

Well Name: MOSAIC FED 2419 2BS	Well Location: T23S / R28E / SEC 24 / NWNW / 32.2951494 / -104.049054	County or Parish/State: EDDY / NM
Well Number: 2H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM134866	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001546682	Well Status: Approved Application for Permit to Drill	Operator: KAISER FRANCIS OIL COMPANY

Notice of Intent

Sundry ID: 2714613

Type of Submission: Notice of Intent

Date Sundry Submitted: 02/08/2023

Date proposed operation will begin: 06/09/2023

Type of Action: APD Change

Time Sundry Submitted: 08:50

Procedure Description: Kaiser-Francis Oil Company requests to change the casing design from a four-string to a three-string design. Procedure description and C-102 are attached.

NOI Attachments

- Procedure Description
- MOSAIC_FED_2419_2BS_2H_20230208085001.pdf
 - Casing_Change_Mosaic_Fed_2419_2BS_2H_20230208084931.pdf

Conditions of Approval

Additional

MOSAIC_FED_2419_2BS_2H___SUNDRY_COA_20230314140620.pdf

Well Name: MOSAIC FED 2419 2BS	Well Location: T23S / R28E / SEC 24 / NWNW / 32.2951494 / -104.049054	County or Parish/State: EDDY / NM
Well Number: 2H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM134866	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001546682	Well Status: Approved Application for Permit to Drill	Operator: KAISER FRANCIS OIL COMPANY

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: CHRISTINA OPFER	Signed on: FEB 08, 2023 08:50 AM
Name: KAISER FRANCIS OIL COMPANY	
Title: Regulatory Manager	
Street Address: 6733 S YALE AVENUE	
City: TULSA	State: OK
Phone: (918) 491-4468	
Email address: CHRISTINAO@KFOC.NET	

Field

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: KEITH P IMMATTY	BLM POC Title: ENGINEER
BLM POC Phone: 5759884722	BLM POC Email Address: KIMMATTY@BLM.GOV
Disposition: Approved	Disposition Date: 03/14/2023
Signature: Keith Immatty	

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

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-46682	² Pool Code 15011	³ Pool Name Culebra Bluff, Bone Spring, South
⁴ Property Code 327121	⁵ Property Name MOSAIC FED 2419 2BS	⁶ Well Number 2H
⁷ OGRID No. 12361	⁸ Operator Name KAISER-FRANCIS OIL COMPANY	⁹ Elevation 2985.1

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	24	23 S	28 E		1438	NORTH	621	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	19	23 S	29 E		1980	NORTH	100	EAST	EDDY

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

NW CORNER SEC. 24 LAT. = 32.2982711°N LONG. = 104.0496660°W NMSP EAST (FT) N = 472359.52 E = 628985.29 N/4 CORNER SEC. 24 LAT. = 32.2982367°N LONG. = 104.0490002°W NMSP EAST (FT) N = 472354.28 E = 631693.80 SECTION CORNER LAT. = 32.2982020°N LONG. = 104.0321341°W NMSP EAST (FT) N = 472349.15 E = 634402.41 N/4 CORNER SEC. 19 LAT. = 32.2980226°N LONG. = 104.0239292°W NMSP EAST (FT) N = 472291.11 E = 636937.75 NE CORNER SEC. 19 LAT. = 32.2978372°N LONG. = 104.0155331°W NMSP EAST (FT) N = 472231.26 E = 639532.21		17 OPERATOR CERTIFICATION <i>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.</i> Christina Opfer 2/1/2023 Signature Date Christina Opfer Printed Name ChristinaO@kfoc.net E-mail Address	
W/4 CORNER SEC. 24 LAT. = 32.2910604°N LONG. = 104.0496400°W NMSP EAST (FT) N = 469736.40 E = 629000.25 1980' FNL, 100' FWL LAT. = 32.2928282°N LONG. = 104.0493228°W QUARTER CORNER LAT. = 32.2908856°N LONG. = 104.0321938°W NMSP EAST (FT) N = 469687.50 E = 634391.42 E/4 CORNER SEC. 19 LAT. = 32.2905007°N LONG. = 104.0155347°W NMSP EAST (FT) N = 469562.33 E = 639539.64		18 SURVEYOR CERTIFICATION <i>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.</i> NOVEMBER 10, 2022 Date of Survey <i>[Signature]</i> Signature and Seal of Professional Surveyor: Certificate Number: 12797 NEW MEXICO PROFESSIONAL SURVEYOR NO. 9598	

Intent ☒ As Drilled ☐

API # 30-015-46682		
Operator Name: KAISER-FRANCIS OIL COMPANY	Property Name: MOSAIC FED 2419 2BS	Well Number 2H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL E	Section 24	Township 23S	Range 28E	Lot	Feet 1980	From N/S NORTH	Feet 100	From E/W WEST	County EDDY
Latitude 32.2928282					Longitude 104.0493228				NAD 83

Last Take Point (LTP)

UL H	Section 19	Township 23S	Range 29E	Lot	Feet 1980	From N/S NORTH	Feet 100	From E/W EAST	County EDDY
Latitude 32.2924010					Longitude 104.0158578				NAD 83

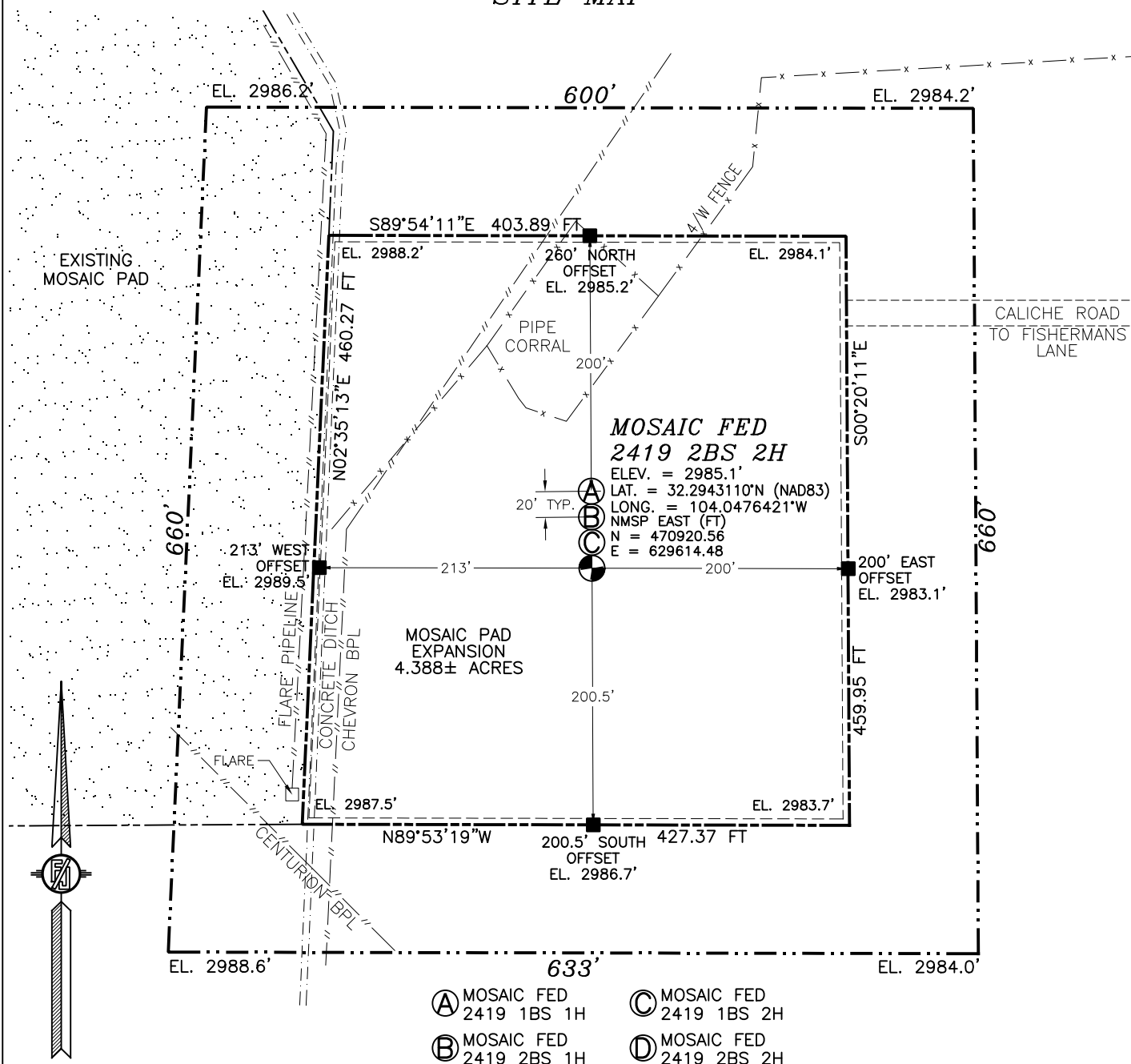
Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

**SECTION 24, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SITE MAP**



012 60 120 240

SCALE 1" = 120'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR. 735 (WINDMILL) & CR. 736 (G. R. HOWARD) GO NORTH ON CR. 735 APPROX. 0.25 MILES, TURN RIGHT AND GO EAST APPROX. 30' TO THE SOUTHEAST PAD CORNER FOR THIS LOCATION.

I, FILIMON F. JARAMILLO, A NEW MEXICO LICENSED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT I HAVE COMPLIED WITH THE MINIMUM STANDARDS FOR SURVEYING IN THE STATE OF NEW MEXICO.

FILIMON F. JARAMILLO, PLS. 2022

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3327

CARLSBAD, NEW MEXICO

**KAISER-FRANCIS OIL COMPANY
MOSAIC FED 2419 2BS 2H
LOCATED 1438 FT. FROM THE NORTH LINE
AND 621 FT. FROM THE WEST LINE OF
SECTION 24, TOWNSHIP 23 SOUTH,
RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO**

NOVEMBER 10, 2022

SURVEY NO. 9598

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code	³ Pool Name
⁴ Property Code	⁵ Property Name MOSAIC FED 2419 2BS	⁶ Well Number 2H
⁷ OGRID No. 12361	⁸ Operator Name KAISER-FRANCIS OIL COMPANY	⁹ Elevation 2985.1

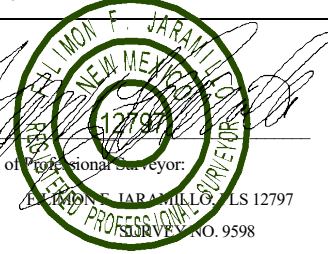
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	24	23 S	28 E		1438	NORTH	621	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

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

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

	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature _____ Date _____ Printed Name _____ E-mail Address _____
	¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. NOVEMBER 10, 2022 Date of Survey _____
	Signature and Seal of Professional Surveyor:  Certificate Number: 12797

Intent ☐ As Drilled ☐

API #		
Operator Name: KAISER-FRANCIS OIL COMPANY	Property Name: MOSAIC FED 2419 2BS	Well Number 2H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
E	24	23S	28E		1980	NORTH	100	WEST	EDDY
Latitude 32.2927069					Longitude 104.0488292				NAD 27

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
H	19	23S	29E		1980	NORTH	100	EAST	EDDY
Latitude 32.2922792					Longitude 104.0153654				NAD 27

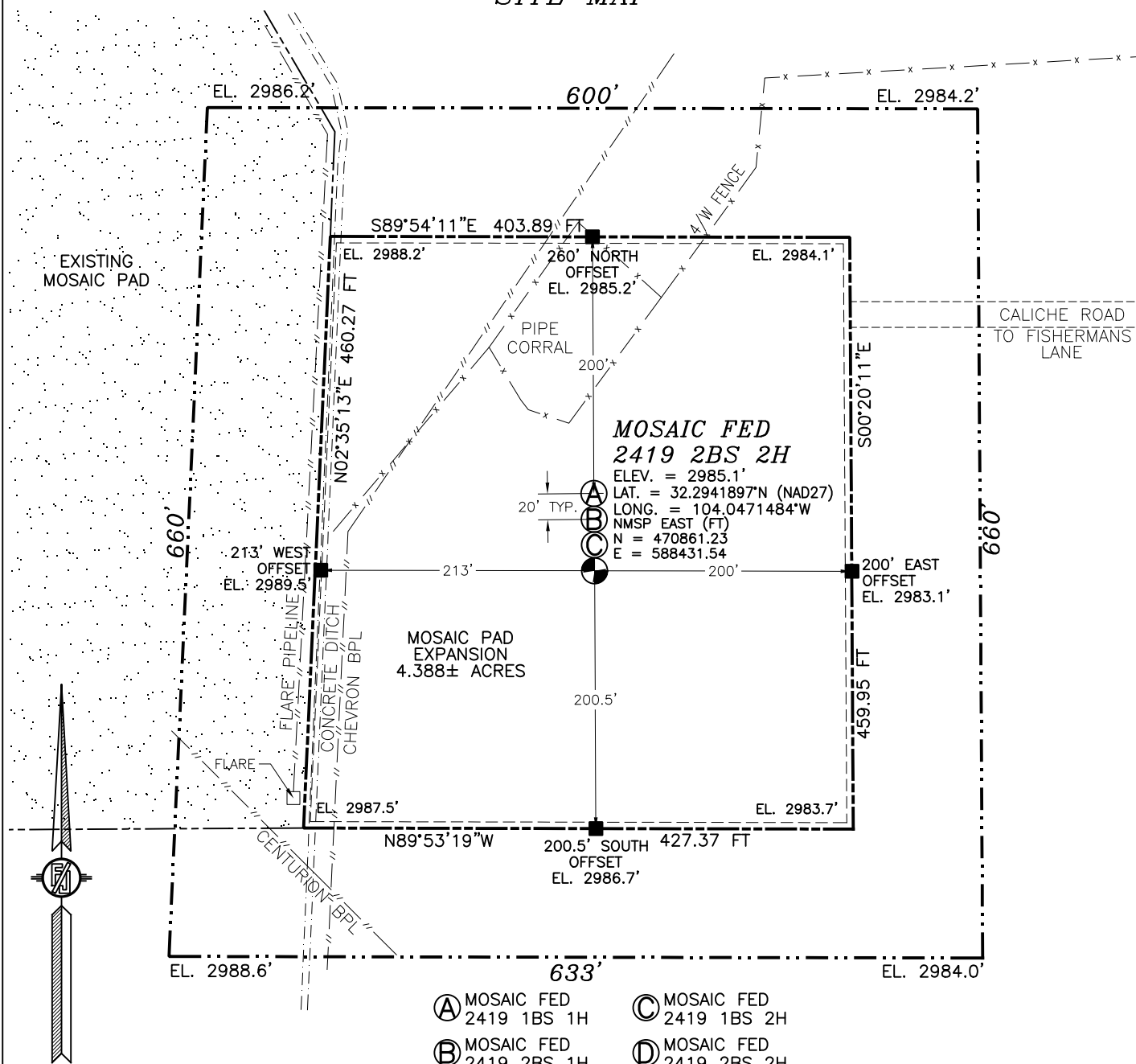
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API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

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EDDY COUNTY, STATE OF NEW MEXICO
SITE MAP**



012 60 120 240

SCALE 1" = 120'

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FILIMON F. JARAMILLO, PLS. 2022

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3327

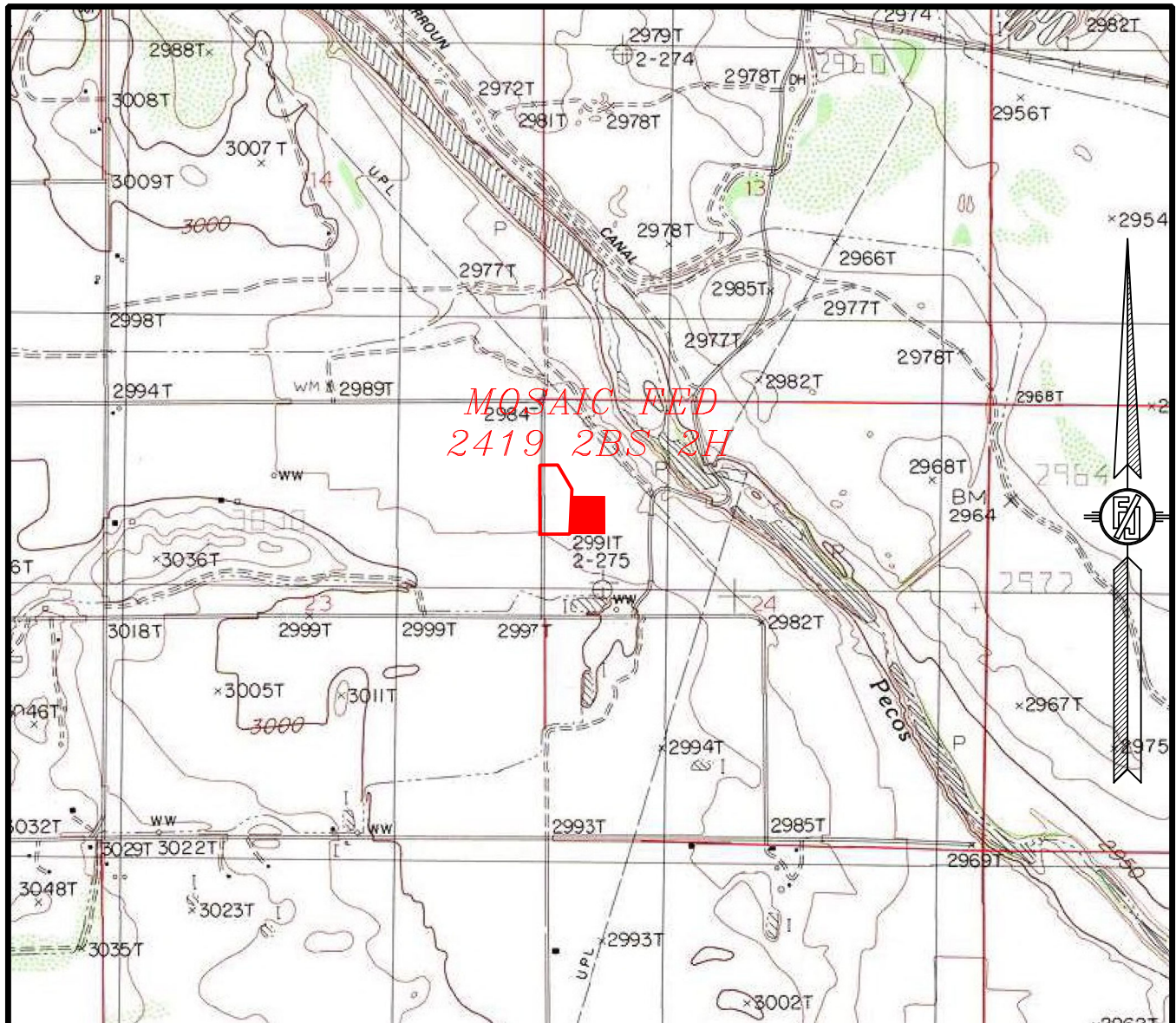
CARLSBAD, NEW MEXICO

**KAISER-FRANCIS OIL COMPANY
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LOCATED 1438 FT. FROM THE NORTH LINE
AND 621 FT. FROM THE WEST LINE OF
SECTION 24, TOWNSHIP 23 SOUTH,
RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO**

NOVEMBER 10, 2022

SURVEY NO. 9598

SECTION 24, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO
 LOCATION VERIFICATION MAP



USGS QUAD MAP:
 LOVING

NOT TO SCALE

KAISER-FRANCIS OIL COMPANY
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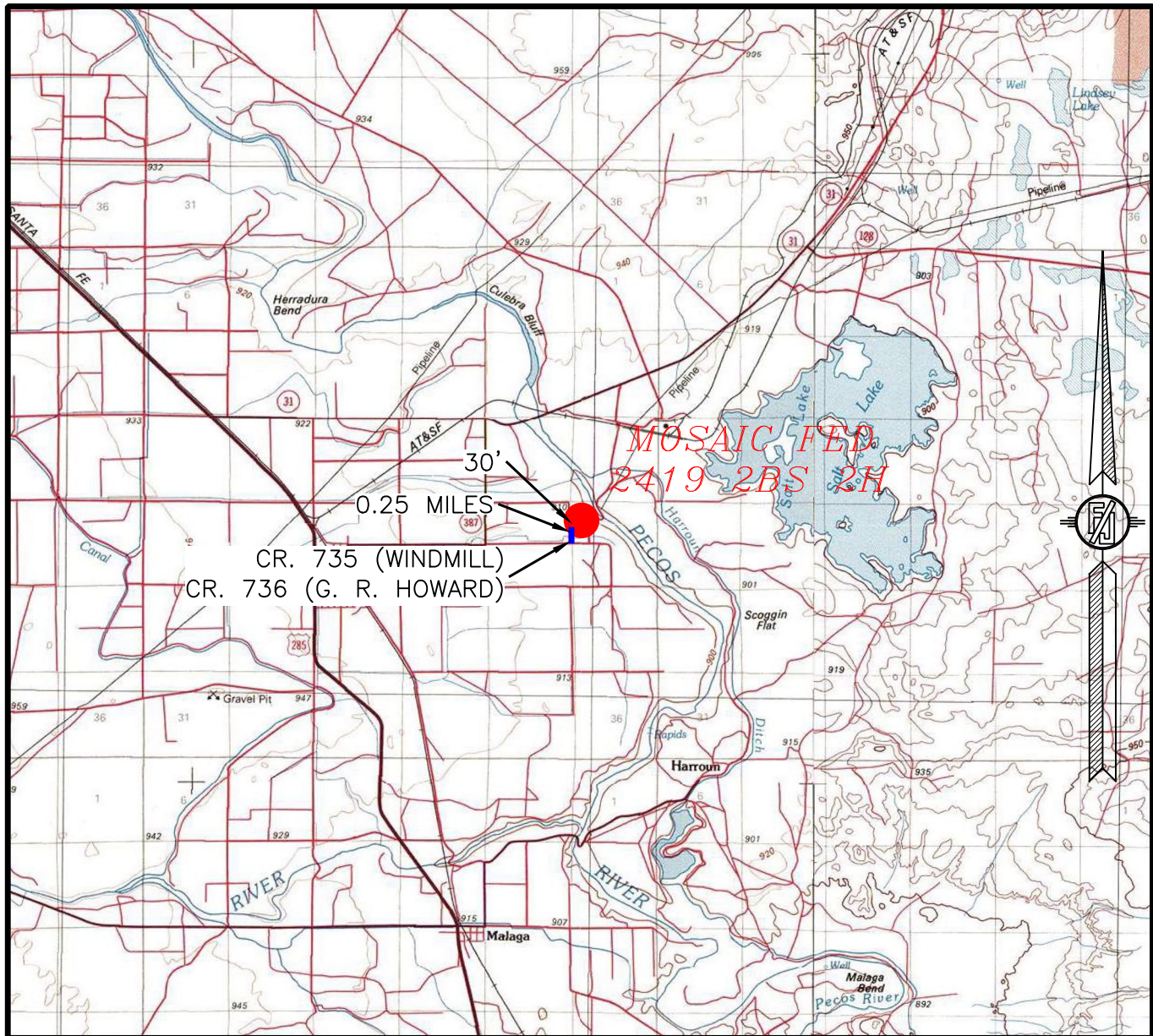
NOVEMBER 10, 2022

MADRON SURVEYING, INC.

301 SOUTH CANAL
 (575) 234-3327

SURVEY NO. 9598
 CARLSBAD, NEW MEXICO

SECTION 24, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO
 VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR. 735 (WINDMILL) & CR. 736 (G. R. HOWARD), GO NORTH ON CR. 735 APPROX. 0.25 MILES, TURN RIGHT AND GO EAST APPROX. 30' TO THE SOUTHEAST PAD CORNER FOR THIS LOCATION.

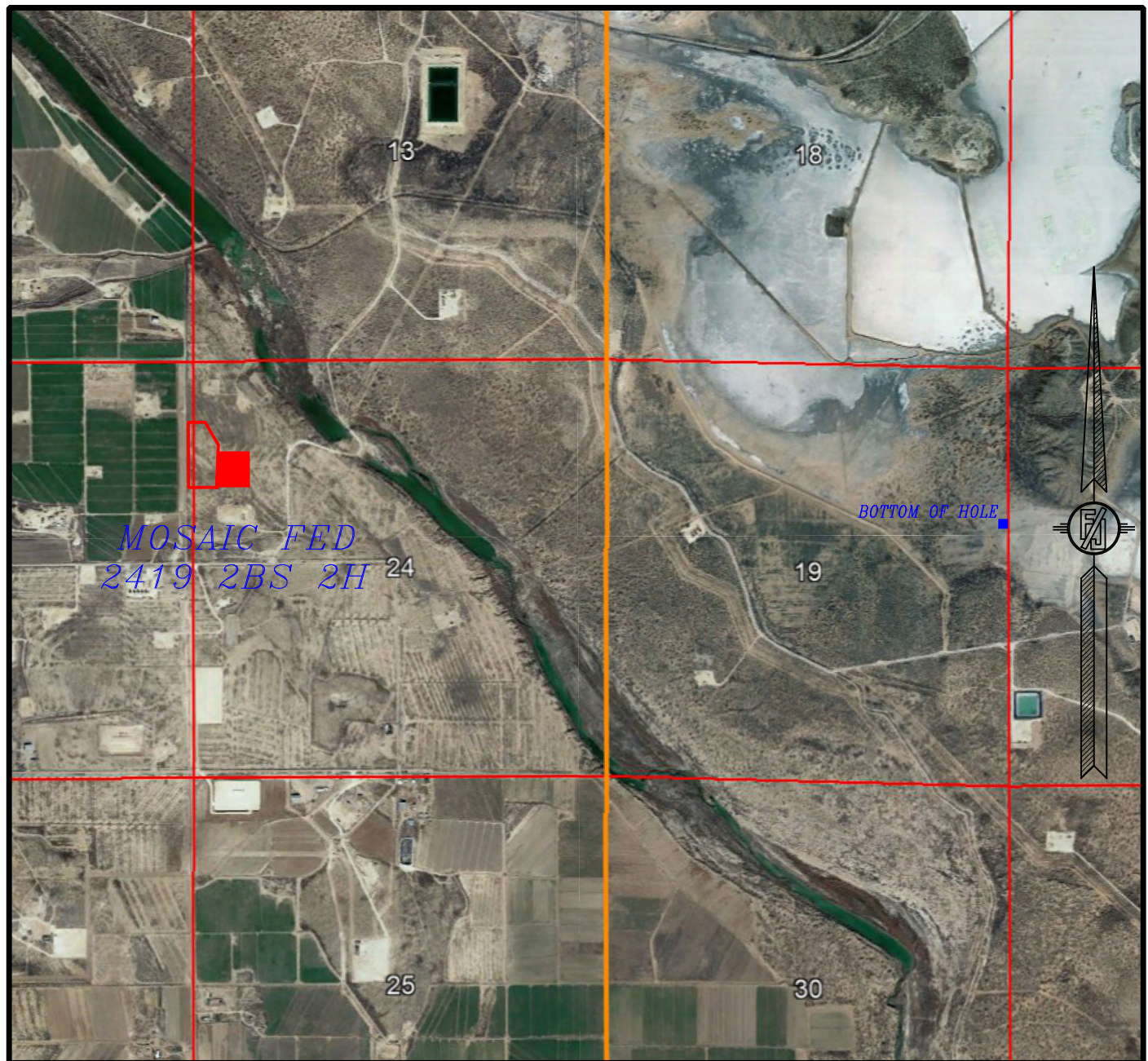
KAISER-FRANCIS OIL COMPANY
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 EDDY COUNTY, STATE OF NEW MEXICO

NOVEMBER 10, 2022

MADRON SURVEYING, INC. 301 SOUTH CANAL
 (575) 234-3327

SURVEY NO. 9598
 CARLSBAD, NEW MEXICO

SECTION 24, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO
 AERIAL PHOTO



NOT TO SCALE
 AERIAL PHOTO:
 GOOGLE EARTH
 DEC. 2019

KAISER-FRANCIS OIL COMPANY
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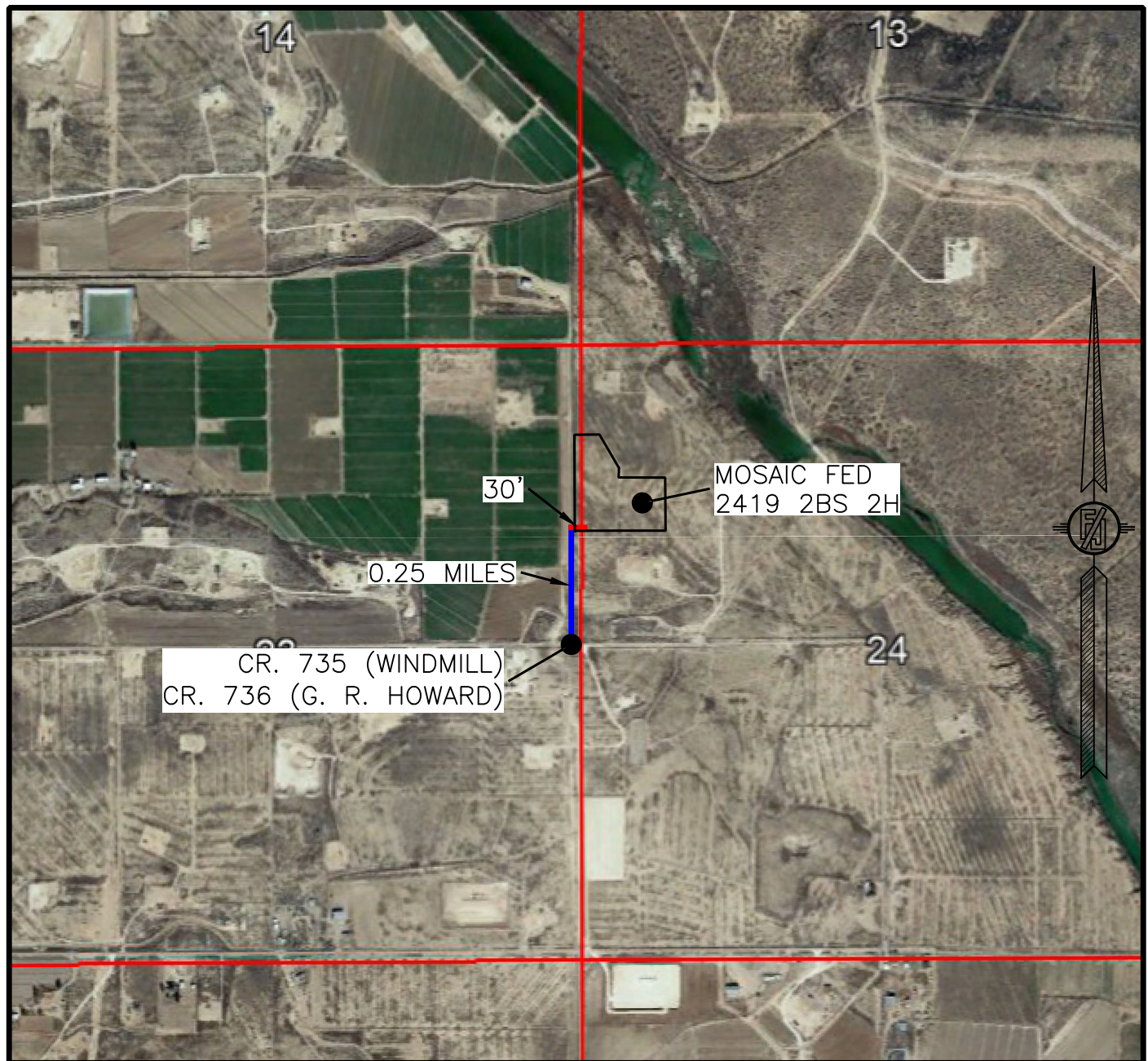
NOVEMBER 10, 2022

SURVEY NO. 9598

MADRON SURVEYING, INC. 301 SOUTH CANAL
 (575) 234-3327

CARLSBAD, NEW MEXICO

SECTION 24, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO
 AERIAL ACCESS ROUTE MAP



NOT TO SCALE
 AERIAL PHOTO:
 GOOGLE EARTH
 DEC. 2019

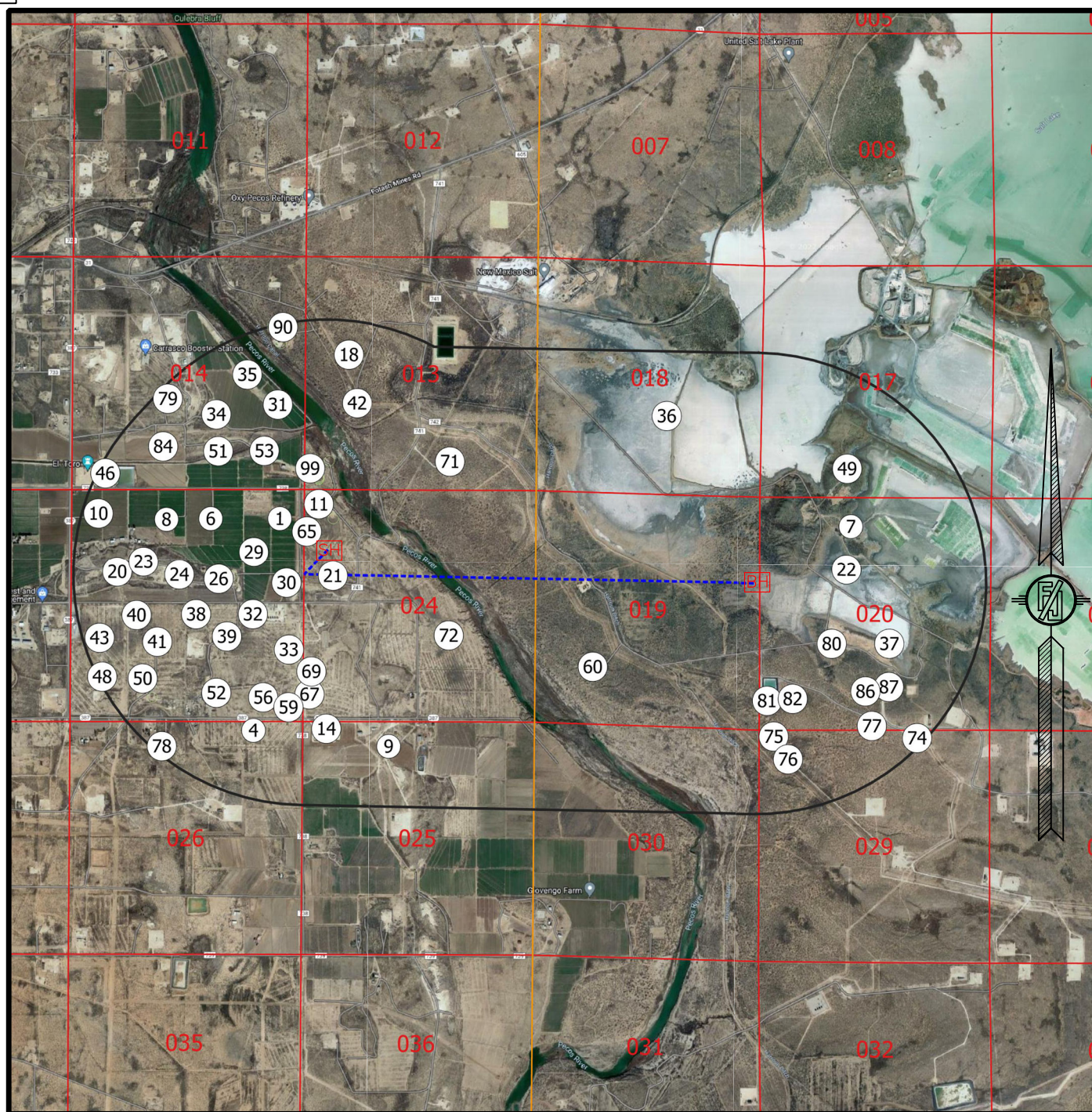
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NOVEMBER 10, 2022

SURVEY NO. 9598

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
 (575) 234-3327

1-MILE WELLS



WELL DATA FROM NMOCDS GIS - 11/17/22

[SH] SURFACE LOCATION

[BH] BOTTOM OF HOLE

[XX] WELLS WITHIN 1 MILE

--- WELL PATH

— 1-MILE BOUNDARY

KAISER-FRANCIS OIL COMPANY
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 EDDY COUNTY, STATE OF NEW MEXICO

NOVEMBER 10, 2022

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CARLSBAD, NEW MEXICO



KAISER FRANCIS OIL CO.

EDDY COUNTY, N.M. 83

SEC 24-T23S-R28E

MOSAIC FED 2419 2BS #2H

ORIGINAL WELLPATH

Plan: PRELIM PLAN 1, REV 1

Standard Planning Report

11 January, 2023

Kaiser-Francis Oil Company



Planning Report

Kaiser-Francis Oil Company

Database:	1 - EDM Production	Local Co-ordinate Reference:	Well MOSAIC FED 2419 2BS #2H
Company:	KAISER FRANCIS OIL CO.	TVD Reference:	2985.1' + 24' @ 3009.10usft (Original Well Elev)
Project:	EDDY COUNTY, N.M. 83	MD Reference:	2985.1' + 24' @ 3009.10usft (Original Well Elev)
Site:	SEC 24-T23S-R28E	North Reference:	Grid
Well:	MOSAIC FED 2419 2BS #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLPATH		
Design:	PRELIM PLAN 1, REV 1		

Project	EDDY COUNTY, N.M. 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	SEC 24-T23S-R28E		
Site Position:		Northing:	467,096.60 usft
From:	Map	Easting:	629,056.70 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.28380362
		Longitude:	-104.04947996

Well	MOSAIC FED 2419 2BS #2H		
Well Position	+N/-S	0.00 usft	Northing: 470,920.56 usft
	+E/-W	0.00 usft	Easting: 629,614.48 usft
Position Uncertainty	0.50 usft	Wellhead Elevation:	usft
Grid Convergence:	0.15 °	Ground Level:	2,985.10 usft

Wellbore	ORIGINAL WELLPATH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	1/10/2023	6.59	59.84	47,325.84178953

Design	PRELIM PLAN 1, REV 1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	90.69

Plan Survey Tool Program	Date	1/11/2023		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,385.00	PRELIM PLAN 1, REV 1 (ORIGIN	MWD+HRGM
			OWSG MWD + HRGM	



Planning Report

Kaiser-Francis Oil Company

Database:	1 - EDM Production	Local Co-ordinate Reference:	Well MOSAIC FED 2419 2BS #2H
Company:	KAISER FRANCIS OIL CO.	TVD Reference:	2985.1' + 24' @ 3009.10usft (Original Well Elev)
Project:	EDDY COUNTY, N.M. 83	MD Reference:	2985.1' + 24' @ 3009.10usft (Original Well Elev)
Site:	SEC 24-T23S-R28E	North Reference:	Grid
Well:	MOSAIC FED 2419 2BS #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLPATH		
Design:	PRELIM PLAN 1, REV 1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,670.00	0.00	0.00	2,670.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,215.52	10.91	220.19	3,212.23	-39.55	-33.42	2.00	2.00	0.00	220.19	
6,826.33	10.91	220.19	6,757.78	-561.61	-474.48	0.00	0.00	0.00	0.00	
7,371.85	0.00	0.00	7,300.00	-601.16	-507.90	2.00	-2.00	0.00	180.00	
7,779.39	0.00	0.00	7,707.54	-601.16	-507.90	0.00	0.00	0.00	0.00	
8,529.39	90.00	85.20	8,185.01	-561.21	-32.11	12.00	12.00	0.00	85.20	
8,804.03	90.00	90.69	8,185.00	-551.37	242.25	2.00	0.00	2.00	90.00	
18,385.74	90.00	90.69	8,185.00	-667.22	9,823.26	0.00	0.00	0.00	0.00	MF 2BS 2H PBHL: 19



Planning Report

Kaiser-Francis Oil Company

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Company:	KAISER FRANCIS OIL CO.	TVD Reference:	2985.1' + 24' @ 3009.10usft (Original Well Elev)
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Well:	MOSAIC FED 2419 2BS #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLPATH		
Design:	PRELIM PLAN 1, REV 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
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	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,670.00	0.00	0.00	2,670.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
2,700.00	0.60	220.19	2,700.00	-0.12	-0.10	-0.10	2.00	2.00	0.00
2,800.00	2.60	220.19	2,799.96	-2.25	-1.90	-1.88	2.00	2.00	0.00
2,900.00	4.60	220.19	2,899.75	-7.05	-5.96	-5.87	2.00	2.00	0.00
3,000.00	6.60	220.19	2,999.27	-14.50	-12.25	-12.08	2.00	2.00	0.00
3,100.00	8.60	220.19	3,098.39	-24.60	-20.79	-20.49	2.00	2.00	0.00
3,200.00	10.60	220.19	3,196.98	-37.34	-31.55	-31.10	2.00	2.00	0.00
3,215.52	10.91	220.19	3,212.23	-39.55	-33.42	-32.94	2.00	2.00	0.00
Start 3610.82 hold at 3215.52 MD									
3,300.00	10.91	220.19	3,295.18	-51.77	-43.74	-43.11	0.00	0.00	0.00
3,400.00	10.91	220.19	3,393.37	-66.23	-55.95	-55.15	0.00	0.00	0.00
3,500.00	10.91	220.19	3,491.57	-80.69	-68.17	-67.19	0.00	0.00	0.00
3,600.00	10.91	220.19	3,589.76	-95.14	-80.38	-79.23	0.00	0.00	0.00
3,700.00	10.91	220.19	3,687.95	-109.60	-92.60	-91.27	0.00	0.00	0.00
3,800.00	10.91	220.19	3,786.14	-124.06	-104.81	-103.31	0.00	0.00	0.00
3,900.00	10.91	220.19	3,884.34	-138.52	-117.03	-115.35	0.00	0.00	0.00
4,000.00	10.91	220.19	3,982.53	-152.98	-129.24	-127.39	0.00	0.00	0.00
4,100.00	10.91	220.19	4,080.72	-167.43	-141.46	-139.43	0.00	0.00	0.00
4,200.00	10.91	220.19	4,178.91	-181.89	-153.67	-151.47	0.00	0.00	0.00
4,300.00	10.91	220.19	4,277.11	-196.35	-165.89	-163.51	0.00	0.00	0.00
4,400.00	10.91	220.19	4,375.30	-210.81	-178.10	-175.55	0.00	0.00	0.00
4,500.00	10.91	220.19	4,473.49	-225.27	-190.32	-187.59	0.00	0.00	0.00
4,600.00	10.91	220.19	4,571.68	-239.72	-202.53	-199.63	0.00	0.00	0.00
4,700.00	10.91	220.19	4,669.88	-254.18	-214.75	-211.67	0.00	0.00	0.00



Planning Report

Kaiser-Francis Oil Company

Database:	1 - EDM Production	Local Co-ordinate Reference:	Well MOSAIC FED 2419 2BS #2H
Company:	KAISER FRANCIS OIL CO.	TVD Reference:	2985.1' + 24' @ 3009.10usft (Original Well Elev)
Project:	EDDY COUNTY, N.M. 83	MD Reference:	2985.1' + 24' @ 3009.10usft (Original Well Elev)
Site:	SEC 24-T23S-R28E	North Reference:	Grid
Well:	MOSAIC FED 2419 2BS #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLPATH		
Design:	PRELIM PLAN 1, REV 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,800.00	10.91	220.19	4,768.07	-268.64	-226.96	-223.71	0.00	0.00	0.00
4,900.00	10.91	220.19	4,866.26	-283.10	-239.18	-235.75	0.00	0.00	0.00
5,000.00	10.91	220.19	4,964.45	-297.55	-251.39	-247.79	0.00	0.00	0.00
5,100.00	10.91	220.19	5,062.65	-312.01	-263.61	-259.83	0.00	0.00	0.00
5,200.00	10.91	220.19	5,160.84	-326.47	-275.82	-271.87	0.00	0.00	0.00
5,300.00	10.91	220.19	5,259.03	-340.93	-288.04	-283.91	0.00	0.00	0.00
5,400.00	10.91	220.19	5,357.22	-355.39	-300.25	-295.95	0.00	0.00	0.00
5,500.00	10.91	220.19	5,455.42	-369.84	-312.47	-307.99	0.00	0.00	0.00
5,600.00	10.91	220.19	5,553.61	-384.30	-324.68	-320.03	0.00	0.00	0.00
5,700.00	10.91	220.19	5,651.80	-398.76	-336.90	-332.07	0.00	0.00	0.00
5,800.00	10.91	220.19	5,749.99	-413.22	-349.11	-344.11	0.00	0.00	0.00
5,900.00	10.91	220.19	5,848.19	-427.68	-361.33	-356.15	0.00	0.00	0.00
6,000.00	10.91	220.19	5,946.38	-442.13	-373.54	-368.19	0.00	0.00	0.00
6,100.00	10.91	220.19	6,044.57	-456.59	-385.76	-380.23	0.00	0.00	0.00
6,200.00	10.91	220.19	6,142.76	-471.05	-397.97	-392.27	0.00	0.00	0.00
6,300.00	10.91	220.19	6,240.96	-485.51	-410.19	-404.31	0.00	0.00	0.00
6,400.00	10.91	220.19	6,339.15	-499.97	-422.40	-416.35	0.00	0.00	0.00
6,500.00	10.91	220.19	6,437.34	-514.42	-434.62	-428.39	0.00	0.00	0.00
6,600.00	10.91	220.19	6,535.53	-528.88	-446.83	-440.43	0.00	0.00	0.00
6,700.00	10.91	220.19	6,633.73	-543.34	-459.05	-452.47	0.00	0.00	0.00
6,800.00	10.91	220.19	6,731.92	-557.80	-471.26	-464.51	0.00	0.00	0.00
6,826.33	10.91	220.19	6,757.78	-561.61	-474.48	-467.68	0.00	0.00	0.00
Start Drop -2.00									
6,900.00	9.44	220.19	6,830.28	-571.54	-482.88	-475.96	2.00	-2.00	0.00
7,000.00	7.44	220.19	6,929.20	-582.75	-492.35	-485.29	2.00	-2.00	0.00
7,100.00	5.44	220.19	7,028.56	-591.31	-499.58	-492.42	2.00	-2.00	0.00
7,200.00	3.44	220.19	7,128.25	-597.22	-504.57	-497.35	2.00	-2.00	0.00
7,300.00	1.44	220.19	7,228.16	-600.47	-507.32	-500.05	2.00	-2.00	0.00
7,371.85	0.00	0.00	7,300.00	-601.16	-507.90	-500.62	2.00	-2.00	0.00
Start 407.54 hold at 7371.85 MD									
7,400.00	0.00	0.00	7,328.15	-601.16	-507.90	-500.62	0.00	0.00	0.00
7,500.00	0.00	0.00	7,428.15	-601.16	-507.90	-500.62	0.00	0.00	0.00
7,600.00	0.00	0.00	7,528.15	-601.16	-507.90	-500.62	0.00	0.00	0.00
7,700.00	0.00	0.00	7,628.15	-601.16	-507.90	-500.62	0.00	0.00	0.00
7,779.39	0.00	0.00	7,707.54	-601.16	-507.90	-500.62	0.00	0.00	0.00
Start Build 12.00									
7,800.00	2.47	85.20	7,728.15	-601.12	-507.46	-500.18	12.00	12.00	0.00
7,825.00	5.47	85.20	7,753.08	-600.98	-505.73	-498.46	12.00	12.00	0.00
7,850.00	8.47	85.20	7,777.89	-600.72	-502.71	-495.44	12.00	12.00	0.00
7,875.00	11.47	85.20	7,802.51	-600.36	-498.39	-491.13	12.00	12.00	0.00
7,900.00	14.47	85.20	7,826.87	-599.89	-492.80	-485.54	12.00	12.00	0.00
7,925.00	17.47	85.20	7,850.91	-599.32	-485.95	-478.69	12.00	12.00	0.00
7,950.00	20.47	85.20	7,874.54	-598.64	-477.85	-470.60	12.00	12.00	0.00
7,975.00	23.47	85.20	7,897.73	-597.85	-468.53	-461.29	12.00	12.00	0.00
8,000.00	26.47	85.20	7,920.39	-596.97	-458.01	-450.79	12.00	12.00	0.00
8,025.00	29.47	85.20	7,942.46	-595.99	-446.33	-439.12	12.00	12.00	0.00
8,050.00	32.47	85.20	7,963.89	-594.91	-433.51	-426.31	12.00	12.00	0.00
8,075.00	35.47	85.20	7,984.62	-593.74	-419.59	-412.41	12.00	12.00	0.00
8,100.00	38.47	85.20	8,004.60	-592.49	-404.60	-397.44	12.00	12.00	0.00
8,125.00	41.47	85.20	8,023.75	-591.14	-388.60	-381.45	12.00	12.00	0.00
8,150.00	44.47	85.20	8,042.04	-589.72	-371.62	-364.49	12.00	12.00	0.00
8,175.00	47.47	85.20	8,059.41	-588.21	-353.71	-346.60	12.00	12.00	0.00



Planning Report

Kaiser-Francis Oil Company

Database:	1 - EDM Production	Local Co-ordinate Reference:	Well MOSAIC FED 2419 2BS #2H
Company:	KAISER FRANCIS OIL CO.	TVD Reference:	2985.1' + 24' @ 3009.10usft (Original Well Elev)
Project:	EDDY COUNTY, N.M. 83	MD Reference:	2985.1' + 24' @ 3009.10usft (Original Well Elev)
Site:	SEC 24-T23S-R28E	North Reference:	Grid
Well:	MOSAIC FED 2419 2BS #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLPATH		
Design:	PRELIM PLAN 1, REV 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,200.00	50.47	85.20	8,075.82	-586.63	-334.92	-327.83	12.00	12.00	0.00
8,225.00	53.47	85.20	8,091.22	-584.99	-315.30	-308.23	12.00	12.00	0.00
8,250.00	56.47	85.20	8,105.57	-583.27	-294.90	-287.85	12.00	12.00	0.00
8,275.00	59.47	85.20	8,118.83	-581.50	-273.78	-266.76	12.00	12.00	0.00
8,300.00	62.47	85.20	8,130.95	-579.67	-252.00	-245.00	12.00	12.00	0.00
8,325.00	65.47	85.20	8,141.92	-577.79	-229.62	-222.64	12.00	12.00	0.00
8,350.00	68.47	85.20	8,151.70	-575.87	-206.69	-199.74	12.00	12.00	0.00
8,375.00	71.47	85.20	8,160.26	-573.90	-183.29	-176.37	12.00	12.00	0.00
8,400.00	74.47	85.20	8,167.58	-571.90	-159.47	-152.57	12.00	12.00	0.00
8,425.00	77.47	85.20	8,173.64	-569.87	-135.31	-128.43	12.00	12.00	0.00
8,450.00	80.47	85.20	8,178.42	-567.82	-110.86	-104.01	12.00	12.00	0.00
8,475.00	83.47	85.20	8,181.91	-565.75	-86.19	-79.37	12.00	12.00	0.00
8,500.00	86.47	85.20	8,184.10	-563.66	-61.38	-54.58	12.00	12.00	0.00
8,525.00	89.47	85.20	8,184.98	-561.57	-36.48	-29.72	12.00	12.00	0.00
8,529.39	90.00	85.20	8,185.01	-561.21	-32.11	-25.35	12.00	12.00	0.00
Start DLS 2.00 TFO 90.00									
8,600.00	90.00	86.61	8,185.01	-556.17	38.32	45.01	2.00	0.00	2.00
8,700.00	90.00	88.61	8,185.00	-552.00	138.23	144.87	2.00	0.00	2.00
8,804.03	90.00	90.69	8,185.00	-551.37	242.25	248.87	2.00	0.00	2.00
Start 9581.71 hold at 8804.03 MD									
8,900.00	90.00	90.69	8,185.00	-552.53	338.21	344.84	0.00	0.00	0.00
9,000.00	90.00	90.69	8,185.00	-553.74	438.21	444.84	0.00	0.00	0.00
9,100.00	90.00	90.69	8,185.00	-554.95	538.20	544.84	0.00	0.00	0.00
9,200.00	90.00	90.69	8,185.00	-556.16	638.19	644.84	0.00	0.00	0.00
9,300.00	90.00	90.69	8,185.00	-557.37	738.18	744.84	0.00	0.00	0.00
9,400.00	90.00	90.69	8,185.00	-558.57	838.18	844.84	0.00	0.00	0.00
9,500.00	90.00	90.69	8,185.00	-559.78	938.17	944.84	0.00	0.00	0.00
9,600.00	90.00	90.69	8,185.00	-560.99	1,038.16	1,044.84	0.00	0.00	0.00
9,700.00	90.00	90.69	8,185.00	-562.20	1,138.15	1,144.84	0.00	0.00	0.00
9,800.00	90.00	90.69	8,185.00	-563.41	1,238.15	1,244.84	0.00	0.00	0.00
9,900.00	90.00	90.69	8,185.00	-564.62	1,338.14	1,344.84	0.00	0.00	0.00
10,000.00	90.00	90.69	8,185.00	-565.83	1,438.13	1,444.84	0.00	0.00	0.00
10,100.00	90.00	90.69	8,185.00	-567.04	1,538.13	1,544.84	0.00	0.00	0.00
10,200.00	90.00	90.69	8,185.00	-568.25	1,638.12	1,644.84	0.00	0.00	0.00
10,300.00	90.00	90.69	8,185.00	-569.46	1,738.11	1,744.84	0.00	0.00	0.00
10,400.00	90.00	90.69	8,185.00	-570.67	1,838.10	1,844.84	0.00	0.00	0.00
10,500.00	90.00	90.69	8,185.00	-571.87	1,938.10	1,944.84	0.00	0.00	0.00
10,600.00	90.00	90.69	8,185.00	-573.08	2,038.09	2,044.84	0.00	0.00	0.00
10,700.00	90.00	90.69	8,185.00	-574.29	2,138.08	2,144.84	0.00	0.00	0.00
10,800.00	90.00	90.69	8,185.00	-575.50	2,238.07	2,244.84	0.00	0.00	0.00
10,900.00	90.00	90.69	8,185.00	-576.71	2,338.07	2,344.84	0.00	0.00	0.00
11,000.00	90.00	90.69	8,185.00	-577.92	2,438.06	2,444.84	0.00	0.00	0.00
11,100.00	90.00	90.69	8,185.00	-579.13	2,538.05	2,544.84	0.00	0.00	0.00
11,200.00	90.00	90.69	8,185.00	-580.34	2,638.05	2,644.84	0.00	0.00	0.00
11,300.00	90.00	90.69	8,185.00	-581.55	2,738.04	2,744.84	0.00	0.00	0.00
11,400.00	90.00	90.69	8,185.00	-582.76	2,838.03	2,844.84	0.00	0.00	0.00
11,500.00	90.00	90.69	8,185.00	-583.97	2,938.02	2,944.84	0.00	0.00	0.00
11,600.00	90.00	90.69	8,185.00	-585.17	3,038.02	3,044.84	0.00	0.00	0.00
11,700.00	90.00	90.69	8,185.00	-586.38	3,138.01	3,144.84	0.00	0.00	0.00
11,800.00	90.00	90.69	8,185.00	-587.59	3,238.00	3,244.84	0.00	0.00	0.00
11,900.00	90.00	90.69	8,185.00	-588.80	3,337.99	3,344.84	0.00	0.00	0.00
12,000.00	90.00	90.69	8,185.00	-590.01	3,437.99	3,444.84	0.00	0.00	0.00



Planning Report

Kaiser-Francis Oil Company

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Company:	KAISER FRANCIS OIL CO.	TVD Reference:	2985.1' + 24' @ 3009.10usft (Original Well Elev)
Project:	EDDY COUNTY, N.M. 83	MD Reference:	2985.1' + 24' @ 3009.10usft (Original Well Elev)
Site:	SEC 24-T23S-R28E	North Reference:	Grid
Well:	MOSAIC FED 2419 2BS #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLPATH		
Design:	PRELIM PLAN 1, REV 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,100.00	90.00	90.69	8,185.00	-591.22	3,537.98	3,544.84	0.00	0.00	0.00	
12,200.00	90.00	90.69	8,185.00	-592.43	3,637.97	3,644.84	0.00	0.00	0.00	
12,300.00	90.00	90.69	8,185.00	-593.64	3,737.96	3,744.84	0.00	0.00	0.00	
12,400.00	90.00	90.69	8,185.00	-594.85	3,837.96	3,844.84	0.00	0.00	0.00	
12,500.00	90.00	90.69	8,185.00	-596.06	3,937.95	3,944.84	0.00	0.00	0.00	
12,600.00	90.00	90.69	8,185.00	-597.27	4,037.94	4,044.84	0.00	0.00	0.00	
12,700.00	90.00	90.69	8,185.00	-598.47	4,137.94	4,144.84	0.00	0.00	0.00	
12,800.00	90.00	90.69	8,185.00	-599.68	4,237.93	4,244.84	0.00	0.00	0.00	
12,900.00	90.00	90.69	8,185.00	-600.89	4,337.92	4,344.84	0.00	0.00	0.00	
13,000.00	90.00	90.69	8,185.00	-602.10	4,437.91	4,444.84	0.00	0.00	0.00	
13,100.00	90.00	90.69	8,185.00	-603.31	4,537.91	4,544.84	0.00	0.00	0.00	
13,200.00	90.00	90.69	8,185.00	-604.52	4,637.90	4,644.84	0.00	0.00	0.00	
13,300.00	90.00	90.69	8,185.00	-605.73	4,737.89	4,744.84	0.00	0.00	0.00	
13,400.00	90.00	90.69	8,185.00	-606.94	4,837.88	4,844.84	0.00	0.00	0.00	
13,500.00	90.00	90.69	8,185.00	-608.15	4,937.88	4,944.84	0.00	0.00	0.00	
13,600.00	90.00	90.69	8,185.00	-609.36	5,037.87	5,044.84	0.00	0.00	0.00	
13,700.00	90.00	90.69	8,185.00	-610.57	5,137.86	5,144.84	0.00	0.00	0.00	
13,800.00	90.00	90.69	8,185.00	-611.77	5,237.86	5,244.84	0.00	0.00	0.00	
13,900.00	90.00	90.69	8,185.00	-612.98	5,337.85	5,344.84	0.00	0.00	0.00	
14,000.00	90.00	90.69	8,185.00	-614.19	5,437.84	5,444.84	0.00	0.00	0.00	
14,100.00	90.00	90.69	8,185.00	-615.40	5,537.83	5,544.84	0.00	0.00	0.00	
14,200.00	90.00	90.69	8,185.00	-616.61	5,637.83	5,644.84	0.00	0.00	0.00	
14,300.00	90.00	90.69	8,185.00	-617.82	5,737.82	5,744.84	0.00	0.00	0.00	
14,400.00	90.00	90.69	8,185.00	-619.03	5,837.81	5,844.84	0.00	0.00	0.00	
14,500.00	90.00	90.69	8,185.00	-620.24	5,937.80	5,944.84	0.00	0.00	0.00	
14,600.00	90.00	90.69	8,185.00	-621.45	6,037.80	6,044.84	0.00	0.00	0.00	
14,700.00	90.00	90.69	8,185.00	-622.66	6,137.79	6,144.84	0.00	0.00	0.00	
14,800.00	90.00	90.69	8,185.00	-623.87	6,237.78	6,244.84	0.00	0.00	0.00	
14,900.00	90.00	90.69	8,185.00	-625.07	6,337.77	6,344.84	0.00	0.00	0.00	
15,000.00	90.00	90.69	8,185.00	-626.28	6,437.77	6,444.84	0.00	0.00	0.00	
15,100.00	90.00	90.69	8,185.00	-627.49	6,537.76	6,544.84	0.00	0.00	0.00	
15,200.00	90.00	90.69	8,185.00	-628.70	6,637.75	6,644.84	0.00	0.00	0.00	
15,300.00	90.00	90.69	8,185.00	-629.91	6,737.75	6,744.84	0.00	0.00	0.00	
15,400.00	90.00	90.69	8,185.00	-631.12	6,837.74	6,844.84	0.00	0.00	0.00	
15,500.00	90.00	90.69	8,185.00	-632.33	6,937.73	6,944.84	0.00	0.00	0.00	
15,600.00	90.00	90.69	8,185.00	-633.54	7,037.72	7,044.84	0.00	0.00	0.00	
15,700.00	90.00	90.69	8,185.00	-634.75	7,137.72	7,144.84	0.00	0.00	0.00	
15,800.00	90.00	90.69	8,185.00	-635.96	7,237.71	7,244.84	0.00	0.00	0.00	
15,900.00	90.00	90.69	8,185.00	-637.17	7,337.70	7,344.84	0.00	0.00	0.00	
16,000.00	90.00	90.69	8,185.00	-638.37	7,437.69	7,444.84	0.00	0.00	0.00	
16,100.00	90.00	90.69	8,185.00	-639.58	7,537.69	7,544.84	0.00	0.00	0.00	
16,200.00	90.00	90.69	8,185.00	-640.79	7,637.68	7,644.84	0.00	0.00	0.00	
16,300.00	90.00	90.69	8,185.00	-642.00	7,737.67	7,744.84	0.00	0.00	0.00	
16,400.00	90.00	90.69	8,185.00	-643.21	7,837.67	7,844.84	0.00	0.00	0.00	
16,500.00	90.00	90.69	8,185.00	-644.42	7,937.66	7,944.84	0.00	0.00	0.00	
16,600.00	90.00	90.69	8,185.00	-645.63	8,037.65	8,044.84	0.00	0.00	0.00	
16,700.00	90.00	90.69	8,185.00	-646.84	8,137.64	8,144.84	0.00	0.00	0.00	
16,800.00	90.00	90.69	8,185.00	-648.05	8,237.64	8,244.84	0.00	0.00	0.00	
16,900.00	90.00	90.69	8,185.00	-649.26	8,337.63	8,344.84	0.00	0.00	0.00	
17,000.00	90.00	90.69	8,185.00	-650.47	8,437.62	8,444.84	0.00	0.00	0.00	
17,100.00	90.00	90.69	8,185.00	-651.67	8,537.61	8,544.84	0.00	0.00	0.00	
17,200.00	90.00	90.69	8,185.00	-652.88	8,637.61	8,644.84	0.00	0.00	0.00	



Planning Report

Kaiser-Francis Oil Company

Database:	1 - EDM Production	Local Co-ordinate Reference:	Well MOSAIC FED 2419 2BS #2H
Company:	KAISER FRANCIS OIL CO.	TVD Reference:	2985.1' + 24' @ 3009.10usft (Original Well Elev)
Project:	EDDY COUNTY, N.M. 83	MD Reference:	2985.1' + 24' @ 3009.10usft (Original Well Elev)
Site:	SEC 24-T23S-R28E	North Reference:	Grid
Well:	MOSAIC FED 2419 2BS #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLPATH		
Design:	PRELIM PLAN 1, REV 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
17,300.00	90.00	90.69	8,185.00	-654.09	8,737.60	8,744.84	0.00	0.00	0.00	
17,400.00	90.00	90.69	8,185.00	-655.30	8,837.59	8,844.84	0.00	0.00	0.00	
17,500.00	90.00	90.69	8,185.00	-656.51	8,937.58	8,944.84	0.00	0.00	0.00	
17,600.00	90.00	90.69	8,185.00	-657.72	9,037.58	9,044.84	0.00	0.00	0.00	
17,700.00	90.00	90.69	8,185.00	-658.93	9,137.57	9,144.84	0.00	0.00	0.00	
17,800.00	90.00	90.69	8,185.00	-660.14	9,237.56	9,244.84	0.00	0.00	0.00	
17,900.00	90.00	90.69	8,185.00	-661.35	9,337.56	9,344.84	0.00	0.00	0.00	
18,000.00	90.00	90.69	8,185.00	-662.56	9,437.55	9,444.84	0.00	0.00	0.00	
18,100.00	90.00	90.69	8,185.00	-663.77	9,537.54	9,544.84	0.00	0.00	0.00	
18,200.00	90.00	90.69	8,185.00	-664.97	9,637.53	9,644.84	0.00	0.00	0.00	
18,300.00	90.00	90.69	8,185.00	-666.18	9,737.53	9,744.84	0.00	0.00	0.00	
18,385.74	90.00	90.69	8,185.00	-667.22	9,823.26	9,830.58	0.00	0.00	0.00	
TD at 18385.74										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
MF 2BS 2H KOP: 1980'	0.00	0.00	7,607.54	-541.16	-567.90	470,379.40	629,046.59	32.29282760	-104.04948459
- plan misses target center by 84.85usft at 7679.39usft MD (7607.54 TVD, -601.16 N, -507.90 E)									
- Point									
MF 2BS 2H PBHL: 1980	0.00	0.00	8,185.00	-667.22	9,823.26	470,253.34	639,437.74	32.29240101	-104.01585781
- plan hits target center									
- Point									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
18,440.33		20" Casing	20	24

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,670.00	2,670.00	0.00	0.00	Start Build 2.00
3,215.52	3,212.23	-39.55	-33.42	Start 3610.82 hold at 3215.52 MD
6,826.33	6,757.78	-561.61	-474.48	Start Drop -2.00
7,371.85	7,300.00	-601.16	-507.90	Start 407.54 hold at 7371.85 MD
7,779.39	7,707.54	-601.16	-507.90	Start Build 12.00
8,529.39	8,185.01	-561.21	-32.11	Start DLS 2.00 TFO 90.00
8,804.03	8,185.00	-551.37	242.25	Start 9581.71 hold at 8804.03 MD
18,385.74	8,185.00	-667.22	9,823.26	TD at 18385.74

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Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 199469

CONDITIONS

Operator: KAISER-FRANCIS OIL CO PO Box 21468 Tulsa, OK 74121146	OGRID: 12361
	Action Number: 199469
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	3/22/2023