

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 - 025-47845	⁵ Pool Name Ojo Chiso; Bone Spring, Southwest		⁶ Pool Code 98259
⁷ Property Code 316707	⁸ Property Name Bell Lake Unit North		⁹ Well Number 228H

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
J	6	23S	34E		2135	South	2455	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
B	31	22S	34E		103	North	2241	East	Lea
¹² Lse Code F	¹³ Producing Method Code F	¹⁴ Gas Connection Date 6/18/21	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 10/30/20	²² Ready Date 4/7/21	²³ TD 18343MD/ 10317TVD	²⁴ PBD 18249MD/ 10318TVD	²⁵ Perforations 10615-18217	²⁶ DHC, MC	
²⁷ Hole Size		²⁸ Casing & Tubing Size		²⁹ Depth Set		³⁰ Sacks Cement
17-1/2"		13-3/8"		1201 '		1030
12-1/4"		9-5/8"		4876 '		1245
8-1/2"		5-1/2"		18323 '		3100

V. Well Test Data

³¹ Date New Oil 6/26/21	³² Gas Delivery Date 6/26/21	³³ Test Date 7/4/21	³⁴ Test Length 24 hrs	³⁵ Tbg. Pressure	³⁶ Csg. Pressure 2350
³⁷ Choke Size 24/64	³⁸ Oil 915 bbl	³⁹ Water 1982 bbl	⁴⁰ Gas 1651 mcf		⁴¹ Test Method F

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: Erica Miles		OIL CONSERVATION DIVISION	
Printed name: Erica Miles		Approved by: KURT SIMMONS	
Title: Geosciences Technician		Title: NMOCD, SANTA FE	
E-mail Address: EricaM@kfoc.net		Approval Date: 08/26/2021	
Date: 8/26/21	Phone:918-491-4548		

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 30-025-47845	² Pool Code 98259	³ Pool Name Ojo Chiso; Bone Spring, Southwest
⁴ Property Code 316707	⁵ Property Name BELL LAKE UNIT NORTH	⁶ Well Number 228H
⁷ OGRID No. 12361	⁸ Operator Name KAISER-FRANCIS OIL CO.	⁹ Elevation 3474.9

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
J	6	23 S	34 E		2135	SOUTH	2455	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
B	31	22 S	34 E		103	NORTH	2241	EAST	LEA
¹² Dedicated Acres 480	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-14527-A						

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.

N89°32'19"E 2561.05 FT N89°32'08"E 2638.83 FT 2241' NW CORNER SEC. 31 LAT. = 32.3552911°N LONG. = 103.5170371°W NMSP EAST (FT) N = 493931.40 E = 752070.57 W/4 CORNER SEC. 31 LAT. = 32.3480359°N LONG. = 103.5170235°W NMSP EAST (FT) N = 491292.06 E = 752094.89 AS-DRILLED LAST TAKE POINT 229° FNL, 2287° FEL LAT. = 32.3546643°N LONG. = 103.5074444°W NW CORNER SEC. 6 LAT. = 32.3407765°N LONG. = 103.5170201°W NMSP EAST (FT) N = 488651.14 E = 752116.08 W/4 CORNER SEC. 6 LAT. = 32.3335215°N LONG. = 103.5170235°W NMSP EAST (FT) N = 486011.81 E = 752135.12 SW CORNER SEC. 6 LAT. = 32.3262657°N LONG. = 103.5170258°W NMSP EAST (FT) N = 483372.22 E = 752154.55 N89°32'55"E 2546.53 FT N/4 CORNER SEC. 6 LAT. = 32.3407780°N LONG. = 103.5087768°W NMSP EAST (FT) N = 488671.20 E = 754662.06 BELL LAKE UNIT NORTH 228H ELEV. = 3474.9' LAT. = 32.3321307°N (NAD27) LONG. = 103.5081774°W NMSP EAST (FT) N = 485526.78 E = 754871.43 S/4 CORNER SEC. 6 LAT. = 32.3262638°N LONG. = 103.5087792°W NMSP EAST (FT) N = 483391.04 E = 754701.98 AS-DRILLED KOP 2162° FSL, 2248° FEL LAT. = 32.3322036°N LONG. = 103.5075087°W SHL KOP FTPL 2135' S89°34'36"W 2547.96 FT S89°36'07"W 2641.15 FT	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. 7/15/21 Signature _____ Date _____ Erica Miles Printed Name _____ EricaM@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. MAY 18, 2021 Date of Survey _____ Signature and Seal of Professional Surveyor: Certificate Number: _____
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Intent ☐ As Drilled ☒

API # 30-025-47845		
Operator Name: KAISER-FRANCIS OIL CO.	Property Name: BELL LAKE UNIT NORTH	Well Number 228H

Kick Off Point (KOP)

UL J	Section 6	Township 23S	Range 34E	Lot	Feet 2162	From N/S SOUTH	Feet 2248	From E/W EAST	County LEA
Latitude 32.3322036					Longitude 103.5075087			NAD 27	

First Take Point (FTP)

UL G	Section 6	Township 23S	Range 34E	Lot	Feet 2540	From N/S NORTH	Feet 2187	From E/W EAST	County LEA
Latitude 32.3337974					Longitude 103.5073101			NAD 27	

Last Take Point (LTP)

UL B	Section 31	Township 22S	Range 34E	Lot	Feet 229	From N/S NORTH	Feet 2237	From E/W EAST	County LEA
Latitude 32.3546643					Longitude 103.5074444			NAD 27	

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 # 30-025-43033		
Operator Name: Kaiser-Francis Oil Company	Property Name: Bell Lake Unit North	Well Number 230H

KZ 06/29/2018

District I
1625 N. French Dr., Hobbs, NM 88240
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	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. 7/15/21 Signature _____ Date _____ Erica Miles Printed Name _____ EricaM@kfoc.net E-mail Address _____
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Intent ☐ As Drilled ☒

API # 30-025-47845		
Operator Name: KAISER-FRANCIS OIL CO.	Property Name: BELL LAKE UNIT NORTH	Well Number 228H

Kick Off Point (KOP)

UL J	Section 6	Township 23S	Range 34E	Lot	Feet 2162	From N/S SOUTH	Feet 2248	From E/W EAST	County LEA
Latitude 32.3323275					Longitude 103.5079895			NAD 83	

First Take Point (FTP)

UL G	Section 6	Township 23S	Range 34E	Lot	Feet 2540	From N/S NORTH	Feet 2187	From E/W EAST	County LEA
Latitude 32.3339212					Longitude 103.5077909			NAD 83	

Last Take Point (LTP)

UL B	Section 31	Township 22S	Range 34E	Lot	Feet 229	From N/S NORTH	Feet 2237	From E/W EAST	County LEA
Latitude 32.3547881					Longitude 103.5079258			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 # 30-025-43033		
Operator Name: Kaiser-Francis Oil Company	Property Name: Bell Lake Unit North	Well Number 230H

KZ 06/29/2018

Kaiser-Francis Oil Company

Kaiser-Francis Oil Co.

Lea County, NM (NAD 83)
SEC 6, T23S, R34E
BELL LAKE UNIT NORTH 228H

OH

Design: FINAL

Standard Survey Report

08 November, 2020



Kaiser-Francis Oil Company



CATHEDRAL

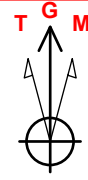
Project: Lea County, NM (NAD 83)
 Site: SEC 6, T23S, R34E
 Well: BELL LAKE UNIT NORTH 228H
 Wellbore: OH
 FINAL

WELL DETAILS: BELL LAKE UNIT NORTH 228H

KB 23.9' @ 3498.80usft (Cactus 171)
 Ground Level: 3474.90

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	485586.71	796054.60	32° 19' 56.116 N	103° 30' 31.169 W

US State Plane 1983
 New Mexico Eastern Zone

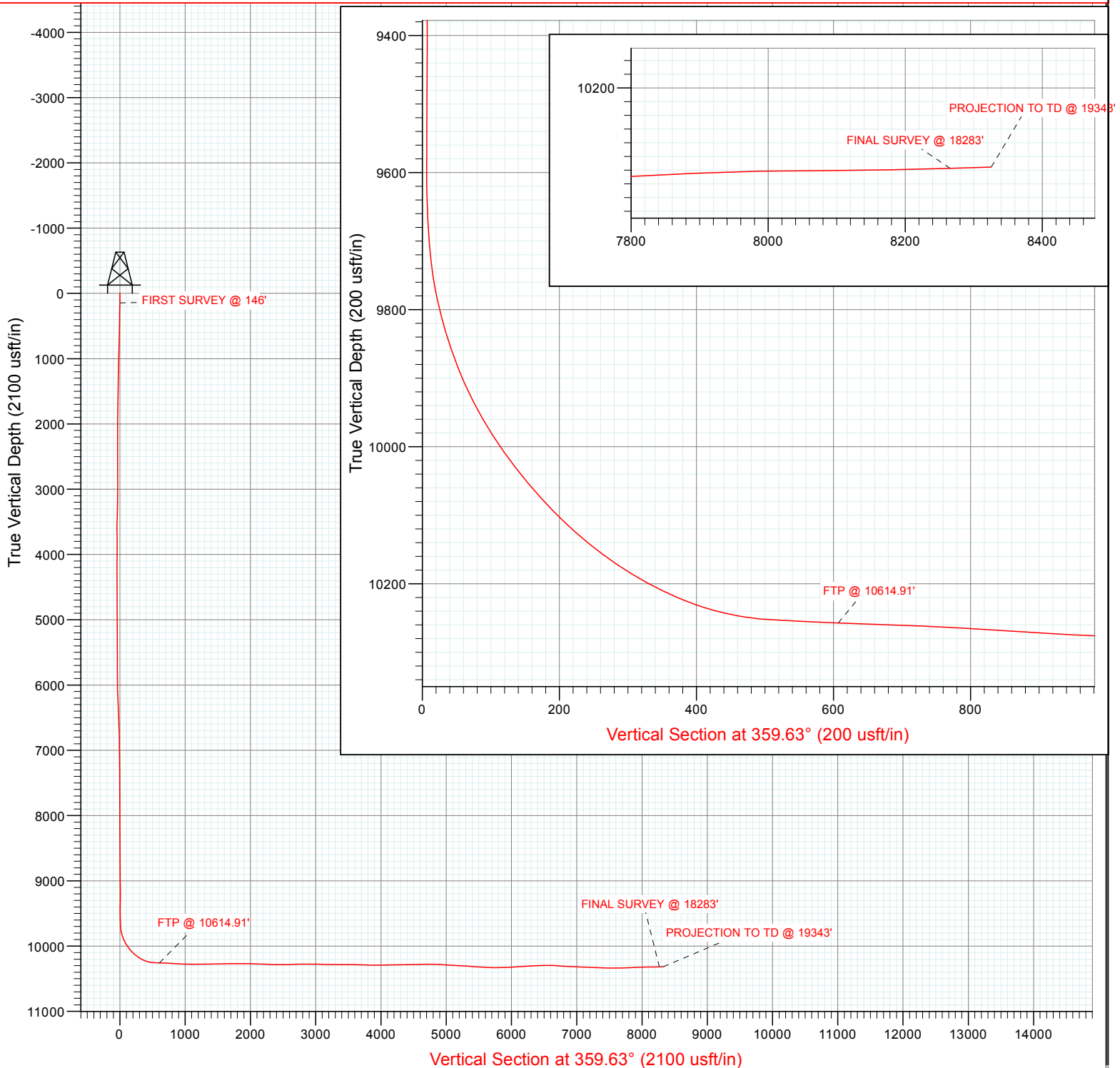


Total Azimuth to Grid North
 True North: -0.44°
 Magnetic North: 6.06°

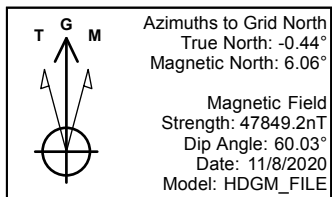
Magnetic Field
 Strength: 47849.2nT
 Dip Angle: 60.03°
 Date: 11/8/2020
 Model: HDGM_FILE

SURVEY DETAILS

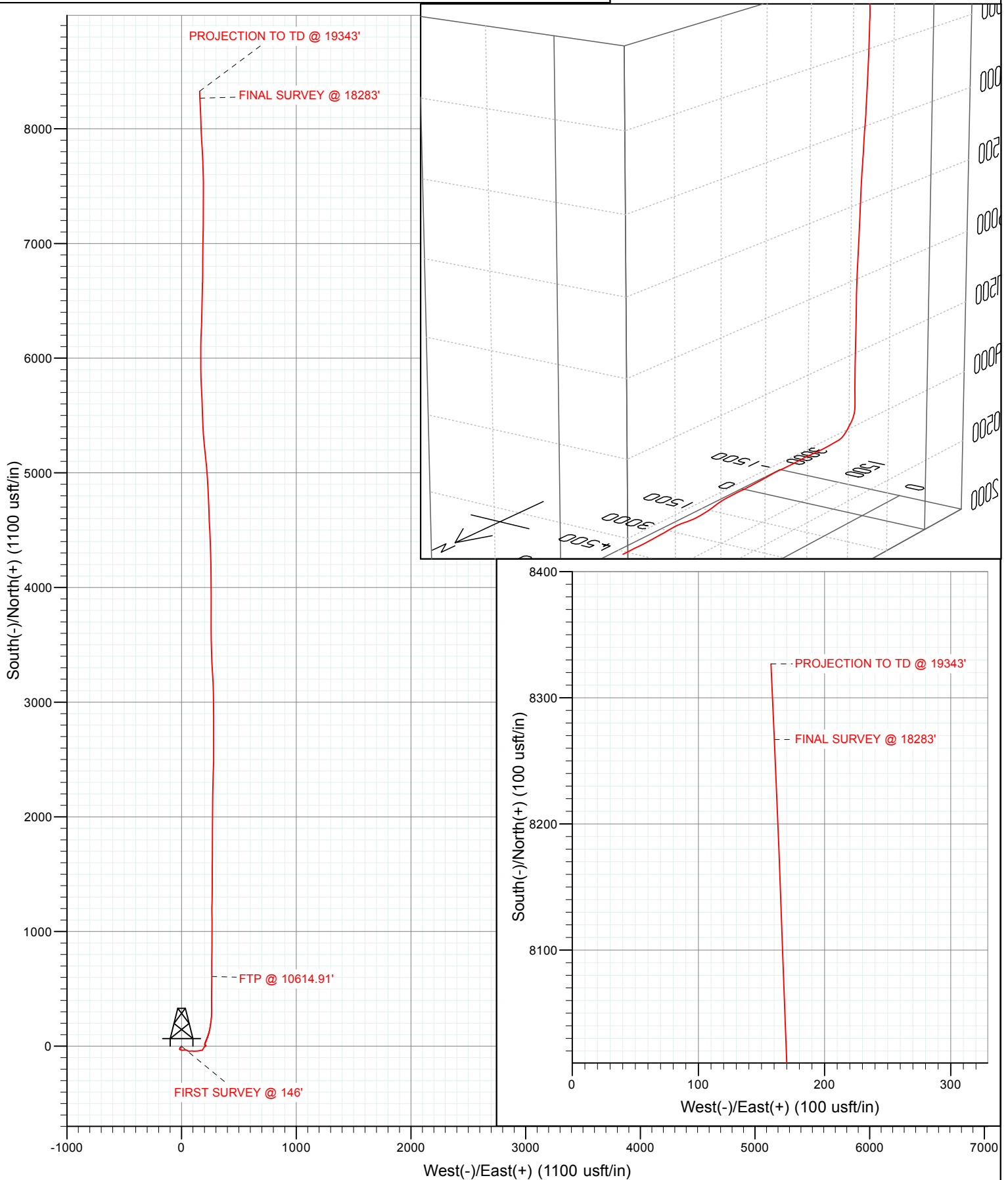
MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
146.00	0.86	224.52	145.99	-0.78	-0.77	-0.78	1.10	FIRST SURVEY @ 146'
10614.91	87.87	0.05	10257.26	608.53	263.24	606.82	913.91	FTP @ 10614.91'
18283.00	91.74	357.37	10317.52	8266.95	160.28	8265.74	8576.70	FINAL SURVEY @ 18283'
18343.00	91.74	357.37	10315.70	8326.86	157.53	8325.67	8636.67	PROJECTION TO TD @ 19343'



Kaiser-Francis Oil Company

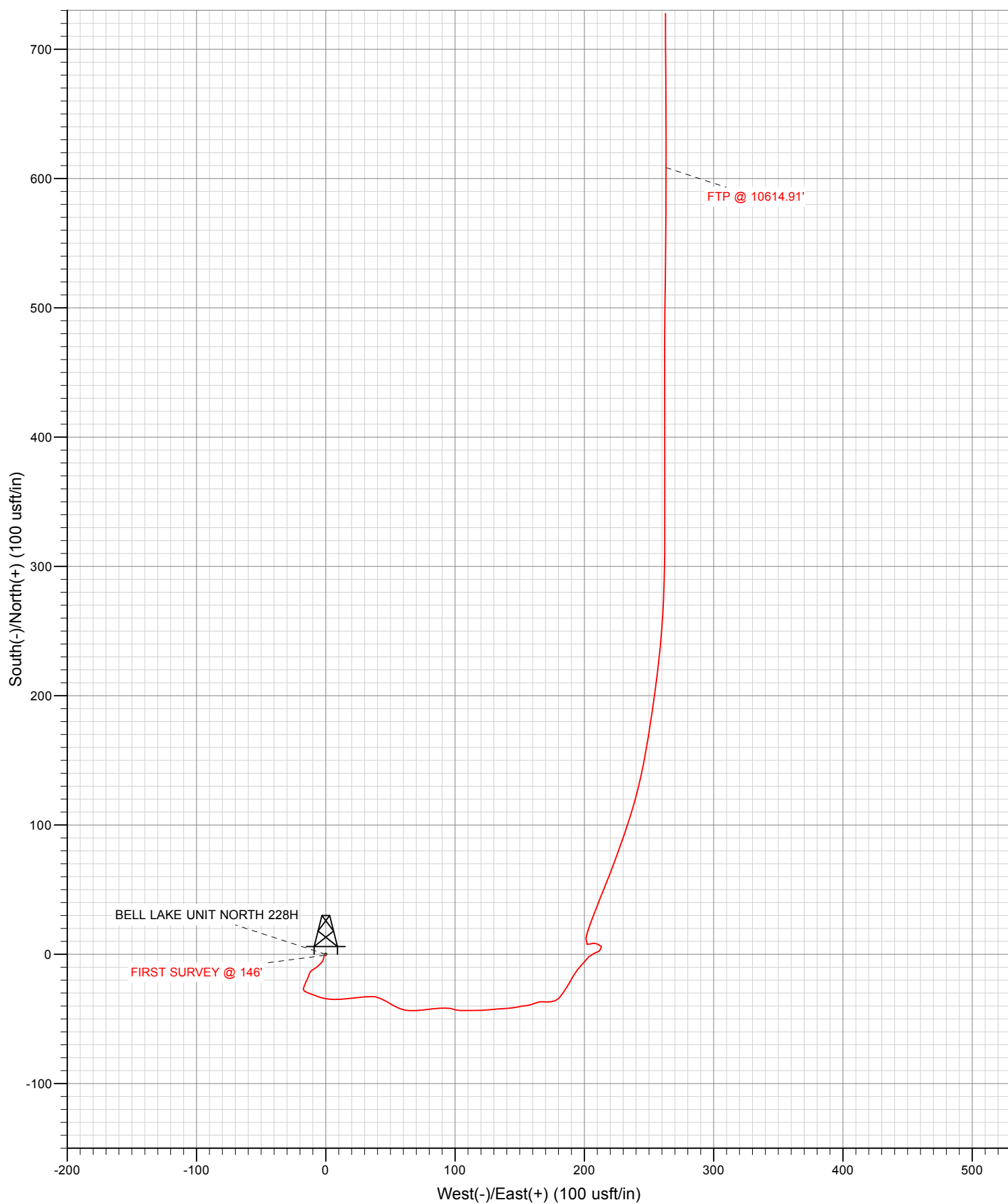


US State Plane 1983
New Mexico Eastern Zone
Project: Lea County, NM (NAD 83)
Site: SEC 6, T23S, R34E
Well: BELL LAKE UNIT NORTH 228H
Wellbore: OH
KB 23.9' @ 3498.80usft (Cactus 171)
Ground Elevation: 3474.90
FINAL



**Kaiser-Francis Oil Company**

US State Plane 1983
New Mexico Eastern Zone
Project: Lea County, NM (NAD 83)
Site: SEC 6, T23S, R34E
Well: BELL LAKE UNIT NORTH 228H
Wellbore: OH
KB 23.9' @ 3498.80usft (Cactus 171)
Ground Elevation: 3474.90
FINAL



Kaiser-Francis Oil Company

Survey Report



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well BELL LAKE UNIT NORTH 228H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB 23.9' @ 3498.80usft (Cactus 171)
Site:	SEC 6, T23S, R34E	MD Reference:	KB 23.9' @ 3498.80usft (Cactus 171)
Well:	BELL LAKE UNIT NORTH 228H	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 6, T23S, R34E			
Site Position:		Northing:	484,136.67 usft	Latitude:	32° 19' 41.731 N
From:	Lat/Long	Easting:	796,546.17 usft	Longitude:	103° 30' 25.571 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.44 °

Well	BELL LAKE UNIT NORTH 228H					
Well Position	+N/-S	0.00 usft	Northing:	485,586.71 usft	Latitude:	32° 19' 56.116 N
	+E/-W	0.00 usft	Easting:	796,054.60 usft	Longitude:	103° 30' 31.169 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,474.90 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	11/8/2020	6.50	60.03	47,849.20000000

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	359.63	

Survey Program	Date	11/8/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
146.00	18,343.00	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		
146.00	0.86	224.52	145.99	-0.78	-0.77	-0.78	0.59	0.59	FIRST SURVEY @ 146'	
240.00	0.93	192.05	239.98	-2.03	-1.42	-2.02	0.54	0.07		
334.00	1.20	194.58	333.97	-3.73	-1.83	-3.72	0.29	0.29		
427.00	1.24	212.37	426.95	-5.52	-2.61	-5.50	0.41	0.04		
520.00	1.79	226.31	519.91	-7.37	-4.20	-7.35	0.71	0.59		
614.00	1.57	228.92	613.87	-9.23	-6.23	-9.19	0.25	-0.23		
708.00	1.63	237.01	707.84	-10.81	-8.33	-10.75	0.25	0.06		
801.00	1.86	235.69	800.79	-12.38	-10.68	-12.31	0.25	0.25		
895.00	1.55	201.15	894.75	-14.43	-12.40	-14.35	1.12	-0.33		
988.00	1.75	200.39	987.72	-16.93	-13.35	-16.84	0.22	0.22		
1,082.00	1.57	201.75	1,081.68	-19.47	-14.33	-19.38	0.20	-0.19		
1,141.00	1.67	209.25	1,140.65	-20.97	-15.05	-20.87	0.40	0.17		

Kaiser-Francis Oil Company

Survey Report



Company: Kaiser-Francis Oil Co.
Project: Lea County, NM (NAD 83)
Site: SEC 6, T23S, R34E
Well: BELL LAKE UNIT NORTH 228H
Wellbore: OH
Design: FINAL

Local Co-ordinate Reference: Well BELL LAKE UNIT NORTH 228H
TVD Reference: KB 23.9' @ 3498.80usft (Cactus 171)
MD Reference: KB 23.9' @ 3498.80usft (Cactus 171)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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
1,279.00	1.48	197.57	1,278.60	-24.43	-16.57	-24.32	0.27	-0.14	
1,374.00	1.33	202.97	1,373.57	-26.61	-17.37	-26.50	0.21	-0.16	
1,469.00	1.67	122.02	1,468.55	-28.36	-16.62	-28.25	2.07	0.36	
1,564.00	2.34	110.86	1,563.49	-29.78	-13.64	-29.70	0.81	0.71	
1,659.00	1.83	110.71	1,658.43	-31.01	-10.41	-30.94	0.54	-0.54	
1,753.00	1.76	112.60	1,752.38	-32.10	-7.67	-32.05	0.10	-0.07	
1,848.00	1.44	107.19	1,847.34	-33.01	-5.18	-32.98	0.37	-0.34	
1,943.00	1.38	103.72	1,942.32	-33.63	-2.93	-33.61	0.11	-0.06	
2,038.00	1.45	101.57	2,037.29	-34.15	-0.64	-34.14	0.09	0.07	
2,133.00	1.47	96.14	2,132.26	-34.52	1.75	-34.53	0.15	0.02	
2,228.00	1.69	92.42	2,227.22	-34.71	4.36	-34.73	0.26	0.23	
2,322.00	1.61	94.31	2,321.18	-34.86	7.06	-34.91	0.10	-0.09	
2,417.00	1.63	85.75	2,416.14	-34.87	9.74	-34.93	0.26	0.02	
2,512.00	1.67	85.89	2,511.10	-34.67	12.47	-34.75	0.04	0.04	
2,607.00	1.89	84.46	2,606.06	-34.42	15.41	-34.51	0.24	0.23	
2,702.00	2.33	82.98	2,700.99	-34.03	18.88	-34.15	0.47	0.46	
2,797.00	2.70	84.76	2,795.90	-33.59	23.03	-33.74	0.40	0.39	
2,892.00	3.53	84.94	2,890.76	-33.13	28.17	-33.31	0.87	0.87	
2,986.00	4.01	86.53	2,984.56	-32.67	34.33	-32.89	0.52	0.51	
3,081.00	2.96	109.02	3,079.38	-33.27	39.97	-33.53	1.79	-1.11	
3,176.00	2.93	115.81	3,174.26	-35.13	44.47	-35.41	0.37	-0.03	
3,271.00	3.08	121.68	3,269.13	-37.52	48.83	-37.84	0.36	0.16	
3,366.00	3.16	117.30	3,363.99	-40.06	53.33	-40.41	0.26	0.08	
3,461.00	3.20	110.77	3,458.84	-42.21	58.13	-42.58	0.38	0.04	
3,556.00	3.64	94.92	3,553.67	-43.40	63.62	-43.81	1.09	0.46	
3,651.00	4.13	85.88	3,648.46	-43.42	70.03	-43.87	0.82	0.52	
3,745.00	4.38	84.08	3,742.20	-42.80	76.98	-43.30	0.30	0.27	
3,840.00	4.24	83.21	3,836.93	-42.02	84.08	-42.56	0.16	-0.15	
3,935.00	3.11	89.96	3,931.73	-41.60	90.14	-42.18	1.27	-1.19	
4,029.00	2.50	92.14	4,025.62	-41.67	94.74	-42.28	0.66	-0.65	
4,124.00	2.26	110.29	4,120.54	-42.40	98.57	-43.04	0.83	-0.25	
4,219.00	3.07	95.11	4,215.44	-43.28	102.86	-43.94	1.12	0.85	
4,314.00	4.04	89.06	4,310.25	-43.45	108.74	-44.15	1.09	1.02	
4,409.00	3.81	89.86	4,405.03	-43.38	115.24	-44.13	0.25	-0.24	
4,503.00	3.71	86.88	4,498.83	-43.21	121.40	-43.99	0.23	-0.11	
4,598.00	3.50	84.55	4,593.64	-42.77	127.35	-43.59	0.27	-0.22	
4,693.00	3.14	84.50	4,688.48	-42.24	132.83	-43.10	0.38	-0.38	
4,788.00	2.92	88.15	4,783.35	-41.92	137.84	-42.81	0.31	-0.23	
4,846.00	2.59	86.16	4,841.28	-41.78	140.62	-42.69	0.59	-0.57	
4,959.00	2.06	78.98	4,954.19	-41.22	145.16	-42.16	0.53	-0.47	
5,054.00	2.07	81.01	5,049.12	-40.63	148.54	-41.59	0.08	0.01	
5,149.00	2.02	79.66	5,144.06	-40.06	151.88	-41.04	0.07	-0.05	
5,243.00	1.74	84.02	5,238.01	-39.61	154.93	-40.61	0.33	-0.30	
5,338.00	1.71	75.70	5,332.97	-39.11	157.73	-40.13	0.27	-0.03	
5,433.00	1.74	72.27	5,427.93	-38.32	160.48	-39.36	0.11	0.03	
5,528.00	1.57	66.73	5,522.89	-37.37	163.05	-38.42	0.25	-0.18	
5,623.00	1.75	82.82	5,617.85	-36.67	165.69	-37.74	0.52	0.19	
5,718.00	1.56	94.80	5,712.81	-36.60	168.41	-37.69	0.41	-0.20	
5,812.00	1.58	96.05	5,806.77	-36.85	170.98	-37.95	0.04	0.02	
5,907.00	2.09	79.49	5,901.73	-36.67	173.98	-37.79	0.77	0.54	
6,002.00	2.08	75.67	5,996.66	-35.92	177.36	-37.07	0.15	-0.01	
6,097.00	2.48	42.58	6,091.59	-33.98	180.42	-35.15	1.42	0.42	
6,192.00	3.15	32.76	6,186.48	-30.28	183.22	-31.46	0.87	0.71	

Kaiser-Francis Oil Company

Survey Report



Company: Kaiser-Francis Oil Co.
Project: Lea County, NM (NAD 83)
Site: SEC 6, T23S, R34E
Well: BELL LAKE UNIT NORTH 228H
Wellbore: OH
Design: FINAL

Local Co-ordinate Reference: Well BELL LAKE UNIT NORTH 228H
TVD Reference: KB 23.9' @ 3498.80usft (Cactus 171)
MD Reference: KB 23.9' @ 3498.80usft (Cactus 171)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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
6,287.00	3.05	34.44	6,281.34	-26.00	186.06	-27.20	0.14	-0.11	
6,382.00	2.85	28.00	6,376.21	-21.83	188.60	-23.04	0.41	-0.21	
6,477.00	2.88	30.41	6,471.09	-17.68	190.92	-18.92	0.13	0.03	
6,571.00	1.94	34.82	6,565.01	-14.34	193.02	-15.59	1.02	-1.00	
6,666.00	1.51	37.97	6,659.97	-12.03	194.71	-13.29	0.46	-0.45	
6,761.00	1.56	37.81	6,754.93	-10.03	196.27	-11.29	0.05	0.05	
6,856.00	1.27	45.62	6,849.90	-8.27	197.82	-9.54	0.37	-0.31	
6,951.00	1.43	41.40	6,944.88	-6.64	199.35	-7.93	0.20	0.17	
7,045.00	1.29	40.13	7,038.85	-4.95	200.81	-6.25	0.15	-0.15	
7,140.00	0.79	42.65	7,133.83	-3.65	201.94	-4.96	0.53	-0.53	
7,235.00	0.66	41.60	7,228.83	-2.76	202.75	-4.07	0.14	-0.14	
7,330.00	0.62	41.85	7,323.82	-1.97	203.46	-3.28	0.04	-0.04	
7,424.00	0.34	52.30	7,417.82	-1.42	204.02	-2.74	0.31	-0.30	
7,519.00	0.14	108.44	7,512.82	-1.29	204.35	-2.61	0.30	-0.21	
7,614.00	0.39	61.95	7,607.82	-1.17	204.75	-2.49	0.33	0.26	
7,709.00	0.06	39.18	7,702.81	-0.98	205.06	-2.30	0.35	-0.35	
7,804.00	0.12	25.74	7,797.81	-0.85	205.14	-2.18	0.07	0.06	
7,898.00	0.51	54.24	7,891.81	-0.52	205.52	-1.85	0.43	0.41	
7,992.00	0.37	58.67	7,985.81	-0.12	206.12	-1.45	0.15	-0.15	
8,087.00	0.53	65.76	8,080.81	0.22	206.78	-1.11	0.18	0.17	
8,182.00	0.38	52.18	8,175.80	0.60	207.43	-0.74	0.19	-0.16	
8,276.00	0.48	62.04	8,269.80	0.97	208.03	-0.37	0.13	0.11	
8,371.00	0.61	71.84	8,364.80	1.32	208.86	-0.03	0.17	0.14	
8,466.00	0.77	63.75	8,459.79	1.76	209.91	0.40	0.20	0.17	
8,561.00	0.81	61.56	8,554.78	2.36	211.07	1.00	0.05	0.04	
8,656.00	0.60	38.93	8,649.77	3.07	211.98	1.70	0.36	-0.22	
8,751.00	0.67	19.10	8,744.77	3.98	212.47	2.61	0.24	0.07	
8,846.00	0.60	21.47	8,839.76	4.97	212.83	3.59	0.08	-0.07	
8,941.00	0.48	21.21	8,934.76	5.80	213.16	4.42	0.13	-0.13	
9,036.00	0.28	309.28	9,029.76	6.32	213.12	4.94	0.50	-0.21	
9,131.00	0.67	291.45	9,124.75	6.67	212.43	5.30	0.43	0.41	
9,226.00	1.00	301.99	9,219.74	7.31	211.21	5.95	0.38	0.35	
9,321.00	1.34	294.44	9,314.72	8.21	209.49	6.86	0.39	0.36	
9,416.00	1.47	264.04	9,409.70	8.54	207.27	7.20	0.79	0.14	
9,511.00	1.81	257.77	9,504.66	8.10	204.59	6.78	0.40	0.36	
9,605.00	1.27	266.70	9,598.62	7.72	202.10	6.42	0.63	-0.57	
9,719.00	4.80	6.70	9,712.49	12.39	201.40	11.09	4.54	3.10	
9,814.00	15.38	20.92	9,805.89	28.15	206.37	26.82	11.36	11.14	
9,909.00	24.00	21.88	9,895.26	57.90	218.09	56.49	9.08	9.07	
10,004.00	33.93	18.48	9,978.27	101.09	233.74	99.58	10.59	10.45	
10,099.00	40.29	10.01	10,054.05	156.58	247.50	154.98	8.58	6.69	
10,194.00	48.28	6.84	10,122.01	222.14	257.08	220.48	8.73	8.41	
10,289.00	57.28	0.98	10,179.44	297.50	262.00	295.80	10.66	9.47	
10,384.00	67.72	359.42	10,223.25	381.64	262.24	379.94	11.09	10.99	
10,478.00	81.07	0.42	10,248.48	471.97	262.14	470.27	14.24	14.20	
10,514.00	86.50	0.79	10,252.38	507.75	262.52	506.04	15.12	15.08	
10,609.00	87.87	0.08	10,257.04	602.63	263.24	600.91	1.62	1.44	
10,614.91	87.87	0.05	10,257.26	608.53	263.24	606.82	0.54	0.05	FTP @ 10614.91'
10,704.00	87.92	359.57	10,260.53	697.56	262.95	695.85	0.54	0.05	
10,799.00	86.78	1.40	10,264.92	792.45	263.75	790.73	2.27	-1.20	
10,894.00	86.15	0.78	10,270.78	887.25	265.55	885.52	0.93	-0.66	
10,989.00	87.62	359.21	10,275.94	982.11	265.55	980.37	2.26	1.55	
11,083.00	90.48	359.37	10,277.50	1,076.08	264.38	1,074.35	3.05	3.04	

Kaiser-Francis Oil Company

Survey Report



Company: Kaiser-Francis Oil Co.
Project: Lea County, NM (NAD 83)
Site: SEC 6, T23S, R34E
Well: BELL LAKE UNIT NORTH 228H
Wellbore: OH
Design: FINAL

Local Co-ordinate Reference: Well BELL LAKE UNIT NORTH 228H
TVD Reference: KB 23.9' @ 3498.80usft (Cactus 171)
MD Reference: KB 23.9' @ 3498.80usft (Cactus 171)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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
11,178.00	90.56	0.57	10,276.64	1,171.07	264.33	1,169.34	1.27	0.08	
11,273.00	89.24	0.86	10,276.81	1,266.06	265.52	1,264.32	1.42	-1.39	
11,368.00	90.39	0.95	10,277.11	1,361.05	267.02	1,359.29	1.21	1.21	
11,463.00	91.26	0.49	10,275.75	1,456.03	268.21	1,454.27	1.04	0.92	
11,557.00	92.16	359.47	10,272.94	1,549.98	268.18	1,548.22	1.45	0.96	
11,652.00	91.54	0.70	10,269.87	1,644.93	268.32	1,643.16	1.45	-0.65	
11,747.00	90.90	0.50	10,267.85	1,739.90	269.31	1,738.13	0.71	-0.67	
11,841.00	88.51	0.45	10,268.33	1,833.89	270.09	1,832.11	2.54	-2.54	
11,936.00	88.77	359.76	10,270.59	1,928.87	270.27	1,927.08	0.78	0.27	
12,031.00	88.79	0.19	10,272.61	2,023.84	270.23	2,022.06	0.45	0.02	
12,126.00	88.71	0.31	10,274.68	2,118.82	270.64	2,117.03	0.15	-0.08	
12,221.00	88.01	0.74	10,277.40	2,213.78	271.51	2,211.98	0.86	-0.74	
12,315.00	88.01	2.17	10,280.67	2,307.69	273.90	2,305.87	1.52	0.00	
12,410.00	89.61	2.04	10,282.64	2,402.60	277.38	2,400.76	1.69	1.68	
12,505.00	89.75	0.81	10,283.17	2,497.57	279.75	2,495.71	1.30	0.15	
12,600.00	91.43	359.66	10,282.19	2,592.56	280.14	2,590.69	2.14	1.77	
12,695.00	92.95	0.04	10,278.56	2,687.48	279.89	2,685.62	1.65	1.60	
12,790.00	90.25	359.98	10,275.91	2,782.44	279.90	2,780.57	2.84	-2.84	
12,884.00	89.41	359.53	10,276.19	2,876.44	279.50	2,874.57	1.01	-0.89	
12,979.00	89.24	359.08	10,277.31	2,971.42	278.35	2,969.56	0.51	-0.18	
13,074.00	88.54	359.56	10,279.15	3,066.40	277.22	3,064.54	0.89	-0.74	
13,169.00	88.83	357.73	10,281.33	3,161.34	274.98	3,159.50	1.95	0.31	
13,264.00	89.64	356.64	10,282.60	3,256.21	270.31	3,254.40	1.43	0.85	
13,359.00	90.73	356.77	10,282.29	3,351.06	264.85	3,349.28	1.16	1.15	
13,453.00	89.64	358.74	10,281.99	3,444.98	261.17	3,443.22	2.40	-1.16	
13,548.00	89.07	358.71	10,283.06	3,539.95	259.06	3,538.20	0.60	-0.60	
13,643.00	87.90	359.56	10,285.57	3,634.90	257.62	3,633.16	1.52	-1.23	
13,738.00	88.27	1.13	10,288.74	3,729.84	258.19	3,728.10	1.70	0.39	
13,833.00	89.49	359.77	10,290.60	3,824.82	258.94	3,823.07	1.92	1.28	
13,928.00	89.86	359.72	10,291.14	3,919.81	258.52	3,918.06	0.39	0.39	
14,022.00	90.25	358.74	10,291.05	4,013.81	257.25	4,012.06	1.12	0.41	
14,117.00	92.16	359.72	10,289.05	4,108.77	255.98	4,107.03	2.26	2.01	
14,212.00	91.04	359.27	10,286.40	4,203.73	255.14	4,201.99	1.27	-1.18	
14,307.00	90.39	358.45	10,285.21	4,298.70	253.25	4,296.97	1.10	-0.68	
14,402.00	90.59	358.05	10,284.40	4,393.65	250.35	4,391.94	0.47	0.21	
14,497.00	91.60	357.32	10,282.59	4,488.56	246.51	4,486.87	1.31	1.06	
14,592.00	90.45	357.10	10,280.89	4,583.43	241.89	4,581.77	1.23	-1.21	
14,686.00	91.01	357.98	10,279.69	4,677.33	237.85	4,675.70	1.11	0.60	
14,781.00	90.11	357.77	10,278.76	4,772.26	234.33	4,770.65	0.97	-0.95	
14,876.00	87.56	357.50	10,280.69	4,867.15	230.41	4,865.56	2.70	-2.68	
14,971.00	87.08	355.38	10,285.13	4,961.86	224.52	4,960.30	2.29	-0.51	
15,065.00	86.61	355.17	10,290.31	5,055.40	216.79	5,053.89	0.55	-0.50	
15,160.00	85.85	354.23	10,296.55	5,149.78	208.03	5,148.33	1.27	-0.80	
15,255.00	86.80	354.06	10,302.64	5,244.09	198.36	5,242.70	1.02	1.00	
15,350.00	85.90	355.93	10,308.69	5,338.53	190.09	5,337.19	2.18	-0.95	
15,445.00	85.63	358.43	10,315.71	5,433.15	185.43	5,431.84	2.64	-0.28	
15,540.00	87.45	357.63	10,321.44	5,527.92	182.17	5,526.63	2.09	1.92	
15,634.00	88.18	358.16	10,325.02	5,621.78	178.72	5,620.51	0.96	0.78	
15,729.00	88.91	356.96	10,327.44	5,716.67	174.68	5,715.42	1.48	0.77	
15,824.00	89.52	357.63	10,328.74	5,811.55	170.19	5,810.33	0.95	0.64	
15,919.00	91.51	358.95	10,327.88	5,906.50	167.36	5,905.29	2.51	2.09	
16,014.00	93.14	0.90	10,324.03	6,001.41	167.23	6,000.21	2.67	1.72	
16,108.00	94.07	359.95	10,318.12	6,095.22	167.93	6,094.01	1.41	0.99	

Kaiser-Francis Oil Company

Survey Report



Company: Kaiser-Francis Oil Co.
Project: Lea County, NM (NAD 83)
Site: SEC 6, T23S, R34E
Well: BELL LAKE UNIT NORTH 228H
Wellbore: OH
Design: FINAL

Local Co-ordinate Reference: Well BELL LAKE UNIT NORTH 228H
TVD Reference: KB 23.9' @ 3498.80usft (Cactus 171)
MD Reference: KB 23.9' @ 3498.80usft (Cactus 171)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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
16,203.00	93.65	2.64	10,311.72	6,189.97	170.07	6,188.74	2.86	-0.44	
16,298.00	93.61	2.22	10,305.71	6,284.70	174.09	6,283.44	0.44	-0.04	
16,393.00	93.28	1.07	10,300.00	6,379.48	176.81	6,378.21	1.26	-0.35	
16,488.00	93.25	1.09	10,294.59	6,474.31	178.60	6,473.02	0.04	-0.03	
16,582.00	88.57	1.17	10,293.10	6,568.26	180.46	6,566.95	4.98	-4.98	
16,677.00	85.39	1.51	10,298.10	6,663.09	182.67	6,661.77	3.37	-3.35	
16,772.00	85.14	0.02	10,305.94	6,757.75	183.94	6,756.42	1.59	-0.26	
16,867.00	87.36	0.85	10,312.16	6,852.54	184.66	6,851.20	2.49	2.34	
16,962.00	88.66	0.51	10,315.46	6,947.47	185.78	6,946.13	1.41	1.37	
17,057.00	87.73	0.71	10,318.45	7,042.42	186.80	7,041.06	1.00	-0.98	
17,152.00	87.84	0.91	10,322.12	7,137.34	188.14	7,135.97	0.24	0.12	
17,247.00	87.76	0.88	10,325.77	7,232.26	189.62	7,230.88	0.09	-0.08	
17,341.00	87.25	0.65	10,329.86	7,326.16	190.87	7,324.77	0.60	-0.54	
17,436.00	87.22	0.66	10,334.44	7,421.04	191.96	7,419.65	0.03	-0.03	
17,531.00	89.10	358.33	10,337.49	7,515.98	191.12	7,514.59	3.15	1.98	
17,626.00	91.40	358.13	10,337.08	7,610.92	188.19	7,609.55	2.43	2.42	
17,721.00	92.61	357.49	10,333.75	7,705.79	184.56	7,704.44	1.44	1.27	
17,816.00	92.69	357.14	10,329.36	7,800.59	180.11	7,799.26	0.38	0.08	
17,911.00	92.92	356.71	10,324.71	7,895.34	175.02	7,894.04	0.51	0.24	
18,005.00	90.70	358.03	10,321.74	7,989.18	170.71	7,987.92	2.75	-2.36	
18,100.00	90.34	357.96	10,320.88	8,084.12	167.39	8,082.87	0.39	-0.38	
18,195.00	91.09	357.87	10,319.70	8,179.05	163.93	8,177.82	0.80	0.79	
18,283.00	91.74	357.37	10,317.52	8,266.95	160.28	8,265.74	0.93	0.74	FINAL SURVEY @ 18283'
18,343.00	91.74	357.37	10,315.70	8,326.86	157.53	8,325.67	0.00	0.00	PROJECTION TO TD @ 19343'

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
146.00	145.99	-0.78	-0.77	FIRST SURVEY @ 146'
10,614.91	10,257.26	608.53	263.24	FTP @ 10614.91'
18,283.00	10,317.52	8,266.95	160.28	FINAL SURVEY @ 18283'
18,343.00	10,315.70	8,326.86	157.53	PROJECTION TO TD @ 19343'

Checked By: _____ Approved By: _____ Date: _____

Kaiser-Francis Oil Company

Kaiser-Francis Oil Co.

Lea County, NM (NAD 83)
SEC 6, T23S, R34E
BELL LAKE UNIT NORTH 228H

OH

Design: FINAL

Survey Report - Geographic

08 November, 2020



Kaiser-Francis Oil Company

Survey Report - Geographic



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well BELL LAKE UNIT NORTH 228H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB 23.9' @ 3498.80usft (Cactus 171)
Site:	SEC 6, T23S, R34E	MD Reference:	KB 23.9' @ 3498.80usft (Cactus 171)
Well:	BELL LAKE UNIT NORTH 228H	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 6, T23S, R34E		
Site Position:		Northing:	484,136.67 usft
From:	Lat/Long	Easting:	796,546.16 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 19' 41.731 N
		Longitude:	103° 30' 25.571 W
		Grid Convergence:	0.44 °

Well	BELL LAKE UNIT NORTH 228H		
Well Position	+N/-S	0.00 usft	Northing: 485,586.71 usft
	+E/-W	0.00 usft	Easting: 796,054.60 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 19' 56.116 N
		Longitude:	103° 30' 31.169 W
		Ground Level:	3,474.90 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	HDGM_FILE	11/8/2020	6.50
			Dip Angle (°) 60.03
			Field Strength (nT) 47,849.20000000

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)
	0.00	0.00	0.00
			Direction (°) 359.63

Survey Program	Date	11/8/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
146.00	18,343.00	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	485,586.71	796,054.60	32° 19' 56.116 N	103° 30' 31.169 W
146.00	0.86	224.52	145.99	-0.78	-0.77	485,585.93	796,053.83	32° 19' 56.108 N	103° 30' 31.178 W
FIRST SURVEY @ 146'									
240.00	0.93	192.05	239.98	-2.03	-1.42	485,584.68	796,053.18	32° 19' 56.096 N	103° 30' 31.186 W
334.00	1.20	194.58	333.97	-3.73	-1.83	485,582.98	796,052.77	32° 19' 56.079 N	103° 30' 31.191 W
427.00	1.24	212.37	426.95	-5.52	-2.61	485,581.19	796,051.98	32° 19' 56.062 N	103° 30' 31.200 W
520.00	1.79	226.31	519.91	-7.37	-4.20	485,579.34	796,050.40	32° 19' 56.043 N	103° 30' 31.219 W
614.00	1.57	228.92	613.87	-9.23	-6.23	485,577.48	796,048.36	32° 19' 56.025 N	103° 30' 31.243 W
708.00	1.63	237.01	707.84	-10.81	-8.33	485,575.90	796,046.27	32° 19' 56.010 N	103° 30' 31.267 W
801.00	1.86	235.69	800.79	-12.38	-10.68	485,574.33	796,043.92	32° 19' 55.994 N	103° 30' 31.295 W
895.00	1.55	201.15	894.75	-14.43	-12.40	485,572.29	796,042.20	32° 19' 55.974 N	103° 30' 31.315 W
988.00	1.75	200.39	987.72	-16.93	-13.35	485,569.78	796,041.25	32° 19' 55.950 N	103° 30' 31.326 W

Kaiser-Francis Oil Company

Survey Report - Geographic



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well BELL LAKE UNIT NORTH 228H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB 23.9' @ 3498.80usft (Cactus 171)
Site:	SEC 6, T23S, R34E	MD Reference:	KB 23.9' @ 3498.80usft (Cactus 171)
Well:	BELL LAKE UNIT NORTH 228H	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
1,082.00	1.57	201.75	1,081.68	-19.47	-14.33	485,567.24	796,040.27	32° 19' 55.924 N	103° 30' 31.338 W
1,141.00	1.67	209.25	1,140.65	-20.97	-15.05	485,565.74	796,039.55	32° 19' 55.910 N	103° 30' 31.347 W
1,279.00	1.48	197.57	1,278.60	-24.43	-16.57	485,562.29	796,038.03	32° 19' 55.876 N	103° 30' 31.365 W
1,374.00	1.33	202.97	1,373.57	-26.61	-17.37	485,560.10	796,037.23	32° 19' 55.854 N	103° 30' 31.374 W
1,469.00	1.67	122.02	1,468.55	-28.36	-16.62	485,558.35	796,037.97	32° 19' 55.837 N	103° 30' 31.366 W
1,564.00	2.34	110.86	1,563.49	-29.78	-13.64	485,556.93	796,040.96	32° 19' 55.822 N	103° 30' 31.331 W
1,659.00	1.83	110.71	1,658.43	-31.01	-10.41	485,555.70	796,044.19	32° 19' 55.810 N	103° 30' 31.293 W
1,753.00	1.76	112.60	1,752.38	-32.10	-7.67	485,554.61	796,046.93	32° 19' 55.799 N	103° 30' 31.262 W
1,848.00	1.44	107.19	1,847.34	-33.01	-5.18	485,553.70	796,049.41	32° 19' 55.790 N	103° 30' 31.233 W
1,943.00	1.38	103.72	1,942.32	-33.63	-2.93	485,553.08	796,051.67	32° 19' 55.783 N	103° 30' 31.207 W
2,038.00	1.45	101.57	2,037.29	-34.15	-0.64	485,552.56	796,053.95	32° 19' 55.778 N	103° 30' 31.180 W
2,133.00	1.47	96.14	2,132.26	-34.52	1.75	485,552.19	796,056.34	32° 19' 55.774 N	103° 30' 31.152 W
2,228.00	1.69	92.42	2,227.22	-34.71	4.36	485,552.00	796,058.96	32° 19' 55.772 N	103° 30' 31.122 W
2,322.00	1.61	94.31	2,321.18	-34.86	7.06	485,551.85	796,061.66	32° 19' 55.771 N	103° 30' 31.090 W
2,417.00	1.63	85.75	2,416.14	-34.87	9.74	485,551.85	796,064.34	32° 19' 55.770 N	103° 30' 31.059 W
2,512.00	1.67	85.89	2,511.10	-34.67	12.47	485,552.05	796,067.06	32° 19' 55.772 N	103° 30' 31.027 W
2,607.00	1.89	84.46	2,606.06	-34.42	15.41	485,552.30	796,070.00	32° 19' 55.774 N	103° 30' 30.993 W
2,702.00	2.33	82.98	2,700.99	-34.03	18.88	485,552.68	796,073.48	32° 19' 55.778 N	103° 30' 30.952 W
2,797.00	2.70	84.76	2,795.90	-33.59	23.03	485,553.12	796,077.62	32° 19' 55.782 N	103° 30' 30.904 W
2,892.00	3.53	84.94	2,890.76	-33.13	28.17	485,553.59	796,082.77	32° 19' 55.786 N	103° 30' 30.844 W
2,986.00	4.01	86.53	2,984.56	-32.67	34.33	485,554.04	796,088.93	32° 19' 55.790 N	103° 30' 30.772 W
3,081.00	2.96	109.02	3,079.38	-33.27	39.97	485,553.44	796,094.56	32° 19' 55.784 N	103° 30' 30.707 W
3,176.00	2.93	115.81	3,174.26	-35.13	44.47	485,551.58	796,099.07	32° 19' 55.765 N	103° 30' 30.654 W
3,271.00	3.08	121.68	3,269.13	-37.52	48.83	485,549.19	796,103.43	32° 19' 55.741 N	103° 30' 30.604 W
3,366.00	3.16	117.30	3,363.99	-40.06	53.33	485,546.65	796,107.92	32° 19' 55.716 N	103° 30' 30.551 W
3,461.00	3.20	110.77	3,458.84	-42.21	58.13	485,544.50	796,112.73	32° 19' 55.694 N	103° 30' 30.496 W
3,556.00	3.64	94.92	3,553.67	-43.40	63.62	485,543.31	796,118.21	32° 19' 55.682 N	103° 30' 30.432 W
3,651.00	4.13	85.88	3,648.46	-43.42	70.03	485,543.29	796,124.63	32° 19' 55.681 N	103° 30' 30.357 W
3,745.00	4.38	84.08	3,742.20	-42.80	76.98	485,543.91	796,131.58	32° 19' 55.687 N	103° 30' 30.276 W
3,840.00	4.24	83.21	3,836.93	-42.02	84.08	485,544.70	796,138.67	32° 19' 55.694 N	103° 30' 30.193 W
3,935.00	3.11	89.96	3,931.73	-41.60	90.14	485,545.11	796,144.74	32° 19' 55.698 N	103° 30' 30.123 W
4,029.00	2.50	92.14	4,025.62	-41.67	94.74	485,545.04	796,149.34	32° 19' 55.696 N	103° 30' 30.069 W
4,124.00	2.26	110.29	4,120.54	-42.40	98.57	485,544.31	796,153.16	32° 19' 55.689 N	103° 30' 30.024 W
4,219.00	3.07	95.11	4,215.44	-43.28	102.86	485,543.43	796,157.45	32° 19' 55.680 N	103° 30' 29.975 W
4,314.00	4.04	89.06	4,310.25	-43.45	108.74	485,543.26	796,163.33	32° 19' 55.678 N	103° 30' 29.906 W
4,409.00	3.81	89.86	4,405.03	-43.38	115.24	485,543.33	796,169.84	32° 19' 55.678 N	103° 30' 29.830 W
4,503.00	3.71	86.88	4,498.83	-43.21	121.40	485,543.50	796,176.00	32° 19' 55.679 N	103° 30' 29.758 W
4,598.00	3.50	84.55	4,593.64	-42.77	127.35	485,543.94	796,181.95	32° 19' 55.683 N	103° 30' 29.689 W
4,693.00	3.14	84.50	4,688.48	-42.24	132.83	485,544.47	796,187.43	32° 19' 55.688 N	103° 30' 29.625 W
4,788.00	2.92	88.15	4,783.35	-41.92	137.84	485,544.79	796,192.44	32° 19' 55.691 N	103° 30' 29.567 W
4,846.00	2.59	86.16	4,841.28	-41.78	140.62	485,544.93	796,195.22	32° 19' 55.692 N	103° 30' 29.534 W
4,959.00	2.06	78.98	4,954.19	-41.22	145.16	485,545.49	796,199.76	32° 19' 55.697 N	103° 30' 29.481 W
5,054.00	2.07	81.01	5,049.12	-40.63	148.54	485,546.08	796,203.13	32° 19' 55.703 N	103° 30' 29.442 W
5,149.00	2.02	79.66	5,144.06	-40.06	151.88	485,546.65	796,206.48	32° 19' 55.708 N	103° 30' 29.403 W
5,243.00	1.74	84.02	5,238.01	-39.61	154.93	485,547.10	796,209.52	32° 19' 55.712 N	103° 30' 29.367 W
5,338.00	1.71	75.70	5,332.97	-39.11	157.73	485,547.60	796,212.33	32° 19' 55.717 N	103° 30' 29.335 W
5,433.00	1.74	72.27	5,427.93	-38.32	160.48	485,548.39	796,215.08	32° 19' 55.725 N	103° 30' 29.302 W
5,528.00	1.57	66.73	5,522.89	-37.37	163.05	485,549.34	796,217.65	32° 19' 55.734 N	103° 30' 29.272 W
5,623.00	1.75	82.82	5,617.85	-36.67	165.69	485,550.04	796,220.28	32° 19' 55.741 N	103° 30' 29.242 W
5,718.00	1.56	94.80	5,712.81	-36.60	168.41	485,550.11	796,223.01	32° 19' 55.741 N	103° 30' 29.210 W
5,812.00	1.58	96.05	5,806.77	-36.85	170.98	485,549.87	796,225.58	32° 19' 55.738 N	103° 30' 29.180 W
5,907.00	2.09	79.49	5,901.73	-36.67	173.98	485,550.04	796,228.58	32° 19' 55.740 N	103° 30' 29.145 W
6,002.00	2.08	75.67	5,996.66	-35.92	177.36	485,550.79	796,231.95	32° 19' 55.747 N	103° 30' 29.106 W
6,097.00	2.48	42.58	6,091.59	-33.98	180.42	485,552.73	796,235.02	32° 19' 55.766 N	103° 30' 29.070 W
6,192.00	3.15	32.76	6,186.48	-30.28	183.22	485,556.44	796,237.82	32° 19' 55.803 N	103° 30' 29.037 W

Kaiser-Francis Oil Company

Survey Report - Geographic



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well BELL LAKE UNIT NORTH 228H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB 23.9' @ 3498.80usft (Cactus 171)
Site:	SEC 6, T23S, R34E	MD Reference:	KB 23.9' @ 3498.80usft (Cactus 171)
Well:	BELL LAKE UNIT NORTH 228H	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
6,287.00	3.05	34.44	6,281.34	-26.00	186.06	485,560.71	796,240.66	32° 19' 55.845 N	103° 30' 29.003 W
6,382.00	2.85	28.00	6,376.21	-21.83	188.60	485,564.88	796,243.20	32° 19' 55.886 N	103° 30' 28.973 W
6,477.00	2.88	30.41	6,471.09	-17.68	190.92	485,569.03	796,245.52	32° 19' 55.927 N	103° 30' 28.946 W
6,571.00	1.94	34.82	6,565.01	-14.34	193.02	485,572.37	796,247.62	32° 19' 55.959 N	103° 30' 28.921 W
6,666.00	1.51	37.97	6,659.97	-12.03	194.71	485,574.68	796,249.31	32° 19' 55.982 N	103° 30' 28.901 W
6,761.00	1.56	37.81	6,754.93	-10.03	196.27	485,576.69	796,250.87	32° 19' 56.002 N	103° 30' 28.883 W
6,856.00	1.27	45.62	6,849.90	-8.27	197.82	485,578.44	796,252.42	32° 19' 56.019 N	103° 30' 28.865 W
6,951.00	1.43	41.40	6,944.88	-6.64	199.35	485,580.07	796,253.95	32° 19' 56.035 N	103° 30' 28.847 W
7,045.00	1.29	40.13	7,038.85	-4.95	200.81	485,581.76	796,255.41	32° 19' 56.052 N	103° 30' 28.829 W
7,140.00	0.79	42.65	7,133.83	-3.65	201.94	485,583.06	796,256.54	32° 19' 56.065 N	103° 30' 28.816 W
7,235.00	0.66	41.60	7,228.83	-2.76	202.75	485,583.95	796,257.35	32° 19' 56.073 N	103° 30' 28.807 W
7,330.00	0.62	41.85	7,323.82	-1.97	203.46	485,584.74	796,258.06	32° 19' 56.081 N	103° 30' 28.798 W
7,424.00	0.34	52.30	7,417.82	-1.42	204.02	485,585.29	796,258.62	32° 19' 56.086 N	103° 30' 28.792 W
7,519.00	0.14	108.44	7,512.82	-1.29	204.35	485,585.43	796,258.95	32° 19' 56.088 N	103° 30' 28.788 W
7,614.00	0.39	61.95	7,607.82	-1.17	204.75	485,585.54	796,259.34	32° 19' 56.089 N	103° 30' 28.783 W
7,709.00	0.06	39.18	7,702.81	-0.98	205.06	485,585.73	796,259.66	32° 19' 56.091 N	103° 30' 28.780 W
7,804.00	0.12	25.74	7,797.81	-0.85	205.14	485,585.86	796,259.74	32° 19' 56.092 N	103° 30' 28.779 W
7,898.00	0.51	54.24	7,891.81	-0.52	205.52	485,586.19	796,260.12	32° 19' 56.095 N	103° 30' 28.774 W
7,992.00	0.37	58.67	7,985.81	-0.12	206.12	485,586.59	796,260.72	32° 19' 56.099 N	103° 30' 28.767 W
8,087.00	0.53	65.76	8,080.81	0.22	206.78	485,586.93	796,261.38	32° 19' 56.103 N	103° 30' 28.759 W
8,182.00	0.38	52.18	8,175.80	0.60	207.43	485,587.31	796,262.03	32° 19' 56.106 N	103° 30' 28.752 W
8,276.00	0.48	62.04	8,269.80	0.97	208.03	485,587.68	796,262.62	32° 19' 56.110 N	103° 30' 28.745 W
8,371.00	0.61	71.84	8,364.80	1.32	208.86	485,588.03	796,263.45	32° 19' 56.113 N	103° 30' 28.735 W
8,466.00	0.77	63.75	8,459.79	1.76	209.91	485,588.47	796,264.51	32° 19' 56.117 N	103° 30' 28.723 W
8,561.00	0.81	61.56	8,554.78	2.36	211.07	485,589.07	796,265.67	32° 19' 56.123 N	103° 30' 28.709 W
8,656.00	0.60	38.93	8,649.77	3.07	211.98	485,589.78	796,266.57	32° 19' 56.130 N	103° 30' 28.699 W
8,751.00	0.67	19.10	8,744.77	3.98	212.47	485,590.69	796,267.07	32° 19' 56.139 N	103° 30' 28.693 W
8,846.00	0.60	21.47	8,839.76	4.97	212.83	485,591.68	796,267.43	32° 19' 56.149 N	103° 30' 28.688 W
8,941.00	0.48	21.21	8,934.76	5.80	213.16	485,592.51	796,267.76	32° 19' 56.157 N	103° 30' 28.685 W
9,036.00	0.28	309.28	9,029.76	6.32	213.12	485,593.03	796,267.72	32° 19' 56.162 N	103° 30' 28.685 W
9,131.00	0.67	291.45	9,124.75	6.67	212.43	485,593.38	796,267.03	32° 19' 56.166 N	103° 30' 28.693 W
9,226.00	1.00	301.99	9,219.74	7.31	211.21	485,594.02	796,265.81	32° 19' 56.172 N	103° 30' 28.707 W
9,321.00	1.34	294.44	9,314.72	8.21	209.49	485,594.92	796,264.09	32° 19' 56.181 N	103° 30' 28.727 W
9,416.00	1.47	264.04	9,409.70	8.54	207.27	485,595.25	796,261.87	32° 19' 56.185 N	103° 30' 28.753 W
9,511.00	1.81	257.77	9,504.66	8.10	204.59	485,594.81	796,259.19	32° 19' 56.181 N	103° 30' 28.784 W
9,605.00	1.27	266.70	9,598.62	7.72	202.10	485,594.43	796,256.70	32° 19' 56.177 N	103° 30' 28.813 W
9,719.00	4.80	6.70	9,712.49	12.39	201.40	485,599.10	796,255.99	32° 19' 56.223 N	103° 30' 28.821 W
9,814.00	15.38	20.92	9,805.90	28.15	206.37	485,614.86	796,260.97	32° 19' 56.379 N	103° 30' 28.762 W
9,909.00	24.00	21.88	9,895.26	57.90	218.09	485,644.62	796,272.69	32° 19' 56.672 N	103° 30' 28.622 W
10,004.00	33.93	18.48	9,978.27	101.09	233.74	485,687.80	796,288.33	32° 19' 57.099 N	103° 30' 28.436 W
10,099.00	40.29	10.01	10,054.05	156.58	247.50	485,743.29	796,302.10	32° 19' 57.647 N	103° 30' 28.271 W
10,194.00	48.28	6.84	10,122.01	222.14	257.08	485,808.85	796,311.68	32° 19' 58.295 N	103° 30' 28.153 W
10,289.00	57.28	0.98	10,179.44	297.50	262.00	485,884.21	796,316.60	32° 19' 59.040 N	103° 30' 28.089 W
10,384.00	67.72	359.42	10,223.25	381.64	262.24	485,968.35	796,316.84	32° 19' 59.872 N	103° 30' 28.079 W
10,478.00	81.07	0.42	10,248.48	471.97	262.14	486,058.68	796,316.74	32° 20' 0.766 N	103° 30' 28.072 W
10,514.00	86.50	0.79	10,252.38	507.75	262.52	486,094.46	796,317.12	32° 20' 1.120 N	103° 30' 28.064 W
10,609.00	87.87	0.08	10,257.04	602.63	263.24	486,189.34	796,317.84	32° 20' 2.059 N	103° 30' 28.047 W
10,614.91	87.87	0.05	10,257.26	608.53	263.24	486,195.24	796,317.84	32° 20' 2.117 N	103° 30' 28.047 W
FTP @ 10614.91'									
10,704.00	87.92	359.57	10,260.53	697.56	262.95	486,284.27	796,317.55	32° 20' 2.998 N	103° 30' 28.042 W
10,799.00	86.78	1.40	10,264.92	792.45	263.75	486,379.16	796,318.35	32° 20' 3.937 N	103° 30' 28.024 W
10,894.00	86.15	0.78	10,270.78	887.25	265.55	486,473.96	796,320.15	32° 20' 4.875 N	103° 30' 27.995 W
10,989.00	87.62	359.21	10,275.94	982.11	265.55	486,568.82	796,320.14	32° 20' 5.814 N	103° 30' 27.986 W
11,083.00	90.48	359.37	10,277.50	1,076.08	264.38	486,662.79	796,318.98	32° 20' 6.744 N	103° 30' 27.992 W
11,178.00	90.56	0.57	10,276.64	1,171.07	264.33	486,757.78	796,318.93	32° 20' 7.683 N	103° 30' 27.984 W

Kaiser-Francis Oil Company

Survey Report - Geographic



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well BELL LAKE UNIT NORTH 228H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB 23.9' @ 3498.80usft (Cactus 171)
Site:	SEC 6, T23S, R34E	MD Reference:	KB 23.9' @ 3498.80usft (Cactus 171)
Well:	BELL LAKE UNIT NORTH 228H	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
11,273.00	89.24	0.86	10,276.81	1,266.06	265.52	486,852.77	796,320.11	32° 20' 8.623 N	103° 30' 27.961 W
11,368.00	90.39	0.95	10,277.11	1,361.05	267.02	486,947.76	796,321.61	32° 20' 9.563 N	103° 30' 27.935 W
11,463.00	91.26	0.49	10,275.75	1,456.03	268.21	487,042.74	796,322.81	32° 20' 10.503 N	103° 30' 27.913 W
11,557.00	92.16	359.47	10,272.94	1,549.98	268.18	487,136.69	796,322.78	32° 20' 11.432 N	103° 30' 27.905 W
11,652.00	91.54	0.70	10,269.87	1,644.93	268.32	487,231.64	796,322.92	32° 20' 12.372 N	103° 30' 27.895 W
11,747.00	90.90	0.50	10,267.85	1,739.90	269.31	487,326.62	796,323.91	32° 20' 13.312 N	103° 30' 27.874 W
11,841.00	88.51	0.45	10,268.33	1,833.89	270.09	487,420.60	796,324.69	32° 20' 14.242 N	103° 30' 27.857 W
11,936.00	88.77	359.76	10,270.59	1,928.87	270.27	487,515.58	796,324.86	32° 20' 15.181 N	103° 30' 27.846 W
12,031.00	88.79	0.19	10,272.61	2,023.84	270.23	487,610.55	796,324.82	32° 20' 16.121 N	103° 30' 27.838 W
12,126.00	88.71	0.31	10,274.68	2,118.82	270.64	487,705.53	796,325.24	32° 20' 17.061 N	103° 30' 27.825 W
12,221.00	88.01	0.74	10,277.40	2,213.78	271.51	487,800.49	796,326.11	32° 20' 18.000 N	103° 30' 27.806 W
12,315.00	88.01	2.17	10,280.67	2,307.69	273.90	487,894.40	796,328.49	32° 20' 18.929 N	103° 30' 27.770 W
12,410.00	89.61	2.04	10,282.64	2,402.60	277.38	487,989.31	796,331.98	32° 20' 19.868 N	103° 30' 27.721 W
12,505.00	89.75	0.81	10,283.17	2,497.57	279.75	488,084.28	796,334.34	32° 20' 20.808 N	103° 30' 27.685 W
12,600.00	91.43	359.66	10,282.19	2,592.56	280.14	488,179.27	796,334.73	32° 20' 21.748 N	103° 30' 27.672 W
12,695.00	92.95	0.04	10,278.56	2,687.48	279.89	488,274.19	796,334.48	32° 20' 22.687 N	103° 30' 27.666 W
12,790.00	90.25	359.98	10,275.91	2,782.44	279.90	488,369.15	796,334.50	32° 20' 23.627 N	103° 30' 27.657 W
12,884.00	89.41	359.53	10,276.19	2,876.44	279.50	488,463.15	796,334.10	32° 20' 24.557 N	103° 30' 27.654 W
12,979.00	89.24	359.08	10,277.31	2,971.42	278.35	488,558.13	796,332.95	32° 20' 25.497 N	103° 30' 27.658 W
13,074.00	88.54	359.56	10,279.15	3,066.40	277.22	488,653.11	796,331.82	32° 20' 26.436 N	103° 30' 27.663 W
13,169.00	88.83	357.73	10,281.33	3,161.34	274.98	488,748.05	796,329.57	32° 20' 27.376 N	103° 30' 27.681 W
13,264.00	89.64	356.64	10,282.60	3,256.21	270.31	488,842.93	796,324.91	32° 20' 28.315 N	103° 30' 27.727 W
13,359.00	90.73	356.77	10,282.29	3,351.06	264.85	488,937.77	796,319.45	32° 20' 29.254 N	103° 30' 27.782 W
13,453.00	89.64	358.74	10,281.99	3,444.98	261.17	489,031.69	796,315.77	32° 20' 30.184 N	103° 30' 27.816 W
13,548.00	89.07	358.71	10,283.06	3,539.95	259.06	489,126.66	796,313.65	32° 20' 31.124 N	103° 30' 27.832 W
13,643.00	87.90	359.56	10,285.57	3,634.90	257.62	489,221.61	796,312.22	32° 20' 32.063 N	103° 30' 27.840 W
13,738.00	88.27	1.13	10,288.74	3,729.84	258.19	489,316.55	796,312.79	32° 20' 33.003 N	103° 30' 27.825 W
13,833.00	89.49	359.77	10,290.60	3,824.82	258.94	489,411.53	796,313.54	32° 20' 33.942 N	103° 30' 27.808 W
13,928.00	89.86	359.72	10,291.14	3,919.82	258.52	489,506.53	796,313.11	32° 20' 34.882 N	103° 30' 27.804 W
14,022.00	90.25	358.74	10,291.05	4,013.81	257.25	489,600.52	796,311.85	32° 20' 35.812 N	103° 30' 27.811 W
14,117.00	92.16	359.72	10,289.05	4,108.77	255.98	489,695.48	796,310.57	32° 20' 36.752 N	103° 30' 27.817 W
14,212.00	91.04	359.27	10,286.40	4,203.73	255.14	489,790.44	796,309.74	32° 20' 37.692 N	103° 30' 27.818 W
14,307.00	90.39	358.45	10,285.21	4,298.70	253.25	489,885.41	796,307.85	32° 20' 38.632 N	103° 30' 27.832 W
14,402.00	90.59	358.05	10,284.40	4,393.65	250.35	489,980.36	796,304.95	32° 20' 39.572 N	103° 30' 27.857 W
14,497.00	91.60	357.32	10,282.59	4,488.56	246.51	490,075.27	796,301.11	32° 20' 40.511 N	103° 30' 27.893 W
14,592.00	90.45	357.10	10,280.89	4,583.43	241.89	490,170.14	796,296.49	32° 20' 41.450 N	103° 30' 27.939 W
14,686.00	91.01	357.98	10,279.69	4,677.33	237.85	490,264.04	796,292.45	32° 20' 42.379 N	103° 30' 27.977 W
14,781.00	90.11	357.77	10,278.76	4,772.26	234.33	490,358.97	796,288.93	32° 20' 43.319 N	103° 30' 28.010 W
14,876.00	87.56	357.50	10,280.69	4,867.15	230.41	490,453.86	796,285.01	32° 20' 44.258 N	103° 30' 28.047 W
14,971.00	87.08	355.38	10,285.13	4,961.86	224.52	490,548.57	796,279.12	32° 20' 45.196 N	103° 30' 28.107 W
15,065.00	86.61	355.17	10,290.31	5,055.40	216.79	490,642.11	796,271.39	32° 20' 46.122 N	103° 30' 28.189 W
15,160.00	85.85	354.23	10,296.55	5,149.78	208.03	490,736.49	796,262.63	32° 20' 47.057 N	103° 30' 28.282 W
15,255.00	86.80	354.06	10,302.64	5,244.09	198.36	490,830.80	796,252.96	32° 20' 47.990 N	103° 30' 28.387 W
15,350.00	85.90	355.93	10,308.69	5,338.53	190.09	490,925.24	796,244.69	32° 20' 48.926 N	103° 30' 28.474 W
15,445.00	85.63	358.43	10,315.71	5,433.15	185.43	491,019.86	796,240.03	32° 20' 49.862 N	103° 30' 28.520 W
15,540.00	87.45	357.63	10,321.44	5,527.92	182.17	491,114.63	796,236.77	32° 20' 50.800 N	103° 30' 28.550 W
15,634.00	88.18	358.16	10,325.02	5,621.78	178.72	491,208.50	796,233.32	32° 20' 51.729 N	103° 30' 28.582 W
15,729.00	88.91	356.96	10,327.44	5,716.67	174.68	491,303.38	796,229.27	32° 20' 52.668 N	103° 30' 28.620 W
15,824.00	89.52	357.63	10,328.74	5,811.55	170.19	491,398.26	796,224.79	32° 20' 53.608 N	103° 30' 28.664 W
15,919.00	91.51	358.95	10,327.88	5,906.50	167.36	491,493.21	796,221.96	32° 20' 54.547 N	103° 30' 28.688 W
16,014.00	93.14	0.90	10,324.03	6,001.41	167.23	491,588.12	796,221.83	32° 20' 55.486 N	103° 30' 28.681 W
16,108.00	94.07	359.95	10,318.12	6,095.22	167.93	491,681.93	796,222.53	32° 20' 56.415 N	103° 30' 28.665 W
16,203.00	93.65	2.64	10,311.72	6,189.97	170.07	491,776.68	796,224.67	32° 20' 57.352 N	103° 30' 28.631 W
16,298.00	93.61	2.22	10,305.71	6,284.70	174.09	491,871.41	796,228.69	32° 20' 58.289 N	103° 30' 28.576 W
16,393.00	93.28	1.07	10,300.00	6,379.48	176.81	491,966.19	796,231.41	32° 20' 59.227 N	103° 30' 28.536 W

Kaiser-Francis Oil Company

Survey Report - Geographic



Company:	Kaiser-Francis Oil Co.	Local Co-ordinate Reference:	Well BELL LAKE UNIT NORTH 228H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB 23.9' @ 3498.80usft (Cactus 171)
Site:	SEC 6, T23S, R34E	MD Reference:	KB 23.9' @ 3498.80usft (Cactus 171)
Well:	BELL LAKE UNIT NORTH 228H	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
16,488.00	93.25	1.09	10,294.59	6,474.31	178.60	492,061.02	796,233.20	32° 21' 0.165 N	103° 30' 28.506 W
16,582.00	88.57	1.17	10,293.10	6,568.26	180.46	492,154.97	796,235.05	32° 21' 1.094 N	103° 30' 28.476 W
16,677.00	85.39	1.51	10,298.10	6,663.09	182.67	492,249.80	796,237.27	32° 21' 2.032 N	103° 30' 28.442 W
16,772.00	85.14	0.02	10,305.94	6,757.75	183.94	492,344.46	796,238.54	32° 21' 2.969 N	103° 30' 28.419 W
16,867.00	87.36	0.85	10,312.16	6,852.54	184.66	492,439.25	796,239.26	32° 21' 3.907 N	103° 30' 28.402 W
16,962.00	88.66	0.51	10,315.46	6,947.47	185.78	492,534.18	796,240.38	32° 21' 4.846 N	103° 30' 28.380 W
17,057.00	87.73	0.71	10,318.45	7,042.42	186.80	492,629.13	796,241.39	32° 21' 5.785 N	103° 30' 28.360 W
17,152.00	87.84	0.91	10,322.12	7,137.34	188.14	492,724.05	796,242.74	32° 21' 6.725 N	103° 30' 28.336 W
17,247.00	87.76	0.88	10,325.77	7,232.26	189.62	492,818.97	796,244.22	32° 21' 7.664 N	103° 30' 28.310 W
17,341.00	87.25	0.65	10,329.86	7,326.16	190.87	492,912.87	796,245.47	32° 21' 8.593 N	103° 30' 28.287 W
17,436.00	87.22	0.66	10,334.44	7,421.04	191.96	493,007.75	796,246.56	32° 21' 9.532 N	103° 30' 28.266 W
17,531.00	89.10	358.33	10,337.49	7,515.98	191.12	493,102.69	796,245.72	32° 21' 10.471 N	103° 30' 28.267 W
17,626.00	91.40	358.13	10,337.08	7,610.92	188.19	493,197.64	796,242.78	32° 21' 11.411 N	103° 30' 28.292 W
17,721.00	92.61	357.49	10,333.75	7,705.79	184.56	493,292.51	796,239.16	32° 21' 12.350 N	103° 30' 28.326 W
17,816.00	92.69	357.14	10,329.36	7,800.59	180.11	493,387.30	796,234.71	32° 21' 13.288 N	103° 30' 28.369 W
17,911.00	92.92	356.71	10,324.71	7,895.34	175.02	493,482.05	796,229.62	32° 21' 14.226 N	103° 30' 28.420 W
18,005.00	90.70	358.03	10,321.74	7,989.18	170.71	493,575.90	796,225.31	32° 21' 15.155 N	103° 30' 28.462 W
18,100.00	90.34	357.96	10,320.88	8,084.12	167.39	493,670.83	796,221.99	32° 21' 16.094 N	103° 30' 28.492 W
18,195.00	91.09	357.87	10,319.70	8,179.05	163.93	493,765.76	796,218.53	32° 21' 17.034 N	103° 30' 28.524 W
18,283.00	91.74	357.37	10,317.52	8,266.95	160.28	493,853.66	796,214.88	32° 21' 17.904 N	103° 30' 28.559 W
FINAL SURVEY @ 18283'									
18,343.00	91.74	357.37	10,315.70	8,326.86	157.53	493,913.57	796,212.13	32° 21' 18.497 N	103° 30' 28.585 W
PROJECTION TO TD @ 19343'									

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
146.00	145.99	-0.78	-0.77	FIRST SURVEY @ 146'	
10,614.91	10,257.26	608.53	263.24	FTP @ 10614.91'	
18,283.00	10,317.52	8,266.95	160.28	FINAL SURVEY @ 18283'	
18,343.00	10,315.70	8,326.86	157.53	PROJECTION TO TD @ 19343'	

Checked By: _____ Approved By: _____ Date: _____

Well Name: BELL LAKE UNIT NORTH	Well Location: T23S / R34E / SEC 6 / NWSE / 32.3322408 / -103.5086581	County or Parish/State: LEA / NM
Well Number: 228H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0000587, NMNM0587	Unit or CA Name: BELL LAKE	Unit or CA Number: NMNM068292X, NMNM68292X
US Well Number: 3002547845	Well Status: Drilling Well	Operator: KAISER FRANCIS OIL COMPANY

Subsequent Report

Type of Submission: Subsequent Report	Type of Action: Hydraulic Fracturing
Date Sundry Submitted: 05/11/2021	Time Sundry Submitted: 03:08
Date Operation Actually Began: 02/21/2021	

Actual Procedure: 2/21: Pressure test csg to 9,800#. Test annulus to 500#. TCP Stage 1: 18,095'-18,217' O/A w/5, 3 1/8" guns. BD perfs @ 5,600# w/ 2% KCl w/additives. Establish injection into perfs: 4.5 BPM @ 5,600# for 36 bbls. SD and isolate well. ISIP 6,364# 5 min 3,992#, 10 min 3,682#, 15 min 3,521#. 2/21-3/21: Stage-Frac lateral 10,615'-18,217' O/A in 43 stages w/90,500 gal 15% HCl, 383,653 bbls SW and 27,647 bbls HVFR carrying 332,292# 100M and 17,932,553# 30/50 white. 4/21: Drill out all plugs w/4.625" roller cone bit. SICP: 2,300#. TLTR: 418,711 bbls.

SR Attachments

Actual Procedure

BLUN_228H_WBD_20210511150714.pdf

Well Name: BELL LAKE UNIT NORTH	Well Location: T23S / R34E / SEC 6 / NWSE / 32.3322408 / -103.5086581	County or Parish/State: LEA / NM
Well Number: 228H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0000587, NMNM0587	Unit or CA Name: BELL LAKE	Unit or CA Number: NMNM068292X, NMNM68292X
US Well Number: 3002547845	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: MAY 11, 2021 03:07 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: Jeremy Parent		
Street Address: 88 Shell Road		
City: Jal	State: NM	Zip: 88252
Phone: (580)504-2593		
Email address: JeremyP@kfoc.net		

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: 05/14/2021
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								1. WELL API NO. 30-025-47845		
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 Bell Lake Unit North		
								6. Well Number: 228H		
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 Ojo Chiso; Bone Spring, Southwest			
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	J	6	23S	34E		2135	South	2455	East	Lea
BH:	B	31	22S	34E		103	North	2241	East	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.)		
10/30/20	11/8/20		11/10/20			4/7/21		3474.9		
18. Total Measured Depth of Well			19. Plug Back Measured Depth			20. Was Directional Survey Made?		21. Type Electric and Other Logs Run		
18343MD/10317TVD			18249MD/10318TVD			Yes		GR		
22. Producing Interval(s), of this completion - Top, Bottom, Name										
10615' -18217'										
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		1201'		17-1/2"		1030		
9-5/8"		40		4876'		12-1/4"		1245		
5-1/2"		20		18323'		8-1/2"		3100		
24. LINER RECORD						25. TUBING RECORD				
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET			
26. Perforation record (interval, size, and number)					27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.					
10615' -18217', .41, 2064					DEPTH INTERVAL		AMOUNT AND KIND MATERIAL USED			
					10,615-		18,264,845 lbs sd +			
					18,217		413,454 bbls fluid			
28. PRODUCTION										
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)				
6/26/21		f lowing				Prod				
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio			
7/4/21	24	24/64		915	1651	1982	1804			
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)				
-	2350		915	1651	1982	43				
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:			
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			Name			Title			Date	
			Erica Miles			Geosciences				
						Technician				
E-mail Address EricaM@kfoc.net										

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
1115	MD		Rustler				
4978	MD		Top Delaware Group				
8492	MD		Upper Avalon				
9534	MD		1st Bone Spring Sd				
9950	MD		2nd Bone Spring Lm				
10106	MD		2nd Bone Spring Sd				

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 36529

ACKNOWLEDGMENTS

Operator: KAISER-FRANCIS OIL CO P.O. Box 21468 Tulsa, OK 74121	OGRID: 12361
	Action Number: 36529
	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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CONDITIONS

Action 36529

CONDITIONS

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CONDITIONS

Created By	Condition	Condition Date
ksimmons	None	8/26/2021