

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 NW	
⁴ API Number 30 - 0 25 - 47037	⁵ Pool Name Wildcat Upper Wolfcamp Oil Pool		⁶ Pool Code 98158
⁷ Property Code 5467	⁸ Property Name Red Hills Federal		⁹ Well Number 404H

II. 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	25S	33E		220	North	2570	East	Lea

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	6	26S	33E		150	South	1811	East	Lea
¹² Lse Code F	¹³ Producing Method Code F		¹⁴ Gas Connection Date		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 1515 Araphoe St., Suite 1600 Denver, CO 80202	G
	Plains Pipeline LP 333 Clay St., #1600 Houston, TX 77002	O

IV. Well Completion Data

²¹ Spud Date 6/27/20	²² Ready Date 2/20/21	²³ TD 22,537MD/ 12,225TVD	²⁴ PBTD 22,393MD/ 12,224TVD	²⁵ Perforations 12,489-22,360	²⁶ DHC, MC -
²⁷ Hole Size		²⁸ Casing & Tubing Size		²⁹ Depth Set	³⁰ Sacks Cement
17-1/2		13-3/8		960	610 SXS
12-1/4		10-3/4		4,960	1,400 SXS
9-7/8		7-5/8		11,351	1,125 SXS
6-3/4		5-1/2		22,524	1,800 SXS

V. Well Test Data

³¹ Date New Oil 2/21/21	³² Gas Delivery Date 2/21/21	³³ Test Date 3/15/21	³⁴ Test Length 24	³⁵ Tbg. Pressure	³⁶ Csg. Pressure 3801
³⁷ Choke Size 26/64	³⁸ Oil 1164	³⁹ Water 4220	⁴⁰ Gas 2573		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: Eric Hansen Printed name: Eric Hansen Title: Petroleum Engineer E-mail Address: EricH@kfoc.net Date: 4/14/21	OIL CONSERVATION DIVISION	
	Approved by: KURT SIMMONS	
	Title: NMOCD, SANTA FE	
	Approval Date: 09/07/2021	
	Phone:918-491-4339	

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 30-025-47037	² Pool Code 98158	³ Pool Name Wildcat Upper Wolfcamp Oil Pool
⁴ Property Code 5467	⁵ Property Name RED HILLS	⁶ Well Number 404H
⁷ OGRID No. 12361	⁸ Operator Name KAISER-FRANCIS OIL COMPANY	⁹ Elevation 3410.3

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		220	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	33E		150	SOUTH	1811	EAST	LEA
¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-21511						

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. Eric Hansen 4/4/21 Signature Date Eric Hansen Printed Name EricH@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 Signature and Seal of Professional Surveyor: Certificate Number: 12797
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Intent ☐ As Drilled ☒

API # 30-025-47037		
Operator Name: KAISER-FRANCIS OIL COMPANY	Property Name: RED HILLS	Well Number 404H

Kick Off Point (KOP)

UL B	Section 31	Township 25S	Range 33E	Lot	Feet 39	From N/S NORTH	Feet 1813	From E/W EAST	County LEA
Latitude 32.0942134					Longitude 103.6087086				NAD 83

First Take Point (FTP)

UL B	Section 31	Township 25S	Range 33E	Lot	Feet 436	From N/S NORTH	Feet 1837	From E/W EAST	County LEA
Latitude 32.0931223					Longitude 103.6087869				NAD 83

Last Take Point (LTP)

UL O	Section 6	Township 26S	Range 33E	Lot	Feet 271	From N/S SOUTH	Feet 1805	From E/W EAST	County LEA
Latitude 32.0660405					Longitude 103.6086763				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 # 30-025-45572		
Operator Name: Kaiser-Francis Oil Company	Property Name: Red Hills Federal	Well Number 401H

KZ 06/29/2018



KAISER FRANCIS OIL CO.

**LEA COUNTY, N.M.
RED HILLS PAD 7
404H
HORIZONTAL**

Survey: Survey #1

EOW SURVEY REPORT

24 July, 2020

Kaiser-Francis Oil Company



SB Directional Services

EOW SURVEY REPORT

Kaiser-Francis Oil Company

Company:	KAISER FRANCIS OIL CO.	Local Co-ordinate Reference:	Well 404H
Project:	LEA COUNTY, N.M.	TVD Reference:	GE+KB @ 3433.00usft (CAC 166)
Site:	RED HILLS PAD 7	MD Reference:	GE+KB @ 3433.00usft (CAC 166)
Well:	404H	North Reference:	Grid
Wellbore:	HORIZONTAL	Survey Calculation Method:	Minimum Curvature
Design:	HORIZONTAL	Database:	EDM 5000.15 Single User Db

Project	LEA COUNTY, N.M.		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	RED HILLS PAD 7		
Site Position:		Northing:	398,443.02 usft
From:	Map	Easting:	724,008.72 usft
Position Uncertainty:	0.00 usft	Slot Radius:	17-1/2 "
		Latitude:	32.09337
		Longitude:	-103.60999
		Grid Convergence:	0.38 °

Well		404H				
Well Position	+N/-S	0.00 usft	Northing:	398,521.45 usft	Latitude:	32.09359
	+E/-W	0.00 usft	Easting:	723,793.20 usft	Longitude:	-103.61068
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,410.40 usft	Ground Level:	3,410.40 usft	

Wellbore	HORIZONTAL				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	2020/07/01	6.67	59.81	47,512.20177404

Design	HORIZONTAL			
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	180.00

Survey Program	Date	2020/07/15		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
178.00	22,537.00	Survey #1 (HORIZONTAL)	MWD	OWSG MWD - Standard



SB Directional Services

EOW SURVEY REPORT

Kaiser-Francis Oil Company

Company: KAISER FRANCIS OIL CO.
Project: LEA COUNTY, N.M.
Site: RED HILLS PAD 7
Well: 404H
Wellbore: HORIZONTAL
Design: HORIZONTAL

Local Co-ordinate Reference: Well 404H
TVD Reference: GE+KB @ 3433.00usft (CAC 166)
MD Reference: GE+KB @ 3433.00usft (CAC 166)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	Latitude (°)	Longitude (°)
0.00	0.00	0.00	0.00	0.00	0.00	398,521.45	723,793.20	0.00	32.09359	-103.61068
178.00	1.14	111.84	177.99	-0.66	1.64	398,520.79	723,794.84	0.66	32.09359	-103.61068
271.00	0.99	109.66	270.97	-1.27	3.26	398,520.18	723,796.46	1.27	32.09359	-103.61067
361.00	0.84	99.88	360.96	-1.65	4.64	398,519.80	723,797.84	1.65	32.09359	-103.61067
452.00	1.14	121.34	451.95	-2.23	6.07	398,519.22	723,799.27	2.23	32.09358	-103.61066
542.00	0.62	115.54	541.94	-2.91	7.28	398,518.54	723,800.48	2.91	32.09358	-103.61066
633.00	0.62	93.03	632.93	-3.15	8.21	398,518.30	723,801.41	3.15	32.09358	-103.61065
724.00	0.57	155.17	723.93	-3.58	8.89	398,517.87	723,802.09	3.58	32.09358	-103.61065
785.00	0.57	155.70	784.92	-4.14	9.15	398,517.31	723,802.35	4.14	32.09358	-103.61065
846.00	0.84	129.77	845.92	-4.70	9.61	398,516.75	723,802.81	4.70	32.09358	-103.61065
907.00	0.48	166.42	906.92	-5.23	10.02	398,516.22	723,803.22	5.23	32.09358	-103.61065
920.00	0.79	175.03	919.91	-5.38	10.04	398,516.07	723,803.24	5.38	32.09358	-103.61065
1,026.00	0.44	206.32	1,025.91	-6.47	9.92	398,514.98	723,803.12	6.47	32.09357	-103.61065
1,086.00	0.44	234.27	1,085.91	-6.81	9.63	398,514.64	723,802.83	6.81	32.09357	-103.61065
1,149.00	0.57	109.99	1,148.91	-7.06	9.73	398,514.39	723,802.93	7.06	32.09357	-103.61065
1,210.00	1.58	72.64	1,209.90	-6.91	10.82	398,514.54	723,804.02	6.91	32.09357	-103.61065
1,270.00	2.07	67.63	1,269.86	-6.25	12.61	398,515.20	723,805.81	6.25	32.09357	-103.61064
1,333.00	3.43	70.88	1,332.79	-5.20	15.44	398,516.25	723,808.64	5.20	32.09358	-103.61063
1,393.00	4.66	63.67	1,392.64	-3.53	19.32	398,517.92	723,812.52	3.53	32.09358	-103.61062
1,455.00	5.85	59.63	1,454.38	-0.82	24.31	398,520.63	723,817.51	0.82	32.09359	-103.61060
1,518.00	6.81	64.11	1,516.99	2.44	30.44	398,523.89	723,823.64	-2.44	32.09360	-103.61058
1,615.00	8.31	70.53	1,613.15	7.29	42.22	398,528.74	723,835.42	-7.29	32.09361	-103.61054
1,710.00	7.91	70.97	1,707.20	11.70	54.87	398,533.15	723,848.07	-11.70	32.09362	-103.61050
1,805.00	7.52	70.88	1,801.34	15.87	66.93	398,537.32	723,860.13	-15.87	32.09363	-103.61046
1,900.00	8.88	69.30	1,895.37	20.50	79.66	398,541.95	723,872.86	-20.50	32.09364	-103.61042
1,995.00	8.57	68.42	1,989.27	25.70	93.10	398,547.15	723,886.30	-25.70	32.09366	-103.61038
2,090.00	8.31	68.77	2,083.24	30.79	106.08	398,552.24	723,899.28	-30.79	32.09367	-103.61034



SB Directional Services

EOW SURVEY REPORT

Kaiser-Francis Oil Company

Company: KAISER FRANCIS OIL CO.
Project: LEA COUNTY, N.M.
Site: RED HILLS PAD 7
Well: 404H
Wellbore: HORIZONTAL
Design: HORIZONTAL

Local Co-ordinate Reference: Well 404H
TVD Reference: GE+KB @ 3433.00usft (CAC 166)
MD Reference: GE+KB @ 3433.00usft (CAC 166)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	Latitude (°)	Longitude (°)
2,185.00	8.09	68.51	2,177.27	35.72	118.70	398,557.17	723,911.90	-35.72	32.09369	-103.61030
2,280.00	7.74	70.00	2,271.36	40.36	130.93	398,561.81	723,924.13	-40.36	32.09370	-103.61026
2,375.00	7.52	70.88	2,365.52	44.58	142.82	398,566.03	723,936.02	-44.58	32.09371	-103.61022
2,470.00	7.30	71.85	2,459.73	48.50	154.43	398,569.95	723,947.63	-48.50	32.09372	-103.61018
2,565.00	6.68	74.22	2,554.02	51.88	165.48	398,573.33	723,958.68	-51.88	32.09373	-103.61015
2,660.00	7.38	75.36	2,648.31	54.92	176.70	398,576.37	723,969.90	-54.92	32.09374	-103.61011
2,755.00	8.57	76.33	2,742.39	58.14	189.48	398,579.59	723,982.68	-58.14	32.09375	-103.61007
2,850.00	9.71	74.57	2,836.18	61.94	204.08	398,583.39	723,997.28	-61.94	32.09376	-103.61002
2,945.00	9.85	73.52	2,929.80	66.38	219.60	398,587.83	724,012.80	-66.38	32.09377	-103.60997
3,041.00	9.80	72.81	3,024.39	71.13	235.27	398,592.58	724,028.47	-71.13	32.09378	-103.60992
3,136.00	9.41	72.90	3,118.06	75.80	250.42	398,597.25	724,043.62	-75.80	32.09379	-103.60987
3,231.00	9.14	72.99	3,211.82	80.29	265.06	398,601.74	724,058.26	-80.29	32.09381	-103.60982
3,326.00	9.01	73.08	3,305.63	84.66	279.39	398,606.11	724,072.59	-84.66	32.09382	-103.60978
3,421.00	9.14	71.76	3,399.44	89.19	293.67	398,610.64	724,086.87	-89.19	32.09383	-103.60973
3,516.00	8.84	71.06	3,493.27	93.92	307.75	398,615.37	724,100.95	-93.92	32.09384	-103.60969
3,611.00	8.84	70.26	3,587.14	98.75	321.52	398,620.20	724,114.72	-98.75	32.09386	-103.60964
3,706.00	8.57	69.74	3,681.05	103.67	335.03	398,625.12	724,128.23	-103.67	32.09387	-103.60960
3,801.00	8.04	68.77	3,775.05	108.53	347.86	398,629.98	724,141.06	-108.53	32.09388	-103.60956
3,896.00	7.60	68.86	3,869.17	113.20	359.92	398,634.65	724,153.12	-113.20	32.09389	-103.60952
3,991.00	6.90	69.39	3,963.41	117.47	371.12	398,638.92	724,164.32	-117.47	32.09391	-103.60948
4,086.00	6.68	63.06	4,057.74	121.98	381.38	398,643.43	724,174.58	-121.98	32.09392	-103.60945
4,181.00	8.40	71.32	4,151.92	126.71	392.89	398,648.16	724,186.09	-126.71	32.09393	-103.60941
4,276.00	8.40	78.53	4,245.90	130.31	406.26	398,651.76	724,199.46	-130.31	32.09394	-103.60937
4,371.00	8.40	80.72	4,339.88	132.81	419.91	398,654.26	724,213.11	-132.81	32.09395	-103.60932
4,466.00	7.43	81.07	4,433.98	134.88	432.82	398,656.33	724,226.02	-134.88	32.09395	-103.60928
4,561.00	6.64	85.47	4,528.26	136.27	444.37	398,657.72	724,237.57	-136.27	32.09396	-103.60924
4,656.00	6.46	87.14	4,622.64	136.97	455.18	398,658.42	724,248.38	-136.97	32.09396	-103.60921



SB Directional Services

EOW SURVEY REPORT

Kaiser-Francis Oil Company

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Project: LEA COUNTY, N.M.
Site: RED HILLS PAD 7
Well: 404H
Wellbore: HORIZONTAL
Design: HORIZONTAL

Local Co-ordinate Reference: Well 404H
TVD Reference: GE+KB @ 3433.00usft (CAC 166)
MD Reference: GE+KB @ 3433.00usft (CAC 166)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	Latitude (°)	Longitude (°)
4,751.00	5.63	79.76	4,717.12	138.07	465.10	398,659.52	724,258.30	-138.07	32.09396	-103.60918
4,846.00	5.19	72.37	4,811.69	140.20	473.79	398,661.65	724,266.99	-140.20	32.09397	-103.60915
4,919.00	4.66	74.92	4,884.42	141.97	479.80	398,663.42	724,273.00	-141.97	32.09397	-103.60913
5,037.00	4.40	73.69	5,002.05	144.49	488.77	398,665.94	724,281.97	-144.49	32.09398	-103.60910
5,132.00	4.97	69.47	5,096.74	146.95	496.12	398,668.40	724,289.32	-146.95	32.09398	-103.60908
5,227.00	5.58	67.80	5,191.33	150.14	504.25	398,671.59	724,297.45	-150.14	32.09399	-103.60905
5,322.00	6.15	70.26	5,285.84	153.61	513.32	398,675.06	724,306.52	-153.61	32.09400	-103.60902
5,417.00	6.37	70.62	5,380.27	157.07	523.08	398,678.52	724,316.28	-157.07	32.09401	-103.60899
5,512.00	5.98	69.03	5,474.72	160.59	532.67	398,682.04	724,325.87	-160.59	32.09402	-103.60896
5,607.00	5.89	66.13	5,569.21	164.34	541.75	398,685.79	724,334.95	-164.34	32.09403	-103.60893
5,702.00	6.46	75.63	5,663.66	167.64	551.38	398,689.09	724,344.58	-167.64	32.09404	-103.60890
5,797.00	6.42	76.15	5,758.06	170.23	561.72	398,691.68	724,354.92	-170.23	32.09405	-103.60886
5,892.00	5.67	75.36	5,852.53	172.69	571.41	398,694.14	724,364.61	-172.69	32.09405	-103.60883
5,987.00	6.29	76.15	5,947.02	175.12	581.01	398,696.57	724,374.21	-175.12	32.09406	-103.60880
6,082.00	6.68	77.38	6,041.41	177.58	591.45	398,699.03	724,384.65	-177.58	32.09407	-103.60877
6,177.00	6.07	78.97	6,135.82	179.74	601.77	398,701.19	724,394.97	-179.74	32.09407	-103.60873
6,272.00	5.98	78.97	6,230.29	181.65	611.56	398,703.10	724,404.76	-181.65	32.09408	-103.60870
6,367.00	6.90	80.99	6,324.69	183.49	622.05	398,704.94	724,415.25	-183.49	32.09408	-103.60867
6,462.00	7.34	84.06	6,418.96	185.01	633.73	398,706.46	724,426.93	-185.01	32.09409	-103.60863
6,557.00	7.16	82.31	6,513.20	186.43	645.63	398,707.88	724,438.83	-186.43	32.09409	-103.60859
6,652.00	6.33	87.93	6,607.55	187.42	656.73	398,708.87	724,449.93	-187.42	32.09409	-103.60856
6,747.00	6.07	86.61	6,701.99	187.90	666.98	398,709.35	724,460.18	-187.90	32.09409	-103.60852
6,842.00	4.88	83.01	6,796.55	188.69	676.00	398,710.14	724,469.20	-188.69	32.09410	-103.60849
6,937.00	6.90	86.70	6,891.05	189.51	685.71	398,710.96	724,478.91	-189.51	32.09410	-103.60846
7,032.00	7.87	92.85	6,985.26	189.52	697.91	398,710.97	724,491.11	-189.52	32.09410	-103.60842
7,127.00	7.43	92.06	7,079.42	188.97	710.54	398,710.42	724,503.74	-188.97	32.09410	-103.60838
7,222.00	7.08	93.82	7,173.65	188.36	722.52	398,709.81	724,515.72	-188.36	32.09409	-103.60834



SB Directional Services

EOW SURVEY REPORT

Kaiser-Francis Oil Company

Company: KAISER FRANCIS OIL CO.
Project: LEA COUNTY, N.M.
Site: RED HILLS PAD 7
Well: 404H
Wellbore: HORIZONTAL
Design: HORIZONTAL

Local Co-ordinate Reference: Well 404H
TVD Reference: GE+KB @ 3433.00usft (CAC 166)
MD Reference: GE+KB @ 3433.00usft (CAC 166)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	Latitude (°)	Longitude (°)
7,317.00	6.90	93.73	7,267.95	187.60	734.06	398,709.05	724,527.26	-187.60	32.09409	-103.60831
7,412.00	6.46	94.08	7,362.30	186.85	745.08	398,708.30	724,538.28	-186.85	32.09409	-103.60827
7,507.00	6.20	97.25	7,456.72	185.82	755.50	398,707.27	724,548.70	-185.82	32.09409	-103.60824
7,602.00	4.75	92.32	7,551.29	185.01	764.52	398,706.46	724,557.72	-185.01	32.09408	-103.60821
7,697.00	4.57	91.71	7,645.97	184.74	772.23	398,706.19	724,565.43	-184.74	32.09408	-103.60818
7,792.00	4.18	82.13	7,740.70	185.10	779.45	398,706.55	724,572.65	-185.10	32.09408	-103.60816
7,887.00	3.21	81.51	7,835.50	185.97	785.51	398,707.42	724,578.71	-185.97	32.09409	-103.60814
7,982.00	2.99	85.65	7,930.36	186.55	790.61	398,708.00	724,583.81	-186.55	32.09409	-103.60812
8,077.00	2.42	90.74	8,025.26	186.71	795.08	398,708.16	724,588.28	-186.71	32.09409	-103.60811
8,172.00	2.33	101.29	8,120.17	186.31	798.98	398,707.76	724,592.18	-186.31	32.09409	-103.60810
8,267.00	1.93	92.32	8,215.11	185.87	802.48	398,707.32	724,595.68	-185.87	32.09409	-103.60809
8,362.00	1.41	115.44	8,310.07	185.30	805.13	398,706.75	724,598.33	-185.30	32.09408	-103.60808
8,457.00	1.14	129.15	8,405.05	184.20	806.92	398,705.65	724,600.12	-184.20	32.09408	-103.60807
8,552.00	0.66	136.36	8,500.03	183.21	808.03	398,704.66	724,601.23	-183.21	32.09408	-103.60807
8,647.00	0.62	133.46	8,595.03	182.46	808.78	398,703.91	724,601.98	-182.46	32.09408	-103.60807
8,742.00	0.62	148.40	8,690.02	181.67	809.42	398,703.12	724,602.62	-181.67	32.09407	-103.60806
8,837.00	0.57	142.95	8,785.02	180.85	809.98	398,702.30	724,603.18	-180.85	32.09407	-103.60806
8,932.00	0.62	141.90	8,880.01	180.07	810.58	398,701.52	724,603.78	-180.07	32.09407	-103.60806
9,027.00	0.53	132.32	8,975.01	179.37	811.22	398,700.82	724,604.42	-179.37	32.09407	-103.60806
9,122.00	0.44	120.89	9,070.00	178.89	811.86	398,700.34	724,605.06	-178.89	32.09407	-103.60806
9,217.00	0.53	115.09	9,165.00	178.51	812.57	398,699.96	724,605.77	-178.51	32.09407	-103.60805
9,312.00	2.51	240.24	9,259.97	177.29	811.16	398,698.74	724,604.36	-177.29	32.09406	-103.60806
9,407.00	1.98	236.64	9,354.90	175.36	807.98	398,696.81	724,601.18	-175.36	32.09406	-103.60807
9,502.00	1.49	259.05	9,449.86	174.22	805.40	398,695.67	724,598.60	-174.22	32.09405	-103.60808
9,597.00	1.49	258.53	9,544.82	173.74	802.98	398,695.19	724,596.18	-173.74	32.09405	-103.60808
9,693.00	1.23	259.05	9,640.80	173.30	800.74	398,694.75	724,593.94	-173.30	32.09405	-103.60809
9,788.00	0.92	276.54	9,735.78	173.19	798.98	398,694.64	724,592.18	-173.19	32.09405	-103.60810



SB Directional Services

EOW SURVEY REPORT

Kaiser-Francis Oil Company

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Project: LEA COUNTY, N.M.
Site: RED HILLS PAD 7
Well: 404H
Wellbore: HORIZONTAL
Design: HORIZONTAL

Local Co-ordinate Reference: Well 404H
TVD Reference: GE+KB @ 3433.00usft (CAC 166)
MD Reference: GE+KB @ 3433.00usft (CAC 166)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	Latitude (°)	Longitude (°)
9,883.00	1.05	282.08	9,830.77	173.46	797.37	398,694.91	724,590.57	-173.46	32.09405	-103.60810
9,978.00	0.97	245.96	9,925.75	173.31	795.79	398,694.76	724,588.99	-173.31	32.09405	-103.60811
10,073.00	1.01	229.52	10,020.74	172.44	794.42	398,693.89	724,587.62	-172.44	32.09405	-103.60811
10,168.00	1.49	241.04	10,115.72	171.30	792.70	398,692.75	724,585.90	-171.30	32.09405	-103.60812
10,263.00	1.67	248.24	10,210.68	170.19	790.33	398,691.64	724,583.53	-170.19	32.09404	-103.60813
10,358.00	1.63	266.44	10,305.64	169.59	787.70	398,691.04	724,580.90	-169.59	32.09404	-103.60813
10,453.00	2.51	272.76	10,400.58	169.61	784.27	398,691.06	724,577.47	-169.61	32.09404	-103.60814
10,548.00	2.86	271.45	10,495.47	169.77	779.83	398,691.22	724,573.03	-169.77	32.09404	-103.60816
10,643.00	1.49	304.58	10,590.41	170.53	776.44	398,691.98	724,569.64	-170.53	32.09404	-103.60817
10,738.00	0.79	339.74	10,685.39	171.85	775.20	398,693.30	724,568.40	-171.85	32.09405	-103.60817
10,833.00	0.18	54.44	10,780.38	172.55	775.09	398,694.00	724,568.29	-172.55	32.09405	-103.60817
10,928.00	0.97	341.06	10,875.38	173.39	774.95	398,694.84	724,568.15	-173.39	32.09405	-103.60817
11,023.00	1.23	311.96	10,970.36	174.84	773.93	398,696.29	724,567.13	-174.84	32.09406	-103.60818
11,118.00	1.76	300.01	11,065.33	176.25	771.91	398,697.70	724,565.11	-176.25	32.09406	-103.60818
11,213.00	3.08	301.68	11,160.24	178.32	768.48	398,699.77	724,561.68	-178.32	32.09407	-103.60820
11,308.00	3.34	290.17	11,255.10	180.61	763.71	398,702.06	724,556.91	-180.61	32.09407	-103.60821
11,441.00	3.16	278.39	11,387.88	182.48	756.44	398,703.93	724,549.64	-182.48	32.09408	-103.60823
11,536.00	2.55	355.91	11,482.80	184.98	753.70	398,706.43	724,546.90	-184.98	32.09408	-103.60824
11,631.00	1.32	51.46	11,577.75	187.77	754.41	398,709.22	724,547.61	-187.77	32.09409	-103.60824
11,725.00	0.88	35.28	11,671.73	189.03	755.67	398,710.48	724,548.87	-189.03	32.09410	-103.60824
11,774.00	6.64	183.73	11,720.63	186.51	755.70	398,707.96	724,548.90	-186.51	32.09409	-103.60824
11,820.00	11.25	180.92	11,766.06	179.36	755.46	398,700.81	724,548.66	-179.36	32.09407	-103.60824
11,915.00	16.04	194.37	11,858.37	157.36	752.05	398,678.81	724,545.25	-157.36	32.09401	-103.60825
12,010.00	22.77	190.94	11,947.93	126.56	745.29	398,648.01	724,538.49	-126.56	32.09392	-103.60827
12,105.00	31.52	192.96	12,032.38	84.23	736.22	398,605.68	724,529.42	-84.23	32.09381	-103.60830
12,200.00	43.34	190.06	12,107.69	27.73	724.91	398,549.18	724,518.11	-27.73	32.09365	-103.60834
12,295.00	53.45	181.97	12,170.75	-42.76	717.88	398,478.69	724,511.08	42.76	32.09346	-103.60836



SB Directional Services

EOW SURVEY REPORT

Kaiser-Francis Oil Company

Company: KAISER FRANCIS OIL CO.
Project: LEA COUNTY, N.M.
Site: RED HILLS PAD 7
Well: 404H
Wellbore: HORIZONTAL
Design: HORIZONTAL

Local Co-ordinate Reference: Well 404H
TVD Reference: GE+KB @ 3433.00usft (CAC 166)
MD Reference: GE+KB @ 3433.00usft (CAC 166)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	Latitude (°)	Longitude (°)
12,390.00	64.75	173.18	12,219.53	-123.93	721.69	398,397.52	724,514.89	123.93	32.09324	-103.60835
12,485.00	69.89	170.55	12,256.15	-210.66	734.12	398,310.79	724,527.32	210.66	32.09300	-103.60831
12,580.00	77.41	174.41	12,282.88	-300.96	745.99	398,220.49	724,539.19	300.96	32.09275	-103.60828
12,647.00	84.44	175.47	12,293.45	-366.82	751.81	398,154.63	724,545.01	366.82	32.09257	-103.60826
12,706.00	91.87	174.06	12,295.34	-425.50	757.19	398,095.95	724,550.39	425.50	32.09241	-103.60825
12,801.00	93.41	174.33	12,290.97	-519.91	766.79	398,001.54	724,559.99	519.91	32.09215	-103.60822
12,896.00	94.99	174.77	12,284.01	-614.22	775.79	397,907.23	724,568.99	614.22	32.09189	-103.60819
12,991.00	95.08	176.17	12,275.67	-708.56	783.26	397,812.89	724,576.46	708.56	32.09163	-103.60817
13,086.00	94.81	176.44	12,267.48	-803.01	789.36	397,718.44	724,582.56	803.01	32.09137	-103.60815
13,181.00	94.42	174.77	12,259.84	-897.42	796.62	397,624.03	724,589.82	897.42	32.09111	-103.60813
13,276.00	93.14	176.08	12,253.58	-991.90	804.18	397,529.55	724,597.38	991.90	32.09085	-103.60811
13,371.00	93.32	177.93	12,248.22	-1,086.62	809.13	397,434.83	724,602.33	1,086.62	32.09059	-103.60809
13,466.00	91.43	179.34	12,244.29	-1,181.50	811.39	397,339.95	724,604.59	1,181.50	32.09033	-103.60809
13,561.00	88.92	181.01	12,244.00	-1,276.49	811.10	397,244.96	724,604.30	1,276.49	32.09007	-103.60809
13,656.00	90.77	179.78	12,244.25	-1,371.48	810.45	397,149.97	724,603.65	1,371.48	32.08981	-103.60809
13,751.00	90.15	179.07	12,243.49	-1,466.47	811.40	397,054.98	724,604.60	1,466.47	32.08954	-103.60809
13,846.00	90.29	180.83	12,243.13	-1,561.47	811.48	396,959.98	724,604.68	1,561.47	32.08928	-103.60809
13,941.00	89.41	180.83	12,243.38	-1,656.46	810.11	396,864.99	724,603.31	1,656.46	32.08902	-103.60810
14,036.00	89.54	179.60	12,244.25	-1,751.45	809.75	396,770.00	724,602.95	1,751.45	32.08876	-103.60810
14,131.00	90.20	177.58	12,244.46	-1,846.42	812.09	396,675.03	724,605.29	1,846.42	32.08850	-103.60810
14,225.00	91.25	180.39	12,243.27	-1,940.38	813.75	396,581.07	724,606.95	1,940.38	32.08824	-103.60810
14,320.00	89.89	180.92	12,242.33	-2,035.37	812.67	396,486.08	724,605.87	2,035.37	32.08798	-103.60810
14,415.00	90.59	180.74	12,241.93	-2,130.36	811.29	396,391.09	724,604.49	2,130.36	32.08772	-103.60811
14,510.00	88.53	179.95	12,242.66	-2,225.35	810.72	396,296.10	724,603.92	2,225.35	32.08746	-103.60811
14,605.00	91.91	180.13	12,242.29	-2,320.33	810.65	396,201.12	724,603.85	2,320.33	32.08720	-103.60811
14,700.00	88.48	180.13	12,241.97	-2,415.32	810.44	396,106.13	724,603.64	2,415.32	32.08694	-103.60812
14,795.00	90.02	182.68	12,243.21	-2,510.27	808.11	396,011.18	724,601.31	2,510.27	32.08667	-103.60813



SB Directional Services

EOW SURVEY REPORT

Kaiser-Francis Oil Company

Company: KAISER FRANCIS OIL CO.
Project: LEA COUNTY, N.M.
Site: RED HILLS PAD 7
Well: 404H
Wellbore: HORIZONTAL
Design: HORIZONTAL

Local Co-ordinate Reference: Well 404H
TVD Reference: GE+KB @ 3433.00usft (CAC 166)
MD Reference: GE+KB @ 3433.00usft (CAC 166)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	Latitude (°)	Longitude (°)
14,890.00	90.02	182.32	12,243.18	-2,605.18	803.96	395,916.27	724,597.16	2,605.18	32.08641	-103.60814
14,985.00	91.25	182.59	12,242.13	-2,700.09	799.89	395,821.36	724,593.09	2,700.09	32.08615	-103.60816
15,080.00	90.64	184.08	12,240.56	-2,794.91	794.37	395,726.54	724,587.57	2,794.91	32.08589	-103.60818
15,175.00	90.07	182.85	12,239.97	-2,889.73	788.63	395,631.72	724,581.83	2,889.73	32.08563	-103.60820
15,270.00	91.12	181.62	12,238.99	-2,984.65	784.92	395,536.80	724,578.12	2,984.65	32.08537	-103.60821
15,365.00	90.81	179.51	12,237.39	-3,079.63	783.99	395,441.82	724,577.19	3,079.63	32.08511	-103.60822
15,460.00	90.11	178.19	12,236.62	-3,174.60	785.89	395,346.85	724,579.09	3,174.60	32.08485	-103.60821
15,555.00	89.80	179.51	12,236.70	-3,269.58	787.80	395,251.87	724,581.00	3,269.58	32.08459	-103.60821
15,650.00	88.72	180.83	12,237.92	-3,364.57	787.52	395,156.88	724,580.72	3,364.57	32.08433	-103.60821
15,745.00	86.07	180.83	12,242.24	-3,459.45	786.14	395,062.00	724,579.34	3,459.45	32.08407	-103.60822
15,840.00	86.64	180.39	12,248.28	-3,554.26	785.13	394,967.19	724,578.33	3,554.26	32.08381	-103.60822
15,935.00	87.65	180.65	12,253.01	-3,649.13	784.27	394,872.32	724,577.47	3,649.13	32.08354	-103.60823
16,030.00	87.60	180.57	12,256.95	-3,744.05	783.26	394,777.40	724,576.46	3,744.05	32.08328	-103.60823
16,125.00	88.66	181.09	12,260.05	-3,838.98	781.89	394,682.47	724,575.09	3,838.98	32.08302	-103.60824
16,220.00	89.63	181.01	12,261.47	-3,933.96	780.15	394,587.49	724,573.35	3,933.96	32.08276	-103.60825
16,314.00	90.95	181.80	12,260.99	-4,027.92	777.84	394,493.53	724,571.04	4,027.92	32.08250	-103.60826
16,410.00	89.05	180.48	12,260.99	-4,123.90	775.93	394,397.55	724,569.13	4,123.90	32.08224	-103.60826
16,504.00	90.24	180.48	12,261.57	-4,217.89	775.14	394,303.56	724,568.34	4,217.89	32.08198	-103.60827
16,600.00	91.43	182.76	12,260.18	-4,313.83	772.43	394,207.62	724,565.63	4,313.83	32.08172	-103.60828
16,694.00	89.27	182.76	12,259.60	-4,407.72	767.91	394,113.73	724,561.11	4,407.72	32.08146	-103.60830
16,789.00	88.35	182.50	12,261.57	-4,502.60	763.55	394,018.85	724,556.75	4,502.60	32.08120	-103.60831
16,884.00	88.09	180.13	12,264.53	-4,597.52	761.37	393,923.93	724,554.57	4,597.52	32.08094	-103.60832
16,979.00	87.47	177.93	12,268.21	-4,692.43	762.97	393,829.02	724,556.17	4,692.43	32.08068	-103.60832
17,074.00	88.62	178.55	12,271.45	-4,787.33	765.89	393,734.12	724,559.09	4,787.33	32.08042	-103.60831
17,169.00	90.02	180.66	12,272.57	-4,882.31	766.54	393,639.14	724,559.74	4,882.31	32.08016	-103.60831
17,264.00	90.95	178.81	12,271.77	-4,977.30	766.98	393,544.15	724,560.18	4,977.30	32.07989	-103.60831
17,359.00	91.16	179.25	12,270.02	-5,072.27	768.59	393,449.18	724,561.79	5,072.27	32.07963	-103.60831



SB Directional Services

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Kaiser-Francis Oil Company

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Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	Latitude (°)	Longitude (°)
17,454.00	92.00	179.69	12,267.40	-5,167.23	769.47	393,354.22	724,562.67	5,167.23	32.07937	-103.60831
17,549.00	92.13	179.25	12,263.98	-5,262.16	770.35	393,259.29	724,563.55	5,262.16	32.07911	-103.60831
17,644.00	87.21	177.05	12,264.53	-5,357.08	773.41	393,164.37	724,566.61	5,357.08	32.07885	-103.60830
17,739.00	87.34	178.02	12,269.04	-5,451.88	777.50	393,069.57	724,570.70	5,451.88	32.07859	-103.60829
17,834.00	89.05	178.90	12,272.03	-5,546.79	780.05	392,974.66	724,573.25	5,546.79	32.07833	-103.60828
17,929.00	90.68	179.42	12,272.26	-5,641.78	781.44	392,879.67	724,574.64	5,641.78	32.07807	-103.60828
18,024.00	92.35	180.39	12,269.75	-5,736.74	781.60	392,784.71	724,574.80	5,736.74	32.07781	-103.60828
18,119.00	93.36	180.74	12,265.01	-5,831.62	780.66	392,689.83	724,573.86	5,831.62	32.07755	-103.60829
18,214.00	94.11	180.92	12,258.83	-5,926.41	779.29	392,595.04	724,572.49	5,926.41	32.07728	-103.60829
18,309.00	93.32	179.86	12,252.67	-6,021.20	778.64	392,500.25	724,571.84	6,021.20	32.07702	-103.60830
18,404.00	92.04	178.99	12,248.23	-6,116.09	779.60	392,405.36	724,572.80	6,116.09	32.07676	-103.60830
18,499.00	92.66	178.46	12,244.33	-6,210.99	781.71	392,310.46	724,574.91	6,210.99	32.07650	-103.60829
18,594.00	88.62	174.68	12,243.27	-6,305.77	787.39	392,215.68	724,580.59	6,305.77	32.07624	-103.60828
18,689.00	89.36	173.71	12,244.95	-6,400.27	797.00	392,121.18	724,590.20	6,400.27	32.07598	-103.60825
18,784.00	90.77	174.85	12,244.84	-6,494.79	806.47	392,026.66	724,599.67	6,494.79	32.07572	-103.60822
18,879.00	90.95	175.82	12,243.41	-6,589.47	814.19	391,931.98	724,607.39	6,589.47	32.07546	-103.60819
18,974.00	88.00	175.12	12,244.28	-6,684.15	821.69	391,837.30	724,614.89	6,684.15	32.07520	-103.60817
19,069.00	87.47	174.94	12,248.04	-6,778.72	829.92	391,742.73	724,623.12	6,778.72	32.07494	-103.60815
19,164.00	88.18	175.65	12,251.64	-6,873.33	837.70	391,648.12	724,630.90	6,873.33	32.07468	-103.60813
19,259.00	87.96	175.82	12,254.84	-6,968.02	844.76	391,553.43	724,637.96	6,968.02	32.07442	-103.60810
19,354.00	88.84	175.82	12,257.50	-7,062.72	851.69	391,458.73	724,644.89	7,062.72	32.07416	-103.60808
19,450.00	93.19	177.83	12,255.79	-7,158.53	857.00	391,362.92	724,650.20	7,158.53	32.07390	-103.60807
19,544.00	93.36	178.72	12,250.42	-7,252.34	859.83	391,269.11	724,653.03	7,252.34	32.07364	-103.60806
19,639.00	93.71	181.09	12,244.57	-7,347.15	859.98	391,174.30	724,653.18	7,347.15	32.07338	-103.60806
19,734.00	95.34	182.24	12,237.07	-7,441.81	857.23	391,079.64	724,650.43	7,441.81	32.07312	-103.60807
19,829.00	92.79	181.36	12,230.34	-7,536.51	854.26	390,984.94	724,647.46	7,536.51	32.07286	-103.60809
19,924.00	92.62	181.62	12,225.85	-7,631.38	851.79	390,890.07	724,644.99	7,631.38	32.07260	-103.60810



SB Directional Services

EOW SURVEY REPORT

Kaiser-Francis Oil Company

Company: KAISER FRANCIS OIL CO.
Project: LEA COUNTY, N.M.
Site: RED HILLS PAD 7
Well: 404H
Wellbore: HORIZONTAL
Design: HORIZONTAL

Local Co-ordinate Reference: Well 404H
TVD Reference: GE+KB @ 3433.00usft (CAC 166)
MD Reference: GE+KB @ 3433.00usft (CAC 166)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	Latitude (°)	Longitude (°)
20,019.00	90.90	180.48	12,222.94	-7,726.31	850.05	390,795.14	724,643.25	7,726.31	32.07234	-103.60810
20,114.00	92.09	180.39	12,220.46	-7,821.27	849.33	390,700.18	724,642.53	7,821.27	32.07207	-103.60811
20,209.00	89.01	176.17	12,219.55	-7,916.19	852.18	390,605.26	724,645.38	7,916.19	32.07181	-103.60810
20,304.00	88.62	178.37	12,221.51	-8,011.06	856.71	390,510.39	724,649.91	8,011.06	32.07155	-103.60809
20,399.00	91.25	179.95	12,221.62	-8,106.04	858.10	390,415.41	724,651.30	8,106.04	32.07129	-103.60809
20,494.00	89.63	178.72	12,220.89	-8,201.02	859.20	390,320.43	724,652.40	8,201.02	32.07103	-103.60808
20,589.00	89.32	179.25	12,221.76	-8,296.00	860.88	390,225.45	724,654.08	8,296.00	32.07077	-103.60808
20,684.00	91.34	179.95	12,221.21	-8,390.99	861.55	390,130.46	724,654.75	8,390.99	32.07051	-103.60808
20,779.00	89.67	179.42	12,220.37	-8,485.99	862.07	390,035.46	724,655.27	8,485.99	32.07025	-103.60808
20,874.00	91.30	179.25	12,219.57	-8,580.97	863.17	389,940.48	724,656.37	8,580.97	32.06999	-103.60808
20,969.00	90.46	178.99	12,218.11	-8,675.95	864.63	389,845.50	724,657.83	8,675.95	32.06973	-103.60808
21,064.00	89.58	178.46	12,218.08	-8,770.92	866.74	389,750.53	724,659.94	8,770.92	32.06946	-103.60807
21,159.00	91.08	180.65	12,217.53	-8,865.91	867.48	389,655.54	724,660.68	8,865.91	32.06920	-103.60807
21,254.00	89.71	180.13	12,216.88	-8,960.90	866.84	389,560.55	724,660.04	8,960.90	32.06894	-103.60808
21,349.00	90.99	179.51	12,216.30	-9,055.90	867.13	389,465.55	724,660.33	9,055.90	32.06868	-103.60808
21,444.00	90.66	178.72	12,214.93	-9,150.88	868.60	389,370.57	724,661.80	9,150.88	32.06842	-103.60807
21,539.00	89.58	178.28	12,214.73	-9,245.84	871.09	389,275.61	724,664.29	9,245.84	32.06816	-103.60807
21,634.00	88.40	177.58	12,216.40	-9,340.76	874.52	389,180.69	724,667.72	9,340.76	32.06790	-103.60806
21,729.00	88.62	183.91	12,218.88	-9,435.68	873.28	389,085.77	724,666.48	9,435.68	32.06764	-103.60807
21,824.00	89.63	184.96	12,220.33	-9,530.38	865.94	388,991.07	724,659.14	9,530.38	32.06738	-103.60809
21,919.00	90.15	184.61	12,220.51	-9,625.05	858.01	388,896.40	724,651.21	9,625.05	32.06712	-103.60812
22,014.00	90.64	184.79	12,219.85	-9,719.72	850.23	388,801.73	724,643.43	9,719.72	32.06686	-103.60815
22,109.00	88.92	182.06	12,220.22	-9,814.54	844.56	388,706.91	724,637.76	9,814.54	32.06660	-103.60817
22,204.00	88.18	181.36	12,222.62	-9,909.47	841.72	388,611.98	724,634.92	9,909.47	32.06633	-103.60818
22,299.00	90.07	183.38	12,224.07	-10,004.37	837.79	388,517.08	724,630.99	10,004.37	32.06607	-103.60819
22,394.00	90.07	182.76	12,223.96	-10,099.23	832.71	388,422.22	724,625.91	10,099.23	32.06581	-103.60821
22,480.00	89.45	181.18	12,224.32	-10,185.17	829.75	388,336.28	724,622.95	10,185.17	32.06558	-103.60822



SB Directional Services

EOW SURVEY REPORT

Kaiser-Francis Oil Company

Company: KAISER FRANCIS OIL CO.
Project: LEA COUNTY, N.M.
Site: RED HILLS PAD 7
Well: 404H
Wellbore: HORIZONTAL
Design: HORIZONTAL

Local Co-ordinate Reference: Well 404H
TVD Reference: GE+KB @ 3433.00usft (CAC 166)
MD Reference: GE+KB @ 3433.00usft (CAC 166)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	Latitude (°)	Longitude (°)
22,537.00	89.45	181.18	12,224.87	-10,242.16	828.58	388,279.29	724,621.78	10,242.16	32.06542	-103.60823

Well Name: RED HILLS FEDERAL	Well Location: T25S / R33E / SEC 31 / NWNE / 32.0937703 / -103.610765	County or Parish/State: LEA / NM
Well Number: 404H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM122620	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002547037	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: 02:52
Date Operation Actually Began: 09/24/2020	
Actual Procedure: Completion began _9/24/20__ Completion finished __10/28/20__ 1.MIRU WL. 2.TCP Stage 1: 22238-22360. Broke down perfs. 3.Stage frac lateral 12,489'-22,360' in 57 stages w/489,910bbls fluid + 2,423,291# sand. 4.Drilled out plugs w/Tri-Cone bit. Return well to sales. 02/20201	

SR Attachments

Actual Procedure

Red_Hills_404H_WBD_20210416144944.pdf

Well Name: RED HILLS FEDERAL	Well Location: T25S / R33E / SEC 31 / NWNE / 32.0937703 / -103.610765	County or Parish/State: LEA / NM
Well Number: 404H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM122620	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002547037	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 02:52 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: 04/30/2021
Signature: Jonathon Shepard	

Submit To Appropriate District Office Two Copies <u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 811 S. First St., Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> 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					
WELL COMPLETION OR RECOMPLETION REPORT AND LOG										
4. Reason for filing: ☒ 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)								5. Lease Name or Unit Agreement Name Red Hills Federal		
								6. Well Number: 404H		
7. Type of Completion: ☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER										
8. Name of Operator Kaiser-Francis Oil Company						9. OGRID 12361				
10. Address of Operator P.O. Box 21468, Tulsa, OK 74121-1468						11. Pool name or Wildcat Wildcat Upper Wolfcamp Oil Pool				
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		220	North	2570	East	Lea
BH:	0	6	26S	33E		150	South	1811	East	Lea
13. Date Spudded 6/27/20	14. Date T.D. Reached (date)		15. Date Rig Released (date)		16. Date Completed (Ready to Produce) (date)			17. Elevations (DF and RKB, RT, GR, etc.) 3410 GR		
18. Total Measured Depth of Well 22,537MD 12,225TVD			19. Plug Back Measured Depth 22,393MD 12,224TVD		20. Was Directional Survey Made? Yes			21. Type Electric and Other Logs Run (Log)		
22. Producing Interval(s), of this completion - Top, Bottom, Name 12,489-22,360							Wolfcamp			
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		960		17-1/2		610 SXS		-0-
10-3/4		45.5		4,960		12-1/4		1,400 SXS		-0-
7-5/8		29.7		11,351		9-7/8		1,125 SXS		-0-
5-1/2		23		22,524		6-3/4		1,800 SXS		-0-
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) 12,489-22,360 # #						27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.				
						DEPTH INTERVAL		AMOUNT AND KIND MATERIAL USED		
						12,489-		489,910 bbls fluid +		
						22,360		27,939,420# sd.		
28. PRODUCTION										
Date First Production 1		Production Method (Flowing, gas lift, pumping - Size and type pump) 1				Well Status (Prod. or Shut-in) 1				
Date of Test 1	Hours Tested 1	Choke Size 1	Prod'n For Test Period 1	Oil - Bbl 1	Gas - MCF 1	Water - Bbl. 1	Gas - Oil Ratio 1			
Flow Tubing Press. 1	Casing Pressure 1	Calculated 24-Hour Rate 1	Oil - Bbl. 1	Gas - MCF 1	Water - Bbl. 1	Oil Gravity - API - (Corr.) 1				
29. Disposition of Gas (Sold, used for fuel, vented, etc.) 1							30. Test Witnessed By 1			
31. List Attachments C-104NW, C-102 As-Drilled w/HSU, C-103 Casing, 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:			
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 Date E-mail Address EricH@kfoc.net			Name Eric Hansen				Title Petroleum Engineer			

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. Blinbry	T. Gr. Wash	T. Dakota	
T. Tubb	T. Delaware Sand 4850	T. Morrison	
T. Drinkard	T. Bone Springs 1st 9980	T. Todilto	
T. Abo	T. Avalon 9185	T. Entrada	
T. Wolfcamp	T. 2 Bone Sprg 10540	T. Wingate	
T. Penn	T. 3 Bone Sprg 11745	T. Chinle	
T. Cisco (Bough C)	T. Wolfcamp 12260	T. Permian	

OIL OR GAS SANDS OR ZONES

No. 1, from 12,489 to 22,360
No. 2, from to

No. 3, 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
4850			De laware				
9185			Ava lon				
9980			1st Bone Sprg				
10540			2nd Bone Sprg				
10995			2nd Bone Sprg Lm				
11745			3rd Bone Sprg				
12260			Wolfcamp				

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 39802

ACKNOWLEDGMENTS

Operator: KAISER-FRANCIS OIL CO P.O. Box 21468 Tulsa, OK 74121	OGRID: 12361
	Action Number: 39802
	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.

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

CONDITIONS

Action 39802

CONDITIONS

Operator: KAISER-FRANCIS OIL CO P.O. Box 21468 Tulsa, OK 74121	OGRID: 12361
	Action Number: 39802
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
ksimmons	None	9/7/2021