

**CASE NO. 21419**

**APPLICATION OF KAISER-FRANCIS OIL COMPANY FOR COMPULSORY  
POOLING, EDDY COUNTY, NEW MEXICO**

**EXHIBITS**

1. Application and Proposed Ad
2. Landman's Affidavit (Brendon Kushnerick)
3. Geologist's Affidavit (Lee J. Lindman)
4. Affidavit of Notice
5. Affidavit of Publication
6. Pooling Checklist

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF KAISER-FRANCIS OIL  
COMPANY FOR COMPULSORY POOLING,  
EDDY COUNTY, NEW MEXICO.

Case No. 21419

APPLICATION

Kaiser-Francis Oil Company applies for an order pooling all mineral interests in the Wolfcamp formation underlying a horizontal spacing unit comprised of the SE/4 of Section 20 and the SW/4 of Section 21, Township 23 South, Range 28 East, N.M.P.M., Eddy County, New Mexico, and in support thereof, states:

1. Applicant is an interest owner in the SE/4 of Section 20 and the SW/4 of Section 21, and has the right to drill a well or wells thereon.
2. Applicant proposes to drill the following wells to test the Wolfcamp formation:
  - (a) The Loving Townsite 2021 WC Well No. 1H, with a first take point in the NW/4SE/4 of Section 20, and a final take point in the NE/4SW/4 of Section 21;
  - (b) The Loving Townsite 2021 WA Well No. 1H, with a first take point in the NW/4SE/4 of Section 20, and a final take point in the NE/4SW/4 of Section 21;
  - (c) The Loving Townsite 2021 WC Well No. 2H, well with a first take point in the SW/4SE/4 of Section 20, and a final take point in the SE/4SW/4 of Section 21; and
  - (d) The Loving Townsite 2021 WA Well No. 2H, with a first take point in the SW/4SE/4 of Section 20, and a final take point in the SE/4SW/4 of Section 21.
3. Applicant has in good faith sought to obtain the voluntary joinder of all other mineral interest owners in the SE/4 of Section 20 and the SW/4 of Section 21 for the purposes set forth herein.

EXHIBIT ]

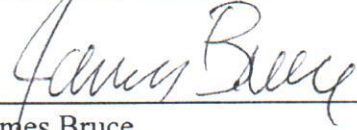
4. Although applicant attempted to obtain voluntary agreements from all mineral interest owners to participate in the drilling of the wells or to otherwise commit their interests to the wells, certain interest owners have failed or refused to join in dedicating their interests. Therefore, applicant seeks an order pooling all mineral interest owners in the Wolfcamp formation in the SE/4 of Section 20 and the SW/4 of Section 21, pursuant to NMSA 1978 §§70-2-17, 18.

5. The pooling of all mineral interests in the Wolfcamp formation underlying the SE/4 of Section 20 and the SW/4 of Section 21 will prevent the drilling of unnecessary wells, prevent waste, and protect correlative rights.

**WHEREFORE**, applicant requests that, after notice and hearing, the Division enter its order:

- A. Pooling all mineral interests in the Wolfcamp formation underlying the SE/4 of Section 20 and the SW/4 of Section 21;
- B. Designating applicant as operator of the wells;
- C. Considering the cost of drilling, completing, and equipping the wells, and allocating the cost among the wells' working interest owners;
- D. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure; and
- E. Setting a 200% charge for the risk involved in drilling, completing, and equipping the wells in the event a working interest owner elects not to participate in the wells.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "James Bruce", written over a horizontal line.

James Bruce  
Post Office Box 1056  
Santa Fe, New Mexico 87504  
(505) 982-2043

Attorney for Kaiser-Francis Oil Company

PROPOSED ADVERTISEMENT

Case No. 21419:

*Application of Kaiser-Francis Oil Company for a compulsory pooling, Eddy County, New Mexico.* Kaiser-Francis Oil Company seeks an order pooling all mineral interests in the Wolfcamp formation underlying spacing and proration unit in the Wolfcamp formation comprised of the SE/4 of Section 20 and the SW/4 of Section 21, Township 23 South, Range 28 East, NMPM. The unit will be dedicated to: (a) the Loving Townsite 2021 WC Well No. 1H, with a first take point in the NW/4SE/4 of Section 20 and a final take point in the NE/4SW/4 of Section 21; (b) the Loving Townsite 2021 WA Well No. 1H, a with a first take point in the NW/4SE/4 of Section 20 and a final take point in the NE/4SW/4 of Section 21; (c) the Loving Townsite 2021 WC Well No. 2H, well with a first take point in the SW/4SE/4 of Section 20 and a final take point in the SE/4SW/4 of Section 21; and (d) the Loving Townsite 2021 WA Well No. 2H, with a first take point in the SW/4SE/4 of Section 20 and a final take point in the SE/4SW/4 of Section 21. Also to be considered will be the cost of drilling, completing, and equipping the wells and the allocation of the cost thereof, as well as actual operating costs and charges for supervision, designation of applicant as operator of the wells, and a 200% charge for the risk involved in drilling, completing, and equipping the wells. The unit is located in the center of Loving, New Mexico.

**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 KAISER-FRANCIS OIL  
COMPANY COMPULSORY POOLING, EDDY  
COUNTY, NEW MEXICO.**

**Case No. 21419**

**VERIFIED STATEMENT OF BRENDON KUSHNERICK**

Brendon Kushnerick, being duly sworn upon his oath, deposes and states:

1. I am a landman for Kaiser-Francis Oil Company ("KFOC"), and have personal knowledge of the matters stated herein. I have been qualified by the Division as an expert petroleum landman.

2. 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 that have been drilled or are to be drilled in the unit.

(b) No opposition is expected because KFOC has attempted to contact all the interest owners being pooled regarding the proposed well, and the interest owners have either failed or refused to voluntarily commit their interests to the well.

(c) A Midland Map Co. plat outlining the unit being pooled is attached hereto as Attachment A. KFOC seeks an order pooling the Wolfcamp formation underlying a horizontal spacing unit comprised of the SE/4 of Section 20 & SW/4 of Section 21, Township 23 South, Range 28 East, NMPM, containing 324.1 acres.

(i) Pool Code: 98220 Pool Name: Purple Sage; Wolfcamp Gas Pool, to be dedicated to the Loving Townsite 2021 WC No 1H. The well is a horizontal well with a first take point in the NW/4 SE/4 of Section 20 and a final take point in the NE/4 SW/4 of Section 21.

SHL: 1,078' FSL & 2,519' FEL

BHL: 1,893' FSL & 2,413' FWL

15,157' MD/ 10,496' TVD

EXHIBIT

2

(ii) Pool Code: 98220 Pool Name: Purple Sage; Wolfcamp Gas Pool, to be dedicated to the Loving Townsite 2021 WC No 2H. The well is a horizontal well with a first take point in the SW/4 SE/4 of Section 20 and a final take point in the SE/4 SW/4 of Section 21.

SHL: 1,048' FSL & 2,519' FEL

BHL: 725' FSL & 2,584' FWL

15,353' MD/ 10,475' TVD

(iii) Pool Code: 98220 Pool Name: Purple Sage; Wolfcamp Gas Pool, to be dedicated to the Loving Townsite 2021 WA No 1H. The well is a horizontal well with a first take point in the NW/4 SE/4 of Section 20 and a final take point in the NE/4 SW/4 of Section 21.

SHL: 1,148' FSL & 2,499' FEL

BHL: 1,980' FSL & 2,310' FWL

14,900' MD/ 10,100' TVD

(iv) Pool Code: 98220 Pool Name: Purple Sage; Wolfcamp Gas Pool, to be dedicated to the Loving Townsite 2021 WA No 2H. The well is a horizontal well with a first take point in the SW/4 SE/4 of Section 20 and a final take point in the SE/4 SW/4 of Section 21.

SHL: 948' FSL & 2,499' FEL

BHL: 660' FSL & 2,310' FWL

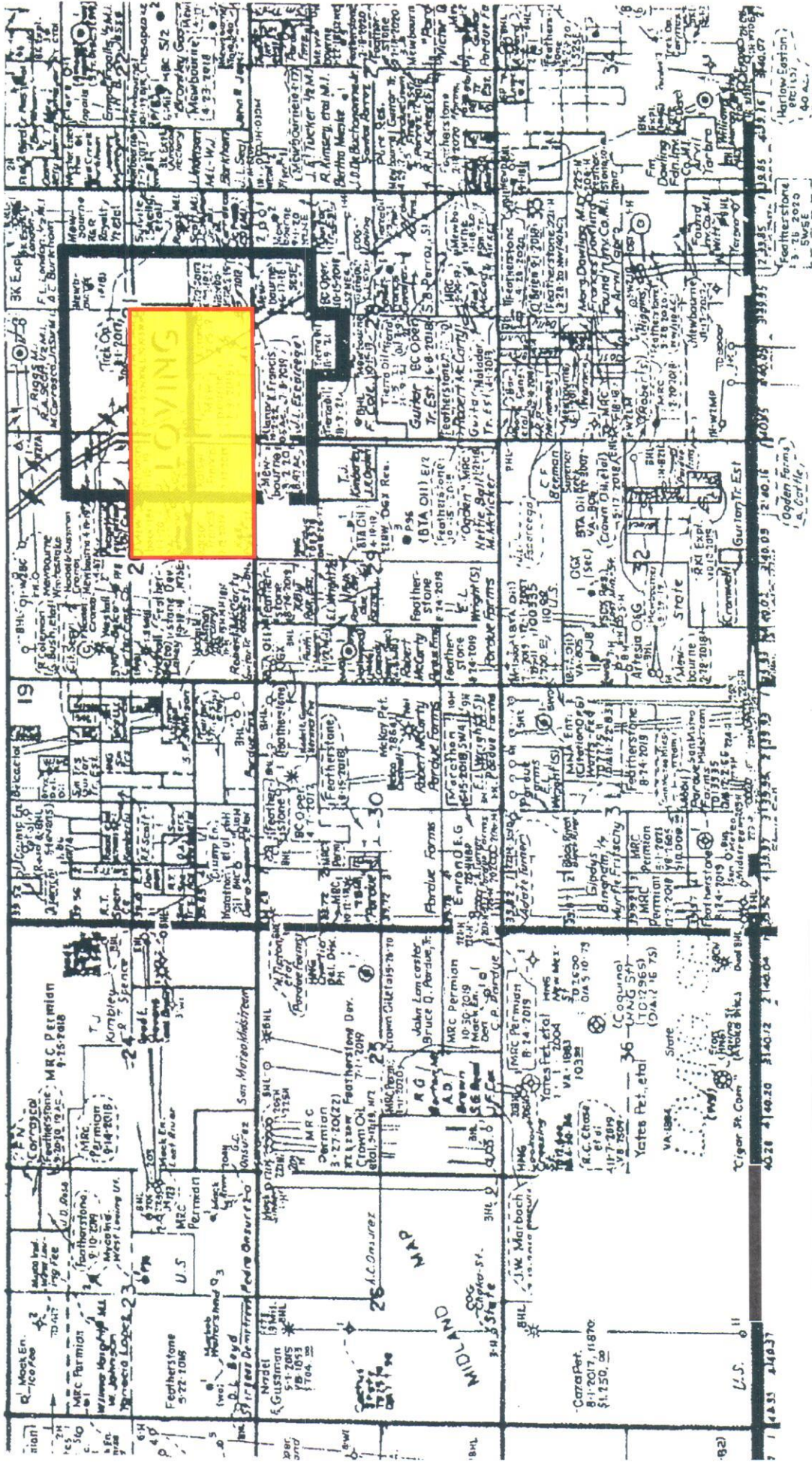
14,900' MD/ 10,100' TVD

A Form C-102 for each well is attached as Attachment B.

- (d) There is no depth severance in the Wolfcamp formation.
- (d) The parties being pooled and their interests are set forth in Attachment C. Their current or last known address are also set forth.
- (e) There were five unlocatable interest owners.
- (f) Attachment D contains a summary of contacts or attempted contacts with the interest owners, together with copies of the proposal letters sent to the interest owners.
- (g) KFOC has made a good faith effort to obtain the voluntary joinder of the working interest owners in the proposed wells.
- (h) KFOC has the right to pool the overriding royalty owners in the well unit.
- (i) Attachment E contains the Authorization for Expenditures for the proposed wells. The estimated cost of the wells set forth therein is fair and reasonable, and are comparable to the costs of other wells of similar depth and length drilled in this area of Eddy County.







ATTACHMENT A

**NM OIL CONSERVATION  
ARTESIA DISTRICT**

Form C-102

District I  
1625 N French Dr., Hobbs, NM 88240  
Phone: (575) 303-6161 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) 476-3400 Fax: (505) 476-3462

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

Revised August 1, 2011

Submit one copy to appropriate

District Office

**RECEIVED**

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number <b>30-015-45003</b>	<sup>1</sup> Pool Code <b>98220</b>	<sup>1</sup> Pool Name <b>Purple Sage - Wolfcamp Gas Pool</b>
<sup>2</sup> Property Code <b>321475</b>	<sup>3</sup> Property Name <b>LOVING TOWNSITE 2021 WA</b>	
<sup>4</sup> OGRID No. <b>12361</b>	<sup>5</sup> Operator Name <b>KAISER-FRANCIS OIL COMPANY</b>	
		<sup>6</sup> Well Number <b>1H</b>
		<sup>7</sup> Elevation <b>3069.1</b>

<sup>10</sup> Surface Location

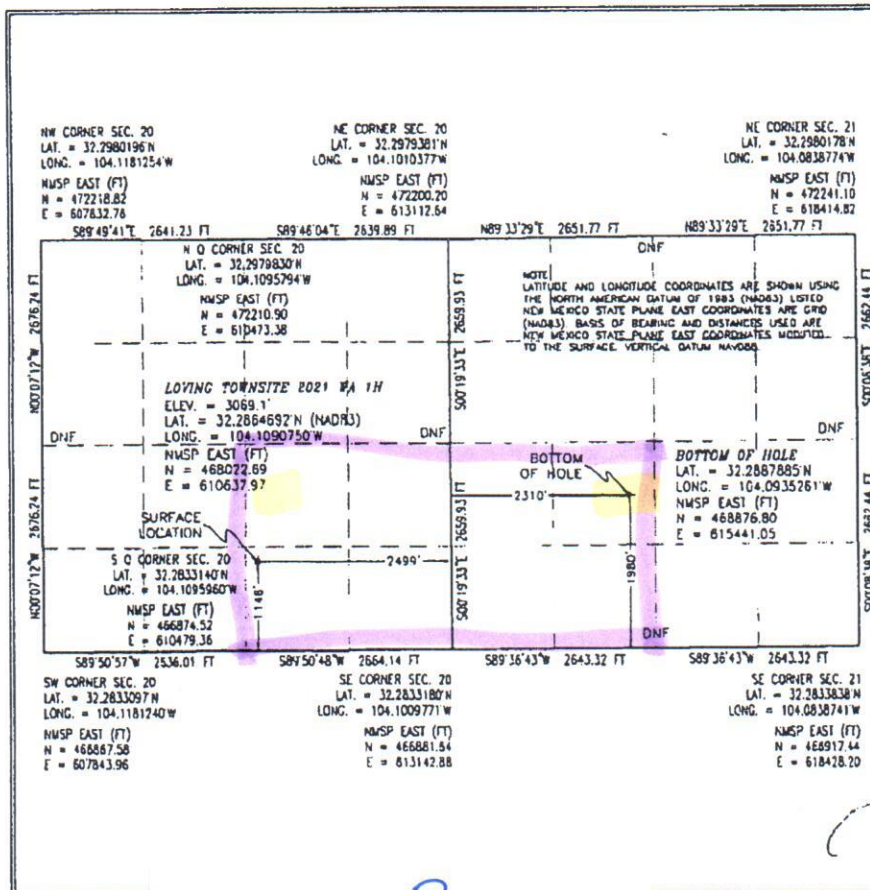
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	20	23 S	28 E		1148	SOUTH	2499	EAST	EDDY

<sup>11</sup> 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
K	21	23 S	28 E		1980	SOUTH	2310	WEST	EDDY

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
320	-	-	-

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



**" OPERATOR CERTIFICATION**  
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest or has a voluntary pooling agreement in a completion pending on the surface owned by the district.

Signature: *Charlotte Van Valkenburg* Date: 5/24/18  
Printed Name: **Charlotte Van Valkenburg**  
E-mail Address: **Charlotv@kfoc.net**

**" 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.

MAY 16, 2018  
Date of Survey: *[Signature]*  
Signature and Seal of Professional Surveyor: *[Signature]*  
Certificate Number: **FLEMING F. JARAMILLO, PLS 12797**  
SURVEY NO. 6251

ATTACHMENT **B**

*NSP required*

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) 745-1263 Fax: (575) 745-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

**NM OIL CONSERVATION**  
**ARTESIA DISTRICT**

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

JUN 01 2018

AMENDED REPORT

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WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-015-45004</b>	<sup>1</sup> Pool Code 98220	<sup>1</sup> Pool Name Purple Sage - Wolfcamp Gas Pool
<sup>4</sup> Property Code <b>321475</b>	<sup>3</sup> Property Name LOVING TOWNSITE 2021 WA	
<sup>7</sup> OGRID No. 12361	<sup>4</sup> Operator Name KAISER-FRANCIS OIL COMPANY	<sup>6</sup> Well Number 2H <sup>8</sup> Elevation 3070.2

<sup>10</sup> Surface Location

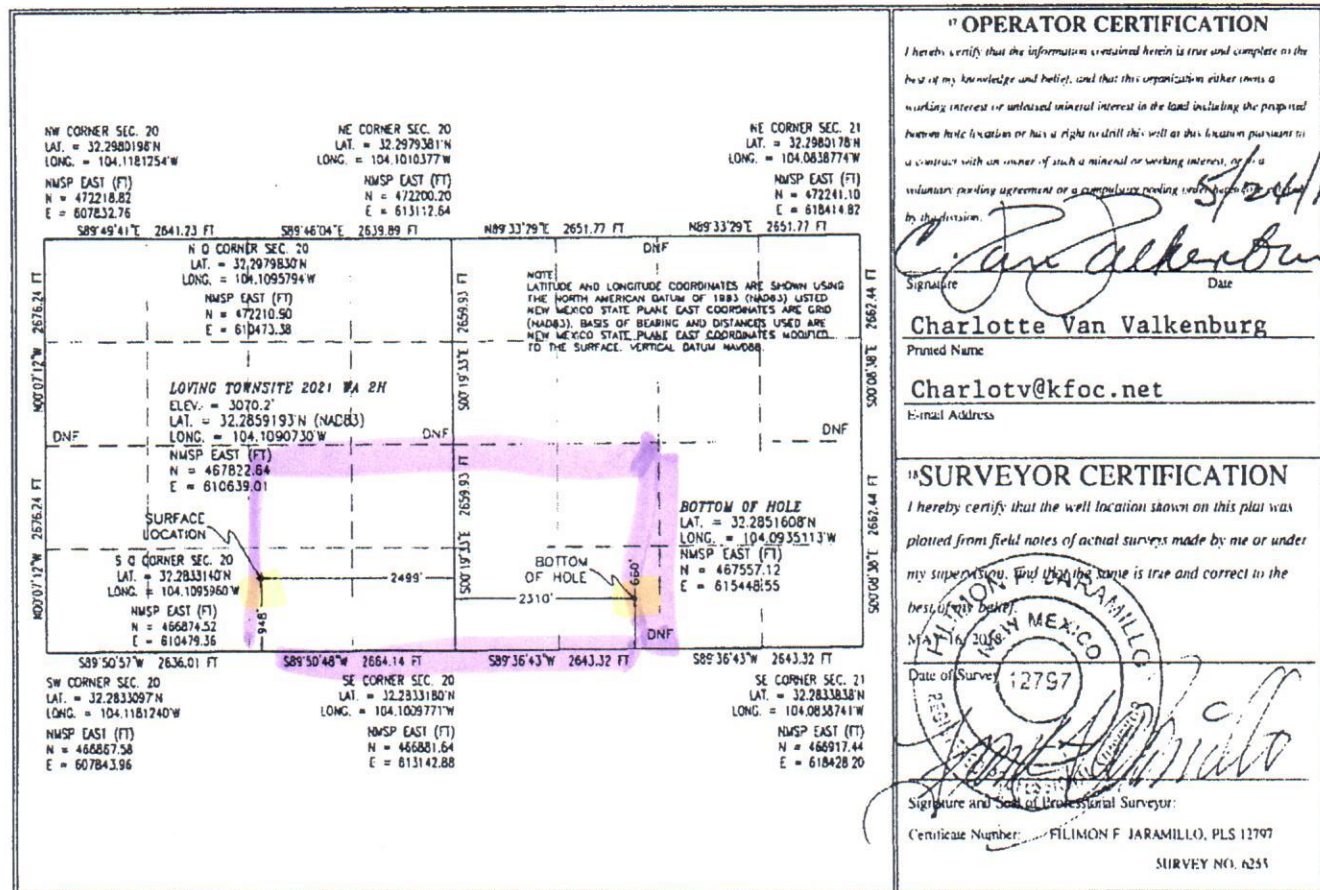
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	20	23 S	28 E		948	SOUTH	2499	EAST	EDDY

<sup>11</sup> 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
N	21	23 S	28 E		660	SOUTH	2310	WEST	EDDY

<sup>12</sup> Dedicated Acres 320	<sup>13</sup> Joint or Infill -	<sup>14</sup> Consolidation Code -	<sup>15</sup> Order No. -
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



*NSP required*

RECEIVED

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Phone: (575) 748-1283 Fax: (575) 748-9720

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Phone: (505) 334-6178 Fax: (505) 334-6170

**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

MAY 03 2019

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

DISTRICT II-ARTESIA O.C.D.

AMENDED REPORT

As-Drilled

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-015-45005	<sup>1</sup> Pool Code 98220	<sup>1</sup> Pool Name Purple Sage; Wolfcamp, Gas
<sup>4</sup> Property Code 321476	<sup>3</sup> Property Name LOVING TOWNSITE 2021 WC	
<sup>7</sup> OGRID No. 12361	<sup>6</sup> Operator Name KAISER-FRANCIS OIL COMPANY	
		<sup>8</sup> Well Number 1H
		<sup>9</sup> Elevation 3069.6

**<sup>10</sup> Surface Location**

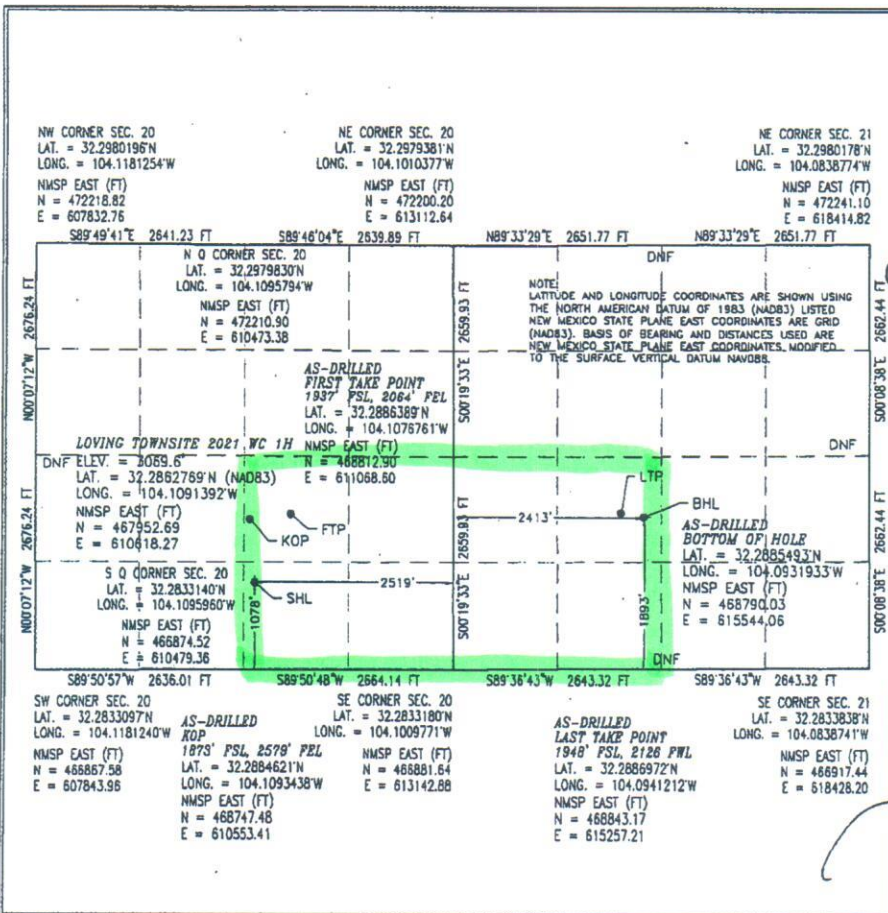
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	20	23 S	28 E		1078	SOUTH	2519	EAST	EDDY

**<sup>11</sup> 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
J	21	23 S	28 E		1893	SOUTH	2413	WEST	EDDY

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
320	-	-	-

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



**<sup>17</sup> 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 unconsolidated 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: *Charlotte Van Valkenburg*  
Date: 5/2/19

Printed Name: Charlotte Van Valkenburg  
E-mail Address: Charlottv@kfoc.net

**<sup>18</sup> 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.

APRIL 11, 2019  
Date of Survey

Signature and Seal of Professional Surveyor: *Elimon F. Jaramillo*  
Certificate Number: 73-ELIMON F. JARAMILLO, PLS 12797  
SURVEY NO. 6250

RECEIVED

Form C-102

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
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State of New Mexico  
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OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

MAY 03 2019

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

DISTRICT II-ARTESIA O.C.D.

AMENDED REPORT

As-Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015-45006	<sup>1</sup> Pool Code 98220	<sup>1</sup> Pool Name Purple Sage; Woldcamp, Gas
<sup>4</sup> Property Code 321476	<sup>3</sup> Property Name LOVING TOWNSITE 2021 WC	
<sup>7</sup> OGRID No. 12361	<sup>8</sup> Operator Name KAISER-FRANCIS OIL COMPANY	
		<sup>6</sup> Well Number 2H
		<sup>9</sup> Elevation 3069.7

<sup>10</sup> Surface Location

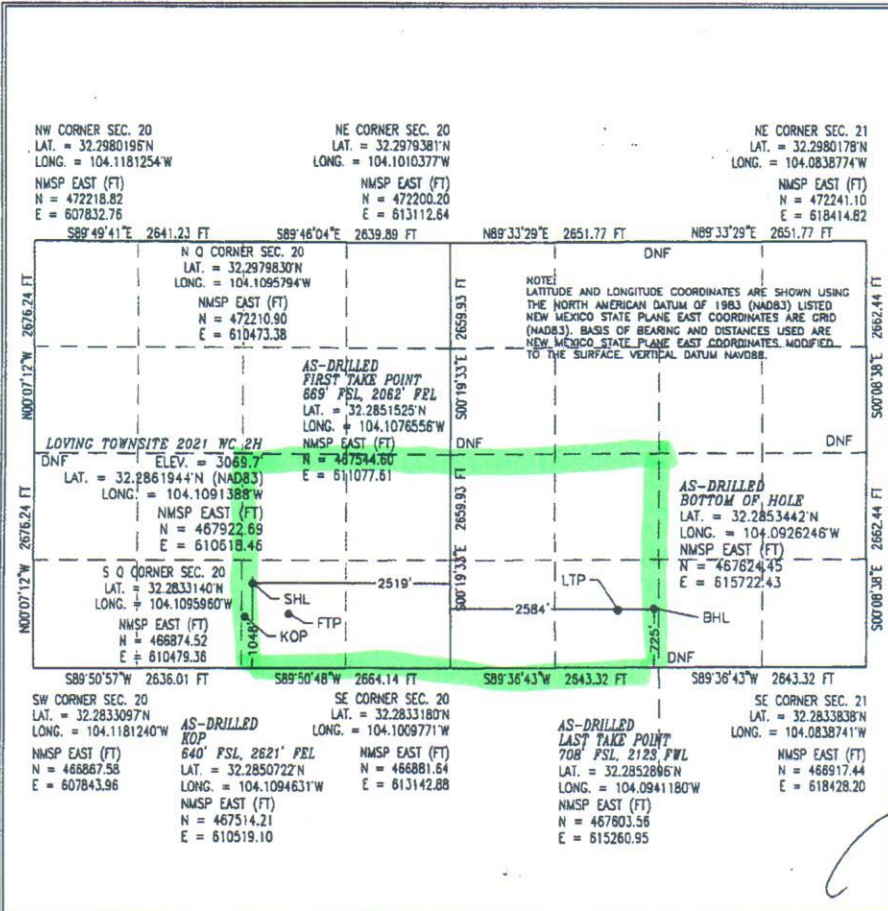
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	20	23 S	28 E		1048	SOUTH	2519	EAST	EDDY

<sup>11</sup> 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
N	21	23 S	28 E		725	SOUTH	2584	WEST	EDDY

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
320	I	-	-

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



**<sup>17</sup> 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: *Charlotte Van Valkenburg*  
 Date: 5/2/19

Printed Name: Charlotte Van Valkenburg  
 E-mail Address: Charlotv@kfoc.net

**<sup>18</sup> 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.

APRIL 11 2019  
 Date of Survey

Signature and Seal of Professional Surveyor: *Blimont F. Jaramillo*  
 Certificate Number: BLIMONT F. JARAMILLO, PLS 12797  
 SURVEY NO. 6251A

Pooling Respondent list for Pooling of the SE/4 of Section 20 and the SW/4 of Section 21 T23S-R29E; Eddy County, New Mexico

Mineral Owner	Address line 1	Address line 2	City	State	Zip	Working Interest
Theodore Aguilar	P.O. Box 433		Loving	NM	88256	0.0007302
Edward Campos	P.O. Box 13		Loving	NM	88256	0.0003548
Teresa Dean	610 Airport Avenue		Carlsbad	NM	88220	0.0007714
Heirs of Maria Garza, Deceased	c/o Cruz Garza Hernandez	2121 North Rojo	Hobbs	NM	88240	0.0007097
Josi Harvey	1602 West Tansil Street		Carlsbad	NM	88220	0.0002366
Josefa Harvey	1801 West Jefferson Avenue		Lovington	NM	88260-3012	0.0001774
Heirs of Alfred Reid Lawrence, Deceased	c/o Thelma McLain Lawrence	621 Wild Willow Drive	El Paso	TX	79922	0.0025224
Heirs of Thelma McNutt, Deceased	5850 Eubank Boulevard	Suite B49	Albuquerque	NM	87111	0.0007097
Pardue Limited Company	P.O. Box 96		Loving	NM	88256	0.0039494
Maria Rojas	4321 Dry Creek Road		Sacramento	CA	95838	0.0007302
Saul Sanchez	P.O. Box 421		Loving	NM	88256	0.0005245
Heirs of Geraldine Hoose Stevens	c/o Curtis Stevens	112 Durham Drive	Crawfordsville	IN	47933	0.0001774
Heirs of Steven Frank Williams	c/o Sondra Lynn William Ellyson	536 Rose Branch Drive	La Vernia	TX	78121	0.0005184
Linda Williams	33764 La Highway 16		Denham Springs	LA	70706	0.0001037

ATTACHMENT C

Summary of Communications  
 Loving Townsite 2021 WC 1H & 2H  
 Loving Townsite 2021 WA 1H & 2H

Company Name: Theodore Aguilar	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020
July 7, 2020	Certified mail receipt showed successful delivery

Company Name: Edward Campos	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020
July 11, 2020	Certified mail receipt showed successful delivery
	Multiple discussions between Kaiser's leasing agent and Mr. Campos about leasing his interest

Company Name: Teresa Dean	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020
	Recipient refused to sign for the letter due to Covid-19

Company Name: Heirs of Maria Garza, Deceased	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020

Company Name: Josi Harvey	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020
July 8, 2020	Certified mail receipt showed successful delivery

Company Name: Josefa Harvey	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020
July 8, 2020	Certified mail receipt showed successful delivery

Company Name: Heirs of Alfred Reid Lawrence, Deceased	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020

Company Name: Heirs of Thelma McNutt, Deceased	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020
July 19, 2020	Certified mail returned to sender
July 20, 2020	Attempted to locate a better address but was unable to locate one

Company Name: Pardue Limited Company	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020
July 7, 2020	Certified mail receipt showed successful delivery

Company Name: Marias Rojas	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020
August 22, 2020	Certified mail returned to sender
August 24, 2020	Attempted to locate a better address but was unable to locate one

Company Name: Saul Sanchez	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020
July 6, 2020	Certified mail receipt showed successful delivery
	Multiple phone conversations have happened between Kaiser employees/contractors and Mr. Sanchez.

Company Name: Heirs of Geraldine Hoose Stevens	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020
July 10, 2020	Certified mail returned to sender
July 13, 2020	Attempted to locate a better address but was unable to locate one

Company Name: Heirs of Steven Frank Williams	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020
July 6, 2020	Certified mail receipt showed successful delivery

Company Name: Linda Williams	
Date:	Comments/Actions
July 1, 2020	Mailed well proposals via certified mail dated July 1, 2020
July 7, 2020	Certified mail receipt showed successful delivery



KAISER-FRANCIS OIL COMPANY

P.O. BOX 21468

TULSA, OKLAHOMA 74121-1468

Michael Maxey, Landman  
Phone: (918) 491-4424  
Fax: (918) 491-4387  
E-mail: MikeMa@kfoe.net

6733 South Yale Avenue, 74136  
Phone: (918) 494-0000

Sent by Certified Mail

January 31, 2019

[REDACTED]

Re: Loving Townsite 2021 WA #1H  
SE/4 Section 20 and SW/4 of Section 21-23S-28E  
Eddy Co., NM

[REDACTED]:

Kaiser-Francis Oil Company hereby proposes the drilling of a 15,495' MD / 9,466' TVD horizontal Wolfcamp test well, covering the referenced 1 mile well path. The well will have an approximate surface location of 2,450' FEL and 1,600' FSL of Section 20-23S-28E, and a terminus of approximately 2,310' FWL and 2,310' FSL of Section 21-23S-28E.

AFE costs are estimated to be \$2,749,050 DHC and \$7,603,112 CWC. Two copies of the AFE are enclosed.

Should [REDACTED] wish to participate in the well, please execute and return one copy of the AFE, along with a reply letter indicating your desire to participate, and we will in turn send you a JOA for your review and approval.

We will be filing for an APD with the State of NM soon, therefore, a prompt answer regarding our proposal would be greatly appreciated.

Should you have any questions, I can be reached at any of the above contact information.

Respectfully,

*Michael D. Maxey*

Michael D. Maxey, Landman  
Kaiser-Francis Oil Company

KAISER-FRANCIS OIL COMPANY

P.O. BOX 21468

TULSA, OKLAHOMA 74121-1468

Michael Maxey, Landman  
Phone: (918) 491-4424  
Fax: (918) 491-4387  
E-mail: MikeMa@kfoc.net

6733 South Yale Avenue, 74136  
Phone: (918) 494-0000

**Sent by Certified Mail**

January 31, 2019

[REDACTED]

Re: Loving Townsite 2021 WA #2H  
SE/4 Section 20 and SW/4 of Section 21-23S-28E  
Eddy Co., NM

[REDACTED]:

Kaiser-Francis Oil Company hereby proposes the drilling of a 15,495' MD / 9,466' TVD horizontal Wolfcamp test well, covering the referenced 1 mile well path. The well will have an approximate surface location of 2,450' FEL and 1,180' FSL of Section 20-23S-28E, and a terminus of approximately 2,310' FWL and 330' FSL of Section 21-23S-28E.

AFE costs are estimated to be \$2,708,674 DHC and \$7,579,220 CWC. Two copies of the AFE are enclosed.

Should [REDACTED] wish to participate in the well, please execute and return one copy of the AFE, along with a reply letter indicating your desire to participate, and we will in turn send you a JOA for your review and approval.

We will be filing for an APD with the State of NM soon, therefore, a prompt answer regarding our proposal would be greatly appreciated.

Should you have any questions, I can be reached at any of the above contact information.

Respectfully,



Michael D. Maxey, Landman  
Kaiser-Francis Oil Company

KAISER-FRANCIS OIL COMPANY

P.O. BOX 21468 TULSA, OKLAHOMA 74121-1468

Michael Maxey, Landman  
Phone: (918) 491-4424  
Fax: (918) 491-4387  
E-mail: MikeMa@kfoc.net

6733 South Yale Avenue, 74136  
Phone: (918) 494-0000

Sent by Certified Mail

January 31, 2019

Alfred R. Lawrence  
412 Elizabeth St. N.E.  
Albuquerque, NM 87112

Re: Loving Townsite 2021 WC #1H  
SE/4 Section 20 and SW/4 of Section 21-23S-28E  
Eddy Co., NM

Alfred R. Lawrence

Kaiser-Francis Oil Company hereby proposes the drilling of a 15,495' MD / 10,347' TVD horizontal Wolfcamp test well, covering the referenced 1 mile well path. The well will have an approximate surface location of 2,450' FEL and 1,600' FSL of Section 20-23S-28E, and a terminus of approximately 2,310' FWL and 2,310' FSL of Section 21-23S-28E.

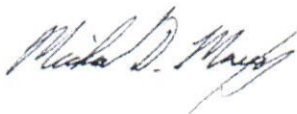
AFE costs are estimated to be \$2,860,382 DHC and \$7,789,930 CWC. Two copies of the AFE are enclosed.

Should Alfred R. Lawrence wish to participate in the well, please execute and return one copy of the AFE, along with a reply letter indicating your desire to participate, and we will in turn send you a JOA for your review and approval.

We will be filing for an APD with the State of NM soon, therefore, a prompt answer regarding our proposal would be greatly appreciated.

Should you have any questions, I can be reached at any of the above contact information.

Respectfully,



Michael D. Maxey, Landman  
Kaiser-Francis Oil Company

KAISER-FRANCIS OIL COMPANY

P.O. BOX 21468

TULSA, OKLAHOMA 74121-1468

Michael Maxey, Landman  
Phone: (918) 491-4424  
Fax: (918) 491-4387  
E-mail: MikeMa@kfoc.net

6733 South Yale Avenue, 74136  
Phone: (918) 494-0000

Sent by Certified Mail

January 31, 2019

[REDACTED]

Re: Loving Townsite 2021 WC #2H  
SE/4 Section 20 and SW/4 of Section 21-23S-28E  
Eddy Co., NM

[REDACTED]

Kaiser-Francis Oil Company hereby proposes the drilling of a 15,495' MD / 10,347' TVD horizontal Wolfcamp test well, covering the referenced 1 mile well path. The well will have an approximate surface location of 2,450' FEL and 1,180' FSL of Section 20-23S-28E, and a terminus of approximately 2,310' FWL and 330' FSL of Section 21-23S-28E.

AFE costs are estimated to be \$2,821,436 DHC and \$7,750,984 CWC. Two copies of the AFE are enclosed.

Should [REDACTED] wish to participate in the well, please execute and return one copy of the AFE, along with a reply letter indicating your desire to participate, and we will in turn send you a JOA for your review and approval.

We will be filing for an APD with the State of NM soon, therefore, a prompt answer regarding our proposal would be greatly appreciated.

Should you have any questions, I can be reached at any of the above contact information.

Respectfully,



Michael D. Maxey, Landman  
Kaiser-Francis Oil Company

KAISER-FRANCIS OIL COMPANY

P.O. BOX 21468

TULSA, OKLAHOMA 74121-1468

Brendon Kushnerick, Landman  
Phone: (918) 491-4431  
E-mail: brendonk@kfoc.net

6733 South Yale Avenue, 74136  
Phone: (918) 494-0000

**Sent by Certified Mail**

June 30, 2020

Heirs of Geraldine Hoose Stevens  
c/o Curtis Stevens  
112 Durham Drive  
Crawfordsville, IN 47933

Re: Loving Townsite 2021 WC #1H  
SE/4 Section 20 and SW/4 of Section 21-23S-28E  
Eddy Co., NM

Heirs of Geraldine Hoose Stevens:

Kaiser-Francis Oil Company hereby proposes the drilling of a 15,495' MD / 10,347' TVD horizontal Wolfcamp test well, covering the referenced 1 mile well path. The well will have an approximate surface location of 2,450' FEL and 1,600' FSL of Section 20-23S-28E, and a terminus of approximately 2,310' FWL and 2,310' FSL of Section 21-23S-28E.

AFE costs are estimated to be \$2,860,382 DHC and \$7,789,930 CWC. Two copies of the AFE are enclosed.

Should Heirs of Geraldine Hoose Stevens wish to participate in the well, please execute and return one copy of the AFE, along with a reply letter indicating your desire to participate, and we will in turn send you a JOA for your review and approval.

We will be filing for an APD with the State of NM soon, therefore, a prompt answer regarding our proposal would be greatly appreciated.

Should you have any questions, I can be reached at any of the above contact information.

Respectfully,



Brendon Kushnerick, Landman  
Kaiser-Francis Oil Company

KAISER-FRANCIS OIL COMPANY

P.O. BOX 21468

TULSA, OKLAHOMA 74121-1468

Brendon Kushnerick, Landman  
Phone: (918) 491-4431  
E-mail: brendonk@kfoc.net

6733 South Yale Avenue, 74136  
Phone: (918) 494-0000

**Sent by Certified Mail**

June 30, 2020

Heirs of Geraldine Hoose Stevens  
c/o Curtis Stevens  
112 Durham Drive  
Crawfordsville, IN 47933

Re: Loving Townsite 2021 WC #2H  
SE/4 Section 20 and SW/4 of Section 21-23S-28E  
Eddy Co., NM

Heirs of Geraldine Hoose Stevens:

Kaiser-Francis Oil Company hereby proposes the drilling of a 15,495' MD / 10,347' TVD horizontal Wolfcamp test well, covering the referenced 1 mile well path. The well will have an approximate surface location of 2,450' FEL and 1,180' FSL of Section 20-23S-28E, and a terminus of approximately 2,310' FWL and 330' FSL of Section 21-23S-28E.

AFE costs are estimated to be \$2,821,436 DHC and \$7,750,984 CWC. Two copies of the AFE are enclosed.

Should Heirs of Geraldine Hoose Stevens, wish to participate in the well, please execute and return one copy of the AFE, along with a reply letter indicating your desire to participate, and we will in turn send you a JOA for your review and approval.

We will be filing for an APD with the State of NM soon, therefore, a prompt answer regarding our proposal would be greatly appreciated.

Should you have any questions, I can be reached at any of the above contact information.

Respectfully,



Brendon Kushnerick, Landman  
Kaiser-Francis Oil Company

**Kaiser-Francis Oil Company**  
Authority for Expenditure

OPERATOR: Kaiser-Francis Oil Company  
 WELL NAME & NO: Loving Townsite 2021 WC #1H  
 PROSPECT NAME: Loving Townsite  
 LOCATION: SHL Sec 20-23-28 BHL Sec 21-23-28  
 PROPOSED TD: 15,495 MD 10,347' TVD  
 OBJECTIVE HORIZON: Wolfcamp C  
 OBJECTIVE: Drill and complete new horizontal well in WC / net lateral 4,620' 5-1/2" Long String

DATE: 12/1/2018  
 FIELD: Purple Sage  
 PSH/COUNTY: Eddy  
 STATE: NM  
 PREPARER: M Warner / D Zergler

Classification of Account	DRILLING	COMPLETION	EQPT/CONST	TOTAL
<b>INTANGIBLE DRILLING &amp; COMPLETION</b>				
500/600 Location / Road Expense / Earthen Pit / Frac Pit Construction	\$40,000	\$7,000	\$60,000	\$107,000
501/**** Cond. Rat Hole, Mouse Hole Services	\$37,000			\$37,000
502/602 Location Damages				\$0
504/604 Drilling Rig		\$20,000		\$20,000
Turnkey				
Footage @		per foot		\$0
Daywork 30 days at \$20,500	\$615,000			\$615,000
505/605 Coiled Tubing & Related Services		\$240,000		\$240,000
506/606 Rig Mob / Demob	\$67,470			\$67,470
507/**** Directional Drilling Services	\$284,200			\$284,200
508/608 Bits & Reamers	\$100,000			\$100,000
510/610 Fuel/Power	\$81,484			\$81,484
512/612 Drilling Water / Completion Fluid	\$25,000	\$470,000		\$495,000
514/614 Mud & Chemicals	\$140,000	\$30,000		\$170,000
515/615 Closed Loop System / Mud & Cuttings Disposal/SWD	\$120,000	\$50,000		\$170,000
516/616 Surface Equipment Rental / Inspection	\$145,727	\$184,300		\$330,027
517/617 Downhole Equipment Rental / Inspection	\$48,900	\$47,000		\$95,900
518/618 Transportation & Loading	\$15,000	\$38,000		\$53,000
520/**** DST, Coring & Analysis				\$0
522/622 Open Hole Logs / Cased Hole Logs & Perforating / Slickline / Plugs				\$0
523/**** Mud Logging / Geosteering / LWD	\$28,600			\$28,600
524/624 Cementing & Squeezing	\$82,000	\$67,000		\$149,000
526/626 Casing Crews & Equipment	\$10,000			\$10,000
528/628 Plug & Abandon				\$0
630 Stimulation		\$2,500,000		\$2,500,000
632/632 Geological & Engineering		\$10,000		\$10,000
534/634 Supervision	\$114,824	\$51,750		\$166,574
536/636 Miscellaneous Contract Labor	\$5,000	\$30,000	\$50,000	\$85,000
538/638 Prof. Fees & Abstracts				\$0
541/641 Liability Insurance / Bonds				\$0
542/642 Drilling Overhead / Completion Overhead	\$12,538	\$6,300		\$18,838
544/644 Miscellaneous & Unforeseen	\$179,611	\$187,568	\$5,500	\$372,679
<b>TOTAL INTANGIBLE DRILLING &amp; COMPLETION</b>	<b>\$2,172,562</b>	<b>\$3,938,918</b>	<b>\$115,500</b>	<b>\$6,226,970</b>
<b>WELL AND LEASE EQUIPMENT</b>				
700 Conductor	Feet			\$0
701 Surface Casing 20" 94#	500	\$38,500		\$38,500
702 Intermediate Casing 13-3/8" 72#	2700	\$148,300		\$148,300
702 Intermediate Casing 9-5/8" 53.5# P-110	9900	\$408,500		\$408,500
704 Drilling Liner (BCP)				\$0
703 Production Liner (ACP) 5-1/2" 20# P-110 G5CD	15495		\$218,457	\$218,457
706 Production Casing (ACP)				\$0
710 Tubing 2 7/8" 6.5# L-80	10500		\$63,000	\$63,000
721/720 Wellhead Equip. BCP/ACP		\$27,000	\$40,000	\$67,000
724 Packers & Downhole Equipment				\$0
726 Rods & Pumps				\$0
737 Line Pipe / Fittings / Pipeline			\$40,000	\$40,000
747 Valves			\$35,000	\$35,000
752 Tanks & Walkways			\$170,000	\$170,000
765 Heaters / Treaters / Separator / VRU			\$110,000	\$110,000
768 Artificial Lift / Compressor			\$85,000	\$85,000
770 Gas Sales Unit / Dehy / Line Heater / Flare			\$5,000	\$5,000
775/774 Transportation and Freight BCP/ACP		\$2,000	\$60,000	\$62,000
777/776 Inspect/Test Tubulars BCP/ACP	\$5,000	\$5,000		\$10,000
779/778 Non-Controllable Equipment BCP/ACP	\$62,530	\$16,423	\$25,250	\$104,203
<b>TOTAL WELL AND LEASE EQUIPMENT</b>		<b>\$344,880</b>	<b>\$530,250</b>	<b>\$1,562,960</b>
<b>TOTAL DRILLING AND COMPLETION COST</b>	<b>\$2,860,382</b>	<b>\$4,283,798</b>	<b>\$645,750</b>	<b>\$7,789,930</b>
	Drilling	Completion	Eqpt/Const	Total

This AFE is only an *estimate* of costs and the *actual* costs incurred may be less or greater than stated.

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

ATTACHMENT **E**

**Kaiser-Francis Oil Company**  
**Authority for Expenditure**

OPERATOR: Kaiser-Francis Oil Company  
WELL NAME & NO: Loving Townsite 2021 WC #2H  
PROSPECT NAME: Loving Townsite  
LOCATION: SHL Sec 20-23-28 BHL Sec 21-23-28  
PROPOSED TD: 15,485 MD 10,347' TVD  
OBJECTIVE HORIZON: Wolfcamp C  
OBJECTIVE: Drill and complete new horizontal well in WC / net lateral 4,820' 5-1/2" Long String

DATE: 4/3/2018  
FIELD: Purple Sage  
PSH/COUNTY: Eddy  
STATE: NM  
PREPARER: M Warner / D Zerger

Classification of Account	DRILLING	COMPLETION	EQPT/CONST	TOTAL
<b>INTANGIBLE DRILLING &amp; COMPLETION</b>				
500/600 Location / Road Expense / Earthen Pit / Frac Pit Construction	\$30,000	\$7,000	\$60,000	\$97,000
501*** Cond, Rat Hole, Mouse Hole Services	\$37,000			\$37,000
502/602 Location Damages				\$0
504/604 Drilling Rig		\$20,000		\$20,000
Turnkey				
Completion Rig				
Footage @ per foot				
Daywork 30 days at \$20,500	\$815,000			\$815,000
506/605 Coiled Tubing & Related Services		\$240,000		\$240,000
506/606 Rig Mob / Demob	\$65,500			\$65,500
507*** Directional Drilling Services	\$284,200			\$284,200
508/608 Bits & Reamers	\$100,000			\$100,000
510/610 Fuel/Power	\$80,800			\$80,800
512/612 Drilling Water / Completion Fluid	\$25,000	\$470,000		\$495,000
514/614 Mud & Chemicals	\$140,000	\$30,000		\$170,000
515/615 Closed Loop System / Mud & Cuttings Disposal/SWD	\$120,000	\$50,000		\$170,000
516/616 Surface Equipment Rental / Inspection	\$144,416	\$184,300		\$328,716
517/617 Downhole Equipment Rental / Inspection	\$48,900	\$47,000		\$95,900
518/618 Transportation & Loading	\$15,000	\$38,000		\$53,000
520*** DST, Coring & Analysis				\$0
522/622 Open Hole Logs / Cased Hole Logs & Perforating / Silckline / Plugs				\$0
523*** Mud Logging / Geosteering / LWD	\$28,800			\$28,800
524/624 Cementing & Squeezing	\$82,000	\$87,000		\$149,000
526/626 Casing Crews & Equipment	\$10,000			\$10,000
528/628 Plug & Abandon				\$0
630 Stimulation		\$2,600,000		\$2,600,000
632/632 Geological & Engineering		\$10,000		\$10,000
634/634 Supervision	\$113,800	\$61,760		\$165,560
636/636 Miscellaneous Contract Labor	\$5,000	\$30,000	\$60,000	\$95,000
638/638 Prof. Fees & Abstracts				\$0
641/641 Liability Insurance / Bonds				\$0
642/642 Drilling Overhead / Compellion Overhead	\$12,400	\$9,300		\$18,700
644/644 Miscellaneous & Unforeseen	\$178,380	\$187,568	\$5,600	\$369,468
<b>TOTAL INTANGIBLE DRILLING &amp; COMPLETION</b>	<b>\$2,133,606</b>	<b>\$3,938,918</b>	<b>\$116,600</b>	<b>\$6,188,024</b>
<b>WELL AND LEASE EQUIPMENT</b>				
700 Conductor				\$0
701 Surface Casing 20" 84#	500	\$38,600		\$38,600
702 Intermediate Casing 13-3/8" 72#	2700	\$146,300		\$146,300
702 Intermediate Casing 9-5/8" 63.5# P-110	9900	\$408,600		\$408,600
704 Drilling Liner (BCP)				\$0
703 Production Liner (ACP) 6-1/2" 20# P-110 GBCD	15495		\$218,457	\$218,457
706 Production Casing (ACP)				\$0
710 Tubing 2 7/8" 6.5# L-80	10600		\$83,000	\$83,000
721/720 Wellhead Equip. BCP/ACP		\$27,000	\$40,000	\$67,000
724 Packers & Downhole Equipment				\$0
726 Rods & Pumps				\$0
737 Line Pipe / Fittings / Pipeline			\$40,000	\$40,000
747 Valves			\$35,000	\$35,000
762 Tanks & Walkways			\$170,000	\$170,000
765 Healers / Treaters / Separator / VRU			\$110,000	\$110,000
768 Artificial Lift / Compressor			\$85,000	\$85,000
770 Gas Sales Unit / Dehy / Line Heater / Flare			\$5,000	\$5,000
776/774 Transportation and Freight BCP/ACP		\$2,000	\$60,000	\$62,000
777/776 Inspect/Test Tubulars BCP/ACP	\$5,000	\$5,000		\$10,000
779/778 Non-Controllable Equipment BCP/ACP	\$82,530	\$18,423	\$25,250	\$104,203
<b>TOTAL WELL AND LEASE EQUIPMENT</b>	<b>\$687,830</b>	<b>\$344,880</b>	<b>\$530,250</b>	<b>\$1,562,960</b>
<b>TOTAL DRILLING AND COMPLETION COST</b>	<b>\$2,821,436</b>	<b>\$4,283,798</b>	<b>\$645,750</b>	<b>\$7,750,984</b>
	<b>Drilling</b>	<b>Completion</b>	<b>Eqpt/Const</b>	<b>Total</b>

This AFE is only an estimate of costs and the actual costs incurred may be less or greater than stated.

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_



**Kaiser-Francis Oil Company**  
Authority for Expenditure

Operator: Kaiser-Francis Oil Company	Date: 7/10/2020
Well Name: Loving Townsite WA #1H	Field: Purple Sage
Prospect: Loving Townsite	County / Psh: Eddy
Location: Sec 20/21 - 23S - 28E	State: NM
Depth: 14900 MD 10100 TVD	Preparer: RS/DZ/JC
Horizon: Wolfcamp A	

Objective: Drill and complete a 1.0 mile horizontal Wolfcamp A well on an two-well pad

JIB Code	Intangible Drilling and Completion Costs	Drilling	Completion	Eqpt/Const	Total
500/600	Location / Road Expense / Frac Pit Construction	\$35,000	\$14,000	\$4,000	\$53,000
501/**	Cond, Rat Hole, Mouse Hole Services	\$32,000			\$32,000
502/602	Location Damages	\$200,000	\$40,000		\$240,000
503/603	Environmental, Regulatory, and Permitting	\$20,000			\$20,000
504/604	Turnkey Completion Rig		\$8,000		\$8,000
	Footage @ per foot				\$0
	Daywork 21 days at \$18,850	\$386,425			\$386,425
505/605	Coiled Tubing & Related Services		\$60,000		\$60,000
506/606	Rig Mob / Demob	\$97,250			\$97,250
507/**	Directional Drilling Services	\$298,500			\$298,500
508/608	Bits & Reamers	\$78,000			\$78,000
510/610	Fuel/Power	\$92,250			\$92,250
512/612	Drilling Water / Completion Fluid	\$37,000	\$375,000		\$412,000
514/614	Mud & Chemicals	\$201,000	\$20,000		\$221,000
515/615	Closed Loop System / Mud & Cuttings Disposal / SWD	\$125,000	\$35,000		\$160,000
516/616	Surface Equipment Rental / Inspection	\$254,300	\$120,800		\$375,100
517/617	Downhole Equipment Rental / Inspection	\$166,700	\$31,000		\$197,700
518/618	Transportation & Loading	\$35,000	\$63,000		\$98,000
520/**	DST, Coring & Analysis				\$0
521/621	Downhole tools: Whipstocks, Liner Hangers, Frac Plugs		\$20,000		\$20,000
522/622	OH Logs / CH Logs / Perforating / Slickline		\$75,000		\$75,000
523/**	Mud Logging / Geosteering / LWD	\$24,000			\$24,000
524/624	Cementing & Squeezing	\$178,500			\$178,500
526/626	Casing Crews & Equipment	\$57,500			\$57,500
528/628	Plug & Abandon				\$0
530/**	Stimulation		\$1,300,000		\$1,300,000
532/632	Geological & Engineering				\$0
534/634	Supervision	\$111,800	\$41,750		\$153,550
536/636	Miscellaneous Contract Labor	\$45,000	\$60,000	\$20,000	\$125,000
538/638	Prof. Fees & Abstracts	\$10,000			\$10,000
541/641	Liability Insurance / Bonds				\$0
542/642	Drilling Overhead / Completion Overhead	\$9,200	\$5,250		\$14,450
544/644	Miscellaneous & Unforeseen	\$102,671	\$226,880	\$1,200	\$330,751
	<b>Total Intangible Drilling &amp; Completion</b>	<b>\$2,597,096</b>	<b>\$2,495,680</b>	<b>\$25,200</b>	<b>\$5,117,976</b>

JIB Code	Tangible Well and Lease Equipment Costs	Drilling	Completion	Eqpt/Const	Total
700	Conductor				\$0
701	Surface Casing 13-3/8" 48# H40 STC 2020 COPAS 500	\$31,840			\$31,840
702	Intermediate Casing 10 3/4" 40.50# J-55 BTC 2020 COPAS 2400	\$109,248			\$109,248
702	Intermediate Casing 7-5/8" 29.7# P-110 HC BTC 2020 COPAS 8900	\$211,758			\$211,758
704	Drilling Liner (BCP)				\$0
703	Production Liner (ACP)				\$0
706	Production Casing (ACP) 5-1/2" P110HP 20# SF 2020 COPAS 14900	\$403,262			\$403,262
710	Tubing 2-7/8" 6.5# L-80 EUE 2020 COPAS 10300		\$56,238		\$56,238
721/720	Wellhead Equip. BCP/ACP	\$45,000	\$45,000		\$90,000
724	Packers & Downhole Equipment		\$20,000		\$20,000
726	Rods & Pumps				\$0
737	Line Pipe / Fittings / Pipeline			\$20,000	\$20,000
738	Automation/SCADA/Misc Electrical Equipment			\$15,000	\$15,000
747	Valves			\$20,000	\$20,000
752	Tanks & Walkways			\$55,000	\$55,000
765	Heaters / Treaters / Separator / VRU			\$55,000	\$55,000
768	Artificial Lift / Compressor			\$40,000	\$40,000
770	Gas Sales Unit / Dehy / Line Heater / Flare				\$0
775/774	Transportation and Freight BCP/ACP	\$10,000	\$2,000	\$40,000	\$52,000
777/776	Inspect/Test Tubulars BCP/ACP	\$4,400	\$5,000		\$9,400
779/778	Non-Controllable Equipment BCP/ACP	\$20,612	\$6,412	\$23,000	\$50,024
	<b>Total Well and Lease Equipment</b>	<b>\$836,120</b>	<b>\$134,650</b>	<b>\$268,000</b>	<b>\$1,238,770</b>

<b>Total Drilling and Completion Cost</b>	<b>\$3,433,217</b>	<b>\$2,630,330</b>	<b>\$293,200</b>	<b>\$6,356,746</b>
---	--------------------	--------------------	------------------	--------------------

KFOC APPROVALS	PARTNER APPROVAL
_____	_____
Drilling	Signature
_____	_____
Completion	Printed Name
_____	_____
Land	Position
_____	_____
Geology	Company
_____	_____
Reservoir	Date
_____	
Asset Manager	
_____	
Chief Operating Officer	

**Kaiser-Francis Oil Company**  
Authority for Expenditure

Operator: Kaiser-Francis Oil Company	Date: 7/10/2020
Well Name: Loving Townsite WA #2H	Field: Purple Sage
Prospect: Loving Townsite	County / Psh: Eddy
Location: Sec 20/21 - 23S - 28E	State: NM
Depth: 14900 MD 10100 TVD	Preparer: RS/DZ/JC
Horizon: Wolfcamp A	

Objective: Drill and complete a 1.0 mile horizontal Wolfcamp A well on an two-well pad

JIB Code	Intangible Drilling and Completion Costs	Drilling	Completion	Eqpt/Const	Total
500/600	Location / Road Expense / Frac Pit Construction	\$35,000	\$14,000	\$4,000	\$53,000
501/**	Cond, Rat Hole, Mouse Hole Services	\$32,000			\$32,000
502/602	Location Damages	\$200,000	\$40,000		\$240,000
503/603	Environmental, Regulatory, and Permitting	\$20,000			\$20,000
504/604	Turnkey Completion Rig		\$8,000		\$8,000
	Footage @ per foot				\$0
	Daywork 21 days at \$18,850	\$386,425			\$386,425
505/605	Coiled Tubing & Related Services		\$60,000		\$60,000
506/606	Rig Mob / Demob	\$97,250			\$97,250
507/**	Directional Drilling Services	\$298,500			\$298,500
508/608	Bits & Reamers	\$78,000			\$78,000
510/610	Fuel/Power	\$92,250			\$92,250
512/612	Drilling Water / Completion Fluid	\$37,000	\$375,000		\$412,000
514/614	Mud & Chemicals	\$201,000	\$20,000		\$221,000
515/615	Closed Loop System / Mud & Cuttings Disposal / SWD	\$125,000	\$35,000		\$160,000
516/616	Surface Equipment Rental / Inspection	\$254,300	\$120,800		\$375,100
517/617	Downhole Equipment Rental / Inspection	\$166,700	\$31,000		\$197,700
518/618	Transportation & Loading	\$35,000	\$63,000		\$98,000
520/**	DST, Coring & Analysis				\$0
521/621	Downhole tools: Whipstocks, Liner Hangers, Frac Plugs		\$20,000		\$20,000
522/622	OH Logs / CH Logs / Perforating / Slickline		\$75,000		\$75,000
523/**	Mud Logging / Geosteering / LWD	\$24,000			\$24,000
524/624	Cementing & Squeezing	\$178,500			\$178,500
526/626	Casing Crews & Equipment	\$57,500			\$57,500
528/628	Plug & Abandon				\$0
530/**	Stimulation		\$1,300,000		\$1,300,000
532/632	Geological & Engineering				\$0
534/634	Supervision	\$111,800	\$41,750		\$153,550
536/636	Miscellaneous Contract Labor	\$45,000	\$60,000	\$20,000	\$125,000
538/638	Prof. Fees & Abstracts	\$10,000			\$10,000
541/641	Liability Insurance / Bonds				\$0
542/642	Drilling Overhead / Completion Overhead	\$9,200	\$5,250		\$14,450
544/644	Miscellaneous & Unforeseen	\$102,671	\$226,880	\$1,200	\$330,751
	<b>Total Intangible Drilling &amp; Completion</b>	<b>\$2,597,096</b>	<b>\$2,495,680</b>	<b>\$25,200</b>	<b>\$5,117,976</b>

JIB Code	Tangible Well and Lease Equipment Costs	Drilling	Completion	Eqpt/Const	Total
700	Conductor				\$0
701	Surface Casing 13-3/8" 48# H40 STC 2020 COPAS 500	\$31,840			\$31,840
702	Intermediate Casing 10 3/4" 40.50# J-55 BTC 2020 COPAS 2400	\$109,248			\$109,248
702	Intermediate Casing 7-5/8" 29.7# P-110 HC BTC 2020 COPAS 8900	\$211,758			\$211,758
704	Drilling Liner (BCP)				\$0
703	Production Liner (ACP)				\$0
706	Production Casing (ACP) 5-1/2" P110HP 20# SF 2020 COPAS 14900	\$403,262			\$403,262
710	Tubing 2-7/8" 6.5# L-80 EUE 2020 COPAS 10300		\$56,238		\$56,238
721/720	Wellhead Equip. BCP/ACP	\$45,000	\$45,000		\$90,000
724	Packers & Downhole Equipment		\$20,000		\$20,000
726	Rods & Pumps				\$0
737	Line Pipe / Fittings / Pipeline			\$20,000	\$20,000
738	Automation/SCADA/Misc Electrical Equipment			\$15,000	\$15,000
747	Valves			\$20,000	\$20,000
752	Tanks & Walkways			\$55,000	\$55,000
765	Heaters / Treaters / Separator / VRU			\$55,000	\$55,000
768	Artificial Lift / Compressor			\$40,000	\$40,000
770	Gas Sales Unit / Dehy / Line Heater / Flare				\$0
775/774	Transportation and Freight BCP/ACP	\$10,000	\$2,000	\$40,000	\$52,000
777/776	Inspect/Test Tubulars BCP/ACP	\$4,400	\$5,000		\$9,400
779/778	Non-Controllable Equipment BCP/ACP	\$20,612	\$6,412	\$23,000	\$50,024
	<b>Total Well and Lease Equipment</b>	<b>\$836,120</b>	<b>\$134,650</b>	<b>\$268,000</b>	<b>\$1,238,770</b>

**Total Drilling and Completion Cost**      **\$3,433,217**      **\$2,630,330**      **\$293,200**      **\$6,356,746**

KFOC APPROVALS	PARTNER APPROVAL
_____	_____
Drilling	Signature
_____	_____
Completion	Printed Name
_____	_____
Land	Position
_____	_____
Geology	Company
_____	_____
Reservoir	Date
_____	
Asset Manager	
_____	
Chief Operating Officer	

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

**APPLICATION OF KAISER-FRANCIS OIL  
COMPANY FOR COMPULSORY POOLING,  
EDDY COUNTY, NEW MEXICO.**

Case No. 21419

**VERIFIED STATEMENT OF LEE LINDMAN**

Lee J. Lindman, being duly sworn upon his oath, deposes and states:

1. I am over the age of 18, and have personal knowledge of the geological matters stated herein.
2. I am a geologist for Kaiser-Francis Oil Company ("KFOC"). I have been qualified by the Division as an expert petroleum geologist. My area of responsibility at KFOC includes this portion of Southeast New Mexico.
3. The following geological plats are attached hereto:
  - (a) Attachment A is a structure map on the Base of the Wolfcamp Y Sand. It shows that structure dips gently to the East. It also displays other Wolfcamp X-Y wells and permits in the vicinity of the Loving Townsite 2021 WA 1H & 2H, and a line of cross-section. The proposed completion interval in the well is the upper Wolfcamp X-Y sand.
  - (b) Attachment B is a Gross Isopach map of the Wolfcamp X-Y Sand. This zone has uniform thickness across the proposed well unit.
  - (c) Attachment C is a cross-section B – B'. The well logs on the cross-section give a representative sample of the Wolfcamp X-Y formation in this area. The target zone for these wells is continuous across the well unit.
  - (d) Attachment D is a structure map of the Base of the Wolfcamp C. It shows that the structure dips gently to the East. It also displays the other Wolfcamp C wells and permits in the vicinity of the Loving Townsite 2021 WC 1H & 2H, and a line of cross-section. The completed interval is the Wolfcamp C.
  - (e) Attachment E is a Gross Isopach map of the Wolfcamp C. This zone has uniform thickness across the well unit.
  - (f) Attachment F is a cross-section B – B'. The well logs on the cross-section give a representative sample of the Wolfcamp C formation in this area. The target zone for these wells is continuous across the well unit.

EXHIBIT


**3**

4. I conclude from the maps that:
  - (a) The horizontal spacing unit is justified from a geologic standpoint.
  - (b) Each quarter section in the well unit will contribute more or less equally to production from the well.
  - (c) There is no faulting or other geologic impediment which will adversely affect the drilling of the subject well.
5. Based on production from wells in this area, KFOC sees no difference for standup or laydown wells in this area.
6. Attachment G contains the proposed horizontal drilling plans for the Loving Townsite WA 1H & 2H wells and the as drilled surveys for the Loving Townsite 2021 WC 1H & #2H wells. The producing interval of the proposed wells will be orthodox and the producing wells are orthodox. The completed Loving Townsite 2021 WC 1H and 2H are orthodox and comply with Division setback requirements. The proposed wells will also be orthodox and comply with Division setback requirements.

VERIFICATION

STATE OF OKLAHOMA            )  
  ) ss.  
COUNTY OF TULSA            )

Lee J. Lindman, being duly sworn upon his oath, deposes and states that: He is a geologist for Kaiser-Francis 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.

  
\_\_\_\_\_  
Lee J. Lindman

SUBSCRIBED AND SWORN TO before me this 1st day of September, 2020 by Diann Coggins.



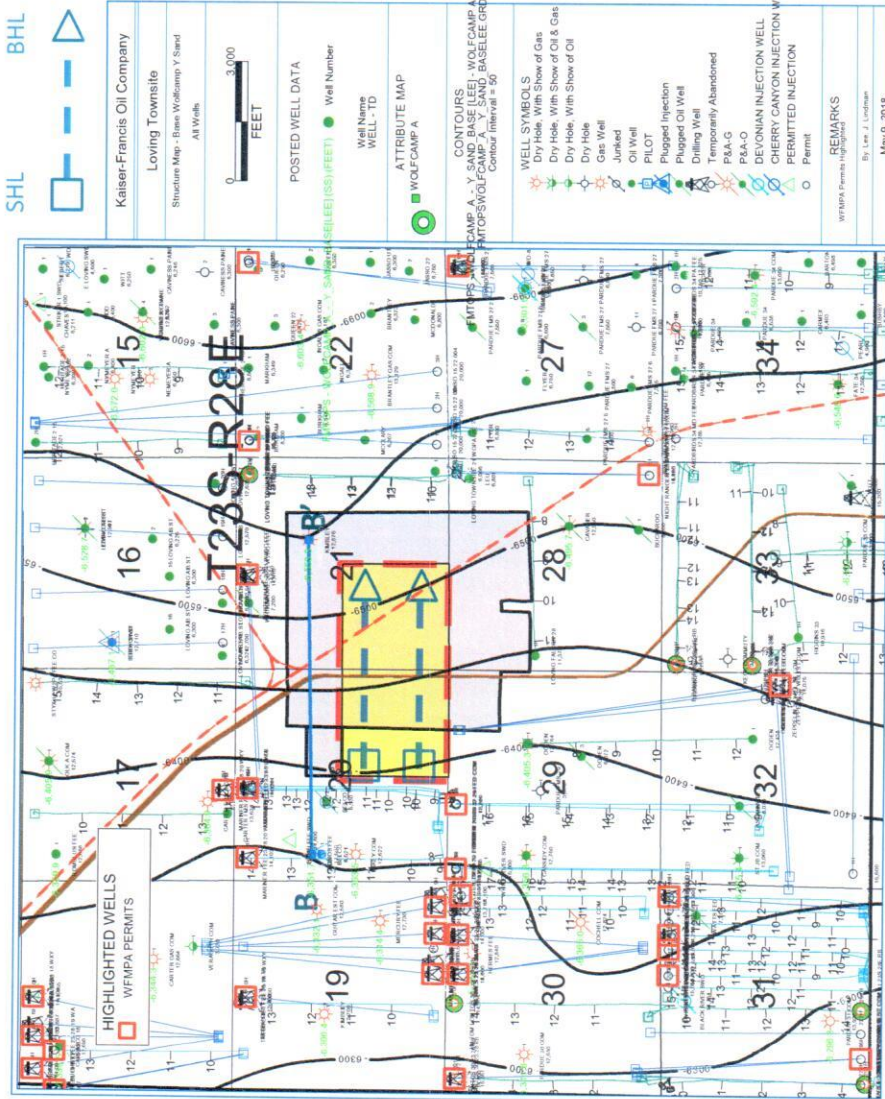
My Commission Expires: 6-21-24



Notary Public

ATTACHMENT

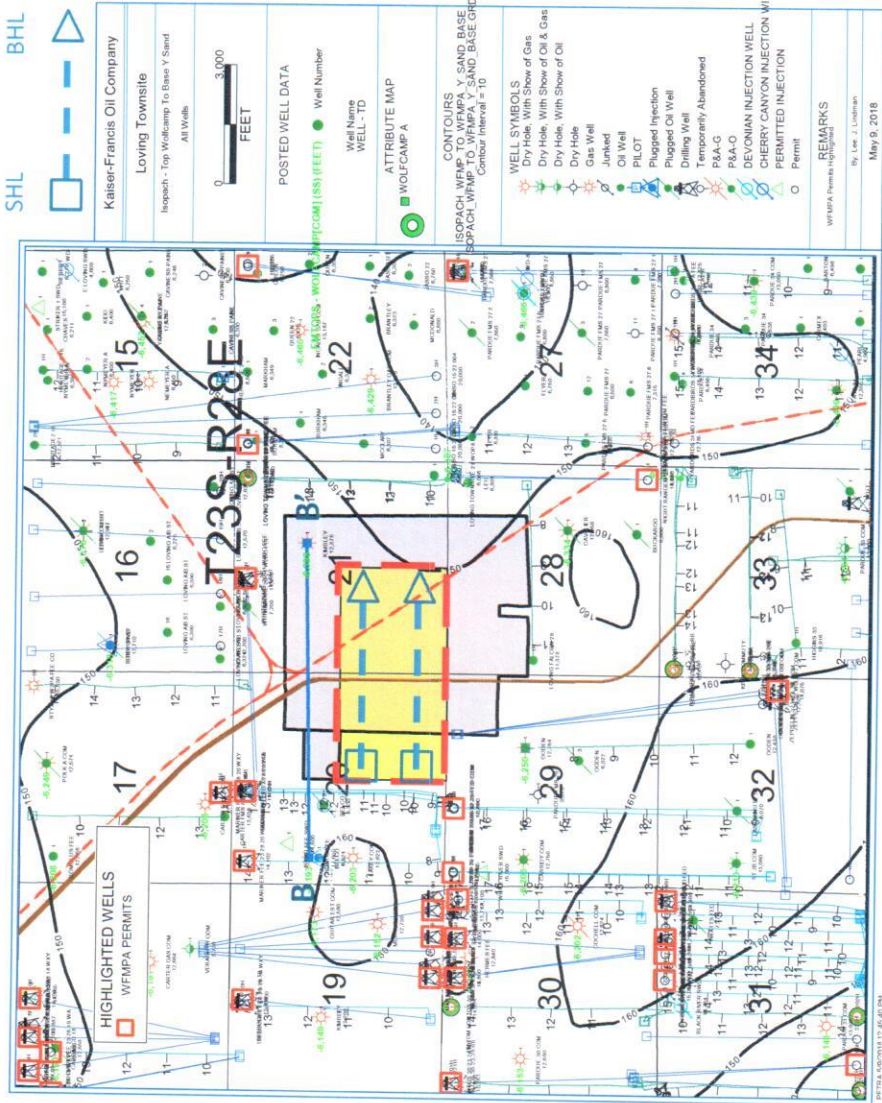
A



Structure Map (Base Wolfcamp Y Sand - Subsea)

Project Area

ATTACHMENT B

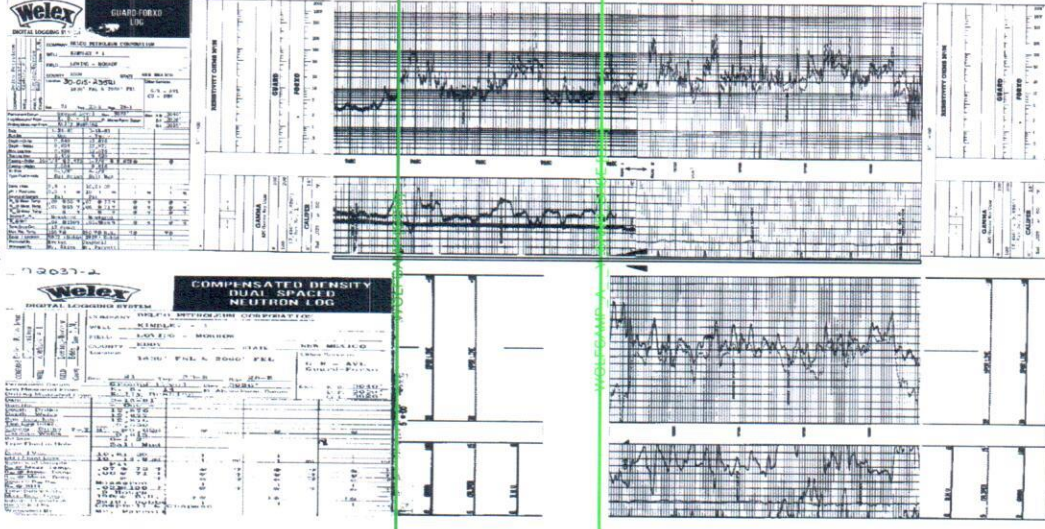


Isopach Map (Wolfcamp X/Y Sand)

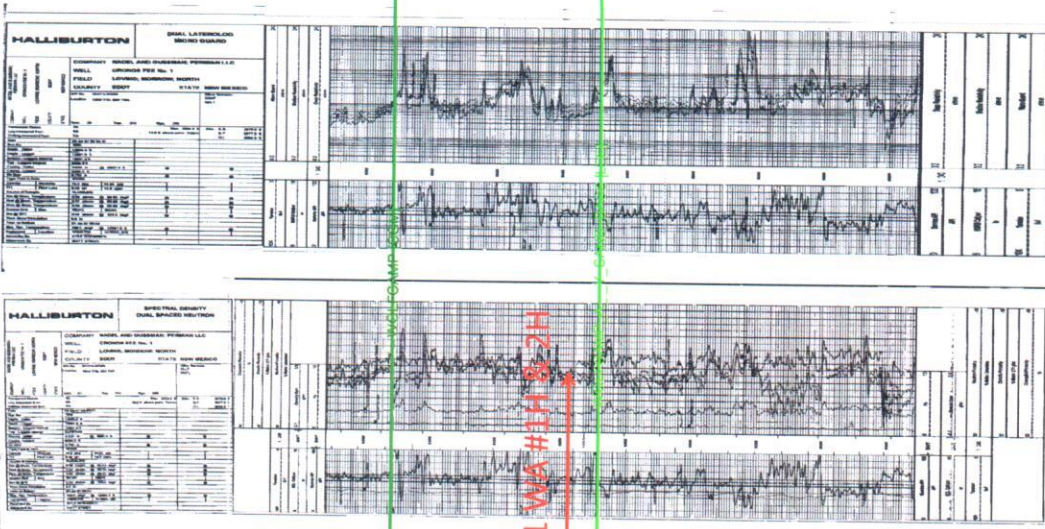
B'

ATTACHMENT C

NORDSTRAND ENG  
KIMBLEY  
12.876



MARATHON  
CRONOS FEE  
12.650



Rel Depth(ft)  
-50  
0  
50  
100  
150  
200  
250  
300  
350  
400

Datum

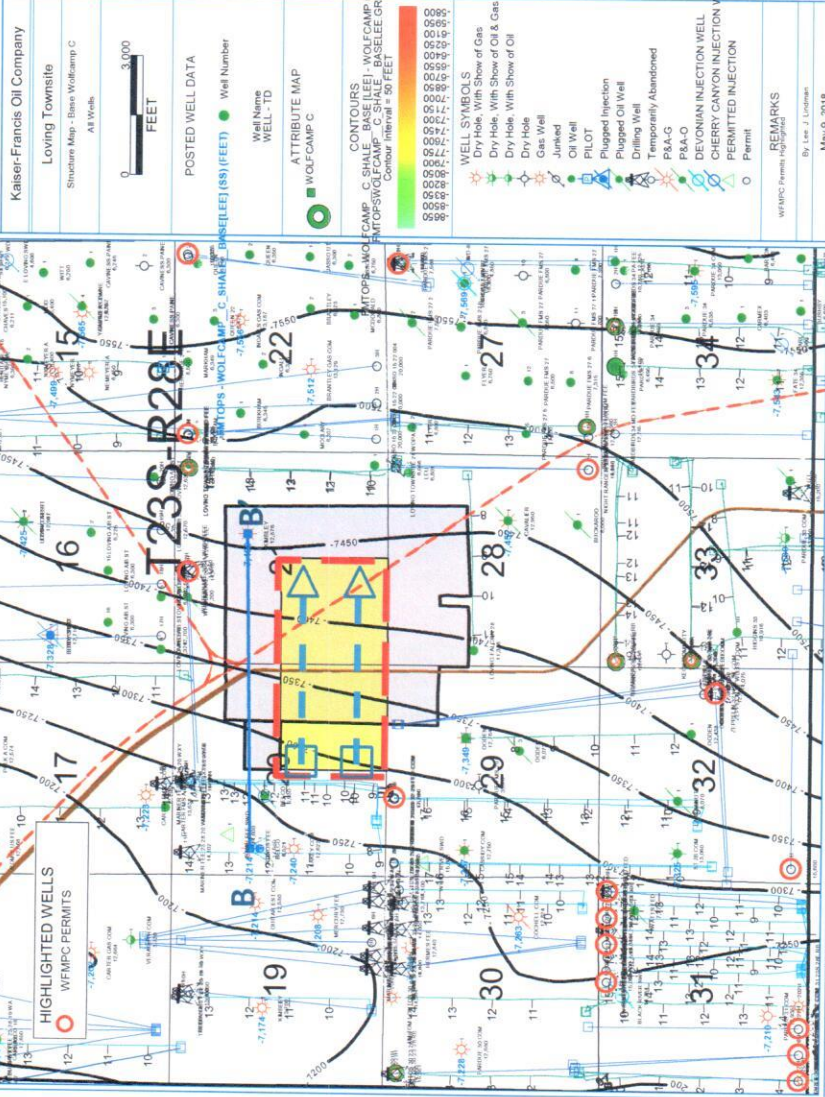
Loving Townsite 2021 WA #1A & 2H

Rel Depth(ft)  
-50  
0  
50  
100  
150  
200  
250  
300  
350  
400

Stratigraphic Cross Section B - B'



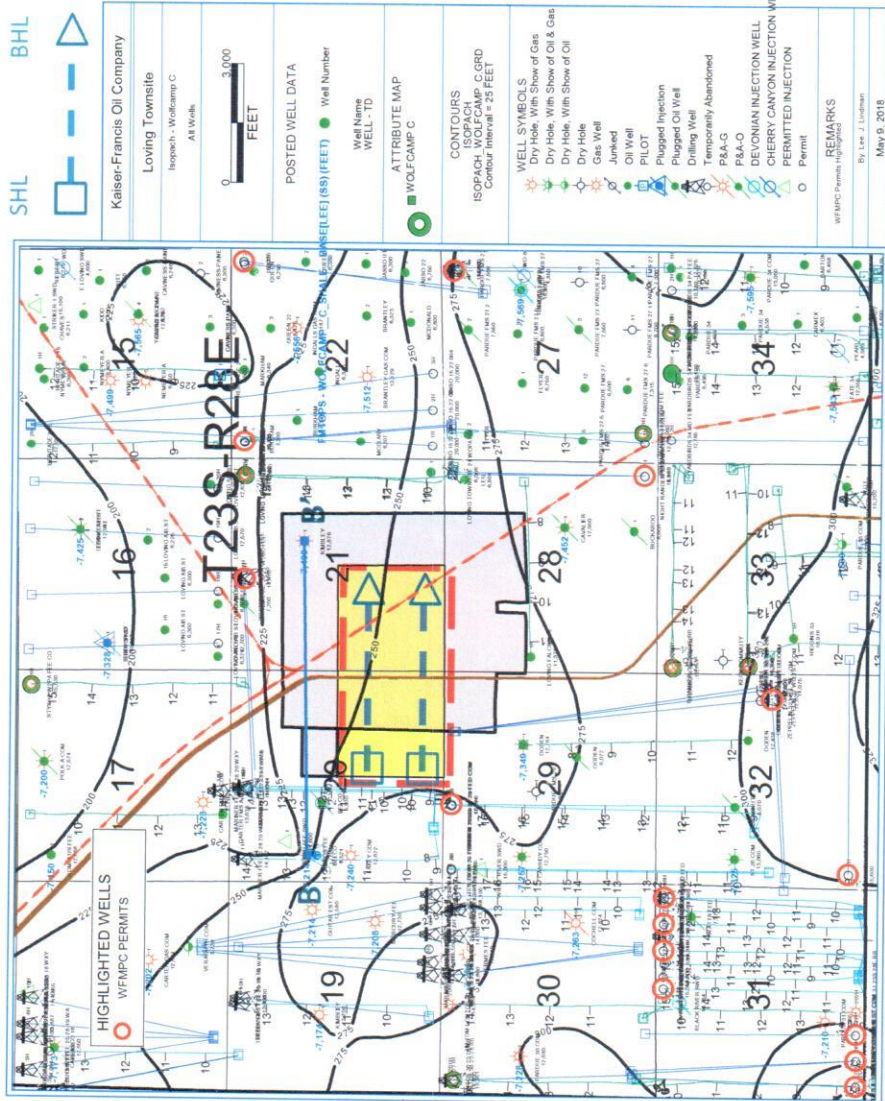
SHL BHL



Structure Map (Base Wolfcamp C - Subsea)

ATTACHMENT





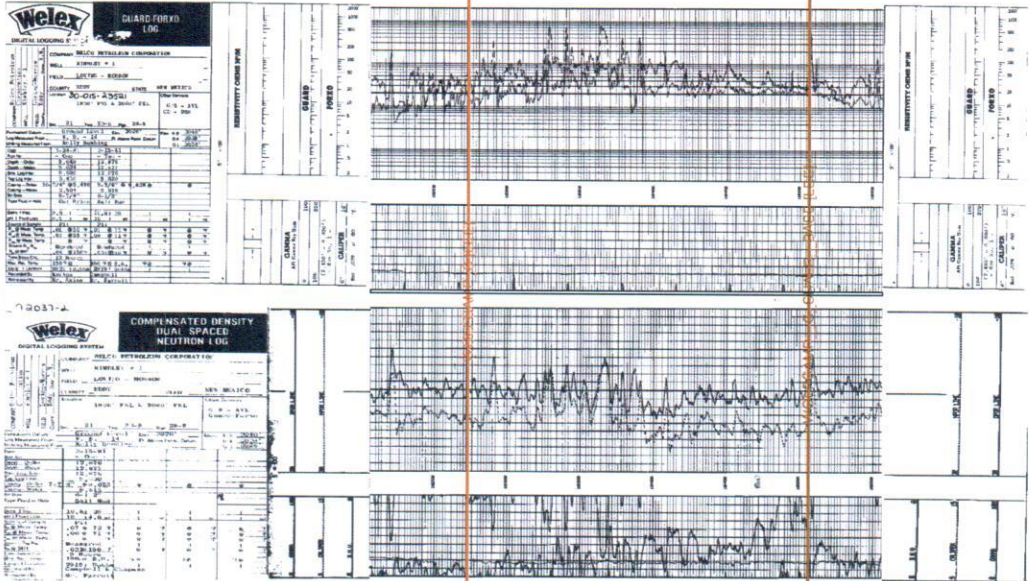
Isopach Map (Wolfcamp C)



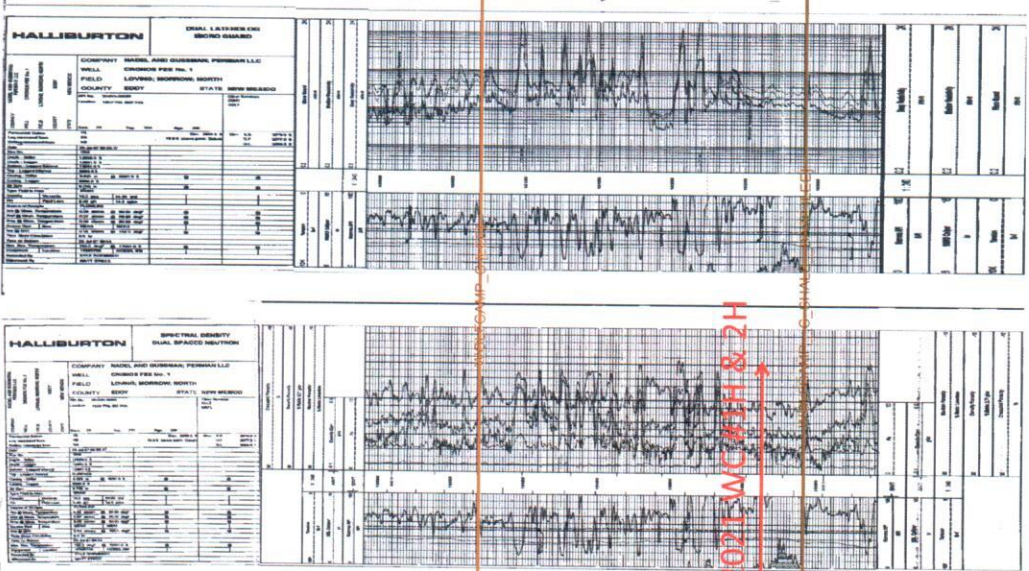
ATTACHMENT **E**

B'

1  
NORDSTRAND ENG  
KIMBLEY  
12.876



1  
MARATHON  
CRONOS FEE  
12.650



Rel Depth(ft) -300 -250 -200 -150 -100 -50 0 -50

ATTACHMENT F

Rel Depth(ft) -300 -250 -200 -150 -100 -50 0 50

Loving Townsite 2021 WCA 1H & 2H  
Datum

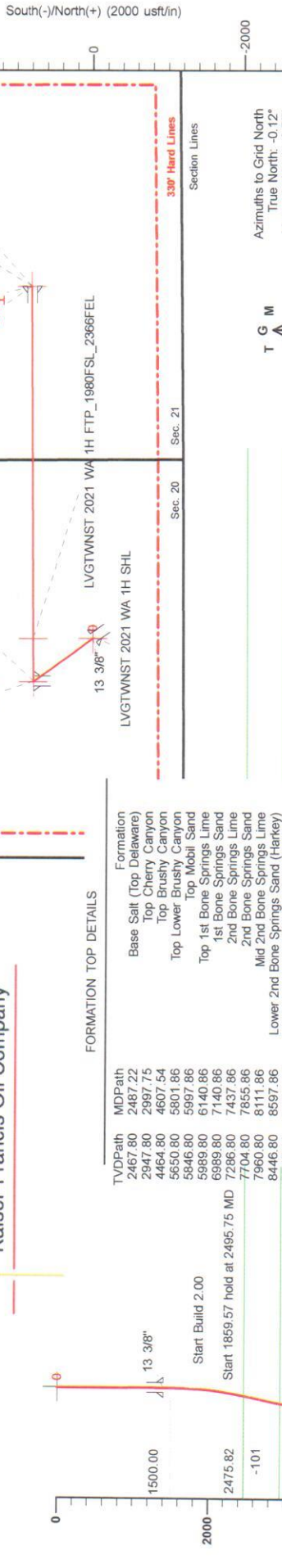
Stratigraphic Cross Section B - B'

# KAISER-FRANCIS OIL COMPANY

3069.8 @ 3069.80usft (GLOnly)  
North American Datum 1983

Project: Eddy County, NM (NMEZ) NAD83 Grid  
Site: Loving Townsite 2021 WA  
Well: WA 1H  
Wellbore: Lateral  
Design: Plan #1

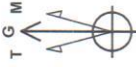
**Kaiser-Francis Oil Company**



### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2467.80	2467.22	Base Salt (Top Delaware)
2947.80	2997.75	Top Cherry Canyon
4464.80	4607.54	Top Brushy Canyon
5650.80	5801.86	Top Lower Brushy Canyon
5846.80	5997.86	Top Mobil Sand
5989.80	6140.86	Top 1st Bone Springs Lime
6989.80	7140.86	1st Bone Springs Sand
7286.80	7437.86	2nd Bone Springs Lime
7704.80	7855.86	2nd Bone Springs Sand
7960.80	8111.86	Mid 2nd Bone Springs Lime
8446.80	8597.86	2nd Bone Springs Sand (Hartkey)
8747.80	8898.86	3rd Bone Springs Lime
8977.80	9128.99	3rd Bone Springs Sand
9319.80	9515.56	Top Wolfcamp (Wolfcamp A)
9349.80	9559.69	Top Wolfcamp A - X Sand
9394.80	9634.70	Top Wolfcamp A - Y Sand
9424.80	9694.46	Base Wolfcamp A - Y Sand
9474.80	9842.89	

Azimuths to Grid North  
True North: -0.12°  
Magnetic North: 6.77°  
Magnetic Field  
Strength: 47561.4nT  
Dip Angle: 59.90°  
Date: 08/25/2020  
Model: IGRF2020



### SECTION DETAILS

Dirleg	+E/W	+N/S	TVD	Azi	Inc	MD	MDPath	Formation	VScd
0.00	0.00	0.00	0.00	0.00	0.00	0.00	2467.80	Base Salt (Top Delaware)	0.00
0.00	0.00	0.00	1500.00	0.00	0.00	1500.00	2947.80	Top Cherry Canyon	0.00
2.00	-101.19	138.24	2475.82	323.79	19.91	2495.75	2947.80	Top Brushy Canyon	-100.57
0.00	-475.35	649.34	4464.80	323.79	19.91	4355.32	4464.80	Top Lower Brushy Canyon	0.00
0.00	-576.54	787.57	5650.80	0.00	0.00	5351.06	5650.80	Top Mobil Sand	0.00
0.00	-576.54	787.57	5846.80	0.00	0.00	9066.10	5846.80	Top 1st Bone Springs Lime	0.00
0.00	-576.54	787.57	5989.80	0.00	0.00	9966.10	5989.80	1st Bone Springs Sand	0.00
0.00	-576.54	787.57	6989.80	89.74	90.00	9966.10	6989.80	2nd Bone Springs Lime	0.00
0.00	-576.54	787.57	7286.80	89.74	90.00	9966.10	7286.80	2nd Bone Springs Sand	0.00
0.00	-576.54	787.57	7704.80	89.74	90.00	9966.10	7704.80	Mid 2nd Bone Springs Lime	0.00
0.00	-576.54	787.57	7960.80	89.74	90.00	9966.10	7960.80	2nd Bone Springs Sand (Hartkey)	0.00
0.00	-576.54	787.57	8446.80	89.74	90.00	9966.10	8446.80	3rd Bone Springs Lime	0.00
0.00	-576.54	787.57	8747.80	89.74	90.00	9966.10	8747.80	3rd Bone Springs Sand	0.00
0.00	-576.54	787.57	8977.80	89.74	90.00	9966.10	8977.80	Top Wolfcamp (Wolfcamp A)	0.00
0.00	-576.54	787.57	9319.80	89.74	90.00	9966.10	9319.80	Top Wolfcamp A - X Sand	0.00
0.00	-576.54	787.57	9349.80	89.74	90.00	9966.10	9349.80	Top Wolfcamp A - Y Sand	0.00
0.00	-576.54	787.57	9394.80	89.74	90.00	9966.10	9394.80	Base Wolfcamp A - Y Sand	0.00
0.00	-576.54	787.57	9424.80	89.74	90.00	9966.10	9424.80		0.00
0.00	-576.54	787.57	9474.80	89.74	90.00	9966.10	9474.80		0.00

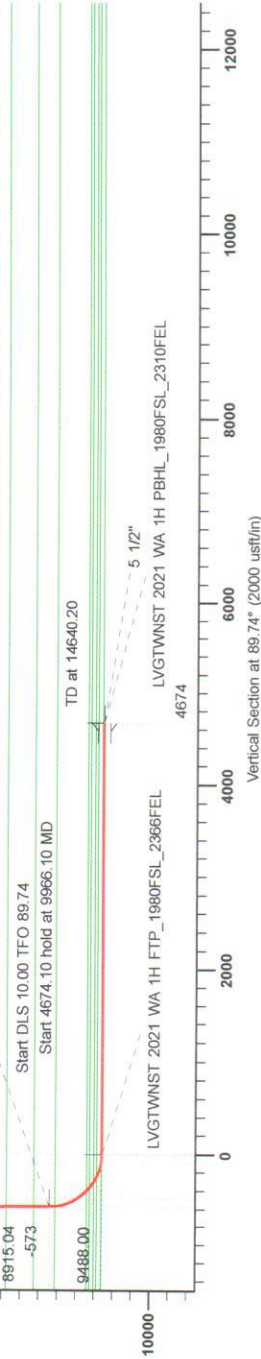
To convert a Magnetic Direction to a Grid Direction, Add 6.77°  
To convert a Magnetic Direction to a True Direction, Add 6.89° East  
Magnetic North is 6.77° East of Grid North (Magnetic Convergence)  
Magnetic North is 6.89° East of True North (Magnetic Declination)

### TARGET DETAILS

TVD	+E/W	+N/S	Northing	Easting
0.00	0.00	0.00	468065.09	610770.59
8915.04	-576.54	787.57	468852.66	610194.05
9488.00	-3.59	790.21	468855.30	610767.00
9488.00	4670.46	811.71	468876.80	615441.05

### CASING DETAILS

TVD	MD	Name	Size
1400.00	13 3/8"		13.37
5300.00	5 1/2"		9.62
9488.00	14640.20	5 1/2"	5.50



Plan: Plan #1 (WA 1H/L)  
Created By: Mekka Wil  
10:38, August 25, 2020

ATTACHMENT

SB DIRECTIONAL SERVICES  
5135 SW 29TH ST  
OKLAHOMA CITY, OK 73179



Kaiser-Francis Oil Company

## **KAISER-FRANCIS OIL COMPANY**

Eddy County, NM (NMEZ) NAD83 Grid

Loving Townsite 2021 WA

WA 1H - Slot 1H

Lateral

Plan: Plan #1

## **Survey Report Landscape**

25 August, 2020





Survey Report Landscape

**Company:** KAISER-FRANCIS OIL COMPANY  
**Project:** Eddy County, NM (NMEZ) NAD83 Grid  
**Site:** Loving Townsite 2021 WA  
**Well:** WA 1H  
**Wellbore:** Lateral  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well WA 1H - Slot 1H  
**TVD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**MD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** SBDIR\_EDM

**Project:** Eddy County, NM (NMEZ) NAD83 Grid  
**Map System:** US State Plane 1983  
**Geo Datum:** North American Datum 1983  
**Map Zone:** New Mexico Eastern Zone  
**System Datum:** Mean Sea Level

**Site:** Loving Townsite 2021 WA  
**Site Position:**  
**From:** Map  
**Position Uncertainty:** 0.00 usft  
**Northing:** 468,065.09 usft  
**Easting:** 610,770.59 usft  
**Slot Radius:** 13.20 in  
**Latitude:** 32.2865850°N  
**Longitude:** 104.1086456°W  
**Grid Convergence:** 0.12 °

**Well:** WA 1H - Slot 1H  
**Well Position:**  
**+N/-S:** 0.00 usft  
**+E/-W:** 0.00 usft  
**Wellhead Elevation:** 0.00 usft  
**Latitude:** 32.2865850°N  
**Longitude:** 104.1086456°W  
**Ground Level:** 3,069.80 usft

**Wellbore:** Lateral  
**Magnetics:** Model Name IGRF2020 Sample Date 08/25/20  
 Declination (°) 6.89 Dip Angle (°) 59.90 Field Strength (nT) 47,561.35418065

**Design:** Plan #1  
**Audit Notes:**  
**Version:** PROTOTYPE  
**Phase:** PROTOTYPE  
**Tie On Depth:** 0.00  
**Vertical Section:** Depth From (TVD) (usft) 0.00  
 +N/-S (usft) 0.00 +E/-W (usft) 0.00 Direction (°) 89.74

**Survey Tool Program:** Date 08/25/20  
**From (usft):** 0.00  
**To (usft):** 14,640.09  
**Survey (Wellbore):** Plan #1 (Lateral)



Survey Report Landscape

**Company:** KAISER-FRANCIS OIL COMPANY  
**Project:** Eddy County, NM (NMEZ) NAD83 Grid  
**Site:** Loving Townsite 2021 WA  
**Well:** WA 1H  
**Wellbore:** Lateral  
**Design:** Plan #1

**Local Co-ordinate Reference:**  
**TVD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**MD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** SBDIR\_EDM

**Well WA 1H - Slot 1H**  
 3069.8 @ 3069.80usft (GLOnly)  
 3069.8 @ 3069.80usft (GLOnly)  
 Grid  
 Minimum Curvature  
 SBDIR\_EDM

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100ft)	Northing (usft)	Easting (usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
<b>LVGTWNST 2021 WA 1H SHL</b>										
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
<b>13 3/8"</b>										
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59
1,600.00	2.00	323.79	1,599.98	1.41	-1.03	1.75	323.79	2.00	468,066.50	610,769.56
1,700.00	4.00	323.79	1,699.84	5.63	-4.12	6.98	323.79	2.00	468,070.72	610,766.47
1,800.00	6.00	323.79	1,799.45	12.66	-9.27	15.69	323.79	2.00	468,077.75	610,761.32
1,900.00	8.00	323.79	1,898.70	22.50	-16.47	27.88	323.79	2.00	468,087.59	610,754.12
2,000.00	10.00	323.79	1,997.47	35.12	-25.71	43.52	323.79	2.00	468,100.21	610,744.88
2,100.00	12.00	323.79	2,095.62	50.51	-36.98	62.60	323.79	2.00	468,115.60	610,733.61
2,200.00	14.00	323.79	2,193.06	68.66	-50.27	85.10	323.79	2.00	468,133.75	610,720.32
2,300.00	16.00	323.79	2,289.64	89.55	-65.55	110.98	323.79	2.00	468,154.64	610,705.04
2,400.00	18.00	323.79	2,385.27	113.14	-82.82	140.21	323.79	2.00	468,178.23	610,687.77



Survey Report Landscape

**Company:** KAISER-FRANCIS OIL COMPANY  
**Project:** Eddy County, NM (NMEZ) NAD83 Grid  
**Site:** Loving Townsite 2021 WA  
**Well:** WA 1H  
**Wellbore:** Lateral  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well WA 1H - Slot 1H  
**TVD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**MD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** SBDIR\_EDM

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100ft)	Northing (usft)	Easting (usft)
2,487.22	19.74	323.79	2,467.80	135.90	-99.49	168.43	323.79	2.00	468,200.99	610,671.10
<b>Base Salt (Top Delaware)</b>										
2,495.75	19.91	323.79	2,475.82	138.24	-101.19	171.32	323.79	2.00	468,203.33	610,669.40
2,500.00	19.91	323.79	2,479.82	139.40	-102.05	172.77	323.79	0.00	468,204.49	610,668.54
2,600.00	19.91	323.79	2,573.84	166.89	-122.17	206.83	323.79	0.00	468,231.98	610,648.42
2,700.00	19.91	323.79	2,667.86	194.37	-142.29	240.89	323.79	0.00	468,259.46	610,628.30
2,800.00	19.91	323.79	2,761.88	221.86	-162.41	274.95	323.79	0.00	468,286.95	610,608.18
2,900.00	19.91	323.79	2,855.90	249.34	-182.53	309.02	323.79	0.00	468,314.43	610,588.06
2,997.75	19.91	323.79	2,947.80	276.21	-202.20	342.31	323.79	0.00	468,341.30	610,568.39
<b>Top Cherry Canyon</b>										
3,000.00	19.91	323.79	2,949.92	276.83	-202.65	343.08	323.79	0.00	468,341.92	610,567.94
3,100.00	19.91	323.79	3,043.94	304.31	-222.77	377.14	323.79	0.00	468,369.40	610,547.82
3,200.00	19.91	323.79	3,137.96	331.80	-242.89	411.20	323.79	0.00	468,396.89	610,527.70
3,300.00	19.91	323.79	3,231.98	359.28	-263.01	445.27	323.79	0.00	468,424.37	610,507.58
3,400.00	19.91	323.79	3,326.00	386.77	-283.13	479.33	323.79	0.00	468,451.86	610,487.46
3,500.00	19.91	323.79	3,420.02	414.25	-303.25	513.39	323.79	0.00	468,479.34	610,467.34
3,600.00	19.91	323.79	3,514.04	441.74	-323.37	547.45	323.79	0.00	468,506.83	610,447.22
3,700.00	19.91	323.79	3,608.06	469.22	-343.49	581.52	323.79	0.00	468,534.31	610,427.10
3,800.00	19.91	323.79	3,702.08	496.71	-363.61	615.58	323.79	0.00	468,561.80	610,406.98
3,900.00	19.91	323.79	3,796.10	524.19	-383.73	649.64	323.79	0.00	468,589.28	610,386.86
4,000.00	19.91	323.79	3,890.12	551.68	-403.85	683.70	323.79	0.00	468,616.77	610,366.74
4,100.00	19.91	323.79	3,984.14	579.16	-423.98	717.77	323.79	0.00	468,644.25	610,346.61
4,200.00	19.91	323.79	4,078.16	606.65	-444.10	751.83	323.79	0.00	468,671.74	610,326.49
4,300.00	19.91	323.79	4,172.18	634.13	-464.22	785.89	323.79	0.00	468,699.22	610,306.37
4,355.32	19.91	323.79	4,224.18	649.34	-475.35	804.73	323.79	0.00	468,714.43	610,295.24
4,400.00	19.02	323.79	4,266.31	661.36	-484.14	819.62	323.79	2.00	468,726.45	610,286.45
4,500.00	17.02	323.79	4,361.40	686.32	-502.42	850.56	323.79	2.00	468,751.41	610,268.17





Survey Report Landscape

**Company:** KAISER-FRANCIS OIL COMPANY  
**Project:** Eddy County, NM (NIMEZ) NAD83 Grid  
**Site:** Loving Townsite 2021 WA  
**Well:** WA 1H  
**Wellbore:** Lateral  
**Design:** Plan #1

**Local Co-ordinate Reference:**  
**TVD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**MD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** SBDIR\_EDM

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100ft)	Northing (usft)	Easting (usft)
4,600.00	15.02	323.79	4,457.51	708.59	-518.72	878.16	323.79	2.00	468,773.68	610,251.87
4,607.54	14.87	323.79	4,464.80	710.16	-519.87	880.10	323.79	2.00	468,775.25	610,250.72
<b>Top Brushy Canyon</b>										
4,700.00	13.02	323.79	4,554.53	728.13	-533.03	902.38	323.79	2.00	468,793.22	610,237.56
4,800.00	11.02	323.79	4,652.33	744.94	-545.33	923.21	323.79	2.00	468,810.03	610,225.26
4,900.00	9.02	323.79	4,750.80	758.98	-555.61	940.61	323.79	2.00	468,824.07	610,214.98
5,000.00	7.02	323.79	4,849.82	770.24	-563.85	954.57	323.79	2.00	468,835.33	610,206.74
5,100.00	5.02	323.79	4,949.26	778.70	-570.05	965.05	323.79	2.00	468,843.79	610,200.54
5,200.00	3.02	323.79	5,049.01	784.36	-574.19	972.07	323.79	2.00	468,849.45	610,196.40
5,300.00	1.02	323.79	5,148.94	787.21	-576.27	975.59	323.79	2.00	468,852.30	610,194.32
5,351.06	0.00	0.00	5,200.00	787.57	-576.54	976.05	323.79	2.00	468,852.66	610,194.05
5,400.00	0.00	0.00	5,248.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
5,451.06	0.00	0.00	5,300.00	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
<b>9 5/8"</b>										
5,500.00	0.00	0.00	5,348.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
5,600.00	0.00	0.00	5,448.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
5,700.00	0.00	0.00	5,548.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
5,800.00	0.00	0.00	5,648.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
5,801.86	0.00	0.00	5,650.80	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
<b>Top Lower Brushy Canyon</b>										
5,900.00	0.00	0.00	5,748.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
5,997.86	0.00	0.00	5,846.80	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
<b>Top Mobil Sand</b>										
6,000.00	0.00	0.00	5,848.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
6,100.00	0.00	0.00	5,948.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
6,140.86	0.00	0.00	5,989.80	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
<b>Top 1st Bone Springs Lime</b>										
6,200.00	0.00	0.00	6,048.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05



Survey Report Landscape

Company: KAISER-FRANCIS OIL COMPANY  
 Project: Eddy County, NM (NMEZ) NAD83 Grid  
 Site: Loving Townsite 2021 WA  
 Well: WA 1H  
 Wellbore: Lateral  
 Design: Plan #1

Local Co-ordinate Reference:  
 TVD Reference: 3069.8 @ 3069.80ustf (GLOnly)  
 MD Reference: 3069.8 @ 3069.80ustf (GLOnly)  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature  
 Database: SBDIR\_EDM

Well WA 1H - Slot 1H  
 3069.8 @ 3069.80ustf (GLOnly)  
 3069.8 @ 3069.80ustf (GLOnly)  
 Grid  
 Minimum Curvature  
 SBDIR\_EDM

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100ft)	Northing (usft)	Easting (usft)
6,300.00	0.00	0.00	6,148.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
6,400.00	0.00	0.00	6,248.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
6,500.00	0.00	0.00	6,348.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
6,600.00	0.00	0.00	6,448.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
6,700.00	0.00	0.00	6,548.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
6,800.00	0.00	0.00	6,648.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
6,900.00	0.00	0.00	6,748.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
7,000.00	0.00	0.00	6,848.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
7,100.00	0.00	0.00	6,948.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
7,140.86	0.00	0.00	6,989.80	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
<b>1st Bone Springs Sand</b>										
7,200.00	0.00	0.00	7,048.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
7,300.00	0.00	0.00	7,148.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
7,400.00	0.00	0.00	7,248.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
7,437.86	0.00	0.00	7,286.80	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
<b>2nd Bone Springs Lime</b>										
7,500.00	0.00	0.00	7,348.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
7,600.00	0.00	0.00	7,448.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
7,700.00	0.00	0.00	7,548.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
7,800.00	0.00	0.00	7,648.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
7,855.86	0.00	0.00	7,704.80	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
<b>2nd Bone Springs Sand</b>										
7,900.00	0.00	0.00	7,748.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
8,000.00	0.00	0.00	7,848.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
8,100.00	0.00	0.00	7,948.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
8,111.86	0.00	0.00	7,960.80	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
<b>Mid 2nd Bone Springs Lime</b>										



Survey Report Landscape

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 Project: Eddy County, NM (NIMEZ) NAD83 Grid  
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 Design: Plan #1

Local Co-ordinate Reference: Well WA 1H - Slot 1H  
 TVD Reference: 3069.8 @ 3069.80usft (GLOnly)  
 MD Reference: 3069.8 @ 3069.80usft (GLOnly)  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature  
 Database: SBDIR\_EDM

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100ft)	Northing (usft)	Easting (usft)
8,200.00	0.00	0.00	8,048.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
8,300.00	0.00	0.00	8,148.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
8,400.00	0.00	0.00	8,248.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
8,500.00	0.00	0.00	8,348.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
8,597.86	0.00	0.00	8,446.80	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
<b>Lower 2nd Bone Springs Sand (Harkey)</b>										
8,600.00	0.00	0.00	8,448.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
8,700.00	0.00	0.00	8,548.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
8,800.00	0.00	0.00	8,648.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
8,898.86	0.00	0.00	8,747.80	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
<b>3rd Bone Springs Lime</b>										
8,900.00	0.00	0.00	8,748.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
9,000.00	0.00	0.00	8,848.94	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
9,066.10	0.00	0.00	8,915.04	787.57	-576.54	976.05	323.79	0.00	468,852.66	610,194.05
<b>LVGTWNST 2021 WA 1H KOP_1979FSL_2936FEL</b>										
9,100.00	3.39	89.74	8,948.92	787.58	-575.54	975.46	323.84	10.00	468,852.67	610,195.05
9,128.99	6.29	89.74	8,977.80	787.59	-573.09	974.03	323.96	10.00	468,852.68	610,197.50
<b>3rd Bone Springs Sand</b>										
9,150.00	8.39	89.74	8,998.64	787.60	-570.41	972.46	324.09	10.00	468,852.69	610,200.18
9,200.00	13.39	89.74	9,047.72	787.65	-560.97	966.99	324.54	10.00	468,852.74	610,209.62
9,250.00	18.39	89.74	9,095.80	787.71	-547.28	959.17	325.21	10.00	468,852.80	610,223.31
9,300.00	23.39	89.74	9,142.50	787.79	-529.46	949.18	326.10	10.00	468,852.88	610,241.13
9,350.00	28.39	89.74	9,187.46	787.89	-507.63	937.26	327.21	10.00	468,852.98	610,262.96
9,400.00	33.39	89.74	9,230.36	788.01	-481.97	923.72	328.55	10.00	468,853.10	610,288.62
9,450.00	38.39	89.74	9,270.85	788.14	-452.67	908.89	330.13	10.00	468,853.23	610,317.92
9,500.00	43.39	89.74	9,308.64	788.29	-419.95	893.18	331.95	10.00	468,853.38	610,350.64
9,515.56	44.95	89.74	9,319.80	788.34	-409.11	888.18	332.57	10.00	468,853.43	610,361.48
<b>Top Wolfcamp (Wolfcamp A)</b>										



Survey Report Landscape

Kaiser-Francis Oil Company

**Company:** KAISER-FRANCIS OIL COMPANY  
**Project:** Eddy County, NM (NMEZ) NAD83 Grid  
**Site:** Loving Townsite 2021 WA  
**Well:** WA 1H  
**Wellbore:** Lateral  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well WA 1H - Slot 1H  
**TVD Reference:** 3069.8 @ 3069.80ustf (GLOnly)  
**MD Reference:** 3069.8 @ 3069.80ustf (GLOnly)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** SBDIR\_EDM

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100ft)	Northing (usft)	Easting (usft)
9,550.00	48.39	89.74	9,343.43	788.46	-384.06	877.02	334.03	10.00	468,853.55	610,386.53
9,559.69	49.36	89.74	9,349.80	788.49	-376.77	873.88	334.46	10.00	468,853.58	610,393.82
<b>Top Wolfcamp A - X Sand</b>										
9,600.00	53.39	89.74	9,374.96	788.64	-345.28	860.91	336.36	10.00	468,853.73	610,425.31
9,634.70	56.86	89.74	9,394.80	788.77	-316.81	850.01	338.12	10.00	468,853.86	610,453.78
<b>Base Wolfcamp A - X Sand</b>										
9,650.00	58.39	89.74	9,402.99	788.83	-303.89	845.34	338.93	10.00	468,853.92	610,466.70
9,694.46	62.84	89.74	9,424.80	789.01	-265.17	832.37	341.42	10.00	468,854.10	610,505.42
<b>Top Wolfcamp A - Y Sand</b>										
9,700.00	63.39	89.74	9,427.31	789.03	-260.22	830.83	341.75	10.00	468,854.12	610,510.37
9,750.00	68.39	89.74	9,447.72	789.24	-214.60	817.89	344.79	10.00	468,854.33	610,555.99
9,800.00	73.39	89.74	9,464.09	789.46	-167.37	807.00	348.03	10.00	468,854.55	610,603.22
9,842.89	77.68	89.74	9,474.80	789.65	-125.85	799.61	350.94	10.00	468,854.74	610,644.74
<b>Base Wolfcamp A - Y Sand</b>										
9,850.00	78.39	89.74	9,476.27	789.68	-118.90	798.58	351.44	10.00	468,854.77	610,651.69
9,900.00	83.39	89.74	9,484.19	789.91	-69.54	792.96	354.97	10.00	468,855.00	610,701.05
9,950.00	88.39	89.74	9,487.77	790.14	-19.68	790.38	358.57	10.00	468,855.23	610,750.90
9,966.10	90.00	89.74	9,488.00	790.21	-3.59	790.22	359.74	10.00	468,855.30	610,767.00
<b>LVGTWNST 2021 WA 1H FTP_1980FSL_2366FEL</b>										
10,000.00	90.00	89.74	9,488.00	790.37	30.31	790.95	2.20	0.00	468,855.46	610,800.90
10,100.00	90.00	89.74	9,488.00	790.83	130.31	801.49	9.36	0.00	468,855.92	610,900.90
10,200.00	90.00	89.74	9,488.00	791.29	230.31	824.12	16.23	0.00	468,856.38	611,000.90
10,300.00	90.00	89.74	9,488.00	791.75	330.31	857.88	22.65	0.00	468,856.84	611,100.90
10,400.00	90.00	89.74	9,488.00	792.21	430.31	901.53	28.51	0.00	468,857.30	611,200.90
10,500.00	90.00	89.74	9,488.00	792.67	530.30	953.70	33.78	0.00	468,857.76	611,300.89
10,600.00	90.00	89.74	9,488.00	793.13	630.30	1,013.08	38.47	0.00	468,858.22	611,400.89
10,700.00	90.00	89.74	9,488.00	793.59	730.30	1,078.48	42.62	0.00	468,858.68	611,500.89
10,800.00	90.00	89.74	9,488.00	794.05	830.30	1,148.87	46.28	0.00	468,859.14	611,600.89



Survey Report Landscape

Kaiser-Francis Oil Company

**Company:** KAISER-FRANCIS OIL COMPANY  
**Project:** Eddy County, NM (NIMEZ) NAD83 Grid  
**Site:** Loving Township 2021 WA  
**Well:** WA 1H  
**Wellbore:** Lateral  
**Design:** Plan #1

**Local Co-ordinate Reference:**  
**TVD Reference:** 3069.8 @ 3069.80ustf (GLOnly)  
**MD Reference:** 3069.8 @ 3069.80ustf (GLOnly)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** SBDIR\_EDM

Well WA 1H - Slot 1H  
 3069.8 @ 3069.80ustf (GLOnly)  
 3069.8 @ 3069.80ustf (GLOnly)  
 Grid  
 Minimum Curvature  
 SBDIR\_EDM

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	D Leg (%100ft)	Northing (usft)	Easting (usft)
10,900.00	90.00	89.74	9,488.00	794.51	930.30	1,223.40	49.50	0.00	468,859.60	611,700.89
11,000.00	90.00	89.74	9,488.00	794.97	1,030.30	1,301.34	52.35	0.00	468,860.06	611,800.89
11,100.00	90.00	89.74	9,488.00	795.43	1,130.30	1,382.13	54.86	0.00	468,860.52	611,900.89
11,200.00	90.00	89.74	9,488.00	795.89	1,230.30	1,465.29	57.10	0.00	468,860.98	612,000.89
11,300.00	90.00	89.74	9,488.00	796.35	1,330.30	1,550.44	59.09	0.00	468,861.44	612,100.89
11,400.00	90.00	89.74	9,488.00	796.81	1,430.30	1,637.27	60.88	0.00	468,861.90	612,200.89
11,500.00	90.00	89.74	9,488.00	797.27	1,530.29	1,725.52	62.48	0.00	468,862.36	612,300.88
11,600.00	90.00	89.74	9,488.00	797.73	1,630.29	1,815.00	63.93	0.00	468,862.82	612,400.88
11,700.00	90.00	89.74	9,488.00	798.19	1,730.29	1,905.52	65.24	0.00	468,863.28	612,500.88
11,800.00	90.00	89.74	9,488.00	798.65	1,830.29	1,996.95	66.43	0.00	468,863.74	612,600.88
11,900.00	90.00	89.74	9,488.00	799.11	1,930.29	2,089.16	67.51	0.00	468,864.20	612,700.88
12,000.00	90.00	89.74	9,488.00	799.57	2,030.29	2,182.06	68.50	0.00	468,864.66	612,800.88
12,100.00	90.00	89.74	9,488.00	800.03	2,130.29	2,275.56	69.42	0.00	468,865.12	612,900.88
12,200.00	90.00	89.74	9,488.00	800.49	2,230.29	2,369.59	70.26	0.00	468,865.58	613,000.88
12,300.00	90.00	89.74	9,488.00	800.95	2,330.29	2,464.09	71.03	0.00	468,866.04	613,100.88
12,400.00	90.00	89.74	9,488.00	801.41	2,430.28	2,559.01	71.75	0.00	468,866.50	613,200.87
12,500.00	90.00	89.74	9,488.00	801.87	2,530.28	2,654.30	72.42	0.00	468,866.96	613,300.87
12,600.00	90.00	89.74	9,488.00	802.33	2,630.28	2,749.93	73.04	0.00	468,867.42	613,400.87
12,700.00	90.00	89.74	9,488.00	802.79	2,730.28	2,845.86	73.62	0.00	468,867.88	613,500.87
12,800.00	90.00	89.74	9,488.00	803.25	2,830.28	2,942.06	74.16	0.00	468,868.34	613,600.87
12,900.00	90.00	89.74	9,488.00	803.71	2,930.28	3,038.50	74.66	0.00	468,868.80	613,700.87
13,000.00	90.00	89.74	9,488.00	804.17	3,030.28	3,135.17	75.14	0.00	468,869.26	613,800.87
13,100.00	90.00	89.74	9,488.00	804.63	3,130.28	3,232.04	75.58	0.00	468,869.72	613,900.87
13,200.00	90.00	89.74	9,488.00	805.09	3,230.28	3,329.09	76.01	0.00	468,870.18	614,000.87
13,300.00	90.00	89.74	9,488.00	805.55	3,330.28	3,426.32	76.40	0.00	468,870.64	614,100.87
13,400.00	90.00	89.74	9,488.00	806.01	3,430.27	3,523.69	76.78	0.00	468,871.10	614,200.86
13,500.00	90.00	89.74	9,488.00	806.47	3,530.27	3,621.22	77.13	0.00	468,871.56	614,300.86



Survey Report Landscape

**Company:** KAISER-FRANCIS OIL COMPANY  
**Project:** Eddy County, NM (NMEZ) NAD83 Grid  
**Site:** Loving Townsite 2021 WA  
**Well:** WA 1H  
**Wellbore:** Lateral  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well WA 1H - Slot 1H  
**TVD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**MD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** SBDIR\_EDM

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100ft)	Northing (usft)	Easting (usft)
13,600.00	90.00	89.74	9,488.00	806.93	3,630.27	3,718.87	77.47	0.00	468,872.02	614,400.86
13,700.00	90.00	89.74	9,488.00	807.39	3,730.27	3,816.65	77.79	0.00	468,872.48	614,500.86
13,800.00	90.00	89.74	9,488.00	807.85	3,830.27	3,914.53	78.09	0.00	468,872.94	614,600.86
13,900.00	90.00	89.74	9,488.00	808.31	3,930.27	4,012.53	78.38	0.00	468,873.40	614,700.86
14,000.00	90.00	89.74	9,488.00	808.77	4,030.27	4,110.62	78.65	0.00	468,873.86	614,800.86
14,100.00	90.00	89.74	9,488.00	809.23	4,130.27	4,208.79	78.91	0.00	468,874.32	614,900.86
14,200.00	90.00	89.74	9,488.00	809.69	4,230.27	4,307.06	79.16	0.00	468,874.78	615,000.86
14,300.00	90.00	89.74	9,488.00	810.15	4,330.26	4,405.40	79.40	0.00	468,875.24	615,100.85
14,400.00	90.00	89.74	9,488.00	810.61	4,430.26	4,503.81	79.63	0.00	468,875.70	615,200.85
14,500.00	90.00	89.74	9,488.00	811.07	4,530.26	4,602.29	79.85	0.00	468,876.16	615,300.85
14,600.00	90.00	89.74	9,488.00	811.53	4,630.26	4,700.84	80.06	0.00	468,876.62	615,400.85
14,640.20	90.00	89.74	9,488.00	811.71	4,670.46	4,740.47	80.14	0.00	468,876.80	615,441.05

LVGTWNST 2021 WA 1H PBHL\_1980FSL\_2310FEL

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
5,451.06	5,300.00	9 5/8"	9.62	12.25
1,400.00	1,400.00	13 3/8"	13.37	17.50
14,640.20	9,488.00	5 1/2"	5.50	6.00



Survey Report Landscape

Kaiser-Francis Oil Company

**Company:** KAISER-FRANCIS OIL COMPANY  
**Project:** Eddy County, NM (NMEZ) NAD83 Grid  
**Site:** Loving Townsite 2021 WA  
**Well:** WA 1H  
**Wellbore:** Lateral  
**Design:** Plan #1

**Local Co-ordinate Reference:**  
**TVD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**MD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** SBDIR\_EDM

**Well WA 1H - Slot 1H**  
 3069.8 @ 3069.80usft (GLOnly)  
 3069.8 @ 3069.80usft (GLOnly)  
 Grid  
 Minimum Curvature  
 SBDIR\_EDM

Formations	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	8,898.86	8,747.80	3rd Bone Springs Lime			
	9,634.70	9,394.80	Base Wolfcamp A - X Sand			
	7,437.86	7,286.80	2nd Bone Springs Lime			
	7,855.86	7,704.80	2nd Bone Springs Sand			
	5,801.86	5,650.80	Top Lower Brushy Canyon			
	6,140.86	5,989.80	Top 1st Bone Springs Lime			
	9,515.56	9,319.80	Top Wolfcamp (Wolfcamp A)			
	7,140.86	6,989.80	1st Bone Springs Sand			
	2,997.75	2,947.80	Top Cherry Canyon		0.00	
	9,694.46	9,424.80	Top Wolfcamp A - Y Sand			
	9,559.69	9,349.80	Top Wolfcamp A - X Sand			
	5,997.86	5,846.80	Top Mobil Sand			
	9,128.99	8,977.80	3rd Bone Springs Sand			
	9,842.89	9,474.80	Base Wolfcamp A - Y Sand			
	4,607.54	4,464.80	Top Brushy Canyon			
	2,487.22	2,467.80	Base Salt (Top Delaware)			
	8,597.86	8,446.80	Lower 2nd Bone Springs Sand (Harkey)		0.00	
	8,111.86	7,960.80	Mid 2nd Bone Springs Lime			

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

Kaiser-Francis Oil Company

# KAISER-FRANCIS OIL COMPANY

Eddy County, NM (NMEZ) NAD83 Grid

Loving Townsite 2021 WA

WA 1H - Slot 1H

Lateral

Plan: Plan #1

## Standard Planning Report

25 August, 2020







<b>Database:</b>	SBDIR_EDM	<b>Local Co-ordinate Reference:</b>	Well WA 1H - Slot 1H
<b>Company:</b>	KAISER-FRANCIS OIL COMPANY	<b>TVD Reference:</b>	3069.8 @ 3069.80usft (GLOnly)
<b>Project:</b>	Eddy County, NM (NMEZ) NAD83 Grid	<b>MD Reference:</b>	3069.8 @ 3069.80usft (GLOnly)
<b>Site:</b>	Loving Townsite 2021 WA	<b>North Reference:</b>	Grid
<b>Well:</b>	WA 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

<b>Project</b>	Eddy County, NM (NMEZ) NAD83 Grid		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		

<b>Site</b>	Loving Townsite 2021 WA				
<b>Site Position:</b>	<b>Northing:</b>	468,065.09 usft	<b>Latitude:</b>	32.2865850°N	
<b>From:</b>	Map	<b>Easting:</b>	610,770.59 usft	<b>Longitude:</b>	104.1086455°W
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.20 in	<b>Grid Convergence:</b>	0.12 °

<b>Well</b>	WA 1H - Slot 1H					
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	468,065.09 usft	<b>Latitude:</b>	32.2865850°N
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	610,770.59 usft	<b>Longitude:</b>	104.1086455°W
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	3,069.80 usft	

<b>Wellbore</b>	Lateral				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2020	08/25/20	6.89	59.90	47,561.35418065

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	89.74

<b>Plan Survey Tool Program</b>	<b>Date</b>	08/25/20		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	14,640.09	Plan #1 (Lateral)	

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,495.75	19.91	323.79	2,475.82	138.24	-101.19	2.00	2.00	0.00	323.79	
4,355.32	19.91	323.79	4,224.18	649.34	-475.35	0.00	0.00	0.00	0.00	
5,351.06	0.00	0.00	5,200.00	787.57	-576.54	2.00	-2.00	0.00	180.00	
9,066.10	0.00	0.00	8,915.04	787.57	-576.54	0.00	0.00	0.00	0.00	LVGTWNST 2021 WA
9,966.10	90.00	89.74	9,488.00	790.21	-3.59	10.00	10.00	9.97	89.74	
14,640.20	90.00	89.74	9,488.00	811.71	4,670.46	0.00	0.00	0.00	0.00	LVGTWNST 2021 WA



<b>Database:</b>	SBDIR_EDM	<b>Local Co-ordinate Reference:</b>	Well WA 1H - Slot 1H
<b>Company:</b>	KAISER-FRANCIS OIL COMPANY	<b>TVD Reference:</b>	3069.8 @ 3069.80usft (GLOnly)
<b>Project:</b>	Eddy County, NM (NMEZ) NAD83 Grid	<b>MD Reference:</b>	3069.8 @ 3069.80usft (GLOnly)
<b>Site:</b>	Loving Townsite 2021 WA	<b>North Reference:</b>	Grid
<b>Well:</b>	WA 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>LVGTWNST 2021 WA 1H SHL</b>										
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>13 3/8"</b>										
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,600.00	2.00	323.79	1,599.98	1.41	-1.03	-1.02	2.00	2.00	0.00	
1,700.00	4.00	323.79	1,699.84	5.63	-4.12	-4.10	2.00	2.00	0.00	
1,800.00	6.00	323.79	1,799.45	12.66	-9.27	-9.21	2.00	2.00	0.00	
1,900.00	8.00	323.79	1,898.70	22.50	-16.47	-16.37	2.00	2.00	0.00	
2,000.00	10.00	323.79	1,997.47	35.12	-25.71	-25.55	2.00	2.00	0.00	
2,100.00	12.00	323.79	2,095.62	50.51	-36.98	-36.75	2.00	2.00	0.00	
2,200.00	14.00	323.79	2,193.06	68.66	-50.27	-49.95	2.00	2.00	0.00	
2,300.00	16.00	323.79	2,289.64	89.55	-65.55	-65.15	2.00	2.00	0.00	
2,400.00	18.00	323.79	2,385.27	113.14	-82.82	-82.31	2.00	2.00	0.00	
2,487.22	19.74	323.79	2,467.80	135.90	-99.49	-98.87	2.00	2.00	0.00	
<b>Base Salt (Top Delaware)</b>										
2,495.75	19.91	323.79	2,475.82	138.24	-101.19	-100.57	2.00	2.00	0.00	
2,500.00	19.91	323.79	2,479.82	139.40	-102.05	-101.42	0.00	0.00	0.00	
2,600.00	19.91	323.79	2,573.84	166.89	-122.17	-121.41	0.00	0.00	0.00	
2,700.00	19.91	323.79	2,667.86	194.37	-142.29	-141.41	0.00	0.00	0.00	
2,800.00	19.91	323.79	2,761.88	221.86	-162.41	-161.40	0.00	0.00	0.00	
2,900.00	19.91	323.79	2,855.90	249.34	-182.53	-181.40	0.00	0.00	0.00	
2,997.75	19.91	323.79	2,947.80	276.21	-202.20	-200.94	0.00	0.00	0.00	
<b>Top Cherry Canyon</b>										
3,000.00	19.91	323.79	2,949.92	276.83	-202.65	-201.39	0.00	0.00	0.00	
3,100.00	19.91	323.79	3,043.94	304.31	-222.77	-221.39	0.00	0.00	0.00	
3,200.00	19.91	323.79	3,137.96	331.80	-242.89	-241.38	0.00	0.00	0.00	
3,300.00	19.91	323.79	3,231.98	359.28	-263.01	-261.38	0.00	0.00	0.00	
3,400.00	19.91	323.79	3,326.00	386.77	-283.13	-281.38	0.00	0.00	0.00	
3,500.00	19.91	323.79	3,420.02	414.25	-303.25	-301.37	0.00	0.00	0.00	
3,600.00	19.91	323.79	3,514.04	441.74	-323.37	-321.37	0.00	0.00	0.00	
3,700.00	19.91	323.79	3,608.06	469.22	-343.49	-341.36	0.00	0.00	0.00	
3,800.00	19.91	323.79	3,702.08	496.71	-363.61	-361.36	0.00	0.00	0.00	
3,900.00	19.91	323.79	3,796.10	524.19	-383.73	-381.35	0.00	0.00	0.00	
4,000.00	19.91	323.79	3,890.12	551.68	-403.85	-401.35	0.00	0.00	0.00	
4,100.00	19.91	323.79	3,984.14	579.16	-423.98	-421.34	0.00	0.00	0.00	
4,200.00	19.91	323.79	4,078.16	606.65	-444.10	-441.34	0.00	0.00	0.00	
4,300.00	19.91	323.79	4,172.18	634.13	-464.22	-461.33	0.00	0.00	0.00	
4,355.32	19.91	323.79	4,224.18	649.34	-475.35	-472.39	0.00	0.00	0.00	
4,400.00	19.02	323.79	4,266.31	661.36	-484.14	-481.14	2.00	-2.00	0.00	
4,500.00	17.02	323.79	4,361.40	686.32	-502.42	-499.30	2.00	-2.00	0.00	



<b>Database:</b>	SBDIR_EDM	<b>Local Co-ordinate Reference:</b>	Well WA 1H - Slot 1H
<b>Company:</b>	KAISER-FRANCIS OIL COMPANY	<b>TVD Reference:</b>	3069.8 @ 3069.80usft (GLOnly)
<b>Project:</b>	Eddy County, NM (NMEZ) NAD83 Grid	<b>MD Reference:</b>	3069.8 @ 3069.80usft (GLOnly)
<b>Site:</b>	Loving Townsite 2021 WA	<b>North Reference:</b>	Grid
<b>Well:</b>	WA 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,600.00	15.02	323.79	4,457.51	708.59	-518.72	-515.50	2.00	-2.00	0.00
4,607.54	14.87	323.79	4,464.80	710.16	-519.87	-516.64	2.00	-2.00	0.00
<b>Top Brushy Canyon</b>									
4,700.00	13.02	323.79	4,554.53	728.13	-533.03	-529.72	2.00	-2.00	0.00
4,800.00	11.02	323.79	4,652.33	744.94	-545.33	-541.94	2.00	-2.00	0.00
4,900.00	9.02	323.79	4,750.80	758.98	-555.61	-552.16	2.00	-2.00	0.00
5,000.00	7.02	323.79	4,849.82	770.24	-563.85	-560.35	2.00	-2.00	0.00
5,100.00	5.02	323.79	4,949.26	778.70	-570.05	-566.51	2.00	-2.00	0.00
5,200.00	3.02	323.79	5,049.01	784.36	-574.19	-570.62	2.00	-2.00	0.00
5,300.00	1.02	323.79	5,148.94	787.21	-576.27	-572.69	2.00	-2.00	0.00
5,351.06	0.00	0.00	5,200.00	787.57	-576.54	-572.96	2.00	-2.00	0.00
5,400.00	0.00	0.00	5,248.94	787.57	-576.54	-572.96	0.00	0.00	0.00
5,451.06	0.00	0.00	5,300.00	787.57	-576.54	-572.96	0.00	0.00	0.00
<b>9 5/8"</b>									
5,500.00	0.00	0.00	5,348.94	787.57	-576.54	-572.96	0.00	0.00	0.00
5,600.00	0.00	0.00	5,448.94	787.57	-576.54	-572.96	0.00	0.00	0.00
5,700.00	0.00	0.00	5,548.94	787.57	-576.54	-572.96	0.00	0.00	0.00
5,800.00	0.00	0.00	5,648.94	787.57	-576.54	-572.96	0.00	0.00	0.00
5,801.86	0.00	0.00	5,650.80	787.57	-576.54	-572.96	0.00	0.00	0.00
<b>Top Lower Brushy Canyon</b>									
5,900.00	0.00	0.00	5,748.94	787.57	-576.54	-572.96	0.00	0.00	0.00
5,997.86	0.00	0.00	5,848.80	787.57	-576.54	-572.96	0.00	0.00	0.00
<b>Top Mobil Sand</b>									
6,000.00	0.00	0.00	5,848.94	787.57	-576.54	-572.96	0.00	0.00	0.00
6,100.00	0.00	0.00	5,948.94	787.57	-576.54	-572.96	0.00	0.00	0.00
6,140.86	0.00	0.00	5,989.80	787.57	-576.54	-572.96	0.00	0.00	0.00
<b>Top 1st Bone Springs Lime</b>									
6,200.00	0.00	0.00	6,048.94	787.57	-576.54	-572.96	0.00	0.00	0.00
6,300.00	0.00	0.00	6,148.94	787.57	-576.54	-572.96	0.00	0.00	0.00
6,400.00	0.00	0.00	6,248.94	787.57	-576.54	-572.96	0.00	0.00	0.00
6,500.00	0.00	0.00	6,348.94	787.57	-576.54	-572.96	0.00	0.00	0.00
6,600.00	0.00	0.00	6,448.94	787.57	-576.54	-572.96	0.00	0.00	0.00
6,700.00	0.00	0.00	6,548.94	787.57	-576.54	-572.96	0.00	0.00	0.00
6,800.00	0.00	0.00	6,648.94	787.57	-576.54	-572.96	0.00	0.00	0.00
6,900.00	0.00	0.00	6,748.94	787.57	-576.54	-572.96	0.00	0.00	0.00
7,000.00	0.00	0.00	6,848.94	787.57	-576.54	-572.96	0.00	0.00	0.00
7,100.00	0.00	0.00	6,948.94	787.57	-576.54	-572.96	0.00	0.00	0.00
7,140.86	0.00	0.00	6,989.80	787.57	-576.54	-572.96	0.00	0.00	0.00
<b>1st Bone Springs Sand</b>									
7,200.00	0.00	0.00	7,048.94	787.57	-576.54	-572.96	0.00	0.00	0.00
7,300.00	0.00	0.00	7,148.94	787.57	-576.54	-572.96	0.00	0.00	0.00
7,400.00	0.00	0.00	7,248.94	787.57	-576.54	-572.96	0.00	0.00	0.00
7,437.86	0.00	0.00	7,286.80	787.57	-576.54	-572.96	0.00	0.00	0.00
<b>2nd Bone Springs Lime</b>									
7,500.00	0.00	0.00	7,348.94	787.57	-576.54	-572.96	0.00	0.00	0.00
7,600.00	0.00	0.00	7,448.94	787.57	-576.54	-572.96	0.00	0.00	0.00
7,700.00	0.00	0.00	7,548.94	787.57	-576.54	-572.96	0.00	0.00	0.00
7,800.00	0.00	0.00	7,648.94	787.57	-576.54	-572.96	0.00	0.00	0.00
7,855.86	0.00	0.00	7,704.80	787.57	-576.54	-572.96	0.00	0.00	0.00
<b>2nd Bone Springs Sand</b>									
7,900.00	0.00	0.00	7,748.94	787.57	-576.54	-572.96	0.00	0.00	0.00
8,000.00	0.00	0.00	7,848.94	787.57	-576.54	-572.96	0.00	0.00	0.00
8,100.00	0.00	0.00	7,948.94	787.57	-576.54	-572.96	0.00	0.00	0.00



<b>Database:</b>	SBDIR_EDM	<b>Local Co-ordinate Reference:</b>	Well WA 1H - Slot 1H
<b>Company:</b>	KAISER-FRANCIS OIL COMPANY	<b>TVD Reference:</b>	3069.8 @ 3069.80usft (GLOnly)
<b>Project:</b>	Eddy County, NM (NMEZ) NAD83 Grid	<b>MD Reference:</b>	3069.8 @ 3069.80usft (GLOnly)
<b>Site:</b>	Loving Townsite 2021 WA	<b>North Reference:</b>	Grid
<b>Well:</b>	WA 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,111.86	0.00	0.00	7,960.80	787.57	-576.54	-572.96	0.00	0.00	0.00	
<b>Mid 2nd Bone Springs Lime</b>										
8,200.00	0.00	0.00	8,048.94	787.57	-576.54	-572.96	0.00	0.00	0.00	
8,300.00	0.00	0.00	8,148.94	787.57	-576.54	-572.96	0.00	0.00	0.00	
8,400.00	0.00	0.00	8,248.94	787.57	-576.54	-572.96	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,348.94	787.57	-576.54	-572.96	0.00	0.00	0.00	
8,597.86	0.00	0.00	8,446.80	787.57	-576.54	-572.96	0.00	0.00	0.00	
<b>Lower 2nd Bone Springs Sand (Harkey)</b>										
8,600.00	0.00	0.00	8,448.94	787.57	-576.54	-572.96	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,548.94	787.57	-576.54	-572.96	0.00	0.00	0.00	
8,800.00	0.00	0.00	8,648.94	787.57	-576.54	-572.96	0.00	0.00	0.00	
8,898.86	0.00	0.00	8,747.80	787.57	-576.54	-572.96	0.00	0.00	0.00	
<b>3rd Bone Springs Lime</b>										
8,900.00	0.00	0.00	8,748.94	787.57	-576.54	-572.96	0.00	0.00	0.00	
9,000.00	0.00	0.00	8,848.94	787.57	-576.54	-572.96	0.00	0.00	0.00	
9,066.10	0.00	0.00	8,915.04	787.57	-576.54	-572.96	0.00	0.00	0.00	
<b>LVGTWNST 2021 WA 1H KOP_1979FSL_2936FEL</b>										
9,100.00	3.39	89.74	8,948.92	787.58	-575.54	-571.96	10.00	10.00	0.00	
9,128.99	6.29	89.74	8,977.80	787.59	-573.09	-569.51	10.00	10.00	0.00	
<b>3rd Bone Springs Sand</b>										
9,150.00	8.39	89.74	8,998.64	787.60	-570.41	-566.83	10.00	10.00	0.00	
9,200.00	13.39	89.74	9,047.72	787.65	-560.97	-557.39	10.00	10.00	0.00	
9,250.00	18.39	89.74	9,095.80	787.71	-547.28	-543.70	10.00	10.00	0.00	
9,300.00	23.39	89.74	9,142.50	787.79	-529.46	-525.88	10.00	10.00	0.00	
9,350.00	28.39	89.74	9,187.46	787.89	-507.63	-504.05	10.00	10.00	0.00	
9,400.00	33.39	89.74	9,230.36	788.01	-481.97	-478.39	10.00	10.00	0.00	
9,450.00	38.39	89.74	9,270.85	788.14	-452.67	-449.09	10.00	10.00	0.00	
9,500.00	43.39	89.74	9,308.64	788.29	-419.95	-416.37	10.00	10.00	0.00	
9,515.56	44.95	89.74	9,319.80	788.34	-409.11	-405.53	10.00	10.00	0.00	
<b>Top Wolfcamp (Wolfcamp A)</b>										
9,550.00	48.39	89.74	9,343.43	788.46	-384.06	-380.48	10.00	10.00	0.00	
9,559.69	49.36	89.74	9,349.80	788.49	-376.77	-373.18	10.00	10.00	0.00	
<b>Top Wolfcamp A - X Sand</b>										
9,600.00	53.39	89.74	9,374.96	788.64	-345.28	-341.70	10.00	10.00	0.00	
9,634.70	56.86	89.74	9,394.80	788.77	-316.81	-313.23	10.00	10.00	0.00	
<b>Base Wolfcamp A - X Sand</b>										
9,650.00	58.39	89.74	9,402.99	788.83	-303.89	-300.31	10.00	10.00	0.00	
9,694.46	62.84	89.74	9,424.80	789.01	-265.17	-261.58	10.00	10.00	0.00	
<b>Top Wolfcamp A - Y Sand</b>										
9,700.00	63.39	89.74	9,427.31	789.03	-260.22	-256.64	10.00	10.00	0.00	
9,750.00	68.39	89.74	9,447.72	789.24	-214.60	-211.02	10.00	10.00	0.00	
9,800.00	73.39	89.74	9,464.09	789.46	-167.37	-163.79	10.00	10.00	0.00	
9,842.89	77.68	89.74	9,474.80	789.65	-125.85	-122.27	10.00	10.00	0.00	
<b>Base Wolfcamp A - Y Sand</b>										
9,850.00	78.39	89.74	9,476.27	789.68	-118.90	-115.31	10.00	10.00	0.00	
9,900.00	83.39	89.74	9,484.19	789.91	-69.54	-65.96	10.00	10.00	0.00	
9,950.00	88.39	89.74	9,487.77	790.14	-19.69	-16.10	10.00	10.00	0.00	
9,966.10	90.00	89.74	9,488.00	790.21	-3.59	0.00	10.00	10.00	0.00	
<b>LVGTWNST 2021 WA 1H FTP_1980FSL_2366FEL</b>										
10,000.00	90.00	89.74	9,488.00	790.37	30.31	33.90	0.00	0.00	0.00	
10,100.00	90.00	89.74	9,488.00	790.83	130.31	133.90	0.00	0.00	0.00	
10,200.00	90.00	89.74	9,488.00	791.29	230.31	233.90	0.00	0.00	0.00	



<b>Database:</b>	SBDIR_EDM	<b>Local Co-ordinate Reference:</b>	Well WA 1H - Slot 1H
<b>Company:</b>	KAISER-FRANCIS OIL COMPANY	<b>TVD Reference:</b>	3069.8 @ 3069.80usft (GLOnly)
<b>Project:</b>	Eddy County, NM (NMEZ) NAD83 Grid	<b>MD Reference:</b>	3069.8 @ 3069.80usft (GLOnly)
<b>Site:</b>	Loving Townsite 2021 WA	<b>North Reference:</b>	Grid
<b>Well:</b>	WA 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
10,300.00	90.00	89.74	9,488.00	791.75	330.31	333.90	0.00	0.00	0.00	
10,400.00	90.00	89.74	9,488.00	792.21	430.31	433.90	0.00	0.00	0.00	
10,500.00	90.00	89.74	9,488.00	792.67	530.30	533.90	0.00	0.00	0.00	
10,600.00	90.00	89.74	9,488.00	793.13	630.30	633.90	0.00	0.00	0.00	
10,700.00	90.00	89.74	9,488.00	793.59	730.30	733.90	0.00	0.00	0.00	
10,800.00	90.00	89.74	9,488.00	794.05	830.30	833.90	0.00	0.00	0.00	
10,900.00	90.00	89.74	9,488.00	794.51	930.30	933.90	0.00	0.00	0.00	
11,000.00	90.00	89.74	9,488.00	794.97	1,030.30	1,033.90	0.00	0.00	0.00	
11,100.00	90.00	89.74	9,488.00	795.43	1,130.30	1,133.90	0.00	0.00	0.00	
11,200.00	90.00	89.74	9,488.00	795.89	1,230.30	1,233.90	0.00	0.00	0.00	
11,300.00	90.00	89.74	9,488.00	796.35	1,330.30	1,333.90	0.00	0.00	0.00	
11,400.00	90.00	89.74	9,488.00	796.81	1,430.30	1,433.90	0.00	0.00	0.00	
11,500.00	90.00	89.74	9,488.00	797.27	1,530.29	1,533.90	0.00	0.00	0.00	
11,600.00	90.00	89.74	9,488.00	797.73	1,630.29	1,633.90	0.00	0.00	0.00	
11,700.00	90.00	89.74	9,488.00	798.19	1,730.29	1,733.90	0.00	0.00	0.00	
11,800.00	90.00	89.74	9,488.00	798.65	1,830.29	1,833.90	0.00	0.00	0.00	
11,900.00	90.00	89.74	9,488.00	799.11	1,930.29	1,933.90	0.00	0.00	0.00	
12,000.00	90.00	89.74	9,488.00	799.57	2,030.29	2,033.90	0.00	0.00	0.00	
12,100.00	90.00	89.74	9,488.00	800.03	2,130.29	2,133.90	0.00	0.00	0.00	
12,200.00	90.00	89.74	9,488.00	800.49	2,230.29	2,233.90	0.00	0.00	0.00	
12,300.00	90.00	89.74	9,488.00	800.95	2,330.29	2,333.90	0.00	0.00	0.00	
12,400.00	90.00	89.74	9,488.00	801.41	2,430.28	2,433.90	0.00	0.00	0.00	
12,500.00	90.00	89.74	9,488.00	801.87	2,530.28	2,533.90	0.00	0.00	0.00	
12,600.00	90.00	89.74	9,488.00	802.33	2,630.28	2,633.90	0.00	0.00	0.00	
12,700.00	90.00	89.74	9,488.00	802.79	2,730.28	2,733.90	0.00	0.00	0.00	
12,800.00	90.00	89.74	9,488.00	803.25	2,830.28	2,833.90	0.00	0.00	0.00	
12,900.00	90.00	89.74	9,488.00	803.71	2,930.28	2,933.90	0.00	0.00	0.00	
13,000.00	90.00	89.74	9,488.00	804.17	3,030.28	3,033.90	0.00	0.00	0.00	
13,100.00	90.00	89.74	9,488.00	804.63	3,130.28	3,133.90	0.00	0.00	0.00	
13,200.00	90.00	89.74	9,488.00	805.09	3,230.28	3,233.90	0.00	0.00	0.00	
13,300.00	90.00	89.74	9,488.00	805.55	3,330.28	3,333.90	0.00	0.00	0.00	
13,400.00	90.00	89.74	9,488.00	806.01	3,430.27	3,433.90	0.00	0.00	0.00	
13,500.00	90.00	89.74	9,488.00	806.47	3,530.27	3,533.90	0.00	0.00	0.00	
13,600.00	90.00	89.74	9,488.00	806.93	3,630.27	3,633.90	0.00	0.00	0.00	
13,700.00	90.00	89.74	9,488.00	807.39	3,730.27	3,733.90	0.00	0.00	0.00	
13,800.00	90.00	89.74	9,488.00	807.85	3,830.27	3,833.90	0.00	0.00	0.00	
13,900.00	90.00	89.74	9,488.00	808.31	3,930.27	3,933.90	0.00	0.00	0.00	
14,000.00	90.00	89.74	9,488.00	808.77	4,030.27	4,033.90	0.00	0.00	0.00	
14,100.00	90.00	89.74	9,488.00	809.23	4,130.27	4,133.90	0.00	0.00	0.00	
14,200.00	90.00	89.74	9,488.00	809.69	4,230.27	4,233.90	0.00	0.00	0.00	
14,300.00	90.00	89.74	9,488.00	810.15	4,330.26	4,333.90	0.00	0.00	0.00	
14,400.00	90.00	89.74	9,488.00	810.61	4,430.26	4,433.90	0.00	0.00	0.00	
14,500.00	90.00	89.74	9,488.00	811.07	4,530.26	4,533.90	0.00	0.00	0.00	
14,600.00	90.00	89.74	9,488.00	811.53	4,630.26	4,633.90	0.00	0.00	0.00	
14,640.20	90.00	89.74	9,488.00	811.71	4,670.46	4,674.10	0.00	0.00	0.00	

LVGTWNST 2021 WA 1H PBHL\_1980FSL\_2310FEL



<b>Database:</b>	SBDIR_EDM	<b>Local Co-ordinate Reference:</b>	Well WA 1H - Slot 1H
<b>Company:</b>	KAISER-FRANCIS OIL COMPANY	<b>TVD Reference:</b>	3069.8 @ 3069.80usft (GLOnly)
<b>Project:</b>	Eddy County, NM (NMEZ) NAD83 Grid	<b>MD Reference:</b>	3069.8 @ 3069.80usft (GLOnly)
<b>Site:</b>	Loving Townsite 2021 WA	<b>North Reference:</b>	Grid
<b>Well:</b>	WA 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LVGTWNST 2021 WA 11 - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	468,065.09	610,770.59	32.2865850°N	104.1086455°W
LVGTWNST 2021 WA 11 - plan hits target center - Point	0.00	0.00	8,915.04	787.57	-576.54	468,852.66	610,194.05	32.2887533°N	104.1105059°W
LVGTWNST 2021 WA 11 - plan hits target center - Point	0.00	0.00	9,488.00	790.21	-3.59	468,855.30	610,767.00	32.2887572°N	104.1086518°W
LVGTWNST 2021 WA 11 - plan hits target center - Point	0.00	0.00	9,488.00	811.71	4,670.46	468,876.80	615,441.05	32.2887885°N	104.0935260°W

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)		
1,400.00	1,400.00	13 3/8"	13.37	17.50		
5,451.06	5,300.00	9 5/8"	9.62	12.25		
14,640.20	9,488.00	5 1/2"	5.50	6.00		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,487.22	2,467.80	Base Salt (Top Delaware)		0.00		
2,997.75	2,947.80	Top Cherry Canyon		0.00		
4,607.54	4,464.80	Top Brushy Canyon				
5,801.86	5,650.80	Top Lower Brushy Canyon				
5,997.86	5,846.80	Top Mobil Sand				
6,140.86	5,989.80	Top 1st Bone Springs Lime				
7,140.86	6,989.80	1st Bone Springs Sand				
7,437.86	7,286.80	2nd Bone Springs Lime				
7,855.86	7,704.80	2nd Bone Springs Sand				
8,111.86	7,960.80	Mid 2nd Bone Springs Lime				
8,597.86	8,446.80	Lower 2nd Bone Springs Sand (Harkey)				
8,898.86	8,747.80	3rd Bone Springs Lime				
9,128.99	8,977.80	3rd Bone Springs Sand				
9,515.56	9,319.80	Top Wolfcamp (Wolfcamp A)				
9,559.69	9,349.80	Top Wolfcamp A - X Sand				
9,634.70	9,394.80	Base Wolfcamp A - X Sand				
9,694.46	9,424.80	Top Wolfcamp A - Y Sand				
9,842.89	9,474.80	Base Wolfcamp A - Y Sand				

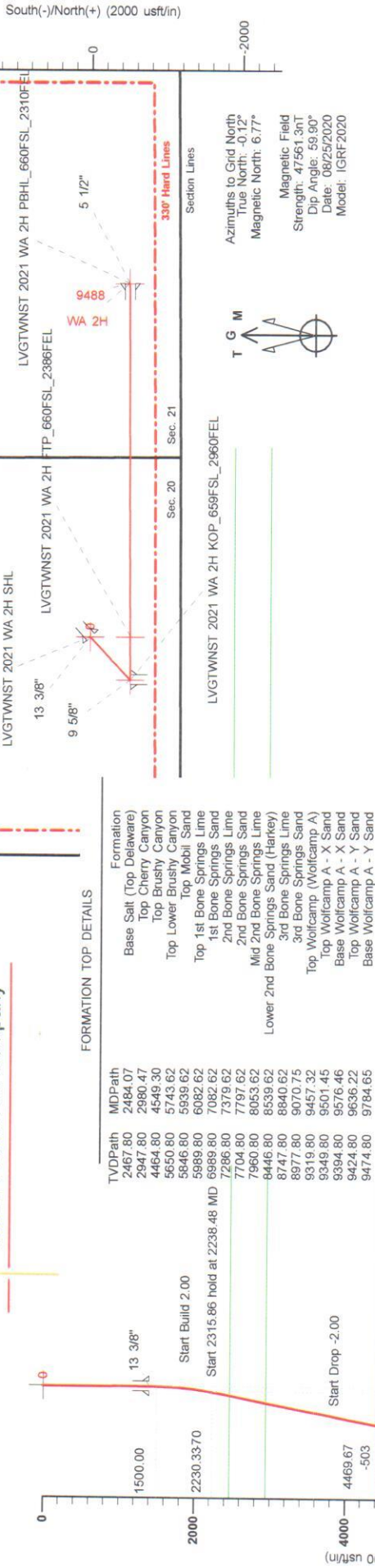
# KAISER-FRANCIS OIL COMPANY

3069.8 @ 3069.80usft (GL Only)  
North American Datum 1983

Project: Eddy County, NM (NMEZ) NAD83 Grid  
Site: Loving Townsite 2021 WA  
Well: WA 2H

Wellbore: Lateral  
Design: Plan #1

## Kaiser-Francis Oil Company



To convert a Magnetic Direction to a Grid Direction, Add 6.77°  
To convert a Magnetic Direction to a True Direction, Add 6.89° East  
Magnetic North is 6.77° East of Grid North (Magnetic Convergence)  
Magnetic North is 6.89° East of True North (Magnetic Declination)

### SECTION DETAILS

Name	+N/-S	+E/-W	Dibg	TFace	VSetc
LVGTWNST 2021 WA 2H SHL	0.00	0.00	0.00	0.00	0.00
LVGTWNST 2021 WA 2H KOP_659FSL_2960FEL	0.00	0.00	0.00	0.00	0.00
LVGTWNST 2021 WA 2H FTP_660FSL_2386FEL	-531.42	-570.55	2.00	227.03	-69.36
LVGTWNST 2021 WA 2H PBHL_660FSL_2310FEL	-528.86	2.40	0.00	0.00	-503.40
LVGTWNST 2021 WA 2H KOP_659FSL_2960FEL	-507.88	4697.97	10.00	89.74	-572.96
LVGTWNST 2021 WA 2H PBHL_660FSL_2310FEL	0.00	0.00	0.00	0.00	0.00

### TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting
LVGTWNST 2021 WA 2H SHL	0.00	0.00	468065.00	610750.58
LVGTWNST 2021 WA 2H KOP_659FSL_2960FEL	-531.42	-570.55	467533.58	610180.03
LVGTWNST 2021 WA 2H FTP_660FSL_2386FEL	-528.86	2.40	467536.14	610752.98
LVGTWNST 2021 WA 2H PBHL_660FSL_2310FEL	-507.88	4697.97	467557.12	615448.55

### CASING DETAILS

TVD	MD	Name	Size
1400.00	1400.00	13 3/8"	13.37
5300.00	5392.82	9 5/8"	9.62
9488.00	14603.48	5 1/2"	5.50

Plan: Plan #1 (WA 2H/Lateral)  
Created By: Mekka Williams  
10:39, August 25 2020

SB DIRECTIONAL SERVICES  
5135 SW 29TH ST  
OKLAHOMA CITY, OK 73179



Kaiser-Francis Oil Company

## **KAISER-FRANCIS OIL COMPANY**

Eddy County, NM (NMEZ) NAD83 Grid

Loving Townsite 2021 WA

WA 2H - Slot 2H

Lateral

Plan: Plan #1

## **Survey Report Landscape**

25 August, 2020







Survey Report Landscape

**Company:** KAISER-FRANCIS OIL COMPANY  
**Project:** Eddy County, NM (NMEZ) NAD83 Grid  
**Site:** Loving Townsite 2021 WA  
**Well:** WA 2H  
**Wellbore:** Lateral  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well WA 2H - Slot 2H  
**TVD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**MD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** SBDIR\_EDM

**Project:** Eddy County, NM (NMEZ) NAD83 Grid  
**Map System:** US State Plane 1983  
**Geo Datum:** North American Datum 1983  
**Map Zone:** New Mexico Eastern Zone  
**System Datum:** Mean Sea Level

**Site:** Loving Townsite 2021 WA  
**Site Position:** Northing: 468,065.09 usft  
**From:** Easting: 610,770.59 usft  
**Position Uncertainty:** Map Slot Radius: 13.20 in  
 Latitude: 32.2865850°N  
 Longitude: 104.1086456°W  
 Grid Convergence: 0.12 °

**Well:** WA 2H - Slot 2H  
**Well Position:** +N/-S 0.00 usft  
 +E/-W 0.00 usft  
**Position Uncertainty:** 0.00 usft  
 Wellhead Elevation: 468,065.00 usft  
 Latitude: 32.2865849°N  
 Longitude: 104.1087103°W  
 Ground Level: 3,069.80 usft

Wellbore	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
Lateral	IGRF2020	08/25/20	6.89	59.90	47,561.34719509

Design	Phase	PROTOTYPE	Tie On Depth:
Plan #1			0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	89.74

Survey Tool Program	Date	Tool Name	Description
From (usft)	08/25/20	Survey (Wellbore)	
To (usft)			
0.00	14,603.42	Plan #1 (Lateral)	



Survey Report Landscape

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**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** SBDIR\_EDM

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100ft)	Northing (usft)	Easting (usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
<b>LVGTWNST 2021 WA 2H SHL</b>										
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
<b>13 3/8"</b>										
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	468,065.00	610,750.58
1,600.00	2.00	227.03	1,599.98	-1.19	-1.28	1.75	227.03	2.00	468,063.81	610,749.30
1,700.00	4.00	227.03	1,699.84	-4.76	-5.11	6.98	227.03	2.00	468,060.24	610,745.47
1,800.00	6.00	227.03	1,799.45	-10.70	-11.48	15.69	227.03	2.00	468,054.30	610,739.10
1,900.00	8.00	227.03	1,898.70	-19.00	-20.40	27.88	227.03	2.00	468,046.00	610,730.18
2,000.00	10.00	227.03	1,997.47	-29.66	-31.85	43.52	227.03	2.00	468,035.34	610,718.73
2,100.00	12.00	227.03	2,095.62	-42.67	-45.81	62.60	227.03	2.00	468,022.33	610,704.77
2,200.00	14.00	227.03	2,193.06	-58.00	-62.27	85.10	227.03	2.00	468,007.00	610,688.31
2,238.48	14.77	227.03	2,230.33	-64.51	-69.26	94.66	227.03	2.00	468,000.49	610,681.32
2,300.00	14.77	227.03	2,289.82	-75.20	-80.74	110.34	227.03	0.00	467,989.80	610,669.84



Survey Report Landscape

Company: KAISER-FRANCIS OIL COMPANY  
 Project: Eddy County, NM (NMEZ) NAD83 Grid  
 Site: Loving Township 2021 WA  
 Well: WA 2H  
 Wellbore: Lateral  
 Design: Plan #1

Local Co-ordinate Reference: Well WA 2H - Slot 2H  
 TVD Reference: 3069.8 @ 3069.80usft (GLOnly)  
 MD Reference: 3069.8 @ 3069.80usft (GLOnly)  
 Grid  
 North Reference: Minimum Curvature  
 Survey Calculation Method: SBDIR\_EDM  
 Database:

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100ft)	Northing (usft)	Easting (usft)
2,400.00	14.77	227.03	2,386.51	-92.58	-99.40	135.83	227.03	0.00	467,972.42	610,651.18
2,484.07	14.77	227.03	2,467.80	-107.19	-115.08	157.26	227.03	0.00	467,957.81	610,635.50
<b>Base Salt (Top Delaware)</b>										
2,500.00	14.77	227.03	2,483.21	-109.95	-118.05	161.33	227.03	0.00	467,955.05	610,632.53
2,600.00	14.77	227.03	2,579.90	-127.33	-136.71	186.82	227.03	0.00	467,937.67	610,613.87
2,700.00	14.77	227.03	2,676.60	-144.71	-155.36	212.31	227.03	0.00	467,920.29	610,595.22
2,800.00	14.77	227.03	2,773.30	-162.08	-174.02	237.81	227.03	0.00	467,902.92	610,576.56
2,900.00	14.77	227.03	2,869.99	-179.46	-192.67	263.30	227.03	0.00	467,885.54	610,557.91
2,980.47	14.77	227.03	2,947.80	-193.44	-207.68	283.81	227.03	0.00	467,871.56	610,542.90
<b>Top Cherry Canyon</b>										
3,000.00	14.77	227.03	2,966.69	-196.83	-211.33	288.79	227.03	0.00	467,868.17	610,539.25
3,100.00	14.77	227.03	3,063.38	-214.21	-229.98	314.29	227.03	0.00	467,850.79	610,520.60
3,200.00	14.77	227.03	3,160.08	-231.58	-248.63	339.78	227.03	0.00	467,833.42	610,501.95
3,300.00	14.77	227.03	3,256.77	-248.96	-267.29	365.27	227.03	0.00	467,816.04	610,483.29
3,400.00	14.77	227.03	3,353.47	-266.33	-285.94	390.77	227.03	0.00	467,798.67	610,464.64
3,500.00	14.77	227.03	3,450.17	-283.71	-304.60	416.26	227.03	0.00	467,781.29	610,445.98
3,600.00	14.77	227.03	3,546.86	-301.08	-323.25	441.75	227.03	0.00	467,763.92	610,427.33
3,700.00	14.77	227.03	3,643.56	-318.46	-341.91	467.25	227.03	0.00	467,746.54	610,408.67
3,800.00	14.77	227.03	3,740.25	-335.84	-360.56	492.74	227.03	0.00	467,729.16	610,390.02
3,900.00	14.77	227.03	3,836.95	-353.21	-379.22	518.23	227.03	0.00	467,711.79	610,371.36
4,000.00	14.77	227.03	3,933.65	-370.59	-397.87	543.73	227.03	0.00	467,694.41	610,352.71
4,100.00	14.77	227.03	4,030.34	-387.96	-416.53	569.22	227.03	0.00	467,677.04	610,334.05
4,200.00	14.77	227.03	4,127.04	-405.34	-435.18	594.71	227.03	0.00	467,659.66	610,315.40
4,300.00	14.77	227.03	4,223.73	-422.71	-453.84	620.21	227.03	0.00	467,642.29	610,296.74
4,400.00	14.77	227.03	4,320.43	-440.09	-472.49	645.70	227.03	0.00	467,624.91	610,278.09
4,500.00	14.77	227.03	4,417.13	-457.46	-491.15	671.19	227.03	0.00	467,607.54	610,259.43
4,549.30	14.77	227.03	4,464.80	-466.03	-500.35	683.76	227.03	0.00	467,598.97	610,250.23
<b>Top Brushy Canyon</b>										



Survey Report Landscape

**Company:** KAISER-FRANCIS OIL COMPANY  
**Project:** Eddy County, NM (NIMEZ) NAD83 Grid  
**Site:** Loving Townsite 2021 WA  
**Well:** WA 2H  
**Wellbore:** Lateral  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well WA 2H - Slot 2H  
**TVD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**MD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** SBDIR\_EDM

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100ft)	Northing (usft)	Easting (usft)
4,554.34	14.77	227.03	4,469.67	-466.91	-501.29	685.05	227.03	0.00	467,598.09	610,249.29
4,600.00	13.86	227.03	4,513.91	-474.60	-509.54	696.33	227.03	2.00	467,590.40	610,241.04
4,700.00	11.86	227.03	4,611.40	-489.76	-525.83	718.58	227.03	2.00	467,575.24	610,224.75
4,800.00	9.86	227.03	4,709.61	-502.60	-539.61	737.42	227.03	2.00	467,562.40	610,210.97
4,900.00	7.86	227.03	4,808.41	-513.09	-550.87	752.81	227.03	2.00	467,551.91	610,199.71
5,000.00	5.86	227.03	4,907.69	-521.23	-559.61	764.75	227.03	2.00	467,543.77	610,190.97
5,100.00	3.86	227.03	5,007.32	-527.00	-565.80	773.21	227.03	2.00	467,538.00	610,184.78
5,200.00	1.86	227.03	5,107.19	-530.40	-569.45	778.20	227.03	2.00	467,534.60	610,181.13
5,292.82	0.00	0.00	5,200.00	-531.42	-570.55	779.70	227.03	2.00	467,533.58	610,180.03
5,300.00	0.00	0.00	5,207.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
5,392.82	0.00	0.00	5,300.00	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
<b>9 5/8"</b>										
5,400.00	0.00	0.00	5,307.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
5,500.00	0.00	0.00	5,407.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
5,600.00	0.00	0.00	5,507.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
5,700.00	0.00	0.00	5,607.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
5,743.62	0.00	0.00	5,650.80	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
<b>Top Lower Brushy Canyon</b>										
5,800.00	0.00	0.00	5,707.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
5,900.00	0.00	0.00	5,807.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
5,939.62	0.00	0.00	5,846.80	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
<b>Top Mobil Sand</b>										
6,000.00	0.00	0.00	5,907.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
6,082.62	0.00	0.00	5,969.80	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
<b>Top 1st Bone Springs Lime</b>										
6,100.00	0.00	0.00	6,007.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
6,200.00	0.00	0.00	6,107.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
6,300.00	0.00	0.00	6,207.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03



Survey Report Landscape

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 Grid  
 North Reference: Minimum Curvature  
 Survey Calculation Method: SBDIR\_EDM  
 Database:

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	D Leg (°/100ft)	Northing (usft)	Easting (usft)
6,400.00	0.00	0.00	6,307.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
6,500.00	0.00	0.00	6,407.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
6,600.00	0.00	0.00	6,507.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
6,700.00	0.00	0.00	6,607.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
6,800.00	0.00	0.00	6,707.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
6,900.00	0.00	0.00	6,807.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
7,000.00	0.00	0.00	6,907.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
7,082.62	0.00	0.00	6,989.80	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
<b>1st Bone Springs Sand</b>										
7,100.00	0.00	0.00	7,007.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
7,200.00	0.00	0.00	7,107.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
7,300.00	0.00	0.00	7,207.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
7,379.62	0.00	0.00	7,286.80	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
<b>2nd Bone Springs Lime</b>										
7,400.00	0.00	0.00	7,307.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
7,500.00	0.00	0.00	7,407.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
7,600.00	0.00	0.00	7,507.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
7,700.00	0.00	0.00	7,607.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
7,797.62	0.00	0.00	7,704.80	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
<b>2nd Bone Springs Sand</b>										
7,800.00	0.00	0.00	7,707.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
7,900.00	0.00	0.00	7,807.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
8,000.00	0.00	0.00	7,907.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
8,053.62	0.00	0.00	7,960.80	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
<b>Mid 2nd Bone Springs Lime</b>										
8,100.00	0.00	0.00	8,007.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
8,200.00	0.00	0.00	8,107.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03



Survey Report Landscape

Company: KAISER-FRANCIS OIL COMPANY  
 Project: Eddy County, NM (NMEZ) NAD83 Grid  
 Site: Loving Townsite 2021 WA  
 Well: WA 2H  
 Wellbore: Lateral  
 Design: Plan #1

Local Co-ordinate Reference:  
 TVD Reference: 3069.8 @ 3069.80usft (GLOnly)  
 MD Reference: 3069.8 @ 3069.80usft (GLOnly)  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature  
 Database: SBDIR\_EDM

Well WA 2H - Slot 2H  
 3069.8 @ 3069.80usft (GLOnly)  
 3069.8 @ 3069.80usft (GLOnly)  
 Grid  
 Minimum Curvature  
 SBDIR\_EDM

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (%100ft)	Northing (usft)	Easting (usft)
8,300.00	0.00	0.00	8,207.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
8,400.00	0.00	0.00	8,307.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
8,500.00	0.00	0.00	8,407.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
8,539.62	0.00	0.00	8,446.80	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
<b>Lower 2nd Bone Springs Sand (Harkey)</b>										
8,600.00	0.00	0.00	8,507.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
8,700.00	0.00	0.00	8,607.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
8,800.00	0.00	0.00	8,707.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
8,840.62	0.00	0.00	8,747.80	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
<b>3rd Bone Springs Lime</b>										
8,900.00	0.00	0.00	8,807.18	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
9,007.86	0.00	0.00	8,915.04	-531.42	-570.55	779.70	227.03	0.00	467,533.58	610,180.03
<b>LVGTWNST 2021 WA 2H KOP_669FSL_2960FEL</b>										
9,050.00	4.21	89.74	8,957.14	-531.41	-569.00	778.56	226.96	10.00	467,533.59	610,181.58
9,070.75	6.29	89.74	8,977.80	-531.40	-567.10	777.17	226.86	10.00	467,533.60	610,183.48
<b>3rd Bone Springs Sand</b>										
9,100.00	9.21	89.74	9,006.78	-531.39	-563.16	774.29	226.66	10.00	467,533.61	610,187.42
9,150.00	14.21	89.74	9,055.72	-531.34	-553.01	766.91	226.14	10.00	467,533.66	610,197.57
9,200.00	19.21	89.74	9,103.60	-531.28	-538.63	756.56	225.39	10.00	467,533.72	610,211.95
9,250.00	24.21	89.74	9,150.03	-531.19	-520.14	743.45	224.40	10.00	467,533.81	610,230.44
9,300.00	29.21	89.74	9,194.68	-531.09	-497.67	727.83	223.14	10.00	467,533.91	610,252.91
9,350.00	34.21	89.74	9,237.20	-530.98	-471.40	710.04	221.60	10.00	467,534.02	610,279.18
9,400.00	39.21	89.74	9,277.27	-530.84	-441.52	690.46	219.75	10.00	467,534.16	610,309.06
9,450.00	44.21	89.74	9,314.59	-530.69	-408.26	669.56	217.57	10.00	467,534.31	610,342.32
9,457.32	44.95	89.74	9,319.80	-530.67	-403.12	666.42	217.22	10.00	467,534.33	610,347.46
<b>Top Wolfcamp (Wolfcamp A)</b>										
9,500.00	49.21	89.74	9,348.86	-530.53	-371.87	647.88	215.03	10.00	467,534.47	610,378.71



Survey Report Landscape

Company: KAISER-FRANCIS OIL COMPANY  
 Project: Eddy County, NM (NMEZ) NAD83 Grid  
 Site: Loving Townsite 2021 WA  
 Well: WA 2H  
 Wellbore: Lateral  
 Design: Plan #1

Local Co-ordinate Reference: Well WA 2H - Slot 2H  
 TVD Reference: 3069.8 @ 3069.80usft (GLOnly)  
 MD Reference: 3069.8 @ 3069.80usft (GLOnly)  
 Grid  
 North Reference: Minimum Curvature  
 Survey Calculation Method: SBDIR\_EDM  
 Database:

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100ft)	Northing (usft)	Easting (usft)
9,501.45	49.36	89.74	9,349.80	-530.53	-370.78	647.25	214.95	10.00	467,534.47	610,379.80
<b>Top Wolfcamp A - X Sand</b>										
9,550.00	54.21	89.74	9,379.83	-530.36	-332.64	626.04	212.10	10.00	467,534.64	610,417.94
9,576.46	56.86	89.74	9,394.80	-530.26	-310.82	614.64	210.38	10.00	467,534.74	610,439.76
<b>Base Wolfcamp A - X Sand</b>										
9,600.00	59.21	89.74	9,407.26	-530.17	-290.85	604.71	208.75	10.00	467,534.83	610,459.73
9,636.22	62.84	89.74	9,424.80	-530.03	-259.18	590.00	206.06	10.00	467,534.97	610,491.40
<b>Top Wolfcamp A - Y Sand</b>										
9,650.00	64.21	89.74	9,430.94	-529.97	-246.84	584.64	204.97	10.00	467,535.03	610,503.74
9,700.00	69.21	89.74	9,450.70	-529.77	-200.93	566.59	200.77	10.00	467,535.23	610,549.65
9,750.00	74.21	89.74	9,466.39	-529.56	-153.47	551.35	196.16	10.00	467,535.44	610,597.11
9,784.65	77.68	89.74	9,474.80	-529.41	-119.86	542.81	192.76	10.00	467,535.59	610,630.72
<b>Base Wolfcamp A - Y Sand</b>										
9,800.00	79.21	89.74	9,477.87	-529.34	-104.82	539.62	191.20	10.00	467,535.66	610,645.76
9,850.00	84.21	89.74	9,485.08	-529.12	-55.36	532.01	185.97	10.00	467,535.88	610,695.22
9,900.00	89.21	89.74	9,487.94	-528.90	-5.46	528.92	180.59	10.00	467,536.10	610,745.12
9,907.86	90.00	89.74	9,488.00	-528.86	2.40	528.87	179.74	10.00	467,536.14	610,752.98
<b>LVGTWNST 2021 WA 2H FTP_660FSL_2386FEL</b>										
10,000.00	90.00	89.74	9,488.00	-528.45	94.54	536.84	169.86	0.00	467,536.55	610,845.12
10,100.00	90.00	89.74	9,488.00	-528.00	194.54	562.70	159.77	0.00	467,537.00	610,945.12
10,200.00	90.00	89.74	9,488.00	-527.55	294.54	604.21	150.83	0.00	467,537.45	611,045.12
10,300.00	90.00	89.74	9,488.00	-527.11	394.54	658.41	143.19	0.00	467,537.89	611,145.12
10,400.00	90.00	89.74	9,488.00	-526.66	494.54	722.45	136.80	0.00	467,538.34	611,245.12
10,500.00	90.00	89.74	9,488.00	-526.21	594.53	793.96	131.51	0.00	467,538.79	611,345.11
10,600.00	90.00	89.74	9,488.00	-525.77	694.53	871.10	127.13	0.00	467,539.23	611,445.11
10,700.00	90.00	89.74	9,488.00	-525.32	794.53	952.49	123.47	0.00	467,539.68	611,545.11
10,800.00	90.00	89.74	9,488.00	-524.87	894.53	1,037.15	120.40	0.00	467,540.13	611,645.11
10,900.00	90.00	89.74	9,488.00	-524.43	994.53	1,124.33	117.80	0.00	467,540.57	611,745.11



Survey Report Landscape

Company: KAISER-FRANCIS OIL COMPANY  
 Project: Eddy County, NM (NIMEZ) NAD83 Grid  
 Site: Loving Townsite 2021 WA  
 Well: WA 2H  
 Wellbore: Lateral  
 Design: Plan #1

Local Co-ordinate Reference: Well WA 2H - Slot 2H  
 TVD Reference: 3069.8 @ 3069.80usft (GLOnly)  
 MD Reference: 3069.8 @ 3069.80usft (GLOnly)  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature  
 Database: SBDIR\_EDM

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100ft)	Northing (usft)	Easting (usft)
11,000.00	90.00	89.74	9,488.00	-523.98	1,094.53	1,213.49	115.58	0.00	467,541.02	611,845.11
11,100.00	90.00	89.74	9,488.00	-523.53	1,194.53	1,304.22	113.67	0.00	467,541.47	611,945.11
11,200.00	90.00	89.74	9,488.00	-523.09	1,294.53	1,396.22	112.00	0.00	467,541.91	612,045.11
11,300.00	90.00	89.74	9,488.00	-522.64	1,394.53	1,489.25	110.54	0.00	467,542.36	612,145.11
11,400.00	90.00	89.74	9,488.00	-522.19	1,494.53	1,583.13	109.26	0.00	467,542.81	612,245.11
11,500.00	90.00	89.74	9,488.00	-521.75	1,594.52	1,677.72	108.12	0.00	467,543.25	612,345.10
11,600.00	90.00	89.74	9,488.00	-521.30	1,694.52	1,772.90	107.10	0.00	467,543.70	612,445.10
11,700.00	90.00	89.74	9,488.00	-520.85	1,794.52	1,868.58	106.19	0.00	467,544.15	612,545.10
11,800.00	90.00	89.74	9,488.00	-520.41	1,894.52	1,964.70	105.36	0.00	467,544.59	612,645.10
11,900.00	90.00	89.74	9,488.00	-519.96	1,994.52	2,061.18	104.61	0.00	467,545.04	612,745.10
12,000.00	90.00	89.74	9,488.00	-519.51	2,094.52	2,157.99	103.93	0.00	467,545.49	612,845.10
12,100.00	90.00	89.74	9,488.00	-519.07	2,194.52	2,255.07	103.31	0.00	467,545.93	612,945.10
12,200.00	90.00	89.74	9,488.00	-518.62	2,294.52	2,352.40	102.74	0.00	467,546.38	613,045.10
12,300.00	90.00	89.74	9,488.00	-518.17	2,394.52	2,449.94	102.21	0.00	467,546.83	613,145.10
12,400.00	90.00	89.74	9,488.00	-517.73	2,494.52	2,547.68	101.73	0.00	467,547.27	613,245.10
12,500.00	90.00	89.74	9,488.00	-517.28	2,594.51	2,645.58	101.28	0.00	467,547.72	613,345.09
12,600.00	90.00	89.74	9,488.00	-516.83	2,694.51	2,743.63	100.86	0.00	467,548.17	613,445.09
12,700.00	90.00	89.74	9,488.00	-516.38	2,794.51	2,841.82	100.47	0.00	467,548.62	613,545.09
12,800.00	90.00	89.74	9,488.00	-515.94	2,894.51	2,940.13	100.11	0.00	467,549.06	613,645.09
12,900.00	90.00	89.74	9,488.00	-515.49	2,994.51	3,038.56	99.77	0.00	467,549.51	613,745.09
13,000.00	90.00	89.74	9,488.00	-515.04	3,094.51	3,137.08	99.45	0.00	467,549.96	613,845.09
13,100.00	90.00	89.74	9,488.00	-514.60	3,194.51	3,235.69	99.15	0.00	467,550.40	613,945.09
13,200.00	90.00	89.74	9,488.00	-514.15	3,294.51	3,334.39	98.87	0.00	467,550.85	614,045.09
13,300.00	90.00	89.74	9,488.00	-513.70	3,394.51	3,433.16	98.61	0.00	467,551.30	614,145.09
13,400.00	90.00	89.74	9,488.00	-513.26	3,494.51	3,532.00	98.36	0.00	467,551.74	614,245.09
13,500.00	90.00	89.74	9,488.00	-512.81	3,594.50	3,630.90	98.12	0.00	467,552.19	614,345.08
13,600.00	90.00	89.74	9,488.00	-512.36	3,694.50	3,729.86	97.90	0.00	467,552.64	614,445.08





Survey Report Landscape

**Company:** KAISER-FRANCIS OIL COMPANY  
**Project:** Eddy County, NM (NMEZ) NAD83 Grid  
**Site:** Loving Townsite 2021 WA  
**Well:** WA 2H  
**Wellbore:** Lateral  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well WA 2H - Slot 2H  
**TVD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**MD Reference:** 3069.8 @ 3069.80usft (GLOnly)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** SBDIR\_EDM

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100ft)	Northing (usft)	Easting (usft)
13,700.00	90.00	89.74	9,488.00	-511.92	3,794.50	3,828.88	97.68	0.00	467,553.08	614,545.08
13,800.00	90.00	89.74	9,488.00	-511.47	3,894.50	3,927.94	97.48	0.00	467,553.53	614,645.08
13,900.00	90.00	89.74	9,488.00	-511.02	3,994.50	4,027.06	97.29	0.00	467,553.98	614,745.08
14,000.00	90.00	89.74	9,488.00	-510.58	4,094.50	4,126.21	97.11	0.00	467,554.42	614,845.08
14,100.00	90.00	89.74	9,488.00	-510.13	4,194.50	4,225.41	96.93	0.00	467,554.87	614,945.08
14,200.00	90.00	89.74	9,488.00	-509.68	4,294.50	4,324.64	96.77	0.00	467,555.32	615,045.08
14,300.00	90.00	89.74	9,488.00	-509.24	4,394.50	4,423.90	96.61	0.00	467,555.76	615,145.08
14,400.00	90.00	89.74	9,488.00	-508.79	4,494.50	4,523.20	96.46	0.00	467,556.21	615,245.08
14,500.00	90.00	89.74	9,488.00	-508.34	4,594.49	4,622.53	96.31	0.00	467,556.66	615,345.07
14,603.48	90.00	89.74	9,488.00	-507.88	4,697.97	4,725.34	96.17	0.00	467,557.12	615,448.55

LVGTWNST 2021 WA 2H PBHL\_660FSL\_2310FEL

Casing Points	Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
	14,603.48	9,488.00	5 1/2"	5.50	6.00
	5,392.82	5,300.00	9 5/8"	9.62	12.25
	1,400.00	1,400.00	13 3/8"	13.37	17.50



Survey Report Landscape

Kaiser-Francis Oil Company

**Company:** KAISER-FRANCIS OIL COMPANY  
**Project:** Eddy County, NM (NMEZ) NAD83 Grid  
**Site:** Loving Townsite 2021 WA  
**Well:** WA 2H  
**Wellbore:** Lateral  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well WA 2H - Slot 2H  
**TVD Reference:** 3069.8 @ 3069.80ustf (GLOnly)  
**MD Reference:** 3069.8 @ 3069.80ustf (GLOnly)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** SBDIR\_EDM

Formations	Measured Depth (ustf)	Vertical Depth (ustf)	Name	Lithology	Dip (°)	Dip Direction (°)
	8,840.62	8,747.80	3rd Bone Springs Lime			
	5,939.62	5,846.80	Top Mobil Sand			
	7,379.62	7,286.80	2nd Bone Springs Lime			
	9,636.22	9,424.80	Top Wolfcamp A - Y Sand			
	2,980.47	2,947.80	Top Cherry Canyon		0.00	
	2,484.07	2,467.80	Base Salt (Top Delaware)		0.00	
	9,070.75	8,977.80	3rd Bone Springs Sand			
	7,082.62	6,989.80	1st Bone Springs Sand			
	9,576.46	9,394.80	Base Wolfcamp A - X Sand			
	6,082.62	5,989.80	Top 1st Bone Springs Lime			
	5,743.62	5,650.80	Top Lower Brushy Canyon			
	8,053.62	7,960.80	Mid 2nd Bone Springs Lime			
	9,457.32	9,319.80	Top Wolfcamp (Wolfcamp A)			
	9,501.45	9,349.80	Top Wolfcamp A - X Sand			
	7,797.62	7,704.80	2nd Bone Springs Sand			
	9,784.65	9,474.80	Base Wolfcamp A - Y Sand			
	4,549.30	4,464.80	Top Brushy Canyon			
	8,539.62	8,446.80	Lower 2nd Bone Springs Sand (Hartkey)			

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



SURVEY CALCULATION PROGRAM

Minimum Curvature

OIL & GAS CO.: KAISER FRANCIS
WELL: Loving Townsite 2021 WC 2H
COUNTY / STATE: Eddy Co. NM
RIG: CACTUS #171
JOB NUMBER: MSMO-59486

API Number: 30-025-45006
VS Referenced to Offset from Surface
TARGET TVD: 10453.00 NORTH/SOUTH: -365.63
TARGET INCL: 88.06 EAST/WEST: 4830.01
TARGET AZM: 89.74 (Enter 0° N and 0° E for Surface)

PROPOSED DIRECTION: 89.74 MAG-DEC./ TOTAL CORR.(+/-): 6.99°
DIRECTIONAL COMPANY: MS Directional
DIRECTIONAL DRILLER(S): Jed Smith, Sam Bedolla

DIRECTIONAL COMPANY: MS Directional
DIRECTIONAL DRILLER(S): Jed Smith, Sam Bedolla

PTB: 15,353 MD INC 89.10 AZM 85.50 TVD 10476.72 N/S -298.31 E/W 5106.13 VS 5103.72

Table with columns: SVY, MD, INC, TRUE AZM, TEMP, F, Course Length, TVD, N-S, E-W, Surface Vert Sect, CLOSURE DIST, DIR, DLSI, BURI, 100', 100', TVD AT 0' V. SEC., TARGET CALCULATIONS ABOVE (+) BELOW (-), Accel X, Accel Y, Accel Z, BHA Number.





SVY	MD	INC	TRUE AZM	TEMP °F	Course Length	TVD	N-S	E-W	Surface		CLOSURE		DLS/ 100'	BURI/ 100'	TVD AT 0' V. SEC.		Mag X	Mag Y	Mag Z	Accel X	Accel Y	Accel Z	BHA Number
									Vert Sect	DIR	DIST	DIR			RIGHT(+)	LEFT(-)							
156	13503	88.50	89.40	187.2	95	10413.99	-363.86	3259.08	3257.40	3279.33	96.37	0.47	-0.42	10467.20	-8.90	-14.20							
157	13598	86.30	88.90	188.1	95	10418.30	-362.45	3353.97	3352.29	3373.50	96.17	2.37	-2.32	10468.30	-9.88	-15.30							
158	13693	87.60	89.30	184.5	95	10423.35	-360.96	3448.82	3447.15	3467.66	95.97	1.43	1.37	10470.14	-10.94	-17.14							
159	13787	88.60	89.60	184.5	94	10426.47	-360.06	3542.76	3541.09	3561.01	95.80	1.11	1.06	10470.07	-11.41	-17.07							
160	13882	90.70	90.50	189.0	95	10427.05	-360.14	3637.76	3636.08	3655.54	95.65	2.40	2.21	10467.43	-10.90	-14.43							
161	13977	89.20	92.80	190.8	95	10427.13	-362.88	3732.71	3731.02	3750.30	95.55	2.89	-1.58	10464.30	-7.73	-11.30							
162	14071	85.60	90.00	192.6	94	10431.40	-365.17	3826.56	3824.86	3843.94	95.45	4.85	-3.83	10465.39	-5.01	-12.39							
163	14166	88.90	89.70	193.5	95	10435.96	-364.92	3921.43	3919.74	3938.38	95.32	3.49	3.47	10466.73	-4.83	-13.73							
164	14260	87.70	86.90	194.4	94	10438.74	-362.14	4015.34	4013.66	4031.64	95.15	3.24	-1.28	10466.34	-7.19	-13.34							
165	14355	89.60	87.40	195.3	95	10440.98	-357.42	4110.19	4108.53	4125.70	94.97	2.07	2.00	10465.36	-11.48	-12.36							
166	14449	88.00	86.50	196.2	94	10442.95	-352.42	4204.03	4202.39	4218.78	94.79	1.95	-1.70	10464.15	-16.05	-11.15							
167	14544	87.80	85.60	197.1	95	10446.43	-345.88	4288.74	4287.13	4312.64	94.60	0.97	-0.21	10464.42	-22.16	-11.42							
168	14638	86.80	84.90	189.0	94	10450.86	-338.10	4392.32	4380.74	4405.31	94.40	1.30	-1.06	10465.68	-29.51	-12.68							
169	14733	91.40	86.40	189.9	95	10452.35	-330.90	4487.00	4485.45	4499.19	94.22	5.09	4.84	10463.97	-36.29	-10.97							
170	14828	89.60	84.90	189.0	95	10451.52	-323.69	4581.72	4580.20	4593.14	94.04	2.47	-1.89	10459.93	-43.06	-6.93							
171	14922	87.90	86.80	193.5	94	10453.57	-316.89	4675.44	4673.96	4686.17	93.88	2.71	-1.81	10458.80	-49.44	-5.80							
172	15017	85.70	88.40	191.7	95	10458.88	-312.92	4770.20	4768.73	4780.45	93.75	2.86	-2.32	10460.90	-52.98	-7.80							
173	15112	84.30	88.70	196.2	95	10467.16	-310.53	4864.81	4863.35	4874.71	93.65	1.51	-1.47	10465.97	-54.95	-12.97							
174	15206	87.10	88.50	193.5	94	10474.20	-308.23	4958.50	4957.06	4968.08	93.56	2.99	2.98	10469.84	-56.81	-16.84							
175	15296	89.60	86.80	194.4	30	10475.07	-307.01	4988.46	4987.02	4997.90	93.52	10.08	8.33	10469.69	-57.91	-16.69							
176	15279	89.10	85.50	191.7	43	10475.56	-304.12	5031.36	5029.93	5040.55	93.46	3.24	-1.16	10468.73	-60.60	-15.73							
177	15353	89.10	85.50	PTB	74	10476.72	-298.31	5105.13	5103.72	5113.83	93.34	0.00	0.00	10467.39	-66.07	-14.39							

30-025-45006 Target Calculations



**SURVEY CALCULATION PROGRAM**

Minimum Curvature

SVY	MD	INC	TRUE AZM	TEMP °F	Course Length	TVD	N-S	E-W	Surface Vert Sect	GLOSURE DIST	DIR	DLS/100	BUR/100'	TVD AT 0' V. SEC.		Mag X	Mag Y	Mag Z	Accel X	Accel Y	Accel Z	BHA Number
														RIGHT(+)	LEFT(-)							
OIL & GAS CO.: KAISER FRANCIS WELL: Loving Townsite 2021 WC 1H COUNTY / STATE: Eddy Co. STATE: NM RIG: CACTUS #171 JOB NUMBER: MSMO-59485 SURVEY COMPANY: MS Directional MS Guidance MWD SPECIALIST(S): Derek Scott, Eddias Henry DIRECTIONAL COMPANY: MS Directional DIRECTIONAL DRILLER(S): Jed Smith, Sam Bedolla DIRECTIONAL DRILLER(S): Jed Smith, Sam Bedolla COMMENTS:																						
TARGET TVD: 10466.00 NORTH/SOUTH: 924.02 TARGET INCL: 88.09 EAST/WEST: 4822.72 TARGET AZM: 89.74 (Enter 0° N and 0° E for Surface) PROPOSED DIRECTION: 89.74 MAG-DEC. / TOTAL CORR. (+/-): 6.98 REFERENCED TO: Grid North																						
API Number: 30-015-45005 VS Referenced to Offset from Surface crtl-shift-I = Insert Survey crtl-shift-D = Delete Survey																						
Target Information VS Referenced to Offset from Surface crtl-shift-I = Insert Survey crtl-shift-D = Delete Survey																						
Target Calculations ABOVE (+) BELOW (-)																						
1	150	0.60	94.40	53.4	150	150.00	-0.06	0.78	0.78	0.79	94.40	0.40	0.40	310.94	902.19	10155.06						
2	244	0.30	53.70	55.2	94	243.99	0.05	1.47	1.47	1.47	88.15	0.45	-0.32	404.91	902.08	10061.09						
3	354	0.40	348.20	58.8	110	353.99	0.59	1.63	1.63	1.73	69.93	0.35	0.09	514.91	901.54	9951.09						
4	521	0.80	4.30	73.1	167	520.99	2.04	1.57	1.58	2.57	37.87	0.15	0.12	681.90	900.10	9784.10						
5	614	0.90	7.20	72.2	93	613.98	3.25	1.71	3.66	27.64	0.33	0.32	774.89	898.89	9691.11							
6	708	1.30	3.20	74.0	94	707.96	5.04	1.85	1.88	5.37	20.16	0.43	0.43	868.87	897.09	9597.13						
7	801	1.50	351.60	76.7	93	800.93	7.30	1.73	1.77	7.50	13.35	0.37	0.22	961.84	894.83	9504.16						
8	895	2.50	0.50	83.0	94	894.87	10.57	1.57	1.62	10.68	8.46	1.11	1.06	1065.79	891.56	9410.21						
9	989	3.80	358.80	89.3	94	988.74	15.57	1.53	1.60	15.64	5.60	1.17	1.17	1149.65	886.56	9316.35						
10	1083	4.10	357.60	94.7	94	1082.53	21.88	1.32	1.42	21.92	3.47	0.54	0.53	1243.45	880.25	9222.55						
11	1177	4.10	4.30	100.1	94	1176.29	28.59	1.44	1.57	28.62	2.88	0.51	0.00	1337.20	873.55	9128.80						
12	1270	3.80	0.30	100.1	94	1269.07	34.98	1.70	1.86	35.02	2.78	0.44	-0.32	1429.97	867.15	9036.03						
13	1364	4.20	5.30	106.4	94	1362.84	41.52	2.04	2.22	41.57	2.81	0.56	0.43	1523.73	860.61	8942.27						
14	1458	4.10	359.80	110.9	94	1456.59	48.31	2.34	2.56	48.37	2.78	0.44	-0.11	1617.47	853.82	8848.53						
15	1551	4.10	3.30	115.4	93	1549.35	54.96	2.52	2.77	55.01	2.63	0.27	0.00	1710.23	847.18	8755.77						
16	1645	4.00	5.70	118.1	94	1643.12	61.57	3.04	3.32	61.65	2.83	0.21	-0.11	1803.98	840.57	8662.02						
17	1739	3.50	13.20	119.9	94	1736.92	67.63	4.02	4.33	67.75	3.40	0.74	-0.53	1897.74	834.52	8568.26						
18	1834	3.50	33.70	122.5	95	1831.75	72.87	6.29	6.62	73.14	4.94	1.31	0.00	1992.49	829.29	8473.51						
19	1929	4.00	28.80	126.1	95	1926.54	78.18	9.50	9.86	78.75	6.93	0.62	0.53	2087.18	823.99	8378.82						
20	2024	4.70	18.80	127.9	95	2021.27	84.76	12.36	12.74	85.66	8.30	1.09	0.74	2181.81	817.42	8284.19						
21	2119	4.60	12.80	125.2	95	2115.96	92.16	14.46	14.88	93.29	8.92	0.52	-0.11	2276.43	810.03	8189.57						
22	2213	4.50	0.60	127.9	94	2209.66	99.53	15.33	15.78	100.70	8.76	1.03	-0.11	2370.10	802.67	8095.90						
23	2307	4.60	4.00	130.6	94	2303.37	106.97	15.63	16.12	108.11	8.31	0.31	0.11	2463.80	795.22	8002.20						
24	2392	4.20	3.80	133.3	85	2388.12	113.48	16.08	16.60	114.61	8.07	0.47	-0.47	2548.53	788.72	7917.47						
25	2491	4.10	5.20	85.7	99	2486.86	120.62	16.85	17.20	121.77	7.86	0.14	-0.10	2647.25	781.56	7818.75						
26	2586	3.80	1.00	88.4	95	2581.83	127.15	17.01	17.59	128.28	7.62	0.44	-0.32	2742.01	775.05	7723.99						
27	2680	4.10	1.30	90.2	94	2675.41	133.63	17.14	17.75	134.72	7.31	0.32	0.32	2835.78	768.56	7630.22						
28	2775	4.80	348.20	92.9	95	2770.12	140.91	16.41	17.05	141.86	6.64	1.29	0.74	2930.52	761.29	7535.48						
29	2868	5.10	345.30	95.6	93	2862.78	148.72	14.56	15.24	149.43	5.59	0.42	0.32	3023.23	753.47	7442.77						
30	2963	5.20	347.30	97.4	95	2957.59	157.00	12.54	13.26	157.50	4.57	0.22	0.11	3117.92	745.18	7348.08						
31	3057	4.00	346.50	99.2	94	3051.02	165.14	10.65	11.40	165.48	3.69	0.23	-0.21	3211.61	737.03	7254.39						
32	3152	4.90	345.70	101.0	95	3145.67	173.10	8.68	9.47	173.32	2.87	0.13	-0.11	3306.32	729.07	7159.68						
33	3246	4.70	345.30	102.8	94	3239.34	180.71	6.71	7.53	180.84	2.13	0.22	0.11	3400.05	721.44	7085.95						
34	3340	3.90	343.00	105.5	94	3333.07	187.50	4.80	5.65	187.56	1.47	0.87	-0.85	3493.85	714.65	6972.15						
35	3434	4.00	341.40	106.4	94	3426.85	193.66	2.82	3.70	193.66	0.83	0.16	0.11	3587.69	708.48	6878.31						
36	3529	4.20	340.70	109.1	95	3521.00	200.08	0.62	1.52	200.08	0.18	0.22	0.21	3682.52	702.05	6783.48						
37	3624	5.30	345.90	110.9	95	3616.28	207.62	-1.60	-0.66	207.63	359.56	1.24	1.16	3777.27	694.50	6688.73						
38	3718	7.60	348.70	113.6	94	3708.68	217.93	-3.88	-2.89	217.96	358.98	2.11	2.45	3870.74	684.18	6595.26						
39	3813	9.60	348.90	114.5	95	3803.60	231.89	-6.50	-5.45	231.88	358.39	2.11	2.11	3964.75	670.21	6501.25						
40	3907	10.00	350.20	115.4	94	3896.23	247.65	-9.26	-8.14	247.82	357.86	0.43	0.43	4057.47	654.44	6408.53						
41	4002	10.30	350.70	114.5	95	3889.74	264.16	-12.04	-10.84	264.43	357.39	0.33	0.32	4151.07	637.91	6314.93						







30-015-45005

Target Calculations

SVY	MD	INC	TRUE AZM	TEMP °F	Course Length	TVD	N-S	E-W	Surface Vert Sect	CLOSURE		DLS/100	BUR/100'	TVD AT 0' V. SEC.	Target Calculations		Mag X	Mag Y	Mag Z	Accel X	Accel Y	Accel Z	BHA Number
										DIST	DIR				RIGHT(+) LEFT(-)	ABOVE (+) BELOW (-)							
156	13976	83.90	89.60	203.4	95	10432.35	920.34	3756.16	3760.30	3867.27	76.23	7.70	-6.00	10467.92	-1.16	-1.92							
157	14070	93.20	92.60	203.4	94	10434.73	916.53	3850.00	3854.13	3958.05	76.58	10.39	9.89	10467.17	1.07	-1.17							
158	14165	88.50	91.80	204.3	95	10433.32	914.89	3944.89	3949.00	4049.59	76.94	5.02	-4.95	10462.59	5.15	3.41							
159	14259	88.00	92.20	204.3	94	10436.19	911.61	4038.79	4042.88	4140.39	77.28	0.68	-0.53	10462.33	8.85	3.67							
160	14354	82.60	92.10	207.0	95	10443.97	908.06	4133.37	4137.45	4231.94	77.61	5.69	-5.68	10466.96	12.83	-0.96							
161	14448	81.10	90.70	207.9	94	10457.30	905.78	4226.39	4230.45	4322.36	77.90	2.17	-1.60	10477.19	15.53	-11.19							
162	14542	78.30	89.60	204.3	94	10474.10	905.54	4318.86	4322.92	4412.77	78.16	3.19	-2.88	10490.91	16.20	-24.91							
163	14657	87.10	89.90	207.9	115	10488.70	906.03	4432.81	4436.88	4524.46	78.45	7.66	7.65	10501.71	16.22	-35.71							
164	14731	88.90	92.90	208.8	74	10491.28	904.22	4506.74	4510.79	4596.55	78.65	4.73	2.43	10501.62	16.36	-35.82							
165	14826	89.80	96.90	209.7	95	10492.36	896.11	4601.36	4605.38	4687.81	78.98	4.32	0.95	10499.75	26.91	-33.75							
166	14921	89.00	99.10	206.1	95	10493.36	882.89	4685.43	4689.38	4777.71	79.35	2.46	-0.84	10497.61	40.55	-31.61							
167	15016	88.70	101.30	205.2	95	10495.26	866.07	4788.90	4792.78	4866.58	79.75	2.34	-0.32	10496.40	57.79	-30.40							
168	15081	88.70	101.80	265.4	65	10496.74	853.06	4852.57	4856.39	4926.98	80.03	0.77	0.00	10495.75	71.09	-29.75							
169	15157	88.70	101.80	PTB	76	10498.46	837.52	4926.94	4930.69	4997.62	80.35	0.00	0.00	10495.00	86.97	-29.00							

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

APPLICATION OF KAISER-FRANCIS OIL  
COMPANY FOR COMPULSORY POOLING,  
EDDY COUNTY, NEW MEXICO.

Case Nos. 21419

SELF-AFFIRMED STATEMENT OF NOTICE

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

James Bruce 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 Kaiser-Francis Oil Company.
3. Kaiser-Francis 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 owner, at its last known address, by certified mail. Copies of the notice letter and certified return receipt are attached hereto as Attachment A.
5. Applicant has complied with the notice provisions of Division Rules.
6. I understand that this Self-Affirmed Statement will be used as written testimony in this case. I affirm that my testimony in paragraphs 1 through 5 above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date handwritten next to my signature below.

Date: \_\_\_\_\_

9/8/2020

  
\_\_\_\_\_  
James Bruce

EXHIBIT

A

**JAMES BRUCE**  
ATTORNEY AT LAW

POST OFFICE BOX 1056  
SANTA FE, NEW MEXICO 87504

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

(505) 982-2043 (Phone)  
(505) 660-6612 (Cell)  
(505) 982-2151 (Fax)  
[jamesbruc@aol.com](mailto:jamesbruc@aol.com)

August 20, 2020

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

To: Persons on Exhibit A

Ladies and gentlemen:

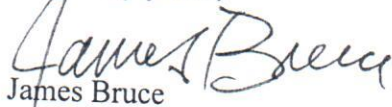
Enclosed is a copy of an application for compulsory pooling, filed with the New Mexico Oil Conservation Division by Kaiser-Francis Oil Company (Case No. 21419), regarding Wolfcamp wells in the SE/4 of Section 20 and the SW/4 of Section 21 Township 23 South, Range 28 East, NMPM, in Eddy County, New Mexico.

This matter is scheduled for hearing at 8:15 a.m. on Thursday, September 10, 2020. During the COVID-19 Public Health Emergency, state buildings are closed to the public and the hearing will be conducted remotely. To determine the location of the hearing or to participate in an electronic hearing, go to [emnrd.state.nm.us/OCD/hearings](http://emnrd.state.nm.us/OCD/hearings) or see the instructions posted on the Division's website, <http://emnrd.state.nm.us/OCD/announcements.html>.

You are not required to attend this hearing, but as an owner of an interest who may be affected by the applications, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from contesting these matters at a later date.

A party appearing in a Division case is required by Division Rules to file a Pre-Hearing Statement no later than Thursday, September 3, 2020. This statement may be filed online with the Division at [ocd.hearings@state.nm.us](mailto:ocd.hearings@state.nm.us), and should include: The name(s) of the party and his or her attorney; a concise statement of the case; the name(s) of the witness(es) the party will call to testify at the hearing; the approximate time the party will need to present his or her case; and identification of any procedural matters that need to be resolved prior to the hearing. The Pre-Hearing Statement must also be provided to the undersigned.

Very truly yours,

  
James Bruce

Attorney for Kaiser-Francis Oil Company

ATTACHMENT 

EXHIBIT A

Theodore Aguilar  
P.O. Box 433  
Loving, New Mexico 88256

Edward Campos  
P.O. Box 13  
Loving, New Mexico 88256

Theresa Dean  
610 Airport Avenue  
Carlsbad, New Mexico 88220

Heirs of Maria Garza  
c/o Cruz Garza Hernandez  
2121 North Rojo  
Hobbs, New Mexico 88240

Josi Harvey  
1602 West Tansil Street  
Hobbs, New Mexico  
Carlsbad, New Mexico 88220

Josefa Harvey  
1801 West Jefferson Avenue  
Lovington, New Mexico 88260

Heirs of Alfred Reid Lawrence  
c/o Thelma McLain Lawrence  
621 Wild Willow Drive  
El Paso, Texas 79922

Heirs of Thelma McNutt  
Suite B49  
5850 Eubank Boulevard  
Albuquerque, New Mexico 87111

Pardue Limited Company  
P.O. Box 96  
Loving, New Mexico 88256

Maria Rojas  
4321 Dry Creek Road  
Sacramento, California 95838

Saul Sanchez  
P.O. Box 421  
Loving, New Mexico 88256

Heirs of Geraldine Hoose Stevens  
c/o Curtis Stevens  
112 Durham Drive  
Crawfordsville, Indiana 47933

Heirs of Steven Frank Williams  
c/o Sondra Lynn Willams Ellyson  
536 Rose Branch Drive  
La Vernia, Texas 78121

Linda Williams  
33764 State Highway 16  
Denham Springs, Louisiana 70706

Tierra Oil Company, LLC  
P.O. Box 700968  
San Antonio, Texas 78270-0968

Mewbourne Oil Company  
Suite 1020  
500 West Texas  
Midland, Texas 79701

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mewbourne Oil Company  
 Suite 1020  
 500 West Texas  
 Midland, Texas 79701



2. Article No. **7020 0640 0000 1403 9336**

PS Form 3811, July 2015 PSN 7530-02-000-9053

**FFL** Domestic Return Receipt

**COMPLETE THIS SECTION ON DELIVERY**

- A. Signature  Agent  Addressee
- B. Received by (Printed Name) Josefa Harvey C. Date of Delivery 08/27
- D. Is delivery address different from item 1?  Yes  No  
 If YES, enter delivery address below:

3. Service Type
- Adult Signature
  - Registered Mail™
  - Certified Mail®
  - Certified Mail Restricted Delivery
  - Return Receipt for Merchandise
  - Signature Confirmation™
  - Signature Confirmation Restricted Delivery
4. Insured Mail Restricted Delivery (over \$500)

Domestic Return Receipt

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

For delivery information, visit our website at [www.usps.com](http://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 \$ \_\_\_\_\_

Postage \$ \_\_\_\_\_

Total Postage and Fees \$ \_\_\_\_\_

Sent To **Mewbourne Oil Company**  
 Suite 1020  
 500 West Texas  
 Midland, Texas 79701

Street and Apt. No., or PO Box \_\_\_\_\_  
 City, State, ZIP+4® \_\_\_\_\_

Postmark Here

9336 0047 0000 0490 0202

PS Form 3800, April 2015 PSN 7530-02-000-6047 See Reverse for Instructions

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

For delivery information, visit our website at [www.usps.com](http://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 \$ \_\_\_\_\_

Postage \$ \_\_\_\_\_

Total Postage and Fees \$ \_\_\_\_\_

Sent To **Josefa Harvey**  
 1801 West Jefferson Avenue  
 Lovington, New Mexico 88260

Street and Apt. No. \_\_\_\_\_  
 City, State, ZIP+4® \_\_\_\_\_

Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-6047 See Reverse for Instructions

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Josefa Harvey  
 1801 West Jefferson Avenue  
 Lovington, New Mexico 88260



2. Article No. **7020 0640 0000 1403 9237**

PS Form 3811, July 2015 PSN 7530-02-000-9053

**COMPLETE THIS SECTION ON DELIVERY**

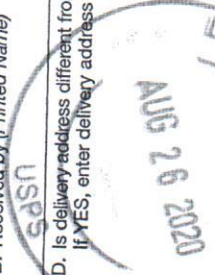
- A. Signature  Agent  Addressee
- B. Received by (Printed Name) Josefa Harvey C. Date of Delivery 08/27
- D. Is delivery address different from item 1?  Yes  No  
 If YES, enter delivery address below:

3. Service Type
- Priority Mail Express®
  - Registered Mail™
  - Certified Mail®
  - Certified Mail Restricted Delivery
  - Return Receipt for Merchandise
  - Signature Confirmation™
  - Signature Confirmation Restricted Delivery

(over \$500)

Domestic Return Receipt

**FFL**



SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Heirs of Alfred Reid Lawrence  
 c/o Thelma McLain Lawrence  
 621 Wild Willow Drive  
 El Paso, Texas 79922



9590 9402 5941 0062 9785 77

2. A 7020 0640 0000 1403 9244

(over \$500)

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

KF C

COMPLETE THIS SECTION ON DELIVERY

- A. Signature  Agent  Addressee
- B. Received by (Printed Name) TH Lawrence C. Date of Delivery 8/26/20
- D. Is delivery address different from item 1?  Yes  No  
 If YES, enter delivery address below:

3. Service Type
- Priority Mail Express®
  - Adult Signature
  - Registered Mail™
  - Certified Mail®
  - Certified Mail Restricted Delivery
  - Return Receipt for Merchandise
  - Signature Confirmation™
  - Signature Confirmation Restricted Delivery

Restricted Delivery

(over \$500)

Domestic Return Receipt

KF C

0226 6047 0000 0490 0202

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 \$

Postage \$

Total Postage and Fee \$

Sent To Josi Harvey  
1602 West Tansil Street  
Hobbs, New Mexico  
Carlsbad, New Mexico 88220

Street and Apt. No., P.O. Box, or Rural Route No.

City, State, Zip+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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 \$

Postage \$

Postmark Here

Total Postage and Fee \$

Sent To Heirs of Alfred Reid Lawrence  
c/o Thelma McLain Lawrence  
621 Wild Willow Drive  
El Paso, Texas 79922

Street and Apt. No., P.O. Box, or Rural Route No.

City, State, Zip+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Josi Harvey  
 1602 West Tansil Street  
 Hobbs, New Mexico  
 Carlsbad, New Mexico 88220



9590 9402 5941 0062 9785 91

2. 7020 0640 0000 1403 9220

(over \$500)

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

KF C

COMPLETE THIS SECTION ON DELIVERY

- A. Signature  Agent  Addressee
- B. Received by (Printed Name) TH Lawrence C. Date of Delivery 8-26-20
- D. Is delivery address different from item 1?  Yes  No  
 If YES, enter delivery address below:

3. Service Type
- Priority Mail Express®
  - Adult Signature
  - Registered Mail™
  - Certified Mail®
  - Certified Mail Restricted Delivery
  - Return Receipt for Merchandise
  - Signature Confirmation™
  - Signature Confirmation Restricted Delivery

(over \$500)

Domestic Return Receipt

KF C



**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Saul Sanchez  
P.O. Box 421  
Loving, New Mexico 88256



2. Article Number (Domestic Mail Only)  
7020 0640 0000 1403 9282

Insured Mail Restricted Delivery (over \$500)

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

KFL

**COMPLETE THIS SECTION ON DELIVERY**

- A. Signature  Agent  
 Addressee
- B. Received by (Printed Name) \_\_\_\_\_ C. Date of Delivery \_\_\_\_\_

D. Is delivery address different from item 1?  Yes  
if YES, enter delivery address below:  No

3. Service Type
- Priority Mail Express®
  - Registered Mail™
  - Adult Signature Restricted Delivery
  - Certified Mail®
  - Certified Mail Restricted Delivery
  - Collect on Delivery
  - Return Receipt for Merchandise
  - Signature Confirmation™
  - Signature Confirmation Restricted Delivery

Domestic Return Receipt

KFL

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

For delivery information, visit our website at [www.usps.com](http://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 \$ \_\_\_\_\_

Postage \$ \_\_\_\_\_

Total Postage and Fees \$ \_\_\_\_\_

Sent To Saul Sanchez

Street and Apt. No. P.O. Box 421

City, State, ZIP+4® Loving, New Mexico 88256

Postmark Here

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Heirs of Steven Frank Williams  
c/o Sondra Lynn Williams Ellyson  
536 Rose Branch Drive  
La Vernia, Texas 78121



2. Article Number (Domestic Mail Only)  
7020 0640 0000 1403 9305

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

KFL

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

For delivery information, visit our website at [www.usps.com](http://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 \$ \_\_\_\_\_

Postage \$ \_\_\_\_\_

Total Postage and F \$ \_\_\_\_\_

Sent To Heirs of Steven Frank Williams

Street and Apt. No. c/o Sondra Lynn Williams Ellyson

City, State, ZIP+4® 536 Rose Branch Drive  
La Vernia, Texas 78121

Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

**COMPLETE THIS SECTION ON DELIVERY**

- A. Signature  Agent  
 Addressee
- B. Received by (Printed Name) \_\_\_\_\_ C. Date of Delivery \_\_\_\_\_

D. Is delivery address different from item 1?  Yes  
if YES, enter delivery address below:  No

3. Service Type
- Priority Mail Express®
  - Registered Mail™
  - Adult Signature Restricted Delivery
  - Certified Mail®
  - Certified Mail Restricted Delivery
  - Collect on Delivery
  - Collect on Delivery Restricted Delivery

Domestic Return Receipt

KFL

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Linda Williams  
 33764 State Highway 16  
 Denham Springs, Louisiana 70706



9590 9402 5941 0062 9785 08

2. Article

7020 0640 0000 1403 9312

PS Form 3811, July 2015 PSN 7530-02-000-9053  
 (over \$500) **KFL** Domestic Return Receipt

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

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®

**OFFICIAL USE**

Certified Mail Fee	\$	
Extra Services & Fees (check box, add fee as appropriate)		
<input type="checkbox"/> Return Receipt (hardcopy)	\$	
<input type="checkbox"/> Return Receipt (electronic)	\$	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
<input type="checkbox"/> Adult Signature Required	\$	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	
<b>Total Postage and Fees</b>	\$	
Sent To	Linda Williams	
Street and Apt. No.	33764 State Highway 16	
City, State, ZIP+4®	Denham Springs, Louisiana 70706	

Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
 Addressee

B. Received by (Printed Name) Linda Williams

C. Date of Delivery 8/1/15

D. Is delivery address different from item 1?  Yes  No

3. Service Type

Adult Signature  
 Adult Signature Restricted Delivery  
 Certified Mail®  
 Certified Mail Restricted Delivery  
 Collect on Delivery  
 Collect on Delivery Restricted Delivery  
 Restricted Delivery

Priority Mail Express®  
 Registered Mail™  
 Registered Mail Restricted Delivery  
 Return Receipt for Merchandise  
 Signature Confirmation™  
 Signature Confirmation Restricted Delivery

7020 0640 0000 1403 9312

7020 0640 0000 1403 9329

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

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

OFFICIAL USE

Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postmark  
Here

Postage	\$
Total Postage and Fees	\$

Sent To **Tierra Oil Company, LLC**  
 P.O. Box 700968  
 Street and Apt. No., c **San Antonio, Texas 78270-0968**  
 City, State, ZIP+4®

7020 0640 0000 1403 9275

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

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

OFFICIAL USE

Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postmark  
Here

Postage	\$
Total Postage and Fees	\$

Sent To **Maria Rojas**  
 4321 Dry Creek Road  
 Street and Apt. No., c **Sacramento, California 95838**  
 City, State, ZIP+4®

7020 0640 0000 1403 9206

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

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

OFFICIAL USE

Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postmark  
Here

Postage	\$
Total Postage and Fees	\$

Sent To **Theresa Dean**  
 610 Airport Avenue  
 Street and Apt. No., c **Carlsbad, New Mexico 88220**  
 City, State, ZIP+4®

7020 0640 0000 1403 9213

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

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

OFFICIAL USE

Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postmark  
Here

Postage	\$
Total Postage and Fees	\$

Sent To **Heirs of Maria Garza**  
 c/o Cruz Garza Hernandez  
 2121 North Rojo  
 Street and Apt. No., c **Hobbs, New Mexico 88240**  
 City, State, ZIP+4®

7020 0640 0000 1403 9190

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

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

OFFICIAL USE

Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postmark  
Here

Postage	\$
Total Postage and Fees	\$

Sent To **Edward Campos**  
 P.O. Box 13  
 Street and Apt. No., **Loving, New Mexico 88256**  
 City, State, ZIP+4®

6

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Theodore Aguilar  
 P.O. Box 433  
 Loving, New Mexico 88256



9590 9402 5941 0062 9786 38

2. Art 7020 0640 0000 1403 9183

(USE ZIP+4)

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

KFB

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
 Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

3. Service Type

Adult Signature  
 Adult Signature Restricted Delivery  
 Certified Mail®  
 Certified Mail Restricted Delivery  
 Collect on Delivery  
 Collect on Delivery Restricted Delivery  
 Restricted Delivery

Priority Mail Express®  
 Registered Mail™  
 Registered Mail Restricted Delivery  
 Return Receipt for Merchandise  
 Signature Confirmation™  
 Signature Confirmation Restricted Delivery

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

For delivery information, visit our website at [www.usps.com](http://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 \$

Postage

\$ Total Postage and Fees

\$ Sent To

Theodore Aguilar

P.O. Box 433

Street and Apt. No., or P.O. Box

Loving, New Mexico 88256

City, State, ZIP+4®

Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-9017 See Reverse for Instructions

7020 0640 0000 1403 9183

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Heirs of Thelma McNutt  
Suite B49  
5850 Eubank Boulevard  
Albuquerque, New Mexico 8711



2. Art

7020 0640 0000 1403 9251

(over \$500)

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

*RFL*

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

X  Agent  
 Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1?  Yes  
If YES, enter delivery address below:  No

3. Service Type

- Adult Signature
- Adult Signature Restricted Delivery
- Certified Mail®
- Certified Mail Restricted Delivery
- Collect on Delivery
- Registered Mail™
- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
- Signature Confirmation™
- Signature Confirmation Restricted Delivery

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

For delivery information, visit our website at [www.usps.com](http://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 \$

Postage

Total Postage amt Heirs of Thelma McNutt

Sent To Suite B49

Street and Apt. No. 5850 Eubank Boulevard

City, State, Zip+4® Albuquerque, New Mexico 8711

Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Pardue Limited Company  
P.O. Box 96  
Loving, New Mexico 88256



9590 9402 5941 0062 9785 53

2. Article Number (Transfer from service label)

7020 0640 0000 1403 9268 (over \$500)

PS Form 3811, July 2015 PSN 7530-02-000-9053

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
 Addressee

B. Received by (Printed Name) \_\_\_\_\_

C. Date of Delivery \_\_\_\_\_

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

3. Service Type

Adult Signature

Adult Signature Restricted Delivery

Certified Mail®

Certified Mail Restricted Delivery

Collect on Delivery

Restricted Delivery

Registered Mail™

Registered Mail Restricted Delivery

Return Receipt for Merchandise

Signature Confirmation™

Signature Confirmation Restricted Delivery

Domestic Return Receipt

KFL

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

For delivery information, visit our website at [www.usps.com](http://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 \$ \_\_\_\_\_

Postage \$ \_\_\_\_\_

Total Postage and Fees \$ \_\_\_\_\_

Sent To Pardue Limited Company

P.O. Box 96

Street and Apt. No., Loving, New Mexico 88256

City, State, Zip+4® \_\_\_\_\_

Postmark Here

9926 6040 0000 1403 9268

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Heirs of Geraldine Hoose Stevens  
 c/o Curtis Stevens  
 112 Durham Drive  
 Crawfordsville, Indiana 47933



9590 9402 5941 0062 9785 22

2. Article Number (Transfer from certificate) **7020 0640 0000 1403 9299**

PS Form 3811, July 2015 PSN 7530-02-000-9053

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

- Agent  
 Addressee

B. Received by (Printed Name) \_\_\_\_\_ C. Date of Delivery \_\_\_\_\_

D. Is delivery address different from item 1?  Yes  No  
If YES, enter delivery address below: \_\_\_\_\_

3. Service Type
- Adult Signature
  - Adult Signature Restricted Delivery
  - Certified Mail®
  - Certified Mail Restricted Delivery
  - Collect on Delivery
  - Registered Mail™
  - Registered Mail Restricted Delivery
  - Return Receipt for Merchandise
  - Signature Confirmation™
  - Signature Confirmation Restricted Delivery
  - Priority Mail Express®

Domestic Return Receipt

**KFL**

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

For delivery information, visit our website at [www.usps.com](http://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 \$

Postage

\$

Total Postage and Fees

\$

Sent To **Heirs of Geraldine Hoose Stevens**  
 c/o Curtis Stevens  
 Street and Apt. No., **112 Durham Drive**  
 City, State, ZIP+4® **Crawfordsville, Indiana 47933**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

6626 6067 0000 0490 0202

**Affidavit of Publication**

Ad # 0004345689

This is not an invoice

**JAMES BRUCE ATTORNEY AT LAW**  
POBOX 1056

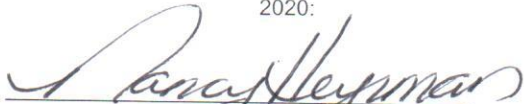
**SANTA FE, NM 87504**

I, a legal clerk of the **Carlsbad Current Argus**, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

08/26/2020

  
\_\_\_\_\_  
Legal Clerk

Subscribed and sworn before me this August 26, 2020:

  
\_\_\_\_\_  
State of WI, County of Brown  
NOTARY PUBLIC  
5.15.23  
\_\_\_\_\_  
My commission expires

**NOTICE**

To: Theodore Aguilar, Edward Campos, Theresa Dean, Heirs of Maria Garza c/o Cruz Garza Hernandez, Josi Harvey, Josefa Harvey, Heirs of Alfred Reid Lawrence c/o Thelma McLain Lawrence, Heirs of Thelma McNutt, Pardue Limited Company, Maria Rojas, Saul Sanchez, Heirs of Geraldine Hoose Stevens c/o Curtis Stevens, Heirs of Steven Frank Williams c/o Sondra Lynn Williams Ellyson, Linda Williams, and Tierra Oil Company, LLC, or your heirs, devisees, successors or assigns: Kaiser-Francis Oil Company has filed an application with the New Mexico Oil Conservation Division (Case No. 21419) seeking an order pooling all mineral interests in the Wolfcamp formation for the following wells and lands:

The Loving Townsite 2021 WC Well No. 1H, Loving Townsite 2021 WA Well No. 1H, Loving Townsite 2021 WC Well No. 2H, and Loving Townsite 2021 WA Well No. 2H, all located in the SE/4 of Section 20 and the SW/4 of Section 21, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico.

Also to be considered will be the cost of drilling and completing the wells and the allocation of the cost thereof, as well as actual operating costs and charges for supervision, designation of applicant as operator of the wells and a 200% charge for the risk involved in drilling and completing the wells. The application is scheduled to be heard at 8:15 a.m. on Thursday, September 10, 2020. During the COVID-19 Public Health Emergency, state buildings are closed to the public and the hearing will be conducted remotely. To determine the location of the hearing or to participate in an electronic hearing, go to [emnrd.state.nm.us/OCD/hearings](http://emnrd.state.nm.us/OCD/hearings) or see the instructions posted on the Division's website, <http://emnrd.state.nm.us/OCD/announcements.html>. As an interest owner in the well unit you have the right to enter an appearance and participate in the case. Failure to appear will preclude you from contesting this matter at a later date. The attorney for applicant is James Bruce, P.O. Box 1056, Santa Fe, New Mexico 87504, [jamesbruc@aol.com](mailto:jamesbruc@aol.com). The unit is located in the center of Loving, New Mexico. #4345689, Current Argus, Aug. 26, 2020

EXHIBIT 5

Ad # 0004345689

PO #: Kaiser  
# of Affidavits 1

This is not an invoice

NANCY HEYRMAN  
Notary Public  
State of Wisconsin



# COMPULSORY POOLING APPLICATION CHECKLIST

ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS

Case:	21419
Date	September 10, 2020
Applicant	Kaiser-Francis Oil Company
Designated Operator & OGRID (affiliation if applicable)	Kaiser-Francis Oil Company/OGRID No. 12361
Applicant's Counsel:	James Bruce
Case Title:	Application of Kaiser-Francis Oil Company for Compulsory Pooling, Eddy County, New Mexico
Entries of Appearance/Intervenors:	
Well Family	Loving Townsite Wolfcamp Wells
<b>Formation/Pool</b>	
Formation Name(s) or Vertical Extent:	Wolfcamp Formation
Primary Product (Oil or Gas):	Gas
Pooling this vertical extent:	Entire Wolfcamp formation
Pool Name and Pool Code:	Purple Sage; Wolfcamp, Gas/Pool Code 98220
Well Location Setback Rules:	Purple Sage rules and current horizontal well rules
Spacing Unit Size:	Half Section/320 acres
<b>Spacing Unit</b>	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	320 acres
Building Blocks:	160 acres
Orientation:	West-East
Description: TRS/County	SE/4 §20 and SW/4 §21-23S-28E, NMPM, Eddy County
Standard Horizontal Well Spacing Unit (Y/N), If No, describe	No, at the time the first well was drilled. But, a non-standard spacing unit was previously approved by the Division.
<b>Other Situations</b>	
Depth Severance: Y/N. If yes, description	No
Proximity Tracts: If yes, description	No
Proximity Defining Well: if yes, description	
Applicant's Ownership in Each Tract	Exhibit 2-C
<b>Well(s)</b>	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard or non-standard)	<p><b><u>Loving Townsite 2021 WA Well No. 1H, API No. 30-015-45003</u></b></p> <p>SHL: 1148 feet from the South line and 2499 feet from the East line of Section 20</p> <p>BHL: 1980 feet from the South line and 2310 feet from the West line of Section 21</p> <p>FTP: 1980 feet from the South line and 2310 from the East line of Section 20</p>

EXHIBIT 6

LTP: 1980 feet from the South line and 2310 feet from the West line of Section 21

Completion Target: Upper Wolfcamp (A) zone  
TVD 9466 feet/MD 15495 Feet  
Well Orientation: West to East  
Completion Location expected to be: standard

**Loving Townsite 2021 WA Well No. 2H, API No. 30-015-45004**

SHL: 948 feet from the South line and 2499 feet from the East line of Section 20

BHL: 660 feet from the South line and 2310 feet from the West line of Section 21

FTP: 660 feet from the South line and 2310 from the East line of Section 20

LTP: 660 feet from the South line and 2310 feet from the West line of Section 21

Completion Target: Upper Wolfcamp (A) zone  
TVD 9466 feet/MD 15495 Feet  
Well Orientation: West to East  
Completion Location expected to be: standard

**Loving Townsite 2021 WC Well No. 1H, API No. 30-015-45005**

SHL: 1078 feet from the South line and 2519 feet from the East line of Section 20

BHL: 1893 feet from the South line and 2413 feet from the West line of Section 21

FTP: 1980 feet from the South line and 2310 from the East line of Section 20

LTP: 1893 feet from the South line and 2310 feet from the West line of Section 21

Completion Target: Wolfcamp (C) zone  
TVD 10347 feet/MD 15495 Feet  
Well Orientation: West to East  
Completion Location expected to be: standard

**Loving Townsite 2021 WC Well No. 2H, API No. 30-015-45006**

SHL: 1048 feet from the South line and 2519 feet from the East line of Section 20

BHL: 725 feet from the South line and 2584 feet from the West line of Section 21

FTP: 660 feet from the South line and 2310 from the East line of Section 20

LTP: 725 feet from the South line and 2310 feet from the West line of Section 21

Completion Target: Wolfcamp (C) zone

TVD 10347 feet/MD 15495 Feet

Well Orientation: West to East

Completion Location expected to be: standard

Horizontal Well First and Last Take Points

See above

Completion Target (Formation, TVD and MD)

See above

**AFE Capex and Operating Costs**

Drilling Supervision/Month \$

\$8000

Production Supervision/Month \$

\$800

Justification for Supervision Costs

Exhibit 2, page 3

Requested Risk Charge

Cost + 200%/Exhibit 2, page 3

**Notice of Hearing**

Proposed Notice of Hearing

Exhibit 1

Proof of Mailed Notice of Hearing (20 days before hearing)

Exhibit 4

Proof of Published Notice of Hearing (10 days before hearing)

Exhibit 5

**Ownership Determination**

Land Ownership Schematic of the Spacing Unit

Exhibit 2-A

Tract List (including lease numbers and owners)

Exhibit 2-C

Pooled Parties (including ownership type)

Exhibit 2-C (unleased mineral owners)

Unlocatable Parties to be Pooled

Exhibit 2, page 2 and Exhibit 4

Ownership Depth Severance (including percentage above & below)

None

**Joinder**

Sample Copy of Proposal Letter

Exhibit 2-D

List of Interest Owners (i.e. Exhibit A of JOA)

Exhibit 2-C

Chronology of Contact with Non-Joined Working Interests

Exhibit 2-D

Overhead Rates In Proposal Letter

Cost Estimate to Drill and Complete

Exhibit 2-E

Cost Estimate to Equip Well

Exhibit 2-E

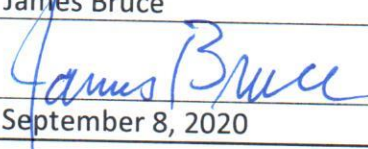
Cost Estimate for Production Facilities

Exhibit 2-E

**Geology**

Summary (including special

Exhibit 3

considerations)	
Spacing Unit Schematic	Exhibit 3-A
Gunbarrel/Lateral Trajectory Schematic	Exhibits 3-C and 3-F
Well Orientation (with rationale)	Laydown/Exhibit 3, page 2
Target Formation	Wolfcamp
HSU Cross Section	Exhibits 3-C and 3-F
Depth Severance Discussion	Not Applicable
<b>Forms, Figures and Tables</b>	
C-102	Exhibit 2-B
Tracts	Exhibit 2-A (small lots in the Town of Lovington)
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit 2-C
General Location Map (including basin)	Exhibit 2-A
Well Bore Location Map	Exhibit 3-A
Structure Contour Map - Subsea Depth	Exhibits 3-A and 3-D
Cross Section Location Map (including wells)	Exhibits 3-C and 3-F
Cross Section (including Landing Zone)	Exhibits 3-C and 3-F
<b>Additional Information</b>	
<b>CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.</b>	
Printed Name (Attorney or Party Representative):	James Bruce
Signed Name (Attorney or Party Representative):	
Date:	September 8, 2020