

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate District Office

☒ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Kaiser-Francis Oil Company P.O. Box 21468, Tulsa, OK 74121-1468		² OGRID Number 12361	
		³ Reason for Filing Code; Effective Date	
⁴ API Number 30-025-47228	⁵ Pool Name WC-025 G-08 S253235G; LWR BONE SPRIN		⁶ Pool Code 97903
⁷ Property Code 5467	⁸ Property Name Red Hills Federal		⁹ Well Number 205H

II. ¹⁰ Surface Location

UL or lot no. B	Section 31	Township 25S	Range 33E	Lot Idn	Feet from the 280	North/South Line North	Feet from the 2,570	East/West line East	County Lea
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¹¹ Bottom Hole Location

UL or lot no. O	Section 6	Township 26S	Range 33E	Lot Idn	Feet from the 106	North/South line South	Feet from the 1,685	East/West line East	County Lea
¹² Lse Code F	¹³ Producing Method Code F		¹⁴ Gas Connection Date 2/13/2021		¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
	Markwest Tornado GP, LLC	G
	1515 Araphoe St., Suite 1600 Denver, CO 80202	
	Plains Pipeline LP	O
	333 Clay St., #1600 Houston, TX 77002	

IV. Well Completion Data

²¹ Spud Date 8/10/2020	²² Ready Date 2/19/2021	²³ TD 20,985' MD/ 10,728' TVD	²⁴ PBDT 20,817' MD/ 10,728' TVD	²⁵ Perforations 11,054'-20,784'	²⁶ DHC, MC
²⁷ Hole Size		²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement	
17 ½"		13 ¾"	1,002'	655	
12 ¼"		9 ⅝"	4,826'	1,295	
8 ½"		5 ½"	20,957'	3,820	

V. Well Test Data

³¹ Date New Oil 2/20/21	³² Gas Delivery Date 2/20/21	³³ Test Date 3/18/21	³⁴ Test Length 24 hrs	³⁵ Tbg. Pressure	³⁶ Csg. Pressure 1,353
³⁷ Choke Size 38/64"	³⁸ Oil 1,095	³⁹ Water 3,430	⁴⁰ Gas 1,987		⁴¹ Test Method
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Christina Opfer</i>			OIL CONSERVATION DIVISION		
Printed name: Christina Opfer			Approved by: <i>PATRICIA MARTINEZ</i>		
Title: Regulatory Manager			Title: <i>PETROLEUM SPECIALIST</i>		
E-mail Address: ChristinaO@kfoc.net			Approval Date: <i>11/28/2022</i>		
Date: 8/23/2022		Phone: 918-491-4468			
<i>File 3160-4 Completion Report within 10 days to NMOCD after BLM approval.</i>					

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 30-025-47228	² Pool Code 97903	³ Pool Name WC-025 G-08 S253235G; LWR BONE SPRIN
⁴ Property Code 5467	⁵ Property Name RED HILLS	⁶ Well Number 205H
⁷ OGRID No. 12361	⁸ Operator Name KAISER-FRANCIS OIL COMPANY	⁹ Elevation 3410.4

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
B	31	25 S	33 E		280	NORTH	2570	EAST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	6	26 S	33 E		106	SOUTH	1685	EAST	LEA

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

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. Christina Opfer 8/3/2022 Signature Date Christina Opfer Printed Name ChristinaO@kfoc.net 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. FEBRUARY 4, 2021 Date of Survey CHRISTINA O. JARAMILLO Signature and Seal of Professional Surveyor Certificate Number: 12797 NEW MEXICO PROFESSIONAL SURVEYOR NO. 7586B
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Intent ☐ As Drilled ☒

API # 30-025-47228		
Operator Name: KAISER-FRANCIS OIL COMPANY	Property Name: RED HILLS	Well Number 205H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
B	31	25S	33E		71	NORTH	1660	EAST	LEA
Latitude 32.0941249					Longitude 103.6082133				NAD 83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
B	31	25S	33E		550	NORTH	1751	EAST	LEA
Latitude 32.0928092					Longitude 103.6085073				NAD 83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
O	6	26S	33E		399	SOUTH	1687	EAST	LEA
Latitude 32.0663926					Longitude 103.6082952				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 # 30-025-47182		
Operator Name: Kaiser-Francis Oil Company	Property Name: Red Hills Federal	Well Number 206H

KZ 06/29/2018

Kaiser-Francis Oil Company

Kaiser-Francis Oil Co.

Lea County, NM (NAD 83)
SEC 31, T25S, R33E
RED HILLS 205H

OH

Design: FINAL

Standard Survey Report

08 September, 2020



Kaiser-Francis Oil Company



CATHEDRAL

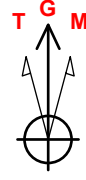
Project: Lea County, NM (NAD 83)
 Site: SEC 31, T25S, R33E
 Well: RED HILLS 205H
 Wellbore: OH
 FINAL

WELL DETAILS: RED HILLS 205H

23.9' KB @ 3434.30usft
 Ground Level: 3410.40

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	398519.12	764980.00	32° 5' 36.780 N	103° 36' 40.148 W

US State Plane 1983
 New Mexico Eastern Zone

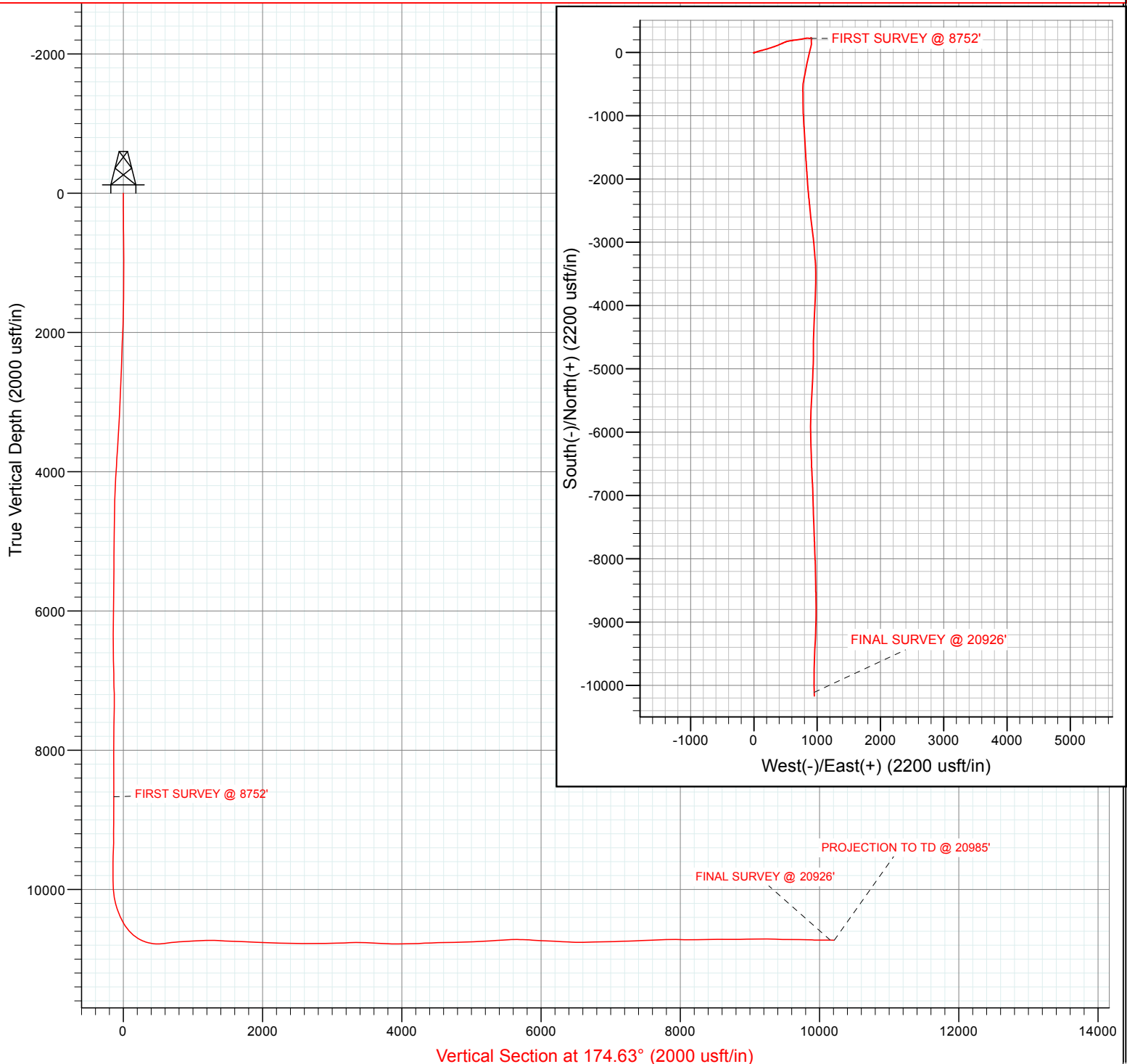


Total Azimuth to Grid North
 True North: -0.38°
 Magnetic North: 6.12°

Magnetic Field
 Strength: 47627.5nT
 Dip Angle: 59.67°
 Date: 9/4/2020
 Model: HDGM_FILE

SURVEY DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
8752.00	0.52	342.08	8668.46	220.82	898.36	-135.81	993.19	FIRST SURVEY @ 8752'
20926.00	89.44	178.15	10727.61	-10109.33	953.57	10154.20	11381.55	FINAL SURVEY @ 20926'
20985.00	89.44	178.15	10728.19	-10168.29	955.48	10213.08	11440.54	PROJECTION TO TD @ 20985'



Kaiser-Francis Oil Company

Survey Report



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well RED HILLS 205H
Project:	Lea County, NM (NAD 83)	TVD Reference:	23.9' KB @ 3434.30usft
Site:	SEC 31, T25S, R33E	MD Reference:	23.9' KB @ 3434.30usft
Well:	RED HILLS 205H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Project	Lea County, NM (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		SEC 31, T25S, R33E				
Site Position:		Northing:	398,519.12 usft	Latitude:	32° 5' 36.780 N	
From:	Map	Easting:	764,980.00 usft	Longitude:	103° 36' 40.148 W	
Position Uncertainty:		0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.38 °

Well	RED HILLS 205H					
Well Position	+N/-S	0.00 usft	Northing:	398,519.12 usft	Latitude:	32° 5' 36.780 N
	+E/-W	0.00 usft	Easting:	764,980.00 usft	Longitude:	103° 36' 40.148 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,410.40 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	9/4/2020	6.50	59.67	47,627.50000000

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	174.63	

Survey Program	Date	9/8/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
241.00	8,688.00	SB DIRECTIONAL (OH)	MWD+HDGM	OWSG MWD + HDGM	
8,752.00	20,985.00	GT MWD (OH)	MWD+HDGM	OWSG MWD + HDGM	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
241.00	0.57	144.00	241.00	-0.97	0.70	1.03	0.24	0.24	
331.00	0.84	148.66	330.99	-1.90	1.31	2.01	0.31	0.30	
421.00	0.62	173.89	420.98	-2.94	1.71	3.09	0.43	-0.24	
512.00	0.44	170.90	511.98	-3.78	1.81	3.93	0.20	-0.20	
602.00	0.48	205.70	601.98	-4.46	1.70	4.60	0.31	0.04	
693.00	0.53	213.26	692.97	-5.15	1.31	5.25	0.09	0.05	
784.00	0.53	221.00	783.97	-5.82	0.80	5.87	0.08	0.00	
875.00	0.48	193.84	874.96	-6.51	0.43	6.52	0.27	-0.05	
961.00	0.66	239.89	960.96	-7.11	-0.08	7.07	0.55	0.21	
1,056.00	1.36	261.43	1,055.95	-7.55	-1.67	7.36	0.83	0.74	
1,148.00	1.19	249.56	1,147.92	-8.05	-3.64	7.67	0.34	-0.18	

Kaiser-Francis Oil Company

Survey Report



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well RED HILLS 205H
Project:	Lea County, NM (NAD 83)	TVD Reference:	23.9' KB @ 3434.30usft
Site:	SEC 31, T25S, R33E	MD Reference:	23.9' KB @ 3434.30usft
Well:	RED HILLS 205H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
1,239.00	0.48	154.20	1,238.92	-8.72	-4.36	8.28	1.46	-0.78	
1,331.00	1.49	64.73	1,330.90	-8.56	-3.11	8.23	1.70	1.10	
1,422.00	2.15	57.70	1,421.86	-7.14	-0.60	7.05	0.76	0.73	
1,513.00	3.69	67.28	1,512.74	-5.10	3.54	5.41	1.77	1.69	
1,607.00	6.29	73.60	1,606.37	-2.47	11.27	3.52	2.82	2.77	
1,702.00	7.60	72.73	1,700.67	0.86	22.27	1.23	1.38	1.38	
1,796.00	9.10	72.02	1,793.68	5.00	35.27	-1.68	1.60	1.60	
1,891.00	8.92	72.55	1,887.50	9.53	49.45	-4.86	0.21	-0.19	
1,985.00	9.85	72.02	1,980.24	14.19	64.05	-8.14	0.99	0.99	
2,080.00	9.67	71.93	2,073.87	19.18	79.36	-11.67	0.19	-0.19	
2,174.00	10.86	75.10	2,166.36	23.90	95.42	-14.87	1.40	1.27	
2,269.00	10.86	76.86	2,259.66	28.24	112.79	-17.56	0.35	0.00	
2,363.00	11.91	73.52	2,351.81	33.00	130.71	-20.63	1.32	1.12	
2,457.00	11.96	74.31	2,443.78	38.39	149.39	-24.25	0.18	0.05	
2,552.00	11.82	74.92	2,536.74	43.58	168.26	-27.65	0.20	-0.15	
2,646.00	11.56	75.19	2,628.79	48.50	186.66	-30.82	0.28	-0.28	
2,741.00	11.25	74.13	2,721.92	53.46	204.78	-34.07	0.39	-0.33	
2,835.00	11.52	72.11	2,814.07	58.85	222.53	-37.78	0.51	0.29	
2,929.00	11.87	72.20	2,906.12	64.69	240.67	-41.89	0.37	0.37	
3,024.00	11.91	72.37	2,999.08	70.65	259.31	-46.08	0.06	0.04	
3,119.00	11.56	72.02	3,092.09	76.56	277.71	-50.24	0.38	-0.37	
3,213.00	11.47	70.88	3,184.20	82.52	295.50	-54.52	0.26	-0.10	
3,307.00	11.52	72.02	3,276.31	88.48	313.26	-58.79	0.25	0.05	
3,402.00	11.82	69.56	3,369.35	94.81	331.40	-63.39	0.61	0.32	
3,497.00	12.18	68.77	3,462.28	101.84	349.86	-68.66	0.42	0.38	
3,591.00	12.40	67.54	3,554.12	109.28	368.43	-74.34	0.36	0.23	
3,686.00	12.40	67.54	3,646.91	117.08	387.28	-80.33	0.00	0.00	
3,780.00	11.96	66.84	3,738.79	124.76	405.56	-86.27	0.49	-0.47	
3,874.00	11.69	66.49	3,830.79	132.39	423.25	-92.21	0.30	-0.29	
3,969.00	10.90	66.84	3,923.95	139.76	440.33	-97.96	0.83	-0.83	
4,064.00	10.20	66.57	4,017.35	146.64	456.31	-103.31	0.74	-0.74	
4,159.00	9.58	65.43	4,110.93	153.27	471.22	-108.52	0.68	-0.65	
4,253.00	9.32	65.96	4,203.66	159.63	485.28	-113.53	0.29	-0.28	
4,348.00	9.63	69.12	4,297.36	165.59	499.73	-118.11	0.64	0.33	
4,442.00	8.75	71.58	4,390.16	170.65	513.86	-121.83	1.03	-0.94	
4,535.00	8.48	75.71	4,482.11	174.58	527.22	-124.49	0.73	-0.29	
4,630.00	8.97	80.46	4,576.01	177.54	541.31	-126.12	0.92	0.52	
4,724.00	8.70	79.32	4,668.89	180.07	555.52	-127.31	0.34	-0.29	
4,789.00	8.04	79.14	4,733.20	181.84	564.82	-128.20	1.02	-1.02	
4,902.00	7.43	80.98	4,845.17	184.47	579.79	-129.42	0.58	-0.54	
4,997.00	6.99	78.87	4,939.42	186.55	591.53	-130.39	0.54	-0.46	
5,092.00	8.44	80.36	5,033.56	188.83	604.08	-131.49	1.54	1.53	
5,186.00	9.45	81.77	5,126.41	191.09	618.52	-132.39	1.10	1.07	
5,280.00	9.89	83.26	5,219.08	193.15	634.17	-132.97	0.54	0.47	
5,375.00	10.20	83.61	5,312.62	195.04	650.63	-133.31	0.33	0.33	
5,469.00	10.73	83.09	5,405.06	197.02	667.59	-133.70	0.57	0.56	
5,564.00	10.77	82.21	5,498.39	199.29	685.17	-134.31	0.18	0.04	
5,658.00	10.73	81.50	5,590.74	201.77	702.52	-135.16	0.15	-0.04	
5,753.00	10.81	81.06	5,684.07	204.46	720.07	-136.20	0.12	0.08	
5,847.00	10.59	80.89	5,776.43	207.20	737.30	-137.31	0.24	-0.23	
5,942.00	9.80	79.83	5,869.93	210.01	753.88	-138.56	0.85	-0.83	
6,037.00	9.36	79.22	5,963.61	212.88	769.43	-139.96	0.48	-0.46	
6,131.00	9.32	79.13	6,056.36	215.75	784.41	-141.41	0.05	-0.04	

Kaiser-Francis Oil Company

Survey Report



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well RED HILLS 205H
Project:	Lea County, NM (NAD 83)	TVD Reference:	23.9' KB @ 3434.30usft
Site:	SEC 31, T25S, R33E	MD Reference:	23.9' KB @ 3434.30usft
Well:	RED HILLS 205H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Formations / Comments
6,226.00	9.19	78.69	6,150.13	218.68	799.41	-142.94	0.16	-0.14	
6,321.00	9.80	78.69	6,243.82	221.76	814.77	-144.56	0.64	0.64	
6,416.00	9.54	84.84	6,337.48	224.05	830.54	-145.37	1.12	-0.27	
6,511.00	8.22	93.81	6,431.34	224.31	845.16	-144.26	2.01	-1.39	
6,605.00	8.22	91.88	6,524.37	223.64	858.58	-142.34	0.29	0.00	
6,700.00	6.95	96.89	6,618.54	222.73	871.08	-140.26	1.51	-1.34	
6,795.00	6.20	93.90	6,712.92	221.69	881.90	-138.21	0.87	-0.79	
6,890.00	5.32	96.18	6,807.44	220.87	891.40	-136.51	0.96	-0.93	
6,984.00	4.53	90.91	6,901.09	220.34	899.44	-135.23	0.97	-0.84	
7,079.00	3.38	98.56	6,995.86	219.86	905.96	-134.14	1.33	-1.21	
7,174.00	2.51	119.03	7,090.74	218.44	910.55	-132.29	1.42	-0.92	
7,268.00	2.07	127.38	7,184.66	216.41	913.70	-129.98	0.59	-0.47	
7,363.00	0.35	90.56	7,279.64	215.36	915.35	-128.78	1.90	-1.81	
7,458.00	1.23	316.61	7,374.63	216.10	914.94	-129.56	1.57	0.93	
7,552.00	1.01	317.49	7,468.62	217.44	913.69	-131.01	0.23	-0.23	
7,646.00	0.97	316.08	7,562.60	218.63	912.58	-132.29	0.05	-0.04	
7,740.00	0.84	316.61	7,656.59	219.70	911.55	-133.46	0.14	-0.14	
7,834.00	0.92	311.51	7,750.58	220.70	910.51	-134.55	0.12	0.09	
7,928.00	0.97	302.90	7,844.57	221.64	909.28	-135.60	0.16	0.05	
8,023.00	0.79	302.20	7,939.55	222.42	908.05	-136.49	0.19	-0.19	
8,121.00	0.79	292.27	8,037.55	223.04	906.86	-137.22	0.14	0.00	
8,215.00	0.70	277.59	8,131.54	223.36	905.69	-137.65	0.22	-0.10	
8,310.00	0.79	270.38	8,226.53	223.44	904.46	-137.84	0.14	0.09	
8,404.00	1.10	246.39	8,320.52	223.08	902.98	-137.63	0.53	0.33	
8,499.00	1.32	231.18	8,415.50	222.03	901.29	-136.74	0.41	0.23	
8,594.00	1.36	229.16	8,510.47	220.61	899.59	-135.48	0.07	0.04	
8,688.00	0.53	336.30	8,604.46	220.28	898.57	-135.25	1.70	-0.88	
8,752.00	0.52	342.08	8,668.46	220.82	898.36	-135.81	0.08	-0.02	FIRST SURVEY @ 8752'
8,847.00	0.63	338.65	8,763.45	221.72	898.04	-136.73	0.12	0.12	
8,942.00	0.18	338.66	8,858.45	222.35	897.79	-137.38	0.47	-0.47	
9,037.00	0.14	358.52	8,953.45	222.60	897.74	-137.64	0.07	-0.04	
9,132.00	0.38	296.29	9,048.45	222.86	897.45	-137.92	0.36	0.25	
9,227.00	0.58	82.51	9,143.45	223.06	897.65	-138.10	0.97	0.21	
9,322.00	0.91	63.61	9,238.44	223.46	898.80	-138.39	0.43	0.35	
9,417.00	1.21	42.31	9,333.42	224.53	900.15	-139.34	0.52	0.32	
9,512.00	2.39	32.67	9,428.38	226.94	901.89	-141.57	1.28	1.24	
9,606.00	2.25	15.80	9,522.30	230.37	903.45	-144.84	0.74	-0.15	
9,701.00	1.07	76.94	9,617.26	232.36	904.83	-146.69	2.07	-1.24	
9,796.00	0.50	31.62	9,712.26	232.92	905.91	-147.14	0.84	-0.60	
9,891.00	0.70	153.52	9,807.25	232.75	906.38	-146.93	1.11	0.21	
9,986.00	2.27	151.61	9,902.22	230.58	907.54	-144.66	1.65	1.65	
10,057.00	2.32	154.48	9,973.16	228.04	908.82	-142.02	0.18	0.07	
10,105.00	2.36	158.89	10,021.12	226.24	909.60	-140.15	0.38	0.08	
10,200.00	11.16	188.63	10,115.38	215.31	908.92	-129.33	9.67	9.26	
10,295.00	14.57	183.32	10,207.99	194.28	906.85	-108.59	3.80	3.59	
10,390.00	19.13	174.73	10,298.90	166.83	907.59	-81.19	5.46	4.80	
10,485.00	26.20	181.52	10,386.52	130.31	908.46	-44.75	7.92	7.44	
10,580.00	29.53	196.99	10,470.61	86.89	901.05	-2.21	8.35	3.51	
10,675.00	37.67	193.20	10,549.68	36.15	887.56	47.04	8.84	8.57	
10,770.00	46.27	193.57	10,620.24	-25.59	872.85	107.14	9.06	9.05	
10,865.00	54.98	193.91	10,680.45	-96.86	855.41	176.46	9.17	9.17	
10,959.00	65.81	191.19	10,726.83	-176.52	837.78	254.13	11.79	11.52	
11,054.00	73.69	190.46	10,759.68	-264.00	821.07	339.66	8.33	8.29	

Kaiser-Francis Oil Company

Survey Report



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well RED HILLS 205H
Project:	Lea County, NM (NAD 83)	TVD Reference:	23.9' KB @ 3434.30usft
Site:	SEC 31, T25S, R33E	MD Reference:	23.9' KB @ 3434.30usft
Well:	RED HILLS 205H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
11,149.00	82.86	191.01	10,778.97	-355.29	803.76	428.93	9.67	9.65	
11,215.00	89.89	191.33	10,783.14	-419.87	791.00	492.03	10.66	10.65	
11,244.00	92.89	190.76	10,782.43	-448.32	785.45	519.84	10.53	10.34	
11,291.00	96.20	186.91	10,778.71	-494.60	778.25	565.24	10.78	7.04	
11,339.00	98.12	181.70	10,772.72	-542.07	774.68	612.17	11.49	4.00	
11,386.00	98.32	180.17	10,766.00	-588.58	773.92	658.40	3.25	0.43	
11,434.00	95.58	179.10	10,760.19	-636.22	774.22	705.86	6.12	-5.71	
11,481.00	93.98	179.04	10,756.28	-683.05	774.98	752.56	3.41	-3.40	
11,528.00	93.70	179.07	10,753.13	-729.94	775.75	799.31	0.60	-0.60	
11,623.00	93.26	178.99	10,747.36	-824.75	777.36	893.86	0.47	-0.46	
11,718.00	93.45	179.20	10,741.80	-919.58	778.86	988.41	0.30	0.20	
11,813.00	92.30	176.80	10,737.04	-1,014.39	782.17	1,083.12	2.80	-1.21	
11,908.00	92.78	176.71	10,732.83	-1,109.14	787.54	1,177.96	0.51	0.51	
12,002.00	88.66	176.48	10,731.65	-1,202.95	793.12	1,271.88	4.39	-4.38	
12,097.00	87.31	176.15	10,734.99	-1,297.69	799.23	1,366.77	1.46	-1.42	
12,192.00	86.44	176.55	10,740.17	-1,392.36	805.26	1,461.59	1.01	-0.92	
12,287.00	88.15	176.48	10,744.65	-1,487.07	811.03	1,556.43	1.80	1.80	
12,381.00	88.46	177.11	10,747.43	-1,580.89	816.29	1,650.32	0.75	0.33	
12,476.00	88.15	176.43	10,750.24	-1,675.69	821.64	1,745.21	0.79	-0.33	
12,571.00	87.28	176.04	10,754.03	-1,770.41	827.87	1,840.10	1.00	-0.92	
12,666.00	86.78	175.94	10,758.95	-1,865.05	834.50	1,934.94	0.54	-0.53	
12,761.00	87.92	176.39	10,763.34	-1,959.73	840.85	2,029.80	1.29	1.20	
12,855.00	88.37	176.26	10,766.39	-2,053.49	846.87	2,123.71	0.50	0.48	
12,950.00	87.81	175.23	10,769.55	-2,148.18	853.92	2,218.64	1.23	-0.59	
13,045.00	87.48	174.24	10,773.46	-2,242.69	862.63	2,313.56	1.10	-0.35	
13,140.00	88.71	174.01	10,776.61	-2,337.14	872.34	2,408.50	1.32	1.29	
13,235.00	89.66	175.12	10,777.97	-2,431.70	881.34	2,503.49	1.54	1.00	
13,330.00	90.20	174.05	10,778.08	-2,526.28	890.31	2,598.49	1.26	0.57	
13,425.00	91.46	173.72	10,776.71	-2,620.72	900.42	2,693.47	1.37	1.33	
13,519.00	90.95	172.94	10,774.73	-2,714.07	911.34	2,787.42	0.99	-0.54	
13,614.00	90.84	173.16	10,773.24	-2,808.36	922.83	2,882.37	0.26	-0.12	
13,709.00	91.01	172.98	10,771.71	-2,902.65	934.30	2,977.33	0.26	0.18	
13,804.00	90.50	174.27	10,770.46	-2,997.05	944.84	3,072.30	1.46	-0.54	
13,899.00	91.68	176.01	10,768.65	-3,091.69	952.89	3,167.27	2.21	1.24	
13,930.00	91.80	175.18	10,767.71	-3,122.58	955.27	3,198.26	2.70	0.39	
14,025.00	91.63	175.39	10,764.87	-3,217.22	963.07	3,293.21	0.28	-0.18	
14,120.00	90.62	175.18	10,763.00	-3,311.88	970.88	3,388.18	1.09	-1.06	
14,215.00	87.50	178.50	10,764.56	-3,406.69	976.12	3,483.07	4.80	-3.28	
14,310.00	86.01	179.60	10,769.94	-3,501.52	977.69	3,577.63	1.95	-1.57	
14,405.00	87.28	180.04	10,775.50	-3,596.36	977.99	3,672.08	1.41	1.34	
14,500.00	88.01	180.82	10,779.40	-3,691.27	977.28	3,766.51	1.12	0.77	
14,594.00	89.10	181.24	10,781.77	-3,785.23	975.59	3,859.90	1.24	1.16	
14,689.00	90.22	184.61	10,782.34	-3,880.09	970.74	3,953.89	3.74	1.18	
14,784.00	90.20	184.04	10,781.99	-3,974.82	963.58	4,047.53	0.60	-0.02	
14,879.00	92.24	182.62	10,779.97	-4,069.63	958.06	4,141.41	2.62	2.15	
14,973.00	92.44	182.04	10,776.13	-4,163.47	954.24	4,234.48	0.65	0.21	
15,068.00	92.69	182.17	10,771.88	-4,258.31	950.75	4,328.58	0.30	0.26	
15,163.00	91.68	181.27	10,768.25	-4,353.20	947.91	4,422.78	1.42	-1.06	
15,258.00	91.90	181.67	10,765.29	-4,448.12	945.47	4,517.06	0.48	0.23	
15,353.00	91.66	181.80	10,762.34	-4,543.03	942.59	4,611.29	0.29	-0.25	
15,447.00	90.87	181.59	10,760.26	-4,636.96	939.82	4,704.55	0.87	-0.84	
15,542.00	90.84	177.23	10,758.84	-4,731.93	940.79	4,799.19	4.59	-0.03	
15,637.00	91.82	182.41	10,756.64	-4,826.87	941.09	4,893.74	5.55	1.03	

Kaiser-Francis Oil Company

Survey Report



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well RED HILLS 205H
Project:	Lea County, NM (NAD 83)	TVD Reference:	23.9' KB @ 3434.30usft
Site:	SEC 31, T25S, R33E	MD Reference:	23.9' KB @ 3434.30usft
Well:	RED HILLS 205H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
15,732.00	92.04	182.15	10,753.44	-4,921.74	937.31	4,987.84	0.36	0.23	
15,827.00	92.94	182.13	10,749.31	-5,016.58	933.77	5,081.94	0.95	0.95	
15,922.00	93.36	181.73	10,744.09	-5,111.38	930.58	5,176.02	0.61	0.44	
16,017.00	93.59	182.56	10,738.33	-5,206.14	927.03	5,270.03	0.91	0.24	
16,111.00	93.87	182.57	10,732.21	-5,299.85	922.83	5,362.94	0.30	0.30	
16,206.00	92.88	184.02	10,726.62	-5,394.52	917.38	5,456.69	1.85	-1.04	
16,301.00	93.45	184.86	10,721.38	-5,489.09	910.04	5,550.15	1.07	0.60	
16,396.00	89.44	184.62	10,718.98	-5,583.72	902.19	5,643.63	4.23	-4.22	
16,491.00	87.87	180.52	10,721.21	-5,678.57	897.93	5,737.67	4.62	-1.65	
16,586.00	87.03	180.13	10,725.44	-5,773.48	897.39	5,832.11	0.97	-0.88	
16,681.00	85.99	179.93	10,731.22	-5,868.30	897.34	5,926.51	1.11	-1.09	
16,776.00	87.17	180.03	10,736.89	-5,963.13	897.38	6,020.93	1.25	1.24	
16,871.00	87.23	179.09	10,741.53	-6,058.01	898.10	6,115.46	0.99	0.06	
16,965.00	87.45	178.64	10,745.89	-6,151.89	899.96	6,209.10	0.53	0.23	
17,060.00	87.25	178.22	10,750.28	-6,246.75	902.56	6,303.79	0.49	-0.21	
17,155.00	87.00	178.11	10,755.05	-6,341.58	905.60	6,398.49	0.29	-0.26	
17,250.00	88.32	178.25	10,758.93	-6,436.45	908.62	6,493.23	1.40	1.39	
17,345.00	90.34	178.24	10,760.04	-6,531.40	911.53	6,588.03	2.13	2.13	
17,440.00	92.52	177.16	10,757.67	-6,626.29	915.34	6,682.86	2.56	2.29	
17,535.00	91.46	176.97	10,754.37	-6,721.10	920.20	6,777.71	1.13	-1.12	
17,630.00	90.31	176.83	10,752.90	-6,815.95	925.33	6,872.63	1.22	-1.21	
17,725.00	91.54	178.00	10,751.37	-6,910.84	929.62	6,967.50	1.79	1.29	
17,820.00	91.85	178.54	10,748.56	-7,005.75	932.49	7,062.26	0.66	0.33	
17,915.00	91.77	178.70	10,745.56	-7,100.68	934.77	7,156.99	0.19	-0.08	
18,010.00	91.88	178.07	10,742.53	-7,195.59	937.45	7,251.73	0.67	0.12	
18,105.00	92.41	178.05	10,738.98	-7,290.47	940.66	7,346.50	0.56	0.56	
18,200.00	92.46	178.15	10,734.94	-7,385.33	943.81	7,441.24	0.12	0.05	
18,294.00	91.85	177.58	10,731.41	-7,479.20	947.31	7,535.02	0.89	-0.65	
18,389.00	92.55	177.61	10,727.76	-7,574.04	951.29	7,629.82	0.74	0.74	
18,484.00	93.39	178.11	10,722.84	-7,668.85	954.83	7,724.54	1.03	0.88	
18,579.00	91.82	178.60	10,718.52	-7,763.71	957.56	7,819.24	1.73	-1.65	
18,674.00	88.12	177.69	10,718.57	-7,858.64	960.63	7,914.05	4.01	-3.89	
18,769.00	88.01	177.40	10,721.78	-7,953.50	964.70	8,008.87	0.33	-0.12	
18,864.00	89.47	178.08	10,723.87	-8,048.40	968.45	8,103.70	1.70	1.54	
18,959.00	90.76	178.67	10,723.68	-8,143.36	971.14	8,198.50	1.49	1.36	
19,053.00	91.82	178.71	10,721.56	-8,237.31	973.29	8,292.24	1.13	1.13	
19,148.00	91.04	179.15	10,719.19	-8,332.26	975.06	8,386.94	0.94	-0.82	
19,243.00	90.76	178.58	10,717.70	-8,427.23	976.94	8,481.67	0.67	-0.29	
19,338.00	90.73	179.43	10,716.46	-8,522.21	978.59	8,576.38	0.90	-0.03	
19,433.00	89.05	179.01	10,716.64	-8,617.20	979.89	8,671.08	1.82	-1.77	
19,528.00	90.17	179.76	10,717.29	-8,712.19	980.90	8,765.74	1.42	1.18	
19,623.00	90.56	180.05	10,716.68	-8,807.18	981.06	8,860.34	0.51	0.41	
19,718.00	91.18	180.11	10,715.24	-8,902.17	980.93	8,954.90	0.66	0.65	
19,813.00	90.53	181.32	10,713.82	-8,997.15	979.74	9,049.35	1.45	-0.68	
19,908.00	91.26	181.32	10,712.34	-9,092.12	977.56	9,143.69	0.77	0.77	
20,002.00	89.44	182.54	10,711.77	-9,186.05	974.39	9,236.92	2.33	-1.94	
20,097.00	88.06	182.95	10,713.84	-9,280.92	969.84	9,330.95	1.52	-1.45	
20,192.00	88.29	182.98	10,716.86	-9,375.74	964.93	9,424.90	0.24	0.24	
20,287.00	89.44	182.44	10,718.75	-9,470.62	960.44	9,518.93	1.34	1.21	
20,382.00	89.33	181.96	10,719.77	-9,565.54	956.79	9,613.10	0.52	-0.12	
20,477.00	89.08	181.75	10,721.08	-9,660.48	953.72	9,707.34	0.34	-0.26	
20,572.00	89.66	181.12	10,722.13	-9,755.45	951.34	9,801.66	0.90	0.61	
20,667.00	87.20	179.04	10,724.73	-9,850.40	951.21	9,896.19	3.39	-2.59	

Kaiser-Francis Oil Company

Survey Report



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well RED HILLS 205H
Project:	Lea County, NM (NAD 83)	TVD Reference:	23.9' KB @ 3434.30usft
Site:	SEC 31, T25S, R33E	MD Reference:	23.9' KB @ 3434.30usft
Well:	RED HILLS 205H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
20,761.00	89.41	180.22	10,727.51	-9,944.35	951.81	9,989.78	2.66	2.35	
20,823.00	90.50	179.85	10,727.56	-10,006.35	951.77	10,051.50	1.86	1.76	
20,926.00	89.44	178.15	10,727.61	-10,109.33	953.57	10,154.20	1.95	-1.03	FINAL SURVEY @ 20926'
20,985.00	89.44	178.15	10,728.19	-10,168.29	955.48	10,213.08	0.00	0.00	PROJECTION TO TD @ 20985'

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
8,752.00	8,668.46	220.82	898.36	FIRST SURVEY @ 8752'	
20,926.00	10,727.61	-10,109.33	953.57	FINAL SURVEY @ 20926'	
20,985.00	10,728.19	-10,168.29	955.48	PROJECTION TO TD @ 20985'	

Checked By: _____ Approved By: _____ Date: _____

Kaiser-Francis Oil Company

Kaiser-Francis Oil Co.

Lea County, NM (NAD 83)
SEC 31, T25S, R33E
RED HILLS 205H

OH

Design: FINAL

Survey Report - Geographic

08 September, 2020



Kaiser-Francis Oil Company

Survey Report - Geographic



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well RED HILLS 205H
Project:	Lea County, NM (NAD 83)	TVD Reference:	23.9' KB @ 3434.30usft
Site:	SEC 31, T25S, R33E	MD Reference:	23.9' KB @ 3434.30usft
Well:	RED HILLS 205H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Project	Lea County, NM (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	SEC 31, T25S, R33E		
Site Position:		Northing:	398,519.12 usft
From:	Map	Easting:	764,980.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 5' 36.780 N
		Longitude:	103° 36' 40.148 W
		Grid Convergence:	0.38 °

Well	RED HILLS 205H		
Well Position	+N/-S	0.00 usft	Northing: 398,519.12 usft
	+E/-W	0.00 usft	Easting: 764,980.00 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 5' 36.780 N
		Longitude:	103° 36' 40.148 W
		Ground Level:	3,410.40 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	9/4/2020	6.50	59.67	47,627.50000000

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	174.63	

Survey Program	Date 9/8/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
241.00	8,688.00	SB DIRECTIONAL (OH)	MWD+HDGM	OWSG MWD + HDGM
8,752.00	20,985.00	GT MWD (OH)	MWD+HDGM	OWSG MWD + HDGM

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	398,519.12	764,980.00	32° 5' 36.780 N	103° 36' 40.148 W	
241.00	0.57	144.00	241.00	-0.97	0.70	398,518.15	764,980.70	32° 5' 36.770 N	103° 36' 40.140 W	
331.00	0.84	148.66	330.99	-1.90	1.31	398,517.22	764,981.31	32° 5' 36.761 N	103° 36' 40.133 W	
421.00	0.62	173.89	420.98	-2.94	1.71	398,516.18	764,981.70	32° 5' 36.750 N	103° 36' 40.129 W	
512.00	0.44	170.90	511.98	-3.78	1.81	398,515.34	764,981.81	32° 5' 36.742 N	103° 36' 40.128 W	
602.00	0.48	205.70	601.98	-4.46	1.70	398,514.66	764,981.70	32° 5' 36.735 N	103° 36' 40.129 W	
693.00	0.53	213.26	692.97	-5.15	1.31	398,513.96	764,981.31	32° 5' 36.729 N	103° 36' 40.133 W	
784.00	0.53	221.00	783.97	-5.82	0.80	398,513.30	764,980.80	32° 5' 36.722 N	103° 36' 40.139 W	
875.00	0.48	193.84	874.96	-6.51	0.43	398,512.61	764,980.43	32° 5' 36.715 N	103° 36' 40.144 W	
961.00	0.66	239.89	960.96	-7.11	-0.08	398,512.01	764,979.92	32° 5' 36.709 N	103° 36' 40.150 W	
1,056.00	1.36	261.43	1,055.95	-7.55	-1.67	398,511.57	764,978.33	32° 5' 36.705 N	103° 36' 40.168 W	

Kaiser-Francis Oil Company

Survey Report - Geographic



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well RED HILLS 205H
Project:	Lea County, NM (NAD 83)	TVD Reference:	23.9' KB @ 3434.30usft
Site:	SEC 31, T25S, R33E	MD Reference:	23.9' KB @ 3434.30usft
Well:	RED HILLS 205H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,148.00	1.19	249.56	1,147.92	-8.05	-3.64	398,511.07	764,976.35	32° 5' 36.700 N	103° 36' 40.191 W
1,239.00	0.48	154.20	1,238.92	-8.72	-4.36	398,510.40	764,975.63	32° 5' 36.694 N	103° 36' 40.200 W
1,331.00	1.49	64.73	1,330.90	-8.56	-3.11	398,510.56	764,976.88	32° 5' 36.695 N	103° 36' 40.185 W
1,422.00	2.15	57.70	1,421.86	-7.14	-0.60	398,511.98	764,979.40	32° 5' 36.709 N	103° 36' 40.156 W
1,513.00	3.69	67.28	1,512.74	-5.10	3.54	398,514.02	764,983.54	32° 5' 36.729 N	103° 36' 40.108 W
1,607.00	6.29	73.60	1,606.37	-2.47	11.27	398,516.64	764,991.27	32° 5' 36.754 N	103° 36' 40.017 W
1,702.00	7.60	72.73	1,700.67	0.86	22.27	398,519.98	765,002.26	32° 5' 36.787 N	103° 36' 39.889 W
1,796.00	9.10	72.02	1,793.68	5.00	35.27	398,524.12	765,015.27	32° 5' 36.827 N	103° 36' 39.738 W
1,891.00	8.92	72.55	1,887.50	9.53	49.45	398,528.65	765,029.44	32° 5' 36.871 N	103° 36' 39.573 W
1,985.00	9.85	72.02	1,980.24	14.19	64.05	398,533.31	765,044.04	32° 5' 36.916 N	103° 36' 39.403 W
2,080.00	9.67	71.93	2,073.87	19.18	79.36	398,538.30	765,059.36	32° 5' 36.964 N	103° 36' 39.224 W
2,174.00	10.86	75.10	2,166.36	23.90	95.42	398,543.02	765,075.42	32° 5' 37.010 N	103° 36' 39.037 W
2,269.00	10.86	76.86	2,259.66	28.24	112.79	398,547.36	765,092.78	32° 5' 37.052 N	103° 36' 38.835 W
2,363.00	11.91	73.52	2,351.81	33.00	130.71	398,552.12	765,110.71	32° 5' 37.098 N	103° 36' 38.626 W
2,457.00	11.96	74.31	2,443.78	38.39	149.39	398,557.51	765,129.39	32° 5' 37.150 N	103° 36' 38.409 W
2,552.00	11.82	74.92	2,536.74	43.58	168.26	398,562.70	765,148.26	32° 5' 37.200 N	103° 36' 38.189 W
2,646.00	11.56	75.19	2,628.79	48.50	186.66	398,567.61	765,166.66	32° 5' 37.247 N	103° 36' 37.975 W
2,741.00	11.25	74.13	2,721.92	53.46	204.78	398,572.58	765,184.78	32° 5' 37.295 N	103° 36' 37.764 W
2,835.00	11.52	72.11	2,814.07	58.85	222.53	398,577.97	765,202.53	32° 5' 37.347 N	103° 36' 37.557 W
2,929.00	11.87	72.20	2,906.12	64.69	240.67	398,583.81	765,220.67	32° 5' 37.404 N	103° 36' 37.346 W
3,024.00	11.91	72.37	2,999.08	70.65	259.31	398,589.77	765,239.31	32° 5' 37.462 N	103° 36' 37.128 W
3,119.00	11.56	72.02	3,092.09	76.56	277.71	398,595.67	765,257.71	32° 5' 37.519 N	103° 36' 36.914 W
3,213.00	11.47	70.88	3,184.20	82.52	295.50	398,601.64	765,275.50	32° 5' 37.577 N	103° 36' 36.707 W
3,307.00	11.52	72.02	3,276.31	88.48	313.26	398,607.60	765,293.26	32° 5' 37.634 N	103° 36' 36.500 W
3,402.00	11.82	69.56	3,369.35	94.81	331.40	398,613.93	765,311.40	32° 5' 37.696 N	103° 36' 36.289 W
3,497.00	12.18	68.77	3,462.28	101.84	349.86	398,620.95	765,329.85	32° 5' 37.764 N	103° 36' 36.074 W
3,591.00	12.40	67.54	3,554.12	109.28	368.43	398,628.40	765,348.42	32° 5' 37.837 N	103° 36' 35.857 W
3,686.00	12.40	67.54	3,646.91	117.08	387.28	398,636.19	765,367.28	32° 5' 37.913 N	103° 36' 35.637 W
3,780.00	11.96	66.84	3,738.79	124.76	405.56	398,643.88	765,385.56	32° 5' 37.987 N	103° 36' 35.424 W
3,874.00	11.69	66.49	3,830.79	132.39	423.25	398,651.51	765,403.25	32° 5' 38.062 N	103° 36' 35.218 W
3,969.00	10.90	66.84	3,923.95	139.76	440.33	398,658.88	765,420.33	32° 5' 38.134 N	103° 36' 35.019 W
4,064.00	10.20	66.57	4,017.35	146.64	456.31	398,665.76	765,436.31	32° 5' 38.200 N	103° 36' 34.833 W
4,159.00	9.58	65.43	4,110.93	153.27	471.22	398,672.39	765,451.21	32° 5' 38.265 N	103° 36' 34.659 W
4,253.00	9.32	65.96	4,203.66	159.63	485.28	398,678.75	765,465.28	32° 5' 38.327 N	103° 36' 34.495 W
4,348.00	9.63	69.12	4,297.36	165.59	499.73	398,684.71	765,479.73	32° 5' 38.385 N	103° 36' 34.326 W
4,442.00	8.75	71.58	4,390.16	170.65	513.86	398,689.77	765,493.86	32° 5' 38.434 N	103° 36' 34.162 W
4,535.00	8.48	75.71	4,482.11	174.58	527.22	398,693.70	765,507.22	32° 5' 38.472 N	103° 36' 34.006 W
4,630.00	8.97	80.46	4,576.01	177.54	541.31	398,696.66	765,521.31	32° 5' 38.501 N	103° 36' 33.842 W
4,724.00	8.70	79.32	4,668.89	180.07	555.52	398,699.19	765,535.52	32° 5' 38.525 N	103° 36' 33.677 W
4,789.00	8.04	79.14	4,733.20	181.84	564.82	398,700.96	765,544.81	32° 5' 38.542 N	103° 36' 33.569 W
4,902.00	7.43	80.98	4,845.17	184.47	579.79	398,703.59	765,559.79	32° 5' 38.567 N	103° 36' 33.394 W
4,997.00	6.99	78.87	4,939.42	186.55	591.53	398,705.67	765,571.53	32° 5' 38.586 N	103° 36' 33.258 W
5,092.00	8.44	80.36	5,033.56	188.83	604.08	398,707.95	765,584.08	32° 5' 38.608 N	103° 36' 33.112 W
5,186.00	9.45	81.77	5,126.42	191.09	618.52	398,710.21	765,598.51	32° 5' 38.630 N	103° 36' 32.944 W
5,280.00	9.89	83.26	5,219.08	193.15	634.17	398,712.26	765,614.17	32° 5' 38.649 N	103° 36' 32.761 W
5,375.00	10.20	83.61	5,312.62	195.04	650.63	398,714.16	765,630.63	32° 5' 38.667 N	103° 36' 32.570 W
5,469.00	10.73	83.09	5,405.06	197.02	667.59	398,716.14	765,647.59	32° 5' 38.685 N	103° 36' 32.373 W
5,564.00	10.77	82.21	5,498.39	199.29	685.17	398,718.40	765,665.16	32° 5' 38.706 N	103° 36' 32.168 W
5,658.00	10.73	81.50	5,590.74	201.77	702.52	398,720.89	765,682.52	32° 5' 38.730 N	103° 36' 31.966 W
5,753.00	10.81	81.06	5,684.07	204.46	720.07	398,723.58	765,700.07	32° 5' 38.755 N	103° 36' 31.762 W
5,847.00	10.59	80.89	5,776.43	207.20	737.30	398,726.32	765,717.30	32° 5' 38.781 N	103° 36' 31.562 W
5,942.00	9.80	79.83	5,869.93	210.01	753.88	398,729.13	765,733.88	32° 5' 38.808 N	103° 36' 31.369 W
6,037.00	9.36	79.22	5,963.61	212.88	769.43	398,732.00	765,749.43	32° 5' 38.835 N	103° 36' 31.188 W
6,131.00	9.32	79.13	6,056.36	215.75	784.41	398,734.87	765,764.41	32° 5' 38.863 N	103° 36' 31.013 W
6,226.00	9.19	78.69	6,150.13	218.68	799.41	398,737.80	765,779.40	32° 5' 38.891 N	103° 36' 30.839 W

Kaiser-Francis Oil Company

Survey Report - Geographic



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well RED HILLS 205H
Project:	Lea County, NM (NAD 83)	TVD Reference:	23.9' KB @ 3434.30usft
Site:	SEC 31, T25S, R33E	MD Reference:	23.9' KB @ 3434.30usft
Well:	RED HILLS 205H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,321.00	9.80	78.69	6,243.82	221.76	814.77	398,740.88	765,794.77	32° 5' 38.920 N	103° 36' 30.660 W
6,416.00	9.54	84.84	6,337.48	224.05	830.54	398,743.17	765,810.54	32° 5' 38.942 N	103° 36' 30.476 W
6,511.00	8.22	93.81	6,431.34	224.31	845.16	398,743.43	765,825.16	32° 5' 38.943 N	103° 36' 30.306 W
6,605.00	8.22	91.88	6,524.37	223.64	858.58	398,742.76	765,838.58	32° 5' 38.936 N	103° 36' 30.150 W
6,700.00	6.95	96.89	6,618.54	222.73	871.08	398,741.85	765,851.07	32° 5' 38.926 N	103° 36' 30.005 W
6,795.00	6.20	93.90	6,712.92	221.69	881.90	398,740.81	765,861.90	32° 5' 38.915 N	103° 36' 29.880 W
6,890.00	5.32	96.18	6,807.44	220.87	891.40	398,739.99	765,871.39	32° 5' 38.906 N	103° 36' 29.769 W
6,984.00	4.53	90.91	6,901.09	220.34	899.44	398,739.46	765,879.44	32° 5' 38.900 N	103° 36' 29.676 W
7,079.00	3.38	98.56	6,995.86	219.86	905.96	398,738.98	765,885.96	32° 5' 38.895 N	103° 36' 29.600 W
7,174.00	2.51	119.03	7,090.74	218.44	910.55	398,737.56	765,890.55	32° 5' 38.881 N	103° 36' 29.547 W
7,268.00	2.07	127.38	7,184.66	216.41	913.70	398,735.53	765,893.70	32° 5' 38.860 N	103° 36' 29.510 W
7,363.00	0.35	90.56	7,279.64	215.36	915.35	398,734.48	765,895.35	32° 5' 38.850 N	103° 36' 29.491 W
7,458.00	1.23	316.61	7,374.63	216.10	914.94	398,735.22	765,894.94	32° 5' 38.857 N	103° 36' 29.496 W
7,552.00	1.01	317.49	7,468.62	217.44	913.69	398,736.56	765,893.69	32° 5' 38.871 N	103° 36' 29.510 W
7,646.00	0.97	316.08	7,562.60	218.63	912.58	398,737.75	765,892.58	32° 5' 38.883 N	103° 36' 29.523 W
7,740.00	0.84	316.61	7,656.59	219.70	911.55	398,738.82	765,891.55	32° 5' 38.893 N	103° 36' 29.535 W
7,834.00	0.92	311.51	7,750.58	220.70	910.51	398,739.82	765,890.51	32° 5' 38.903 N	103° 36' 29.547 W
7,928.00	0.97	302.90	7,844.57	221.64	909.28	398,740.75	765,889.28	32° 5' 38.912 N	103° 36' 29.561 W
8,023.00	0.79	302.20	7,939.55	222.42	908.05	398,741.54	765,888.05	32° 5' 38.920 N	103° 36' 29.575 W
8,121.00	0.79	292.27	8,037.55	223.04	906.86	398,742.16	765,886.85	32° 5' 38.927 N	103° 36' 29.589 W
8,215.00	0.70	277.59	8,131.54	223.36	905.69	398,742.48	765,885.68	32° 5' 38.930 N	103° 36' 29.603 W
8,310.00	0.79	270.38	8,226.53	223.44	904.46	398,742.56	765,884.45	32° 5' 38.931 N	103° 36' 29.617 W
8,404.00	1.10	246.39	8,320.52	223.08	902.98	398,742.20	765,882.98	32° 5' 38.927 N	103° 36' 29.634 W
8,499.00	1.32	231.18	8,415.50	222.03	901.29	398,741.15	765,881.29	32° 5' 38.917 N	103° 36' 29.654 W
8,594.00	1.36	229.16	8,510.47	220.61	899.59	398,739.73	765,879.59	32° 5' 38.903 N	103° 36' 29.674 W
8,688.00	0.53	336.30	8,604.46	220.28	898.57	398,739.40	765,878.57	32° 5' 38.900 N	103° 36' 29.686 W
8,752.00	0.52	342.08	8,668.46	220.82	898.36	398,739.94	765,878.36	32° 5' 38.905 N	103° 36' 29.688 W
FIRST SURVEY @ 8752'									
8,847.00	0.63	338.65	8,763.45	221.72	898.04	398,740.84	765,878.04	32° 5' 38.914 N	103° 36' 29.692 W
8,942.00	0.18	338.66	8,858.45	222.35	897.79	398,741.47	765,877.79	32° 5' 38.920 N	103° 36' 29.695 W
9,037.00	0.14	358.52	8,953.45	222.60	897.74	398,741.72	765,877.73	32° 5' 38.923 N	103° 36' 29.695 W
9,132.00	0.38	296.29	9,048.45	222.86	897.45	398,741.98	765,877.45	32° 5' 38.925 N	103° 36' 29.699 W
9,227.00	0.58	82.51	9,143.45	223.06	897.65	398,742.18	765,877.64	32° 5' 38.927 N	103° 36' 29.696 W
9,322.00	0.91	63.61	9,238.44	223.46	898.80	398,742.58	765,878.80	32° 5' 38.931 N	103° 36' 29.683 W
9,417.00	1.21	42.31	9,333.42	224.53	900.15	398,743.65	765,880.15	32° 5' 38.942 N	103° 36' 29.667 W
9,512.00	2.39	32.67	9,428.38	226.94	901.89	398,746.06	765,881.89	32° 5' 38.966 N	103° 36' 29.647 W
9,606.00	2.25	15.80	9,522.30	230.37	903.45	398,749.49	765,883.45	32° 5' 38.999 N	103° 36' 29.628 W
9,701.00	1.07	76.94	9,617.26	232.36	904.83	398,751.48	765,884.82	32° 5' 39.019 N	103° 36' 29.612 W
9,796.00	0.50	31.62	9,712.26	232.92	905.91	398,752.04	765,885.90	32° 5' 39.024 N	103° 36' 29.600 W
9,891.00	0.70	153.52	9,807.25	232.75	906.38	398,751.87	765,886.38	32° 5' 39.023 N	103° 36' 29.594 W
9,986.00	2.27	151.61	9,902.22	230.58	907.54	398,749.70	765,887.53	32° 5' 39.001 N	103° 36' 29.581 W
10,057.00	2.32	154.48	9,973.16	228.04	908.82	398,747.16	765,888.82	32° 5' 38.976 N	103° 36' 29.566 W
10,105.00	2.36	158.89	10,021.12	226.24	909.60	398,745.36	765,889.60	32° 5' 38.958 N	103° 36' 29.557 W
10,200.00	11.16	188.63	10,115.38	215.31	908.92	398,734.43	765,888.92	32° 5' 38.850 N	103° 36' 29.566 W
10,295.00	14.57	183.32	10,207.99	194.28	906.85	398,713.40	765,886.85	32° 5' 38.642 N	103° 36' 29.592 W
10,390.00	19.13	174.73	10,298.90	166.83	907.59	398,685.95	765,887.59	32° 5' 38.370 N	103° 36' 29.585 W
10,485.00	26.20	181.52	10,386.52	130.31	908.46	398,649.43	765,888.46	32° 5' 38.009 N	103° 36' 29.578 W
10,580.00	29.53	196.99	10,470.61	86.89	901.05	398,606.01	765,881.05	32° 5' 37.580 N	103° 36' 29.667 W
10,675.00	37.67	193.20	10,549.68	36.15	887.56	398,555.27	765,867.56	32° 5' 37.078 N	103° 36' 29.828 W
10,770.00	46.27	193.57	10,620.24	-25.59	872.85	398,493.53	765,852.85	32° 5' 36.468 N	103° 36' 30.004 W
10,865.00	54.98	193.91	10,680.45	-96.86	855.41	398,422.26	765,835.41	32° 5' 35.764 N	103° 36' 30.212 W
10,959.00	65.81	191.19	10,726.83	-176.52	837.78	398,342.59	765,817.78	32° 5' 34.977 N	103° 36' 30.423 W
11,054.00	73.69	190.46	10,759.68	-264.00	821.07	398,255.12	765,801.07	32° 5' 34.113 N	103° 36' 30.625 W
11,149.00	82.86	191.01	10,778.97	-355.29	803.76	398,163.83	765,783.75	32° 5' 33.211 N	103° 36' 30.833 W
11,215.00	89.89	191.33	10,783.14	-419.87	791.00	398,099.25	765,771.00	32° 5' 32.572 N	103° 36' 30.986 W

Kaiser-Francis Oil Company

Survey Report - Geographic



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well RED HILLS 205H
Project:	Lea County, NM (NAD 83)	TVD Reference:	23.9' KB @ 3434.30usft
Site:	SEC 31, T25S, R33E	MD Reference:	23.9' KB @ 3434.30usft
Well:	RED HILLS 205H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,244.00	92.89	190.76	10,782.43	-448.32	785.45	398,070.80	765,765.45	32° 5' 32.291 N	103° 36' 31.053 W
11,291.00	96.20	186.91	10,778.71	-494.60	778.25	398,024.52	765,758.25	32° 5' 31.834 N	103° 36' 31.140 W
11,339.00	98.12	181.70	10,772.72	-542.07	774.68	397,977.05	765,754.67	32° 5' 31.364 N	103° 36' 31.186 W
11,386.00	98.32	180.17	10,766.00	-588.58	773.92	397,930.54	765,753.91	32° 5' 30.904 N	103° 36' 31.198 W
11,434.00	95.58	179.10	10,760.20	-636.22	774.22	397,882.90	765,754.22	32° 5' 30.433 N	103° 36' 31.198 W
11,481.00	93.98	179.04	10,756.28	-683.05	774.98	397,836.07	765,754.98	32° 5' 29.969 N	103° 36' 31.193 W
11,528.00	93.70	179.07	10,753.13	-729.94	775.75	397,789.18	765,755.75	32° 5' 29.505 N	103° 36' 31.188 W
11,623.00	93.26	178.99	10,747.36	-824.75	777.36	397,694.37	765,757.36	32° 5' 28.567 N	103° 36' 31.177 W
11,718.00	93.45	179.20	10,741.81	-919.58	778.86	397,599.54	765,758.86	32° 5' 27.628 N	103° 36' 31.166 W
11,813.00	92.30	176.80	10,737.04	-1,014.39	782.17	397,504.73	765,762.17	32° 5' 26.690 N	103° 36' 31.135 W
11,908.00	92.78	176.71	10,732.83	-1,109.14	787.54	397,409.97	765,767.54	32° 5' 25.752 N	103° 36' 31.080 W
12,002.00	88.66	176.48	10,731.65	-1,202.95	793.12	397,316.17	765,773.12	32° 5' 24.823 N	103° 36' 31.023 W
12,097.00	87.31	176.15	10,734.99	-1,297.69	799.23	397,221.43	765,779.22	32° 5' 23.885 N	103° 36' 30.959 W
12,192.00	86.44	176.55	10,740.17	-1,392.36	805.26	397,126.76	765,785.26	32° 5' 22.948 N	103° 36' 30.896 W
12,287.00	88.15	176.48	10,744.65	-1,487.07	811.03	397,032.04	765,791.03	32° 5' 22.011 N	103° 36' 30.837 W
12,381.00	88.46	177.11	10,747.43	-1,580.89	816.29	396,938.23	765,796.28	32° 5' 21.082 N	103° 36' 30.783 W
12,476.00	88.15	176.43	10,750.24	-1,675.69	821.64	396,843.43	765,801.63	32° 5' 20.143 N	103° 36' 30.728 W
12,571.00	87.28	176.04	10,754.03	-1,770.41	827.87	396,748.71	765,807.87	32° 5' 19.206 N	103° 36' 30.663 W
12,666.00	86.78	175.94	10,758.95	-1,865.05	834.50	396,654.07	765,814.50	32° 5' 18.269 N	103° 36' 30.594 W
12,761.00	87.92	176.39	10,763.34	-1,959.73	840.85	396,559.38	765,820.85	32° 5' 17.331 N	103° 36' 30.527 W
12,855.00	88.37	176.26	10,766.39	-2,053.49	846.87	396,465.63	765,826.87	32° 5' 16.403 N	103° 36' 30.464 W
12,950.00	87.81	175.23	10,769.55	-2,148.18	853.92	396,370.94	765,833.91	32° 5' 15.466 N	103° 36' 30.390 W
13,045.00	87.48	174.24	10,773.46	-2,242.69	862.63	396,276.43	765,842.62	32° 5' 14.530 N	103° 36' 30.296 W
13,140.00	88.71	174.01	10,776.61	-2,337.14	872.34	396,181.98	765,852.34	32° 5' 13.595 N	103° 36' 30.191 W
13,235.00	89.66	175.12	10,777.97	-2,431.70	881.34	396,087.42	765,861.34	32° 5' 12.658 N	103° 36' 30.093 W
13,330.00	90.20	174.05	10,778.08	-2,526.28	890.31	395,992.84	765,870.30	32° 5' 11.722 N	103° 36' 29.997 W
13,425.00	91.46	173.72	10,776.71	-2,620.72	900.42	395,898.40	765,880.42	32° 5' 10.787 N	103° 36' 29.886 W
13,519.00	90.95	172.94	10,774.73	-2,714.07	911.34	395,805.05	765,891.34	32° 5' 9.862 N	103° 36' 29.767 W
13,614.00	90.84	173.16	10,773.24	-2,808.36	922.83	395,710.76	765,902.83	32° 5' 8.928 N	103° 36' 29.641 W
13,709.00	91.01	172.98	10,771.71	-2,902.65	934.30	395,616.47	765,914.29	32° 5' 7.995 N	103° 36' 29.515 W
13,804.00	90.50	174.27	10,770.46	-2,997.05	944.84	395,522.07	765,924.84	32° 5' 7.060 N	103° 36' 29.399 W
13,899.00	91.68	176.01	10,768.65	-3,091.69	952.89	395,427.43	765,932.89	32° 5' 6.123 N	103° 36' 29.313 W
13,930.00	91.80	175.18	10,767.71	-3,122.58	955.27	395,396.54	765,935.27	32° 5' 5.817 N	103° 36' 29.288 W
14,025.00	91.63	175.39	10,764.87	-3,217.22	963.07	395,301.90	765,943.07	32° 5' 4.880 N	103° 36' 29.205 W
14,120.00	90.62	175.18	10,763.00	-3,311.88	970.88	395,207.24	765,950.88	32° 5' 3.943 N	103° 36' 29.121 W
14,215.00	87.50	178.50	10,764.56	-3,406.69	976.12	395,112.42	765,956.12	32° 5' 3.004 N	103° 36' 29.068 W
14,310.00	86.01	179.60	10,769.94	-3,501.52	977.69	395,017.59	765,957.69	32° 5' 2.065 N	103° 36' 29.057 W
14,405.00	87.28	180.04	10,775.50	-3,596.36	977.99	394,922.76	765,957.99	32° 5' 1.127 N	103° 36' 29.061 W
14,500.00	88.01	180.82	10,779.40	-3,691.27	977.28	394,827.84	765,957.27	32° 5' 0.188 N	103° 36' 29.077 W
14,594.00	89.10	181.24	10,781.77	-3,785.23	975.59	394,733.89	765,955.58	32° 4' 59.258 N	103° 36' 29.104 W
14,689.00	90.22	184.61	10,782.34	-3,880.09	970.74	394,639.03	765,950.74	32° 4' 58.320 N	103° 36' 29.167 W
14,784.00	90.20	184.04	10,781.99	-3,974.82	963.58	394,544.30	765,943.57	32° 4' 57.383 N	103° 36' 29.258 W
14,879.00	92.24	182.62	10,779.97	-4,069.63	958.06	394,449.49	765,938.06	32° 4' 56.445 N	103° 36' 29.330 W
14,973.00	92.44	182.04	10,776.13	-4,163.47	954.24	394,355.65	765,934.24	32° 4' 55.517 N	103° 36' 29.381 W
15,068.00	92.69	182.17	10,771.88	-4,258.31	950.75	394,260.81	765,930.75	32° 4' 54.578 N	103° 36' 29.429 W
15,163.00	91.68	181.27	10,768.25	-4,353.20	947.91	394,165.92	765,927.90	32° 4' 53.640 N	103° 36' 29.470 W
15,258.00	91.90	181.67	10,765.29	-4,448.12	945.47	394,071.00	765,925.47	32° 4' 52.701 N	103° 36' 29.506 W
15,353.00	91.66	181.80	10,762.34	-4,543.03	942.59	393,976.09	765,922.59	32° 4' 51.762 N	103° 36' 29.546 W
15,447.00	90.87	181.59	10,760.26	-4,636.96	939.82	393,882.15	765,919.81	32° 4' 50.832 N	103° 36' 29.586 W
15,542.00	90.84	177.23	10,758.84	-4,731.93	940.79	393,787.19	765,920.79	32° 4' 49.893 N	103° 36' 29.582 W
15,637.00	91.82	182.41	10,756.64	-4,826.87	941.09	393,692.25	765,921.09	32° 4' 48.953 N	103° 36' 29.586 W
15,732.00	92.04	182.15	10,753.44	-4,921.74	937.31	393,597.38	765,917.31	32° 4' 48.014 N	103° 36' 29.637 W
15,827.00	92.94	182.13	10,749.31	-5,016.58	933.77	393,502.54	765,913.77	32° 4' 47.076 N	103° 36' 29.686 W
15,922.00	93.36	181.73	10,744.09	-5,111.38	930.58	393,407.74	765,910.57	32° 4' 46.138 N	103° 36' 29.730 W
16,017.00	93.59	182.56	10,738.33	-5,206.14	927.03	393,312.98	765,907.02	32° 4' 45.201 N	103° 36' 29.779 W

Kaiser-Francis Oil Company

Survey Report - Geographic



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well RED HILLS 205H
Project:	Lea County, NM (NAD 83)	TVD Reference:	23.9' KB @ 3434.30usft
Site:	SEC 31, T25S, R33E	MD Reference:	23.9' KB @ 3434.30usft
Well:	RED HILLS 205H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
16,111.00	93.87	182.57	10,732.22	-5,299.85	922.83	393,219.27	765,902.83	32° 4' 44.274 N	103° 36' 29.835 W
16,206.00	92.88	184.02	10,726.62	-5,394.52	917.38	393,124.60	765,897.38	32° 4' 43.337 N	103° 36' 29.906 W
16,301.00	93.45	184.86	10,721.38	-5,489.09	910.04	393,030.03	765,890.03	32° 4' 42.402 N	103° 36' 29.999 W
16,396.00	89.44	184.62	10,718.98	-5,583.72	902.19	392,935.40	765,882.19	32° 4' 41.466 N	103° 36' 30.097 W
16,491.00	87.87	180.52	10,721.21	-5,678.57	897.93	392,840.55	765,877.93	32° 4' 40.528 N	103° 36' 30.154 W
16,586.00	87.03	180.13	10,725.44	-5,773.48	897.39	392,745.64	765,877.39	32° 4' 39.589 N	103° 36' 30.168 W
16,681.00	85.99	179.93	10,731.22	-5,868.30	897.34	392,650.82	765,877.34	32° 4' 38.650 N	103° 36' 30.176 W
16,776.00	87.17	180.03	10,736.89	-5,963.13	897.38	392,555.99	765,877.37	32° 4' 37.712 N	103° 36' 30.183 W
16,871.00	87.23	179.09	10,741.53	-6,058.01	898.10	392,461.11	765,878.10	32° 4' 36.773 N	103° 36' 30.182 W
16,965.00	87.45	178.64	10,745.89	-6,151.89	899.96	392,367.23	765,879.96	32° 4' 35.844 N	103° 36' 30.168 W
17,060.00	87.25	178.22	10,750.28	-6,246.75	902.56	392,272.37	765,882.56	32° 4' 34.905 N	103° 36' 30.145 W
17,155.00	87.00	178.11	10,755.05	-6,341.58	905.60	392,177.54	765,885.60	32° 4' 33.966 N	103° 36' 30.117 W
17,250.00	88.32	178.25	10,758.93	-6,436.45	908.62	392,082.66	765,888.61	32° 4' 33.027 N	103° 36' 30.089 W
17,345.00	90.34	178.24	10,760.04	-6,531.40	911.53	391,987.72	765,891.52	32° 4' 32.088 N	103° 36' 30.063 W
17,440.00	92.52	177.16	10,757.67	-6,626.29	915.34	391,892.83	765,895.33	32° 4' 31.149 N	103° 36' 30.026 W
17,535.00	91.46	176.97	10,754.37	-6,721.10	920.20	391,798.02	765,900.19	32° 4' 30.210 N	103° 36' 29.977 W
17,630.00	90.31	176.83	10,752.90	-6,815.95	925.33	391,703.17	765,905.33	32° 4' 29.271 N	103° 36' 29.925 W
17,725.00	91.54	178.00	10,751.37	-6,910.84	929.62	391,608.28	765,909.62	32° 4' 28.332 N	103° 36' 29.882 W
17,820.00	91.85	178.54	10,748.56	-7,005.75	932.49	391,513.37	765,912.48	32° 4' 27.392 N	103° 36' 29.856 W
17,915.00	91.77	178.70	10,745.56	-7,100.68	934.77	391,418.44	765,914.77	32° 4' 26.453 N	103° 36' 29.837 W
18,010.00	91.88	178.07	10,742.53	-7,195.59	937.45	391,323.53	765,917.45	32° 4' 25.514 N	103° 36' 29.813 W
18,105.00	92.41	178.05	10,738.98	-7,290.47	940.66	391,228.65	765,920.66	32° 4' 24.574 N	103° 36' 29.783 W
18,200.00	92.46	178.15	10,734.94	-7,385.33	943.81	391,133.79	765,923.81	32° 4' 23.636 N	103° 36' 29.754 W
18,294.00	91.85	177.58	10,731.41	-7,479.20	947.31	391,039.92	765,927.31	32° 4' 22.706 N	103° 36' 29.721 W
18,389.00	92.55	177.61	10,727.76	-7,574.05	951.29	390,945.07	765,931.29	32° 4' 21.768 N	103° 36' 29.682 W
18,484.00	93.39	178.11	10,722.84	-7,668.85	954.83	390,850.27	765,934.83	32° 4' 20.829 N	103° 36' 29.648 W
18,579.00	91.82	178.60	10,718.52	-7,763.71	957.56	390,755.41	765,937.56	32° 4' 19.890 N	103° 36' 29.624 W
18,674.00	88.12	177.69	10,718.57	-7,858.64	960.63	390,660.48	765,940.63	32° 4' 18.951 N	103° 36' 29.596 W
18,769.00	88.01	177.40	10,721.78	-7,953.50	964.70	390,565.62	765,944.70	32° 4' 18.012 N	103° 36' 29.556 W
18,864.00	89.47	178.08	10,723.87	-8,048.40	968.45	390,470.72	765,948.44	32° 4' 17.072 N	103° 36' 29.520 W
18,959.00	90.76	178.67	10,723.68	-8,143.36	971.14	390,375.76	765,951.14	32° 4' 16.133 N	103° 36' 29.496 W
19,053.00	91.82	178.71	10,721.56	-8,237.31	973.29	390,281.81	765,953.28	32° 4' 15.203 N	103° 36' 29.478 W
19,148.00	91.04	179.15	10,719.19	-8,332.26	975.06	390,186.86	765,955.06	32° 4' 14.263 N	103° 36' 29.465 W
19,243.00	90.76	178.58	10,717.70	-8,427.23	976.94	390,091.89	765,956.94	32° 4' 13.323 N	103° 36' 29.451 W
19,338.00	90.73	179.43	10,716.46	-8,522.21	978.59	389,996.91	765,958.59	32° 4' 12.383 N	103° 36' 29.439 W
19,433.00	89.05	179.01	10,716.64	-8,617.20	979.89	389,901.92	765,959.88	32° 4' 11.443 N	103° 36' 29.431 W
19,528.00	90.17	179.76	10,717.29	-8,712.19	980.90	389,806.93	765,960.90	32° 4' 10.503 N	103° 36' 29.427 W
19,623.00	90.56	180.05	10,716.68	-8,807.18	981.06	389,711.93	765,961.06	32° 4' 9.563 N	103° 36' 29.432 W
19,718.00	91.18	180.11	10,715.24	-8,902.17	980.93	389,616.95	765,960.93	32° 4' 8.623 N	103° 36' 29.441 W
19,813.00	90.53	181.32	10,713.82	-8,997.15	979.74	389,521.97	765,959.74	32° 4' 7.683 N	103° 36' 29.463 W
19,908.00	91.26	181.32	10,712.34	-9,092.12	977.56	389,427.00	765,957.55	32° 4' 6.744 N	103° 36' 29.495 W
20,002.00	89.44	182.54	10,711.77	-9,186.05	974.39	389,333.06	765,954.39	32° 4' 5.814 N	103° 36' 29.540 W
20,097.00	88.06	182.95	10,713.84	-9,280.92	969.84	389,238.20	765,949.84	32° 4' 4.876 N	103° 36' 29.600 W
20,192.00	88.29	182.98	10,716.86	-9,375.74	964.93	389,143.37	765,944.93	32° 4' 3.938 N	103° 36' 29.664 W
20,287.00	89.44	182.44	10,718.75	-9,470.62	960.44	389,048.50	765,940.44	32° 4' 2.999 N	103° 36' 29.724 W
20,382.00	89.33	181.96	10,719.77	-9,565.54	956.79	388,953.58	765,936.79	32° 4' 2.060 N	103° 36' 29.774 W
20,477.00	89.08	181.75	10,721.08	-9,660.48	953.72	388,858.64	765,933.72	32° 4' 1.121 N	103° 36' 29.817 W
20,572.00	89.66	181.12	10,722.13	-9,755.45	951.34	388,763.67	765,931.34	32° 4' 0.182 N	103° 36' 29.852 W
20,667.00	87.20	179.04	10,724.73	-9,850.40	951.21	388,668.72	765,931.20	32° 3' 59.242 N	103° 36' 29.861 W
20,761.00	89.41	180.22	10,727.51	-9,944.35	951.81	388,574.77	765,931.81	32° 3' 58.312 N	103° 36' 29.861 W
20,823.00	90.50	179.85	10,727.56	-10,006.35	951.77	388,512.77	765,931.77	32° 3' 57.699 N	103° 36' 29.866 W
20,926.00	89.44	178.15	10,727.61	-10,109.33	953.57	388,409.79	765,933.57	32° 3' 56.680 N	103° 36' 29.854 W
FINAL SURVEY @ 20926'									
20,985.00	89.44	178.15	10,728.19	-10,168.29	955.48	388,350.83	765,935.47	32° 3' 56.096 N	103° 36' 29.836 W
PROJECTION TO TD @ 20985'									

Kaiser-Francis Oil Company

Survey Report - Geographic



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well RED HILLS 205H
Project:	Lea County, NM (NAD 83)	TVD Reference:	23.9' KB @ 3434.30usft
Site:	SEC 31, T25S, R33E	MD Reference:	23.9' KB @ 3434.30usft
Well:	RED HILLS 205H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,752.00	8,668.46	220.82	898.36	FIRST SURVEY @ 8752'
20,926.00	10,727.61	-10,109.33	953.57	FINAL SURVEY @ 20926'
20,985.00	10,728.19	-10,168.29	955.48	PROJECTION TO TD @ 20985'

Checked By: _____ Approved By: _____ Date: _____

Well Name: RED HILLS FEDERAL	Well Location: T25S / R33E / SEC 31 / NWNE / 32.09377 / -103.6105714	County or Parish/State: LEA / NM
Well Number: 205H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM122620	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002547228	Well Status: Drilling Well	Operator: KAISER FRANCIS OIL COMPANY

Subsequent Report

Type of Submission: Subsequent Report	Type of Action: Hydraulic Fracturing
Date Sundry Submitted: 04/16/2021	Time Sundry Submitted: 01:30
Date Operation Actually Began: 09/24/2020	
Actual Procedure: Completion began __9/24/20__ Completion finished __10/16/20__ 1.MIRU WL. 2.TCP Stage 1: 20,662-20,784. Broke down perfs. 3.Stage frac lateral 11,054'-20,784' in 57 stages w/394,022 bbls fluid + 25,910,338# sand. 4.Drilled out plugs w/Tri-Cone bit. well to sales.	

SR Attachments

Actual Procedure

Red_Hills_205H_WBD_20210416133010.pdf

Well Name: RED HILLS FEDERAL	Well Location: T25S / R33E / SEC 31 / NWNE / 32.09377 / -103.6105714	County or Parish/State: LEA / NM
Well Number: 205H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM122620	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002547228	Well Status: Drilling Well	Operator: KAISER FRANCIS OIL COMPANY

Operator Certification

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 submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: ERIC HANSEN	Signed on: APR 16, 2021 01:30 PM
Name: KAISER FRANCIS OIL COMPANY	
Title: Drilling Engineer	
Street Address: 6733 S. Yale Ave.	
City: Tulsa	State: OK
Phone: (918) 491-4339	
Email address: EricH@kfoc.net	

Field Representative

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

BLM Point of Contact

BLM POC Name: Jonathon W Shepard	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752345972	BLM POC Email Address: jshepard@blm.gov
Disposition: Accepted	Disposition Date: 04/29/2021
Signature: Jonathon Shepard	

Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505		State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505				Form C-105 Revised April 3, 2017				
		1. WELL API NO.				30-025-47228				
		2. Type of Lease				☐ STATE ☐ FEE ☒ FED/INDIAN				
		3. State Oil & Gas Lease No.								
WELL COMPLETION OR RECOMPLETION REPORT AND LOG										
4. Reason for filing:						5. Lease Name or Unit Agreement Name				
☒ COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) ☐ C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)						Red Hills Federal				
7. Type of Completion:						6. Well Number:				
☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER _____						205H				
8. Name of Operator						9. OGRID				
Kaiser-Francis Oil Company						12361				
10. Address of Operator						11. Pool name or Wildcat				
P.O. Box 21468 Tulsa, OK 74121-1468						WC-025 G-08 S253235G; LWR BONE SPRIN				
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	B	31	25S	33E		280	N	2,570	E	Lea
BH:	O	6	26S	33E		106	S	1,685	E	Lea
13. Date Spudded	14. Date T.D. Reached	15. Date Rig Released		16. Date Completed (Ready to Produce)		17. Elevations (DF and RKB, RT, GR, etc.)				
8/10/20	9/5/20	9/8/20		2/19/21		3,410' GR				
18. Total Measured Depth of Well		19. Plug Back Measured Depth		20. Was Directional Survey Made?		21. Type Electric and Other Logs Run				
20,985' MD		20,817' MD		YES		GR				
22. Producing Interval(s), of this completion - Top, Bottom, Name										
11,054'-20,784'										
23. CASING RECORD (Report all strings set in well)										
CASING SIZE		WEIGHT LB./FT.		DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED
13 3/8"		54.5#		1,002'		17 1/2"		655		
9 5/8"		40#		4,826'		12 1/4"		1,295		
5 1/2"		20#		20,957'		8 1/2"		3,820		
24. LINER RECORD						25. TUBING RECORD				
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET			
none	-	-	-	-	none	-	-			
26. Perforation record (interval, size, and number)						27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.				
11,054'-20,784', 0.41, 2748										
						DEPTH INTERVAL				
						11,054'-20,784'				
						AMOUNT AND KIND MATERIAL USED				
						394,022 bbls fluid + 25,910,338# sd				
28. PRODUCTION										
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)				
2/20/21		Flowing				Prod				
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio			
3/18/21	24	38/64"		1,095	1,987	3,430				
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)				
	1,353									
29. Disposition of Gas (Sold, used for fuel, vented, etc.)							30. Test Witnessed By			
Sold										
31. List Attachments										
C-104 NW, C-102 As-Drilled w/HSU, C-103 Completion, Final Svy., WBD										
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.							33. Rig Release Date: 9/8/20			
34. If an on-site burial was used at the well, report the exact location of the on-site burial:										
Latitude			Longitude			NAD83				
I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief										
Signature <u>Christina Opfer</u>		Printed Name <u>Christina Opfer</u>		Title <u>Regulatory Manager</u>		Date <u>11/28/2022</u>				
E-mail Address <u>ChristinaO@kfoc.net</u>										

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy_____	T. Canyon_____	T. Ojo Alamo_____	T. Penn A"_____
T. Salt_____	T. Strawn_____	T. Kirtland _____	T. Penn. "B"_____
B. Salt_____	T. Atoka_____	T. Fruitland_____	T. Penn. "C"_____
T. Yates_____	T. Miss_____	T. Pictured Cliffs_____	T. Penn. "D"_____
T. 7 Rivers_____	T. Devonian_____	T. Cliff House_____	T. Leadville_____
T. Queen_____	T. Silurian_____	T. Menefee_____	T. Madison_____
T. Grayburg_____	T. Montoya_____	T. Point Lookout_____	T. Elbert_____
T. San Andres_____	T. Simpson_____	T. Mancos_____	T. McCracken_____
T. Glorieta_____	T. McKee_____	T. Gallup_____	T. Ignacio Otzte_____
T. Paddock_____	T. Ellenburger_____	Base Greenhorn_____	T. Granite _____
T. Blinebry_____	T. Gr. Wash_____	T. Dakota_____	
T. Tubb_____	T. Delaware Sand_____	T. Morrison_____	
T. Drinkard_____	T. Bone Springs_____	T. Todilto_____	
T. Abo_____	T. _____	T. Entrada_____	
T. Wolfcamp_____	T. _____	T. Wingate_____	
T. Penn_____	T. _____	T. Chinle_____	
T. Cisco (Bough C)_____	T. _____	T. Permian_____	

OIL OR GAS SANDS OR
ZONES

No. 1, from.....to.....

No. 3, from.....to.....

No. 2, from.....to.....

No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....

No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology	From	To	Thickness In Feet	Lithology
MD							
864			Rustler, Sand				
1,298			Top Salt				
4,663			Base Salt				
4,865			Delaware, Sand				
9,062			Upper Avalon, Sand				
10,480			Bone Spring 1 st , Sand				
10,576			Bone Spring 2 nd , Lime & Sand				

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 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

ACKNOWLEDGMENTS

Action 161477

ACKNOWLEDGMENTS

Operator: KAISER-FRANCIS OIL CO PO Box 21468 Tulsa, OK 74121146	OGRID: 12361
	Action Number: 161477
	Action Type: [C-104] Completion Packet (C-104C)

ACKNOWLEDGMENTS

☒	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☒	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

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

CONDITIONS

Action 161477

CONDITIONS

Operator: KAISER-FRANCIS OIL CO PO Box 21468 Tulsa, OK 74121146	OGRID: 12361
	Action Number: 161477
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
plmartinez	File 3160-4 Completion Report within 10 days to NMOCD after BLM approval.	11/28/2022