,555.67	665,482.42	32° 5' 12.581 N	103° 55' 56.905 W
18,800.0	90.00	359.69	10,489.0	8,854.5	-286.6	395,655.67	665,481.88	32° 5' 13.570 N	103° 55' 56.907 W
18,900.0	90.00	359.69	10,489.0	8,954.5	-287.1	395,755.67	665,481.34	32° 5' 14.560 N	103° 55' 56.909 W
19,000.0	90.00	359.69	10,489.0	9,054.5	-287.7	395,855.66	665,480.80	32° 5' 15.549 N	103° 55' 56.911 W
19,100.0	90.00	359.69	10,489.0	9,154.5	-288.2	395,955.66	665,480.26	32° 5' 16.539 N	103° 55' 56.913 W
19,200.0	90.00	359.69	10,489.0	9,254.5	-288.8	396,055.66	665,479.72	32° 5' 17.529 N	103° 55' 56.915 W
19,300.0	90.00	359.69	10,489.0	9,354.5	-289.3	396,155.66	665,479.17	32° 5' 18.518 N	103° 55' 56.917 W
19,400.0	90.00	359.69	10,489.0	9,454.5	-289.8	396,255.66	665,478.63	32° 5' 19.508 N	103° 55' 56.919 W
19,500.0	90.00	359.69	10,489.0	9,554.5	-290.4	396,355.66	665,478.09	32° 5' 20.497 N	103° 55' 56.921 W
19,600.0	90.00	359.69	10,489.0	9,654.5	-290.9	396,455.66	665,477.55	32° 5' 21.487 N	103° 55' 56.923 W
19,700.0	90.00	359.69	10,489.0	9,754.5	-291.5	396,555.65	665,477.01	32° 5' 22.477 N	103° 55' 56.925 W
19,800.0	90.00	359.69	10,489.0	9,854.5	-292.0	396,655.65	665,476.47	32° 5' 23.466 N	103° 55' 56.927 W

Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Buffalo Trace 1 36 W1PA Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	3042 + 27 @ 3069.0usft (Patterson 562)
Project:	Eddy County, N.M. Nad (83)	MD Reference:	3042 + 27 @ 3069.0usft (Patterson 562)
Site:	Section 1-36-W1PA Fed Com 1H	North Reference:	Grid
Well:	Buffalo Trace 1 36 W1PA Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
19,900.0	90.00	359.69	10,489.0	9,954.5	-292.5	396,755.65	665,475.93	32° 5' 24.456 N	103° 55' 56.929 W
20,000.0	90.00	359.69	10,489.0	10,054.5	-293.1	396,855.65	665,475.39	32° 5' 25.445 N	103° 55' 56.931 W
20,100.0	90.00	359.69	10,489.0	10,154.5	-293.6	396,955.65	665,474.85	32° 5' 26.435 N	103° 55' 56.933 W
20,200.0	90.00	359.69	10,489.0	10,254.5	-294.2	397,055.65	665,474.31	32° 5' 27.425 N	103° 55' 56.935 W
20,300.0	90.00	359.69	10,489.0	10,354.5	-294.7	397,155.65	665,473.77	32° 5' 28.414 N	103° 55' 56.937 W
20,400.0	90.00	359.69	10,489.0	10,454.5	-295.3	397,255.64	665,473.23	32° 5' 29.404 N	103° 55' 56.939 W
20,500.0	90.00	359.69	10,489.0	10,554.5	-295.8	397,355.64	665,472.69	32° 5' 30.394 N	103° 55' 56.941 W
20,600.0	90.00	359.69	10,489.0	10,654.5	-296.3	397,455.64	665,472.15	32° 5' 31.383 N	103° 55' 56.943 W
20,700.0	90.00	359.69	10,489.0	10,754.5	-296.9	397,555.64	665,471.60	32° 5' 32.373 N	103° 55' 56.944 W
20,800.0	90.00	359.69	10,489.0	10,854.5	-297.4	397,655.64	665,471.06	32° 5' 33.362 N	103° 55' 56.946 W
20,829.5	90.00	359.69	10,489.0	10,883.9	-297.6	397,685.10	665,470.90	32° 5' 33.654 N	103° 55' 56.947 W
PBHL Buffalo Trace 1 36 W1PA Fed Com 1H									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
B.B.2 Buffalo Trace 1	0.00	0.00	9,800.0	310.0	-240.4	387,111.16	665,528.08	32° 3' 49.012 N	103° 55' 56.739 W
- plan hits target center									
- Point									
B.B. Buffalo Trace 1/3	0.00	0.00	9,827.0	84.7	-240.4	386,885.88	665,528.11	32° 3' 46.782 N	103° 55' 56.749 W
- plan misses target center by 225.3usft at 9839.3usft MD (9827.0 TVD, 310.0 N, -240.4 E)									
- Point									
LP Buffalo Trace 1/36	0.00	0.00	10,489.0	899.8	-243.9	387,701.00	665,524.55	32° 3' 54.849 N	103° 55' 56.755 W
- plan misses target center by 0.3usft at 10845.2usft MD (10489.0 TVD, 899.8 N, -243.6 E)									
- Point									
PBHL Buffalo Trace 1	0.00	0.00	10,489.0	10,883.9	-297.6	397,685.10	665,470.90	32° 5' 33.654 N	103° 55' 56.947 W
- plan hits target center									
- Point									



COMPANY: Mewbourne Oil Company
 WELL: Buffalo Trace 1 36 W1PA Fed Com 1H
 COUNTY: Eddy County, N.M. Nad (83)
 DATUM: North American Datum 1983
 RIG: Patterson 562

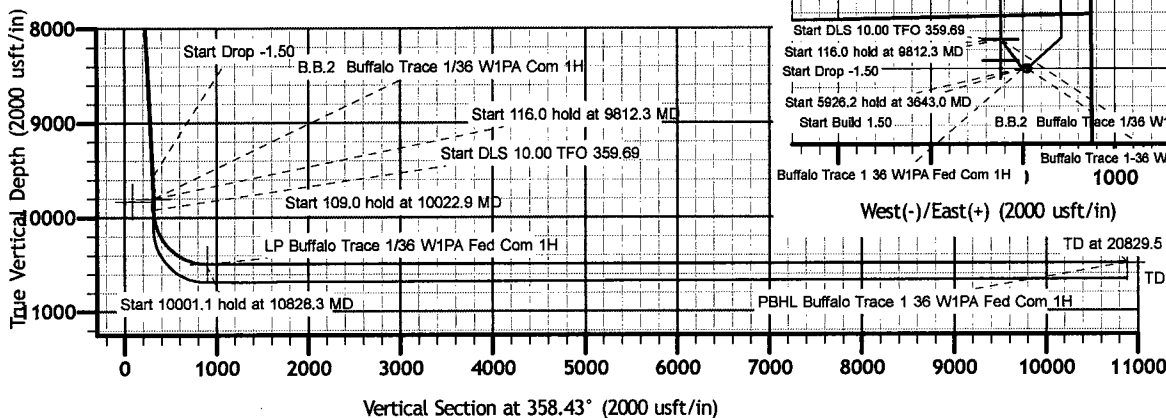
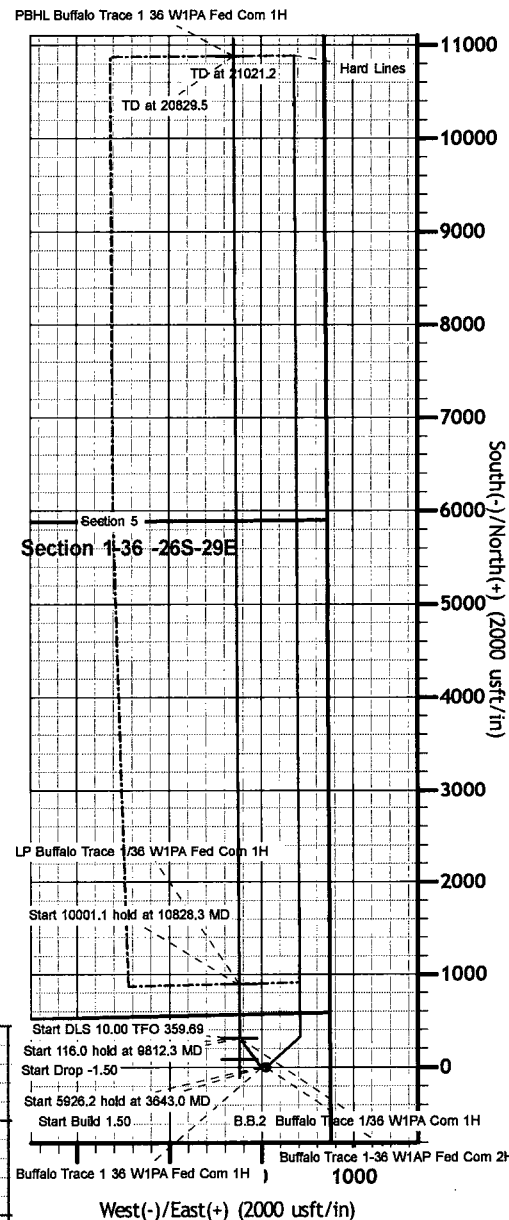
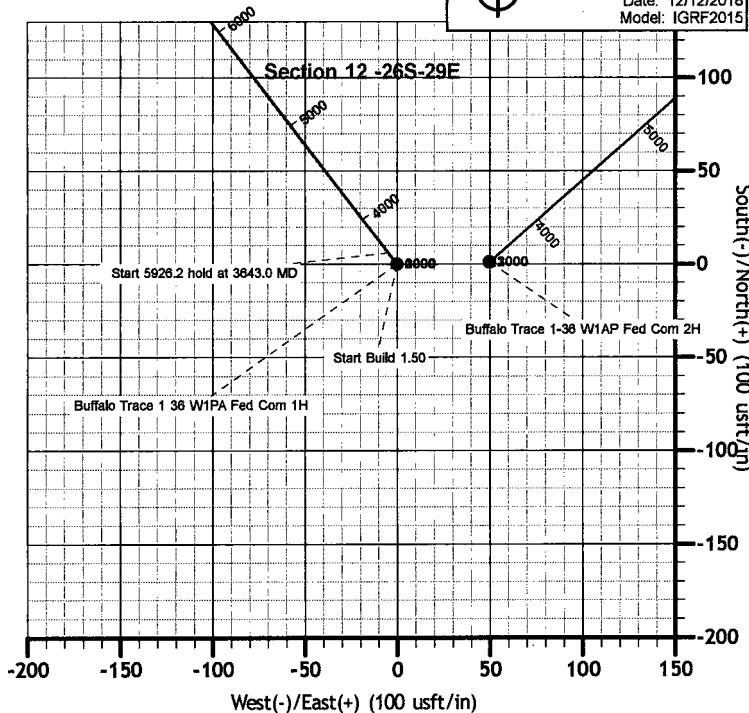
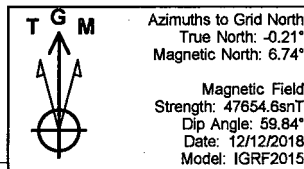


OFFICE: 936.582.7296

GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 6.73°

GEODETIC ZONE: New Mexico Eastern Zone										
3042 + 27 @ 3069.0usft (Patterson 562)										
GROUND ELEVATION: 3042.0										
	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot			
	0.0	0.0	386801.17	665768.48	32° 3' 45.935 N	103° 55' 53.959 W				
PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3400.0	0.00	0.00	3400.0	0.0	0.0	0.00	0.00	0.0	
3	3643.0	3.65	322.21	3642.9	6.1	-4.7	1.50	322.21	6.2	
4	9569.3	3.65	322.21	9557.1	303.9	-235.7	0.00	0.00	310.2	
5	9812.3	0.00	0.00	9800.0	310.0	-240.4	1.50	180.00	316.5	B.B.2 Buffalo Trace 1/36 W1PA Com 1H
6	9928.3	0.00	0.00	9916.0	310.0	-240.4	0.00	0.00	316.5	
7	10828.3	90.00	359.69	10489.0	882.9	-243.5	10.00	359.69	889.3	
8	20829.5	90.00	359.69	10489.0	10883.9	-297.6	0.00	0.00	10888.0	PBHL Buffalo Trace 1 36 W1PA Fed Com 1H

SHL: 575 FNL; 750' FEL
 Section 12-26S-29E
 PBHL: 330' FNL; 990' FEL
 Section 36-26S-29E





MEWBOURNE
OIL COMPANY

Mewbourne Oil Company

Eddy County, N.M. Nad (83)

Section 1-36 -26S-29E Buffalo Trace 1 36 W1AP Fed

Buffalo Trace 1-36 W1AP Fed Com 2H

Original Hole

Plan: Plan#2

Standard Planning Report

18 December, 2018

STRYKER
DIRECTIONAL

Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Buffalo Trace 1-36 W1AP Fed Com 2H
Company:	Mewbourne Oil Company	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Project:	Eddy County, N.M. Nad (83)	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1AP Fed	North Reference:	Grid
Well:	Buffalo Trace 1-36 W1AP Fed Com 2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	1.50	48.67	3,500.0	0.9	1.0	0.9	1.50	1.50	0.00
3,600.0	3.00	48.67	3,599.9	3.5	3.9	3.6	1.50	1.50	0.00
3,697.7	4.47	48.67	3,697.4	7.7	8.7	7.9	1.50	1.50	0.00
3,700.0	4.47	48.67	3,699.7	7.8	8.8	8.0	0.00	0.00	0.00
3,800.0	4.47	48.67	3,799.4	12.9	14.7	13.3	0.00	0.00	0.00
3,900.0	4.47	48.67	3,899.1	18.1	20.5	18.6	0.00	0.00	0.00
4,000.0	4.47	48.67	3,998.8	23.2	26.4	23.9	0.00	0.00	0.00
4,100.0	4.47	48.67	4,098.5	28.3	32.2	29.3	0.00	0.00	0.00
4,200.0	4.47	48.67	4,198.2	33.5	38.1	34.6	0.00	0.00	0.00
4,300.0	4.47	48.67	4,297.9	38.6	43.9	39.9	0.00	0.00	0.00
4,400.0	4.47	48.67	4,397.6	43.8	49.8	45.2	0.00	0.00	0.00
4,500.0	4.47	48.67	4,497.3	48.9	55.6	50.5	0.00	0.00	0.00
4,600.0	4.47	48.67	4,597.0	54.0	61.5	55.8	0.00	0.00	0.00
4,700.0	4.47	48.67	4,696.7	59.2	67.3	61.1	0.00	0.00	0.00
4,800.0	4.47	48.67	4,796.4	64.3	73.2	66.4	0.00	0.00	0.00
4,900.0	4.47	48.67	4,896.0	69.5	79.0	71.7	0.00	0.00	0.00
5,000.0	4.47	48.67	4,995.7	74.6	84.9	77.0	0.00	0.00	0.00
5,100.0	4.47	48.67	5,095.4	79.8	90.7	82.3	0.00	0.00	0.00

Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Buffalo Trace 1-36 W1AP Fed Com 2H
Company:	Mewbourne Oil Company	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Project:	Eddy County, N.M. Nad (83)	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1AP Fed	North Reference:	Grid
Well:	Buffalo Trace 1-36 W1AP Fed Com 2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#2		

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)
B.B. 2 Buffalo Trace 1-36 W1AP Fed Com 2H									
10,100.0	0.00	0.00	10,081.1	325.0	369.6	335.5	0.00	0.00	0.00
10,127.9	0.00	0.00	10,109.0	325.0	369.6	335.5	0.00	0.00	0.00
10,150.0	2.21	359.69	10,131.1	325.4	369.6	335.9	10.00	10.00	0.00
10,200.0	7.21	359.69	10,180.9	329.5	369.6	340.0	10.00	10.00	0.00
10,250.0	12.21	359.69	10,230.2	338.0	369.5	348.4	10.00	10.00	0.00
10,300.0	17.21	359.69	10,278.5	350.6	369.5	361.1	10.00	10.00	0.00
10,350.0	22.21	359.69	10,325.6	367.5	369.4	377.9	10.00	10.00	0.00
10,400.0	27.21	359.69	10,371.0	388.4	369.3	398.8	10.00	10.00	0.00
10,450.0	32.21	359.69	10,414.4	413.2	369.1	423.6	10.00	10.00	0.00
10,500.0	37.21	359.69	10,455.5	441.6	369.0	452.0	10.00	10.00	0.00
10,550.0	42.21	359.69	10,494.0	473.6	368.8	483.9	10.00	10.00	0.00
10,600.0	47.21	359.69	10,529.5	508.7	368.6	519.1	10.00	10.00	0.00
10,650.0	52.21	359.69	10,561.8	546.8	368.4	557.2	10.00	10.00	0.00
10,700.0	57.21	359.69	10,590.7	587.6	368.2	598.0	10.00	10.00	0.00
10,750.0	62.21	359.69	10,615.9	630.8	367.9	641.1	10.00	10.00	0.00
10,800.0	67.21	359.69	10,637.3	676.0	367.7	686.3	10.00	10.00	0.00
10,850.0	72.21	359.69	10,654.6	722.9	367.4	733.1	10.00	10.00	0.00
10,900.0	77.21	359.69	10,667.8	771.1	367.2	781.3	10.00	10.00	0.00
10,950.0	82.21	359.69	10,676.7	820.3	366.9	830.4	10.00	10.00	0.00
11,000.0	87.21	359.69	10,681.3	870.0	366.6	880.2	10.00	10.00	0.00
11,029.4	90.15	359.69	10,682.0	899.4	366.5	909.6	10.00	10.00	0.00
11,043.3	90.15	359.69	10,682.0	913.3	366.4	923.4	0.00	0.00	0.00
LP Buffalo Trace 1-36 W1AP Fed Com 2H									
11,100.0	90.15	359.69	10,681.8	970.0	366.1	980.1	0.00	0.00	0.00
11,200.0	90.15	359.69	10,681.6	1,070.0	365.6	1,080.1	0.00	0.00	0.00
11,300.0	90.15	359.69	10,681.3	1,170.0	365.0	1,180.0	0.00	0.00	0.00
11,400.0	90.15	359.69	10,681.0	1,270.0	364.5	1,279.9	0.00	0.00	0.00
11,500.0	90.15	359.69	10,680.8	1,370.0	363.9	1,379.9	0.00	0.00	0.00
11,600.0	90.15	359.69	10,680.5	1,470.0	363.4	1,479.8	0.00	0.00	0.00
11,700.0	90.15	359.69	10,680.2	1,570.0	362.8	1,579.8	0.00	0.00	0.00
11,800.0	90.15	359.69	10,680.0	1,670.0	362.3	1,679.7	0.00	0.00	0.00
11,900.0	90.15	359.69	10,679.7	1,770.0	361.7	1,779.7	0.00	0.00	0.00
12,000.0	90.15	359.69	10,679.5	1,870.0	361.2	1,879.6	0.00	0.00	0.00
12,100.0	90.15	359.69	10,679.2	1,970.0	360.7	1,979.5	0.00	0.00	0.00
12,200.0	90.15	359.69	10,678.9	2,070.0	360.1	2,079.5	0.00	0.00	0.00
12,300.0	90.15	359.69	10,678.7	2,170.0	359.6	2,179.4	0.00	0.00	0.00
12,400.0	90.15	359.69	10,678.4	2,270.0	359.0	2,279.4	0.00	0.00	0.00
12,500.0	90.15	359.69	10,678.2	2,370.0	358.5	2,379.3	0.00	0.00	0.00
12,600.0	90.15	359.69	10,677.9	2,470.0	357.9	2,479.2	0.00	0.00	0.00
12,700.0	90.15	359.69	10,677.6	2,570.0	357.4	2,579.2	0.00	0.00	0.00
12,800.0	90.15	359.69	10,677.4	2,670.0	356.9	2,679.1	0.00	0.00	0.00
12,900.0	90.15	359.69	10,677.1	2,770.0	356.3	2,779.1	0.00	0.00	0.00
13,000.0	90.15	359.69	10,676.9	2,870.0	355.8	2,879.0	0.00	0.00	0.00
13,100.0	90.15	359.69	10,676.6	2,970.0	355.2	2,978.9	0.00	0.00	0.00
13,200.0	90.15	359.69	10,676.3	3,070.0	354.7	3,078.9	0.00	0.00	0.00
13,300.0	90.15	359.69	10,676.1	3,170.0	354.1	3,178.8	0.00	0.00	0.00
13,400.0	90.15	359.69	10,675.8	3,270.0	353.6	3,278.8	0.00	0.00	0.00
13,500.0	90.15	359.69	10,675.6	3,370.0	353.1	3,378.7	0.00	0.00	0.00
13,600.0	90.15	359.69	10,675.3	3,470.0	352.5	3,478.7	0.00	0.00	0.00
13,700.0	90.15	359.69	10,675.0	3,570.0	352.0	3,578.6	0.00	0.00	0.00
13,800.0	90.15	359.69	10,674.8	3,670.0	351.4	3,678.5	0.00	0.00	0.00

Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Buffalo Trace 1-36 W1AP Fed Com 2H
Company:	Mewbourne Oil Company	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Project:	Eddy County, N.M. Nad (83)	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1AP Fed	North Reference:	Grid
Well:	Buffalo Trace 1-36 W1AP Fed Com 2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#2		

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)
19,200.0	90.15	359.69	10,660.7	9,069.9	322.1	9,075.4	0.00	0.00	0.00
19,300.0	90.15	359.69	10,660.5	9,169.9	321.5	9,175.3	0.00	0.00	0.00
19,400.0	90.15	359.69	10,660.2	9,269.9	321.0	9,275.3	0.00	0.00	0.00
19,500.0	90.15	359.69	10,659.9	9,369.9	320.5	9,375.2	0.00	0.00	0.00
19,600.0	90.15	359.69	10,659.7	9,469.9	319.9	9,475.1	0.00	0.00	0.00
19,700.0	90.15	359.69	10,659.4	9,569.9	319.4	9,575.1	0.00	0.00	0.00
19,800.0	90.15	359.69	10,659.2	9,669.9	318.8	9,675.0	0.00	0.00	0.00
19,900.0	90.15	359.69	10,658.9	9,769.9	318.3	9,775.0	0.00	0.00	0.00
20,000.0	90.15	359.69	10,658.6	9,869.9	317.7	9,874.9	0.00	0.00	0.00
20,100.0	90.15	359.69	10,658.4	9,969.9	317.2	9,974.9	0.00	0.00	0.00
20,200.0	90.15	359.69	10,658.1	10,069.9	316.6	10,074.8	0.00	0.00	0.00
20,300.0	90.15	359.69	10,657.9	10,169.9	316.1	10,174.7	0.00	0.00	0.00
20,400.0	90.15	359.69	10,657.6	10,269.9	315.6	10,274.7	0.00	0.00	0.00
20,500.0	90.15	359.69	10,657.3	10,369.9	315.0	10,374.6	0.00	0.00	0.00
20,600.0	90.15	359.69	10,657.1	10,469.8	314.5	10,474.6	0.00	0.00	0.00
20,700.0	90.15	359.69	10,656.8	10,569.8	313.9	10,574.5	0.00	0.00	0.00
20,800.0	90.15	359.69	10,656.6	10,669.8	313.4	10,674.4	0.00	0.00	0.00
20,900.0	90.15	359.69	10,656.3	10,769.8	312.8	10,774.4	0.00	0.00	0.00
21,000.0	90.15	359.69	10,656.0	10,869.8	312.3	10,874.3	0.00	0.00	0.00
21,017.2	90.15	359.69	10,656.0	10,887.0	312.2	10,891.5	0.00	0.00	0.00

PBHL Buffalo Trace 1-36 W1AP Fed Com 2H

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
B.B. 2 Buffalo Trace 1	0.00	0.00	10,000.0	325.0	369.6	387,127.27	666,188.08	32° 3' 49.147 N	103° 55' 49.069 W
- plan hits target center									
- Point									
B.B. Buffalo Trace 1-3	0.00	0.00	10,000.0	98.2	369.6	386,900.45	666,188.05	32° 3' 46.902 N	103° 55' 49.079 W
- plan misses target center by 226.8usft at 10018.9usft MD (10000.0 TVD, 325.0 N, 369.6 E)									
- Point									
PBHL Buffalo Trace 1-	0.00	0.00	10,656.0	10,887.0	312.2	397,689.27	666,130.68	32° 5' 33.671 N	103° 55' 49.277 W
- plan hits target center									
- Point									
LP Buffalo Trace 1-36	0.00	0.00	10,682.0	913.3	366.0	387,715.57	666,184.49	32° 3' 54.969 N	103° 55' 49.085 W
- plan misses target center by 0.4usft at 11043.3usft MD (10682.0 TVD, 913.3 N, 366.4 E)									
- Point									



COMPANY: Mewbourne Oil Company
WELL: Buffalo Trace 1-36 W1AP Fed Com 2H
COUNTY: Eddy County, N.M. Nad (83)
DATUM: North American Datum 1983
RIG: Patterson 562



OFFICE: 936.582.7296

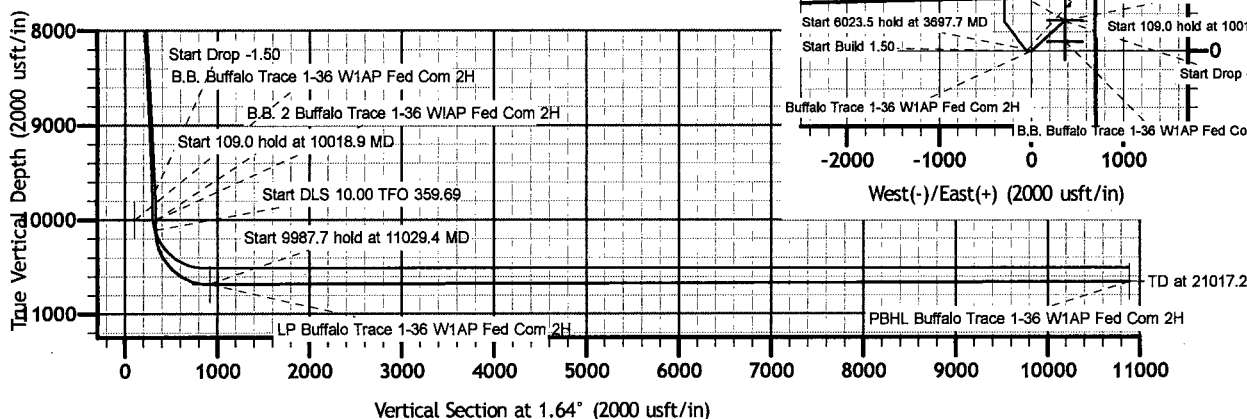
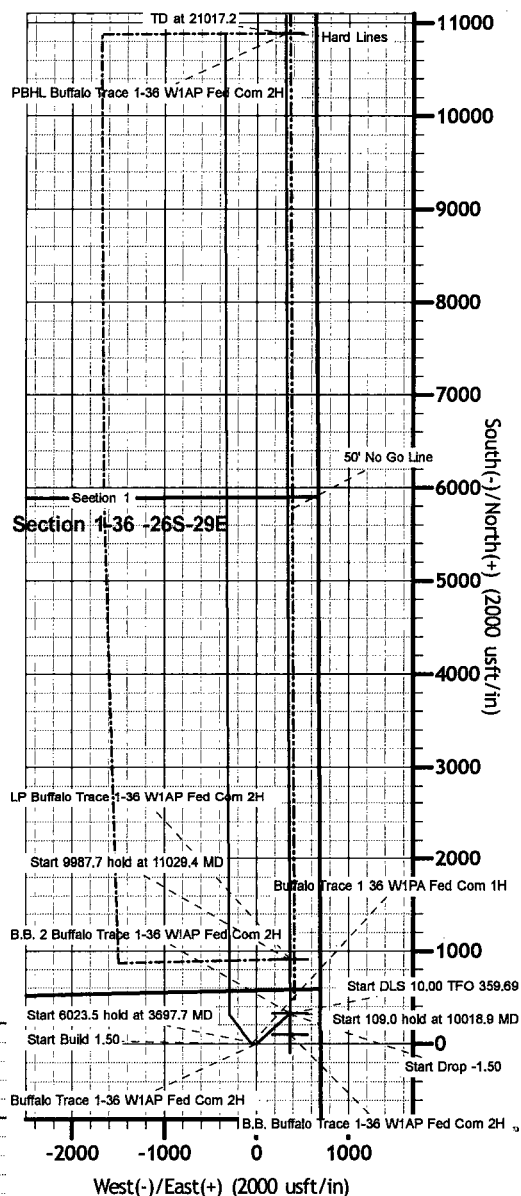
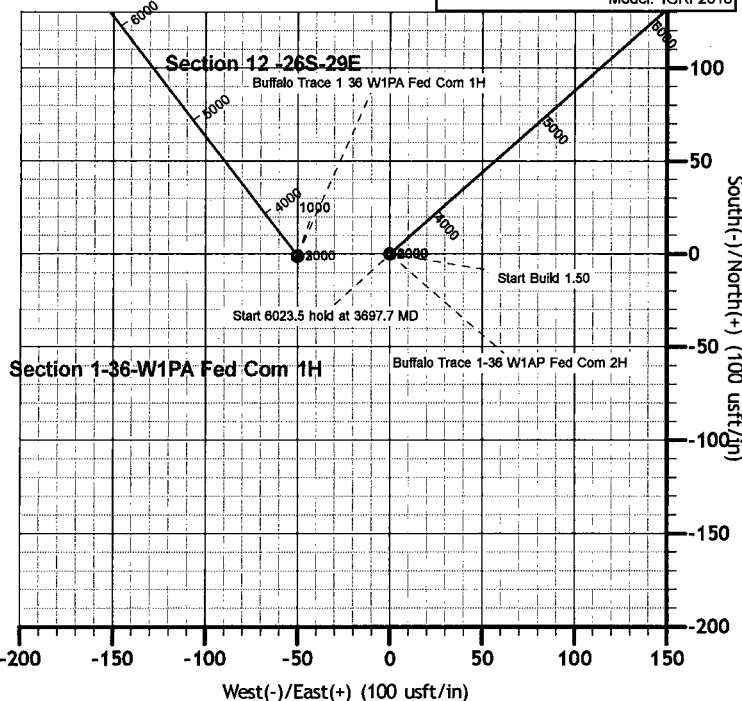
GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 6.73°

GEODETIC ZONE: New Mexico Eastern Zone										
3038 + 27 @ 3065.0usft (Patterson 562)										
GROUND ELEVATION: 3038.0										
	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot			
	0.0	0.0	366802.27	665818.47	32° 3' 45.944 N	103° 55' 53.378 W				
PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3400.0	0.00	0.00	3400.0	0.0	0.0	0.00	0.00	0.0	
3	3697.7	4.47	48.67	3697.4	7.7	8.7	1.50	48.67	7.9	
4	9721.2	4.47	48.67	9702.6	317.3	360.9	0.00	0.00	327.6	
5	10018.9	0.00	0.00	10000.0	325.0	369.6	1.50	180.00	335.5	B.B. 2 Buffalo Trace 1-36 W1AP Fed Corn 2H
6	10127.9	0.00	0.00	10109.0	325.0	369.6	0.00	0.00	335.5	
7	11029.4	90.15	359.69	10682.0	899.4	366.5	10.00	359.69	909.6	
8	21017.2	90.15	359.69	10656.0	10887.0	312.2	0.00	0.00	10891.5	PBHL Buffalo Trace 1-36 W1AP Fed Corn 2H

SHL: 575 FNL; 700' FEL
Section 12-26S-29E
PBHL: 330' FNL; 330' FEL
Section 36-26S-29E



Azimuths to Grid North
True North: -0.21°
Magnetic North: 6.74°
Magnetic Field
Strength: 47654.4nT
Dip Angle: 59.84°
Date: 12/12/2018
Model: IGRF2015



Buffalo Trace Area Wolfcamp Production Table									
API	Well Name	Well Number	Operator	Location	Cum Oil (Mbo)	Cum Gas (BCF)	Cum Water (Mbw)	First Prod Date	WFMP Zone
300154108900	RDX FEDERAL 17	16H	RKI	17D-17M/26S/30E	70	0.3	314	2015-05-01	WFMP A Shale
300154229000	NORTH BRUSHY DRAW FEDERAL COM 35	4H	RKI	35N-35C/25S/29E	147	0.4	569	2015-02-01	WFMP A Shale
300154229100	NORTH BRUSHY DRAW FEDERAL COM 35	5H	RKI	35N-35C/25S/29E	107	0.4	386	2017-04-01	WFMP A Shale
300154229300	NORTH BRUSHY DRAW FEDERAL 35	6H	RKI	35B-35O/25S/29E	113	0.3	389	2015-09-01	WFMP A Shale
300154274301	RDX FEDERAL COM 17	41H	RKI	17O-17B/26S/30E	148	0.8	546	2017-02-01	WFMP A Shale
300154275200	RDX FEDERAL COM 17	26H	RKI	17O-17B/26S/30E	147	0.6	504	2015-11-01	WFMP A Shale
300154347200	ROSS DRAW 25	2H	XTO	25D-36E/26S/29E	130	0.5	457	2017-07-01	WFMP A Shale
300154351700	FULLER 13 24 W1LM FEDERAL COM	3H	MEWBOURNE	13L-24M/26S 29E	367	1.6	783	2016-08-01	WFMP A Shale
300154354400	RDX FEDERAL COM 17	37H	RKI	17D-17M/26S/30E	79	0.3	432	2018-02-01	WFMP A Shale
300154358600	EAST PECOS FEDERAL COM 22	14H	RKI	22P-22A/26S/29E	158	1.8	880	2016-05-01	WFMP D Shale
300154360300	NORTH BRUSHY DRAW FEDERAL 35	12H	RKI	35O-35B/25S/29E	119	0.3	371	2016-08-01	WFMP A Shale
300154363401	RDX FEDERAL COM 17	40H	RKI	17A-17P/26S/30E	143	0.7	423	2016-08-01	WFMP A Shale
300154363600	RDX FEDERAL COM 17	36H	RKI	17D-17M/26S/30E	60	0.4	283	2018-02-01	WFMP A Shale
300154363800	NORTH BRUSHY DRAW FEDERAL 35	10H	RKI	35O-35B/25S 29E	159	0.5	444	2016-08-01	WFMP A Shale
300154385900	FULLER 14 23 W2LM FEDERAL COM	2H	MEWBOURNE	14E-23M/26S/29E	216	2.6	1121	2017-05-01	WFMP D Shale
300154388401	RDX FEDERAL 17	35H	RKI	17D-17M/26S/30E	64	0.4	611	2018-02-01	WFMP D Shale
300154440800	RDX FEDERAL COM 17	45H	RKI	17C-17N/26S/30E	70	0.3	349	2018-02-01	WFMP A Shale
300154440900	RDX FEDERAL COM 17	44H	RKI	17C-17N/26S/30E	71	0.3	286	2018-02-01	WFMP A Shale
300154441000	RDX FEDERAL COM 17	46H	RKI	17C-17N/26S/30E	48	0.3	184	2018-04-01	WFMP A Shale
300154445000	FULLER 14 11 W1HA FEDERAL COM	2H	MEWBOURNE	14H-11A/26S/29E	97	0.5	278	2018-06-01	WFMP A Shale
300154445100	FULLER 14 23 W1IP FEDERAL	1H	MEWBOURNE	14H-23P/26S/29E	101	0.4	246	2018-06-01	WFMP A Shale
300154445300	FULLER 14 23 W2IP FEDERAL	4H	MEWBOURNE	14H-23P/26S/29E	32	0.6	190	2018-06-01	WFMP D Shale
300154460100	FULLER 14 11 W2HA FEDERAL	3H	MEWBOURNE	14H-11A/26S/29E	33	0.6	162	2018-06-01	WFMP D Shale

ATTACHMENT

C