

Submit 1 Copy To Appropriate District Office
 District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
 District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
 District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised July 18, 2013

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) 1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		WELL API NO. 30-025-45899
2. Name of Operator Kaiser-Francis Oil Company		5. Indicate Type of Lease STATE ☐ FEE ☐ FED ☐
3. Address of Operator P.O. Box 21468, Tulsa, OK 74121		6. State Oil & Gas Lease No.
4. Well Location Unit Letter <u>K</u> : <u>2,400</u> feet from the <u>South</u> line and <u>1,835</u> feet from the <u>West</u> line Section <u>31</u> Township <u>25S</u> Range <u>33E</u> NMPM County <u>Lea</u>		7. Lease Name or Unit Agreement Name Red Hills Federal
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3418' GR		8. Well Number 503H
9. OGRID Number 12361		10. Pool name or Wildcat WC-025 G-09 S253236A; UPR WOLFCAMP

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ TEMPORARILY ABANDON ☐ CHANGE PLANS ☐ PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐ DOWNHOLE COMMINGLE ☐ CLOSED-LOOP SYSTEM ☐ OTHER: ☐		SUBSEQUENT REPORT OF: REMEDIAL WORK ☐ ALTERING CASING ☐ COMMENCE DRILLING OPNS. ☐ P AND A ☐ CASING/CEMENT JOB ☐ OTHER: POOL NAME CHANGE ☒	
--	--	---	--

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

KFOC requests the pool code and name for the Red Hills Federal 503H be updated to 98158; WC-025 G-09 S253236A; UPR WOLFCAMP.

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE *Christina Opfer* TITLE Regulatory Manager DATE 11/30/2022
 Type or print name Christina Opfer E-mail address ChristinaO@kfoc.net PHONE 918-491-4468

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____
 Conditions of Approval (if any): _____

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 30-025-45899	² Pool Code 98158	³ Pool Name WC-025 G-09 S253236A; UPR WOLFCAMP
⁴ Property Code 5467	⁵ Property Name RED HILLS	⁶ Well Number 503H
⁷ OGRID No. 12361	⁸ Operator Name KAISER-FRANCIS OIL COMPANY	⁹ Elevation 3418.0

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
K	31	25 S	33 E		2400	SOUTH	1835	WEST	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
N	6	26 S	33 E		330	SOUTH	2182	WEST	LEA

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
478.8			

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

17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Christina Opfer 11/30/22 Signature Date Christina Opfer Printed Name ChristinaO@kfoc.net E-mail Address		18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. JUNE 17, 2019 Date of Survey <i>Filimon F. Jaramillo</i> Signature and Seal of Professional Surveyor Certificate Number: FILIMON F. JARAMILLO, PLS 12797 SURVEY NO. 6210B	
---	--	---	--

Intent ☒ As Drilled ☐

API # 30-025-45899		
Operator Name: KAISER-FRANCIS OIL COMPANY	Property Name: RED HILLS	Well Number 503H

Kick Off Point (KOP)

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

First Take Point (FTP)

UL K	Section 31	Township 25S	Range 33E	Lot	Feet 2600	From N/S SOUTH	Feet 2182	From E/W WEST	County LEA
Latitude 32.0868158					Longitude 103.6124060				NAD 27

Last Take Point (LTP)

UL N	Section 6	Township 26S	Range 33E	Lot	Feet 330	From N/S SOUTH	Feet 2182	From E/W WEST	County LEA
Latitude 32.0660772					Longitude 103.6123309				NAD 27

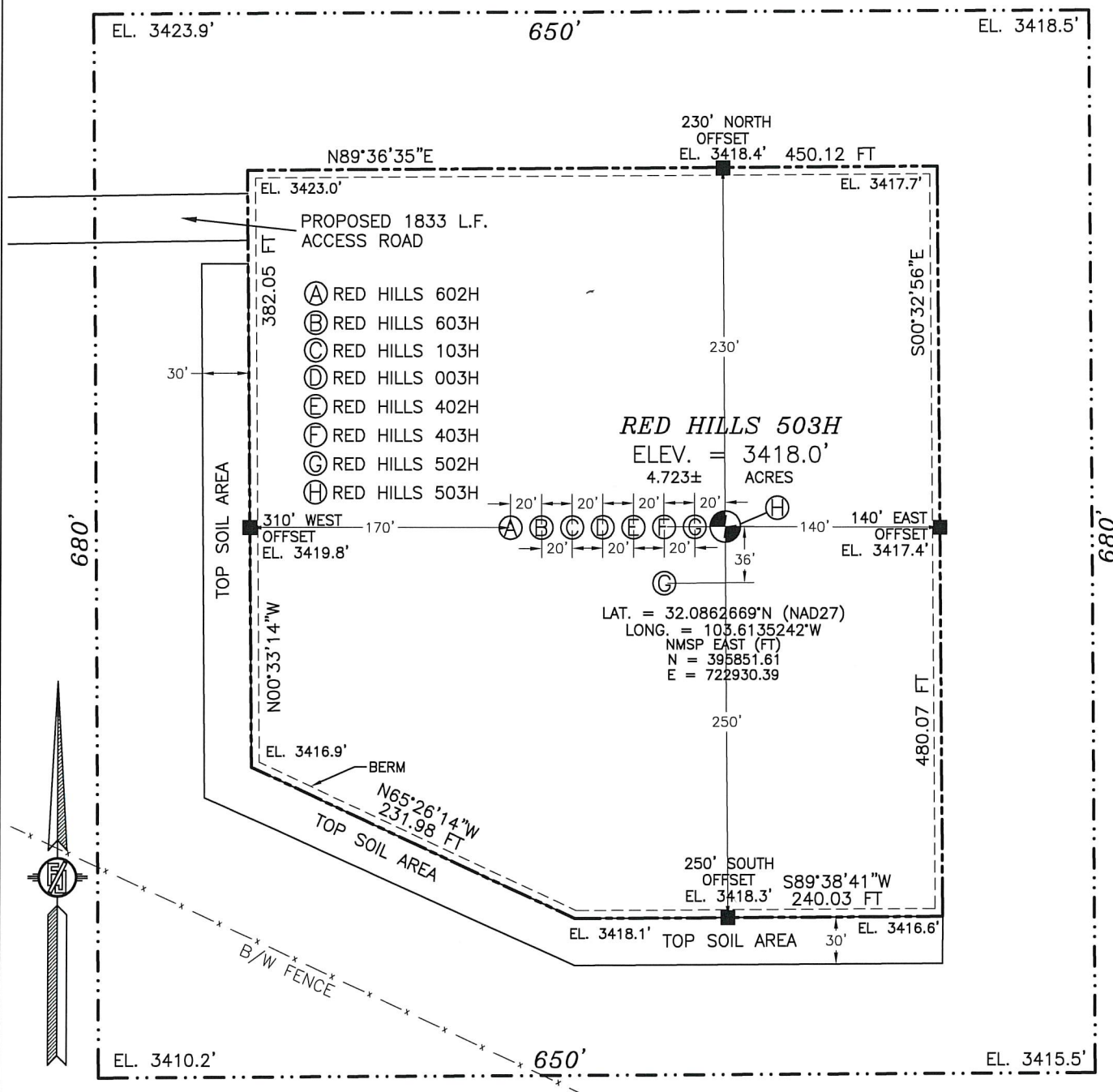
Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☒

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

API # 30-025-45572		
Operator Name: Kaiser-Francis Oil Company	Property Name: Red Hills Federal	Well Number 401H

KZ 06/29/2018

SECTION 31, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
SITE MAP



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR. 1 (ORLA HWY.) AND MONSANTO ROAD, GO SOUTH ON CR. 1 2.1 MILES TO A CALICHE ROAD ON LEFT (EAST), TURN LEFT AND GO EAST ON CALICHE ROAD 2.72 MILES TO A "Y" INTERSECTION, BEAR RIGHT (SOUTHEAST) AND GO SOUTHEAST 0.57 MILE TO A ROAD SURVEY ON RIGHT (SOUTH), FOLLOW ROAD SURVEY SOUTH 930' THEN EAST 903' TO THE NORTHWEST PAD CORNER FOR THIS LOCATION.

KAISER-FRANCIS OIL COMPANY
RED HILLS 503H
LOCATED 2400 FT. FROM THE SOUTH LINE
AND 1835 FT. FROM THE WEST LINE OF
SECTION 31, TOWNSHIP 25 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

JUNE 17, 2019

SURVEY NO. 6210B

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

CARLSBAD, NEW MEXICO

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 30-025-45899	² Pool Code 98158	³ Pool Name WC-025 G-09 S253236A; UPR WOLFCAMP
⁴ Property Code 5467	⁵ Property Name RED HILLS	⁶ Well Number 503H
⁷ OGRID No. 12361	⁸ Operator Name KAISER-FRANCIS OIL COMPANY	⁹ Elevation 3418.0

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
K	31	25 S	33 E		2400	SOUTH	1835	WEST	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
N	6	26 S	33 E		330	SOUTH	2182	WEST	LEA

¹² Dedicated Acres 478.8	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-20051
--	-------------------------------	----------------------------------	------------------------------------

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.

89°33'55"W 2650.63 FT 89°36'15"W 2635.02 FT NW CORNER SEC. 31 LAT. = 32.0943129°N LONG. = 103.6199197°W NMSP EAST (FT) N = 398778.60 E = 762263.04 W/4 CORNER SEC. 31 LAT. = 32.0870551°N LONG. = 103.6199216°W NMSP EAST (FT) N = 396138.31 E = 762279.92 SECTION CORNER LAT. = 32.0797982°N LONG. = 103.6198947°W NMSP EAST (FT) N = 393498.44 E = 762305.72 W/4 CORNER SEC. 6 LAT. = 32.0724271°N LONG. = 103.6198373°W NMSP EAST (FT) N = 390816.98 E = 762331.92 SW CORNER SEC. 6 LAT. = 32.0652928°N LONG. = 103.6198397°W NMSP EAST (FT) N = 388221.69 E = 762357.64		N/4 CORNER SEC. 31 LAT. = 32.0943196°N LONG. = 103.6113623°W NMSP EAST (FT) N = 398798.70 E = 764913.09 TURN POINT LAT. = 32.0869406°N LONG. = 103.6128772°W NMSP EAST (FT) N = 396111.19 E = 764461.90 RED HILLS 503H ELEV. = 3418.0' LAT. = 32.0863917°N (NAD83) LONG. = 103.6139954°W NMSP EAST (FT) N = 395909.19 E = 764116.90 QUARTER CORNER LAT. = 32.0797943°N LONG. = 103.6113923°W NMSP EAST (FT) N = 393514.54 E = 764939.16 LATITUDE AND LONGITUDE VALUES ARE NAD 83 STATE PLANE VALUES ARE NMSP EAST GRID BOTTOM OF HOLE LAT. = 32.0662022°N LONG. = 103.6128008°W NMSP EAST (FT) N = 388567.01 E = 764535.93 S/4 CORNER SEC. 6 LAT. = 32.0652928°N LONG. = 103.6198397°W NMSP EAST (FT) N = 388221.69 E = 762357.64		NE CORNER SEC. 31 LAT. = 32.0943209°N LONG. = 103.6028553°W NMSP EAST (FT) N = 398816.91 E = 767547.55 E/4 CORNER SEC. 31 LAT. = 32.0870695°N LONG. = 103.6028547°W NMSP EAST (FT) N = 396178.96 E = 767565.60 SECTION CORNER LAT. = 32.0797953°N LONG. = 103.6028596°W NMSP EAST (FT) N = 393532.70 E = 767582.02 E/4 CORNER SEC. 6 LAT. = 32.0725247°N LONG. = 103.6028542°W NMSP EAST (FT) N = 390887.75 E = 767601.57 SE CORNER SEC. 6 LAT. = 32.0652983°N LONG. = 103.6028496°W NMSP EAST (FT) N = 388258.92 E = 767620.79	
--	--	--	--	--	--

89°35'41"E 2632.14 FT 89°35'41"E 2632.14 FT

89°35'41"E 2632.14 FT 89°35'41"E 2632.14 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.

Christina Opfer **11/30/22**
Signature Date

Christina Opfer
Printed Name

ChristinaO@kfoc.net
E-mail Address

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JUNE 17, 2019

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number: **ELIMON F. JARAMILLO, PLS 12797**

SURVEY NO. 6210B

Intent ☒ As Drilled ☐

API #

30-025-45899

Operator Name:

KAISER-FRANCIS OIL COMPANY

Property Name:

RED HILLS

Well Number

503H

Kick Off Point (KOP)

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

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
K	31	25S	33E		2600	SOUTH	2182	WEST	LEA
Latitude					Longitude				NAD
32.0869406					103.6128772				83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
N	6	26S	33E		330	SOUTH	2182	WEST	LEA
Latitude					Longitude				NAD
32.0662022					103.6128008				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:

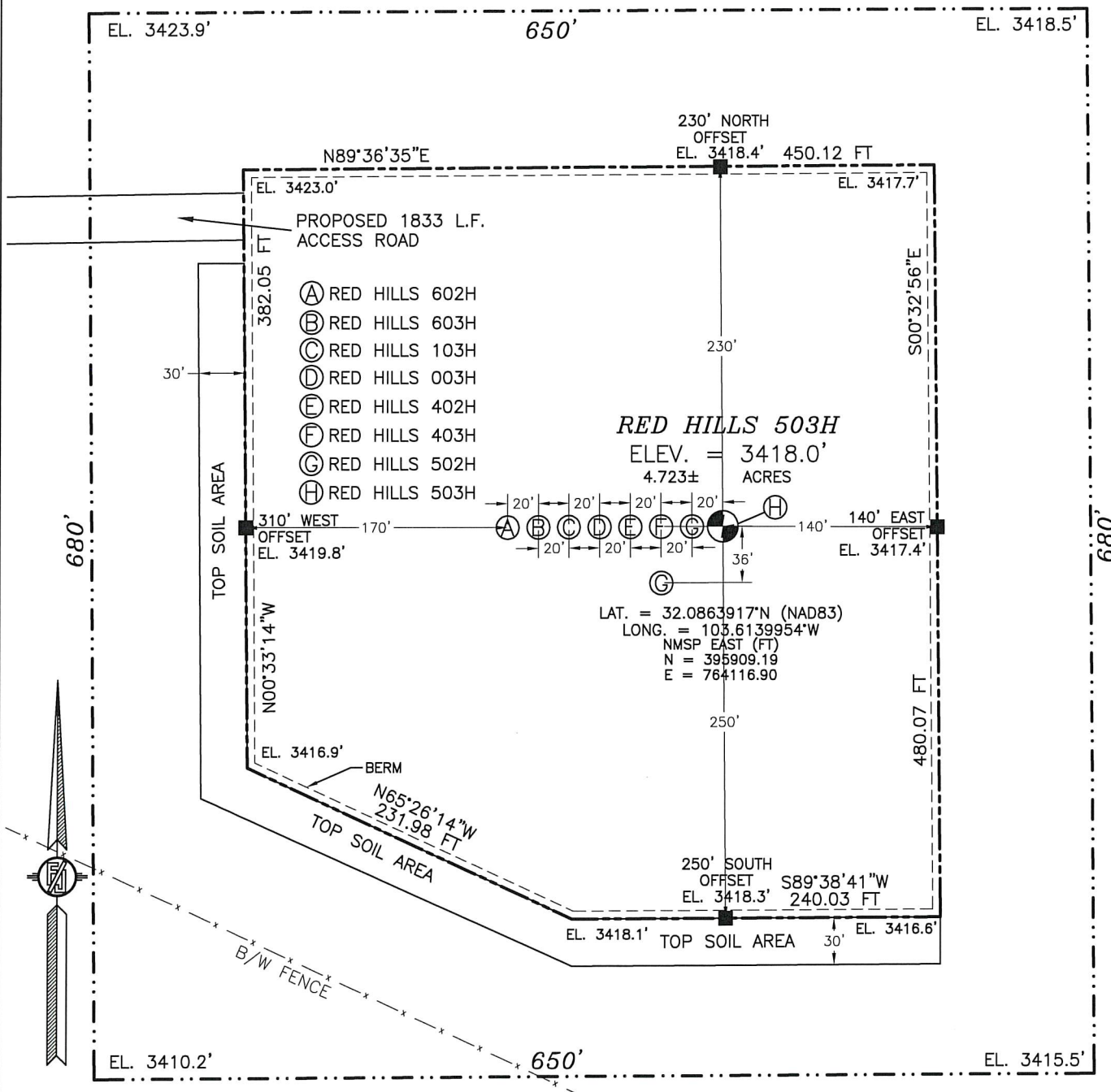
Red Hills Federal

Well Number

401H

KZ 06/29/2018

SECTION 31, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
SITE MAP



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR. 1 (ORLA HWY.) AND MONSANTO ROAD, GO SOUTH ON CR. 1 2.1 MILES TO A CALICHE ROAD ON LEFT (EAST), TURN LEFT AND GO EAST ON CALICHE ROAD 2.72 MILES TO A "Y" INTERSECTION, BEAR RIGHT (SOUTHEAST) AND GO SOUTHEAST 0.57 MILE TO A ROAD SURVEY ON RIGHT (SOUTH), FOLLOW ROAD SURVEY SOUTH 930' THEN EAST 903' TO THE NORTHWEST PAD CORNER FOR THIS LOCATION.

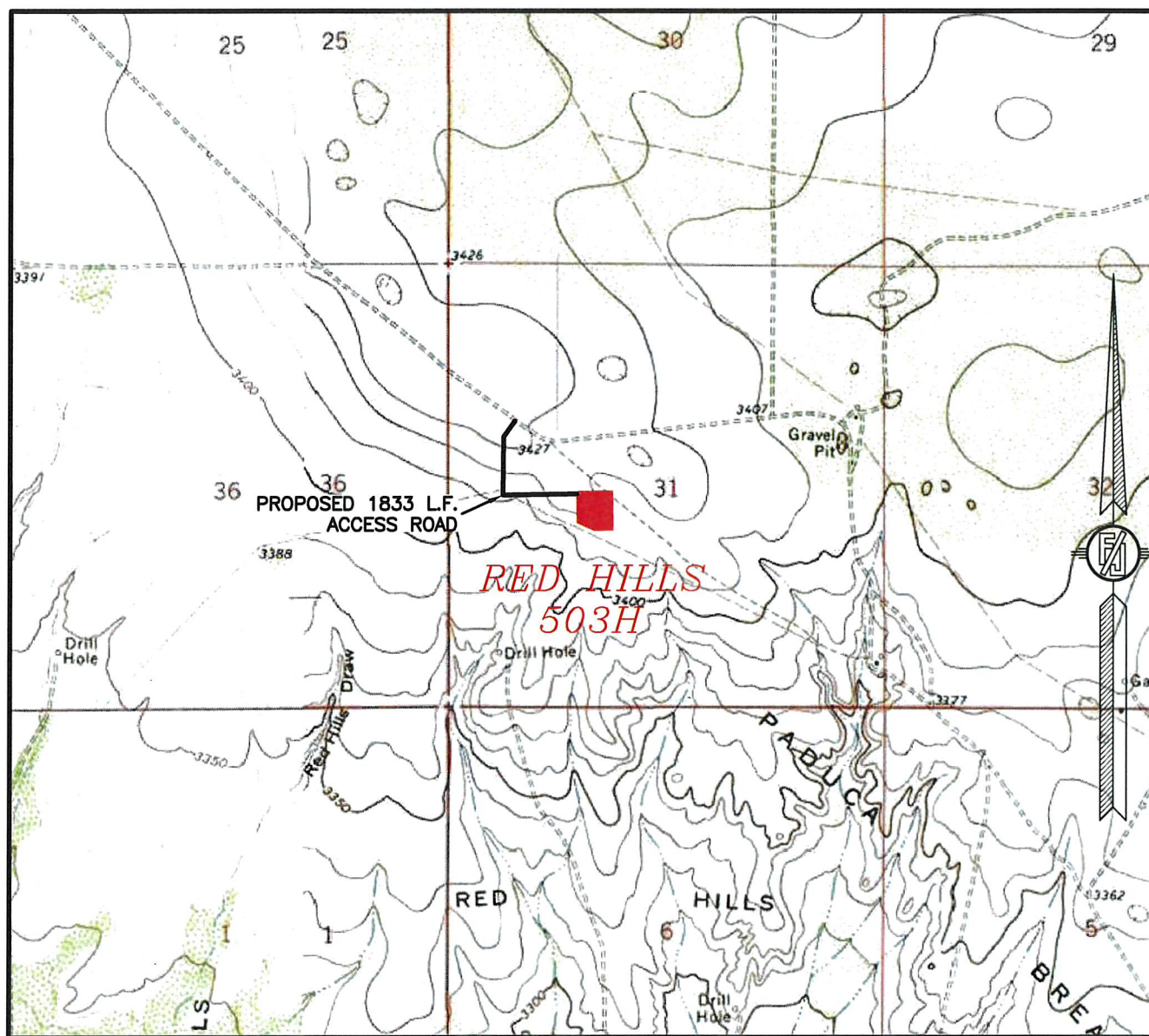
KAISER-FRANCIS OIL COMPANY
RED HILLS 503H
LOCATED 2400 FT. FROM THE SOUTH LINE
AND 1835 FT. FROM THE WEST LINE OF
SECTION 31, TOWNSHIP 25 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

JUNE 17, 2019

SURVEY NO. 6210B

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 234-3341

SECTION 31, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP:
PADUCA BREAKS EAST

NOT TO SCALE

KAISER-FRANCIS OIL COMPANY
RED HILLS 503H
LOCATED 2400 FT. FROM THE SOUTH LINE
AND 1835 FT. FROM THE WEST LINE OF
SECTION 31, TOWNSHIP 25 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

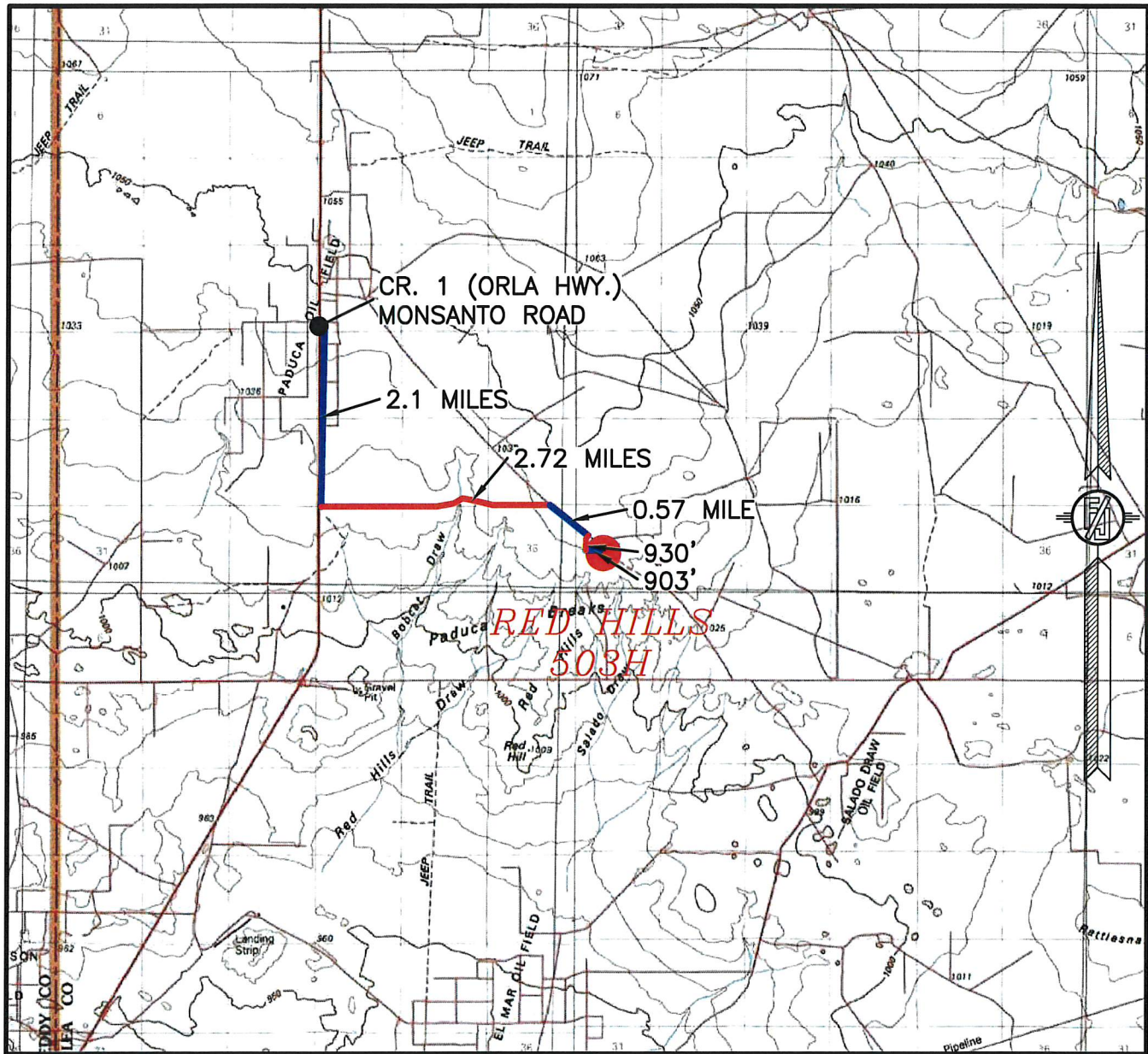
JUNE 17, 2019

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

SURVEY NO. 6210B
CARLSBAD, NEW MEXICO

SECTION 31, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION

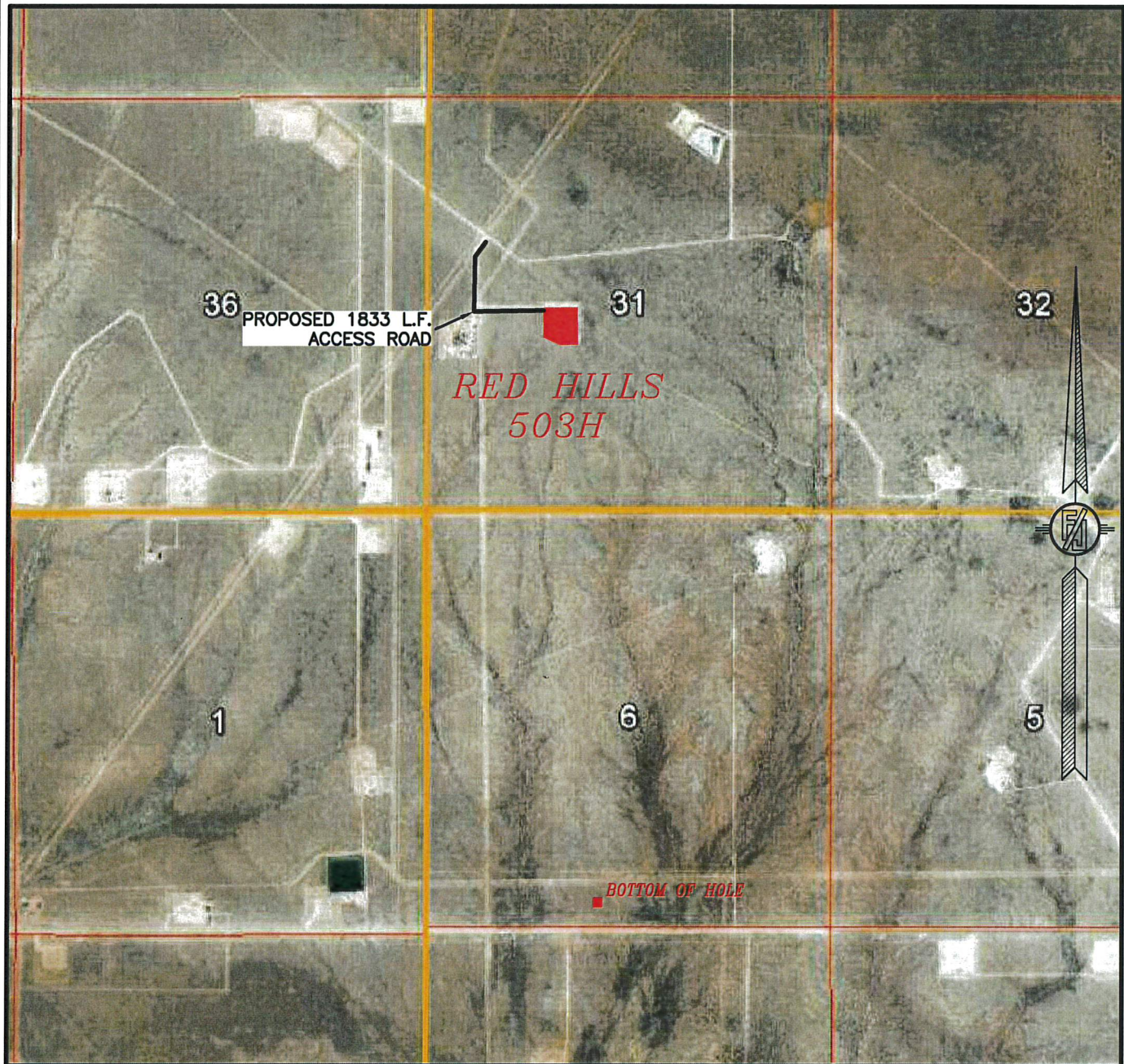
FROM THE INTERSECTION OF CR. 1 (ORLA HWY.) AND MONSANTO ROAD, GO SOUTH ON CR. 1 2.1 MILES TO A CALICHE ROAD ON LEFT (EAST), TURN LEFT AND GO EAST ON CALICHE ROAD 2.72 MILES TO A "Y" INTERSECTION, BEAR RIGHT (SOUTHEAST) AND GO SOUTHEAST 0.57 MILE TO A ROAD SURVEY ON RIGHT (SOUTH), FOLLOW ROAD SURVEY SOUTH 930' THEN EAST 903' TO THE NORTHWEST PAD CORNER FOR THIS LOCATION.

KAISER-FRANCIS OIL COMPANY
RED HILLS 503H
LOCATED 2400 FT. FROM THE SOUTH LINE
AND 1835 FT. FROM THE WEST LINE OF
SECTION 31, TOWNSHIP 25 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

JUNE 17, 2019

MADRON SURVEYING, INC. 301 SOUTH CANAL
(575) 234-3341SURVEY NO. 6210B
CARLSBAD, NEW MEXICO

SECTION 31, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
FEBRUARY 2019

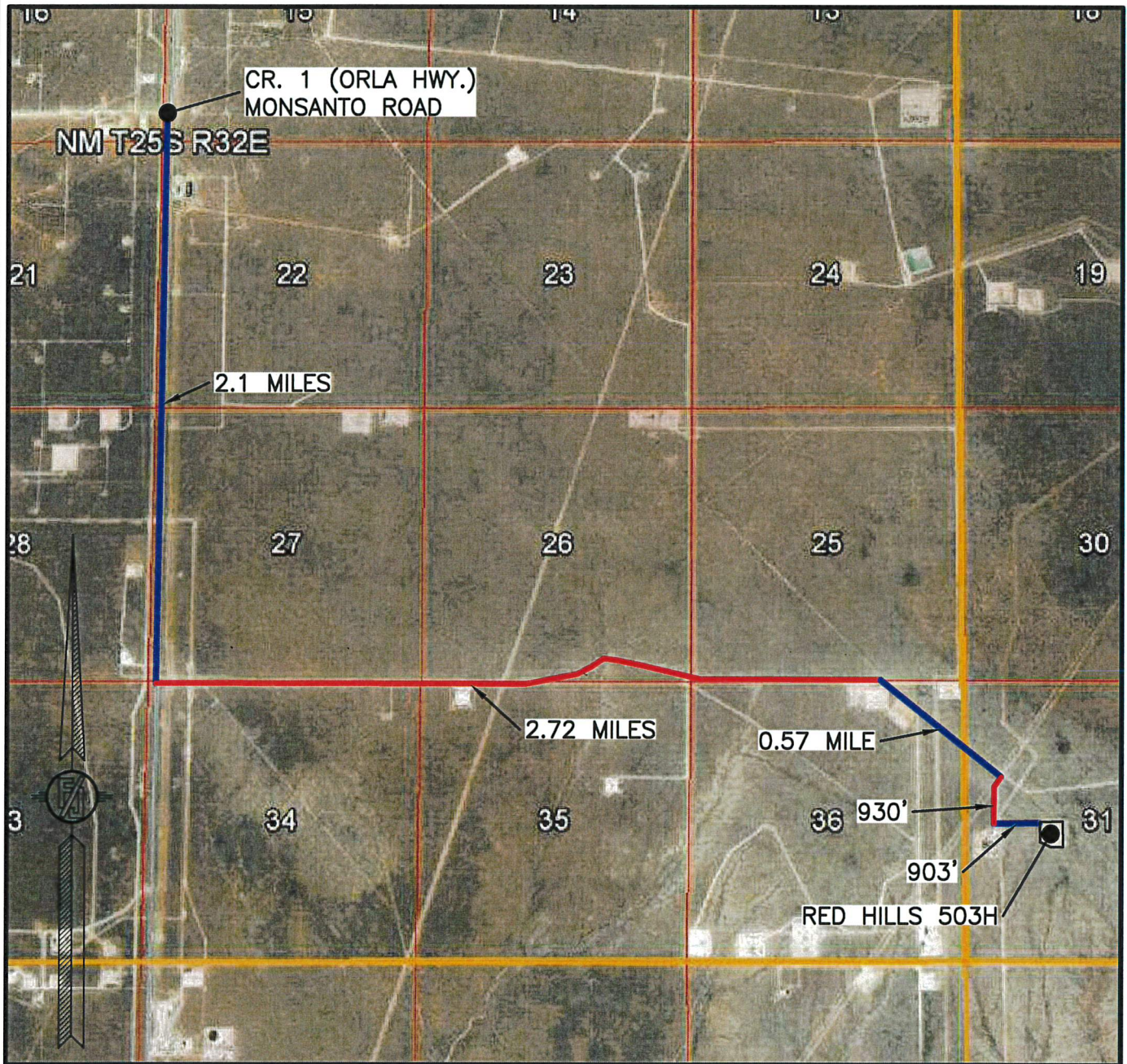
KAISER-FRANCIS OIL COMPANY
RED HILLS 503H
LOCATED 2400 FT. FROM THE SOUTH LINE
AND 1835 FT. FROM THE WEST LINE OF
SECTION 31, TOWNSHIP 25 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

JUNE 17, 2019

SURVEY NO. 6210B

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 31, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL ACCESS ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
FEBRUARY 2019

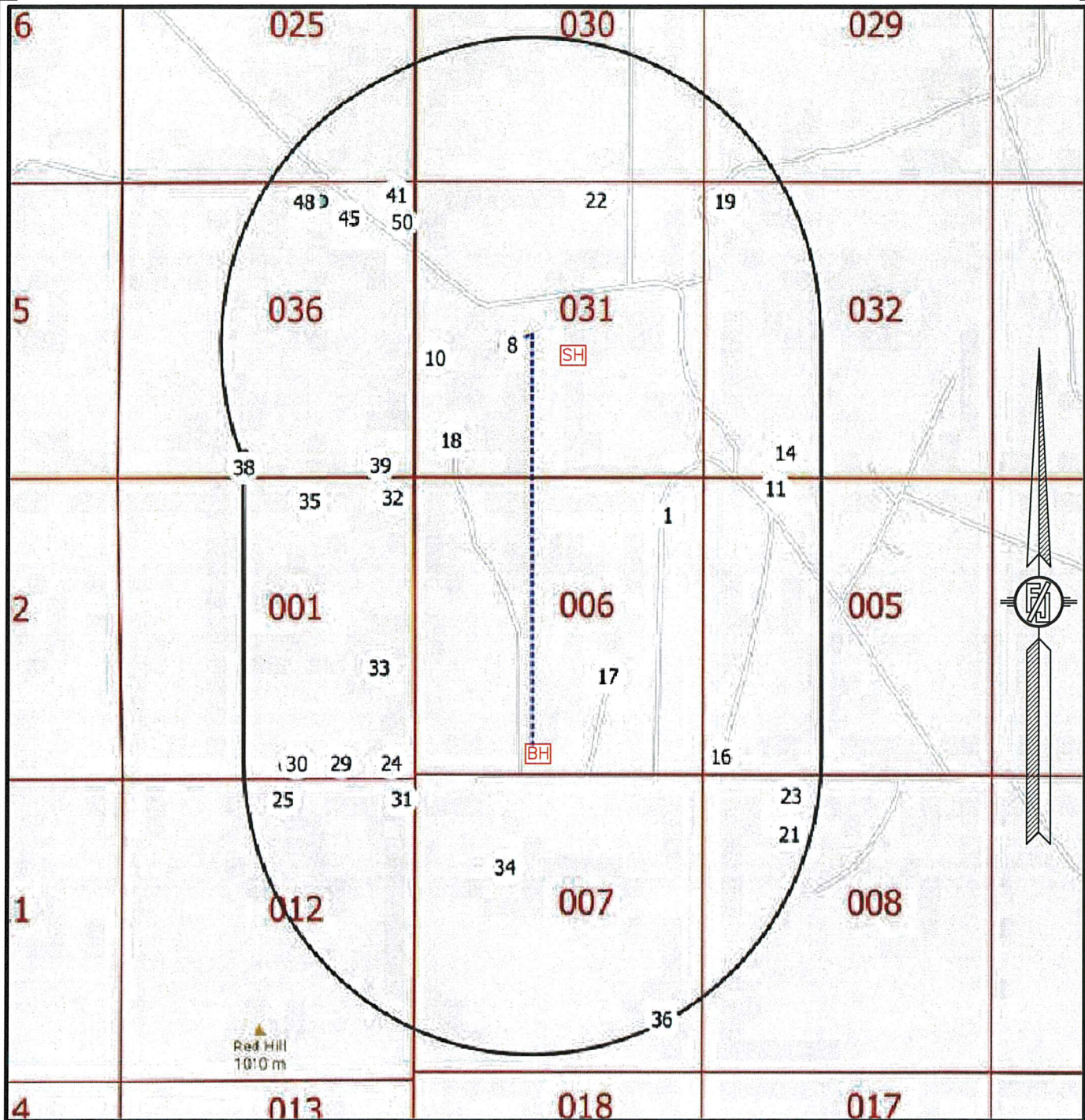
KAISER-FRANCIS OIL COMPANY
RED HILLS 503H
LOCATED 2400 FT. FROM THE SOUTH LINE
AND 1835 FT. FROM THE WEST LINE OF
SECTION 31, TOWNSHIP 25 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

JUNE 17, 2019

SURVEY NO. 6210B

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 234-3341

1-MILE WELLS



WELL DATA FROM NMOCD GIS - 6/14/19

[SH] SURFACE LOCATION

[BH] BOTTOM OF HOLE

[XX] WELLS WITHIN 1 MILE

--- WELL PATH

— 1-MILE BOUNDARY

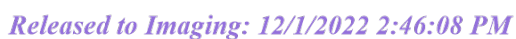
KAISER-FRANCIS OIL COMPANY
RED HILLS 503H
 LOCATED 2400 FT. FROM THE SOUTH LINE
 AND 1835 FT. FROM THE WEST LINE OF
 SECTION 31, TOWNSHIP 25 SOUTH,
 RANGE 33 EAST, N.M.P.M.
 LEA COUNTY, STATE OF NEW MEXICO

JUNE 17, 2019

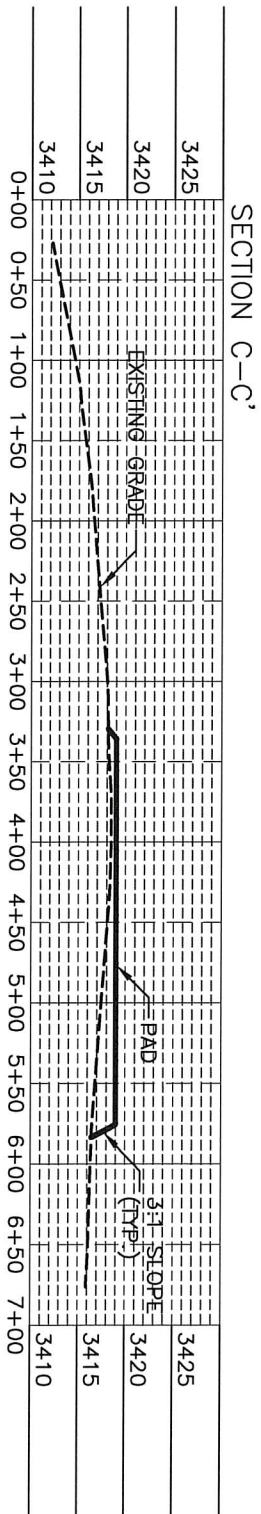
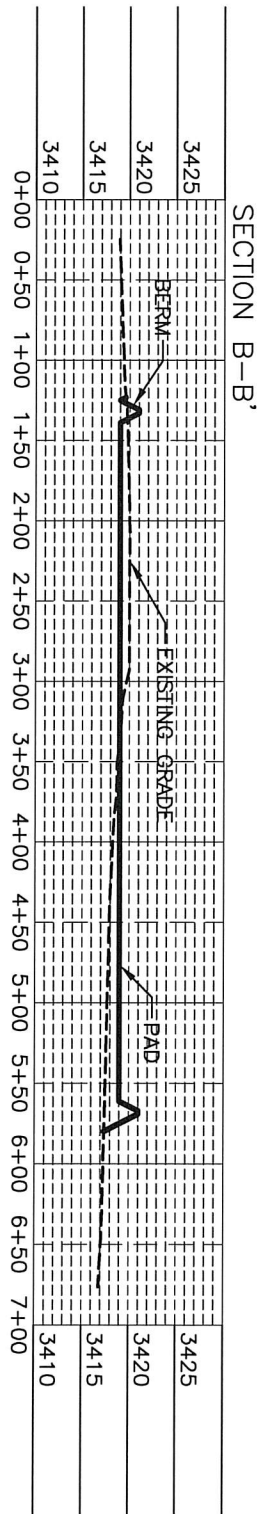
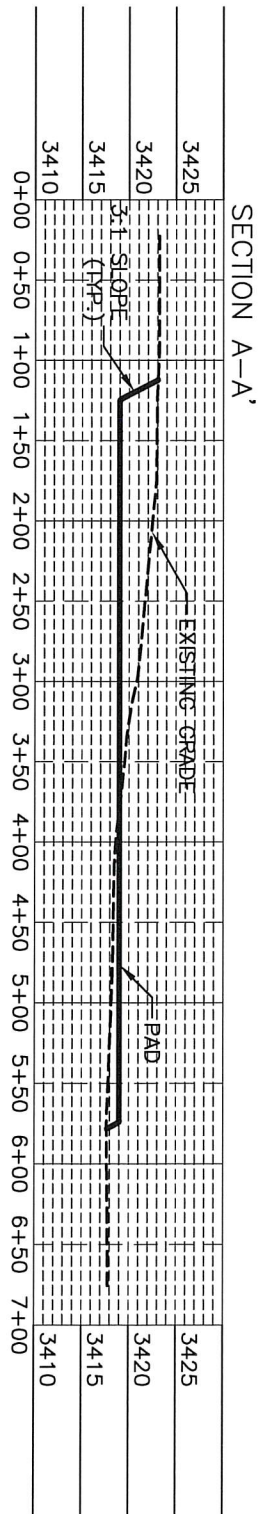
SURVEY NO. 6210B

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341

CARLSBAD, NEW MEXICO



CROSS-SECTIONS



I, FILMON F. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

KAISER-FRANCIS OIL COMPANY
PAD ELEVATIONS AND CROSS SECTIONS
FOR RED HILLS 503H
SECTION 31, TOWNSHIP 25 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO



CUT	FILL	NET
3510 CU. YD	5557 CU. YD	2047 CU. YD (FILL)

EARTHWORK QUANTITIES ARE ESTIMATED

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO SHEET 2-2
JUNE 17, 2019
301 SOUTH CANAL (975) 234-3341 SURVEY NO. 6210B

FILMON F. JARAMILLO PLS. 12797

DATE

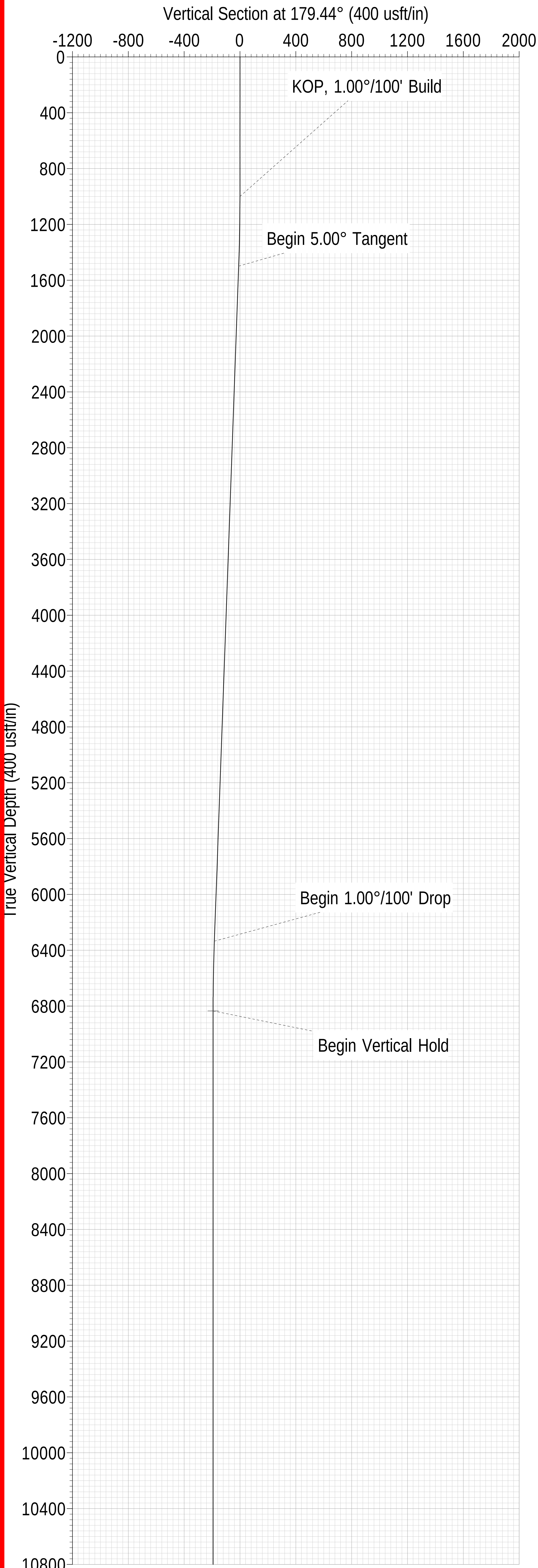
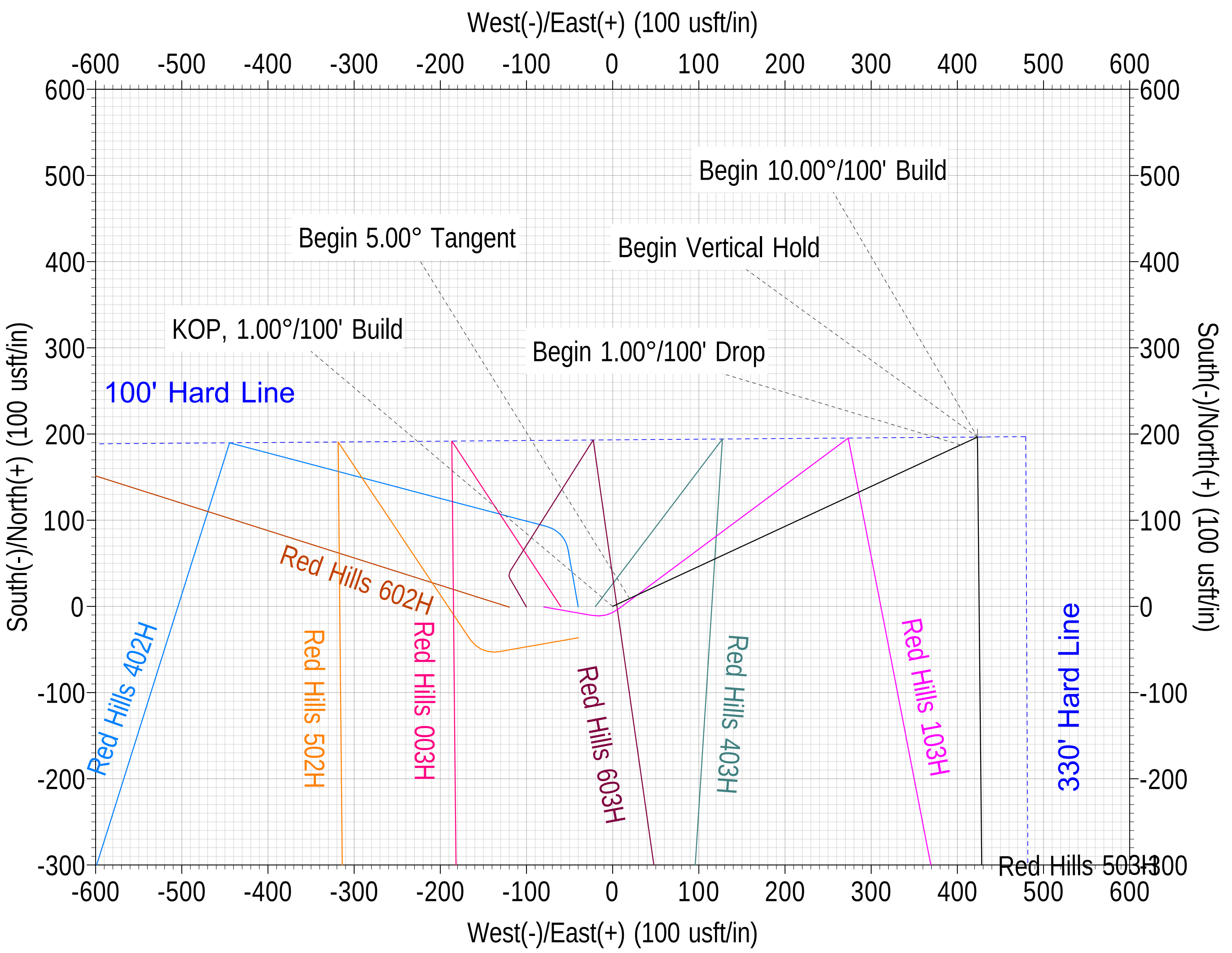
WELL DETAILS: Red Hills 503H

		GL @ 3418.00		WELL @ 3441.00usft (Cactus 171)	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	395851.61	722930.39	32° 5' 10.561 N	103° 36' 48.687 W
DESIGN TARGET DETAILS					

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
VP v2 - Red Hills 503H	6835.00	196.49	423.46	396048.10	723353.85	32° 5' 12.477 N	103° 36' 43.750 W
PBHL v2 - Red Hills 503H	12500.00	-7571.34	499.36	388280.27	723429.75	32° 3' 55.603 N	103° 36' 43.472 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.000	0.00	KOP, 1.00°/100' Build
1500.12	5.00	65.11	1499.49	9.18	19.79	1.00	65.108	-8.99	Begin 5.00° Tangent
6354.63	5.00	65.11	6335.51	187.31	403.67	0.00	0.000	-183.35	Begin 1.00°/100' Drop
6854.75	0.00	0.00	6835.00	196.49	423.46	1.00	180.000	-192.34	Begin Vertical Hold
11946.79	0.00	0.00	11927.04	196.49	423.46	0.00	0.000	-192.34	Begin 10.00°/100' Build
12846.79	90.00	179.44	12500.00	-376.44	429.06	10.00	179.440	380.62	Begin 90.00° Lateral
20042.04	90.00	179.44	12500.00	-7571.34	499.36	0.00	0.000	7575.86	PBHL



Kaiser-Francis Oil Company

Company: Kaiser-Francis
Well: Red Hills 503H
County: Lea County, New Mexico (NAD 27)
Rig: Cactus 171
Wellbore: Wellbore #1
Design: Design #2
Created By: DLD
Date: 11:21, July 09 2019

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

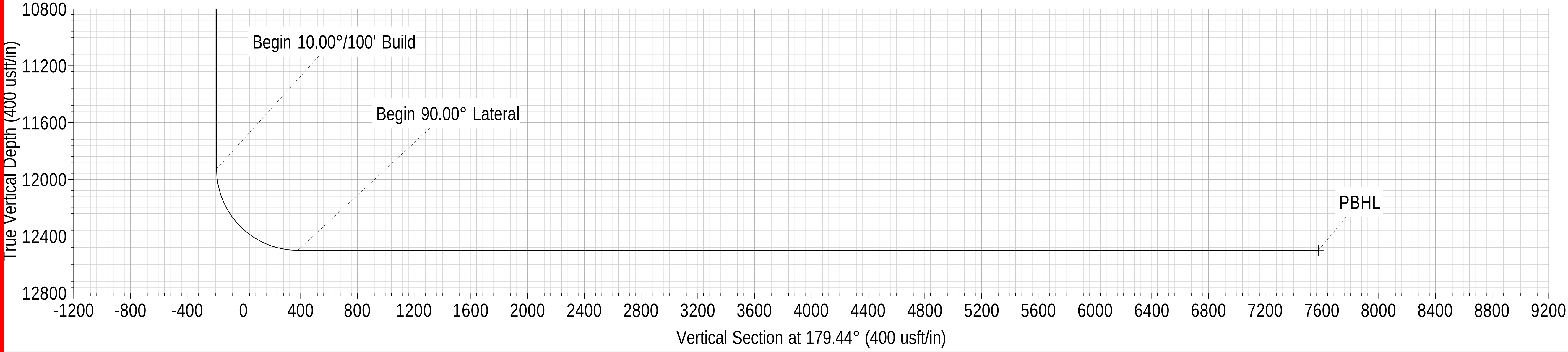
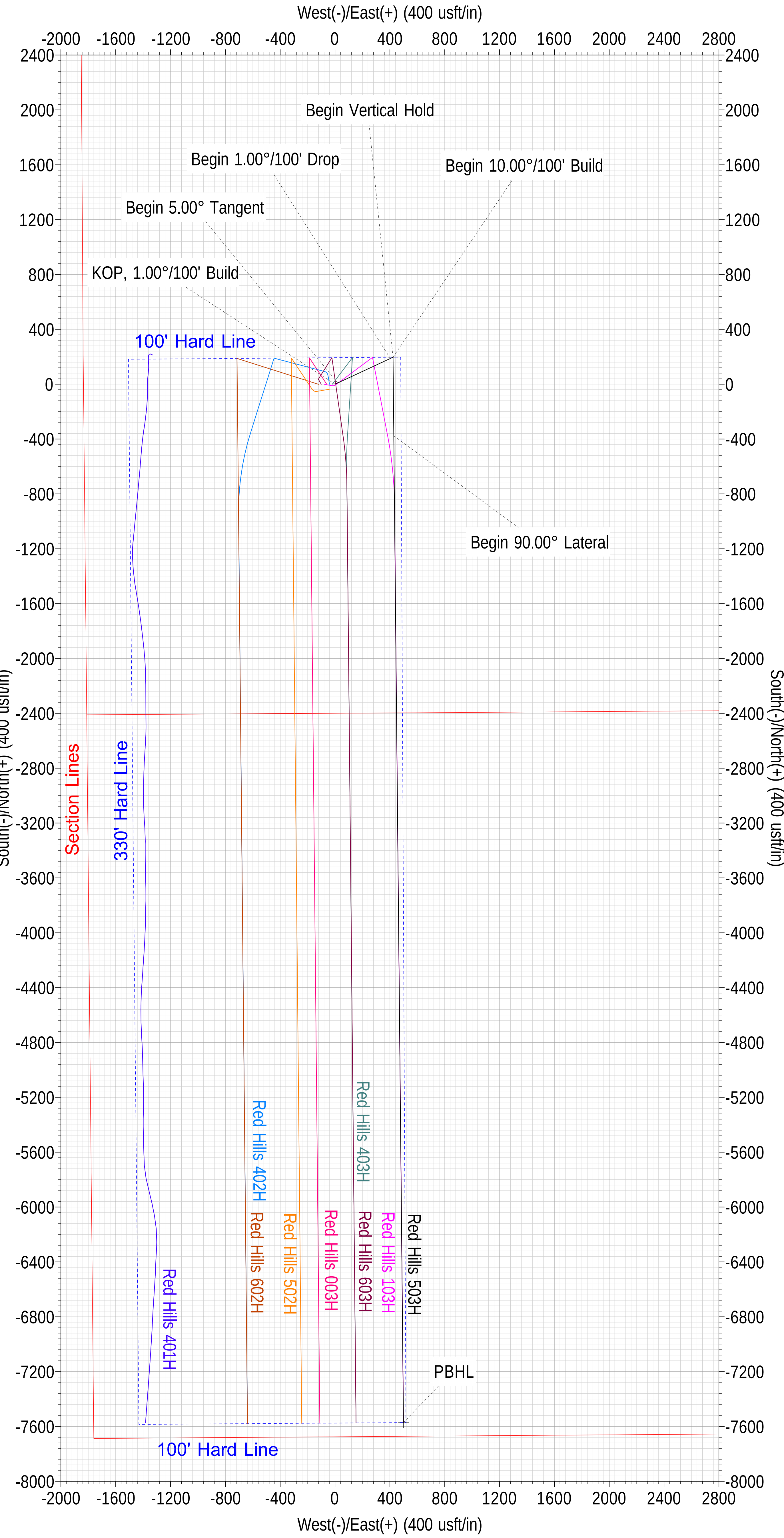
To convert a Magnetic Direction to a Grid Direction, Add 6.251°
To convert a Magnetic Direction to a True Direction, Add 6.633° East
To convert a True Direction to a Grid Direction, Subtract 0.382°

Diagram showing True (T), Grid (G), and Magnetic (M) North directions.

Azimuths to Grid North
True North: -0.38°
Magnetic North: 6.25°

Magnetic Field
Strength: 47731.2nT
Dip Angle: 59.68°
Date: 8/1/2019
Model: HDGM2019

SURVEY PROGRAM			
Depth From	Depth To	Survey/Plan	Tool
0.00	20041.43	Design #2 (Wellbore #1)	MWD+HRGM



Kaiser-Francis Oil Company

Kaiser-Francis

Lea County, New Mexico (NAD 27)

Red Hills 603H - 001H

Red Hills 503H

Wellbore #1

Plan: Design #2

Standard Planning Report

09 July, 2019



Kaiser-Francis Oil Company

MS Directional
Planning Report

Database:	EDM 5000.14 Conroe DB	Local Co-ordinate Reference:	Well Red Hills 503H
Company:	Kaiser-Francis	TVD Reference:	WELL @ 3441.00usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3441.00usft (Cactus 171)
Site:	Red Hills 603H - 001H	North Reference:	Grid
Well:	Red Hills 503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Project	Lea County, New Mexico (NAD 27)		
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 603H - 001H		
Site Position:		Northing:	395,815.29 usft
From:	Map	Easting:	722,890.66 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 5' 10.204 N
		Longitude:	103° 36' 49.152 W

Well	Red Hills 503H		
Well Position	+N/-S	0.00 usft	Northing: 395,851.61 usft
	+E/-W	0.00 usft	Easting: 722,930.39 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
Grid Convergence:	0.382 °	Ground Level:	3,418.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2019	8/1/2019	6.633	59.683	47,731.20

Design	Design #2				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	179.44	

Plan Survey Tool Program	Date	7/9/2019			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	20,041.43	Design #2 (Wellbore #1)	MWD+HRGM	
				OWSG MWD + HRGM	

Plan Sections											
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000		
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.000		
1,500.12	5.00	65.11	1,499.49	9.18	19.79	1.00	1.00	0.00	65.108		
6,354.63	5.00	65.11	6,335.52	187.31	403.67	0.00	0.00	0.00	0.000		
6,854.75	0.00	0.00	6,835.00	196.49	423.46	1.00	-1.00	0.00	180.000	VP v2 - Red Hills 50	
11,946.79	0.00	0.00	11,927.04	196.49	423.46	0.00	0.00	0.00	0.000		
12,846.79	90.00	179.44	12,500.00	-376.44	429.06	10.00	10.00	0.00	179.440		
20,042.04	90.00	179.44	12,500.00	-7,571.34	499.36	0.00	0.00	0.00	0.000	PBHL v2 - Red Hills	

Kaiser-Francis Oil Company

MS Directional
Planning Report

Database:	EDM 5000.14 Conroe DB	Local Co-ordinate Reference:	Well Red Hills 503H
Company:	Kaiser-Francis	TVD Reference:	WELL @ 3441.00usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3441.00usft (Cactus 171)
Site:	Red Hills 603H - 001H	North Reference:	Grid
Well:	Red Hills 503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP, 1.00°/100' Build									
1,100.00	1.00	65.11	1,099.99	0.37	0.79	-0.36	1.00	1.00	0.00
1,200.00	2.00	65.11	1,199.96	1.47	3.17	-1.44	1.00	1.00	0.00
1,300.00	3.00	65.11	1,299.86	3.31	7.12	-3.24	1.00	1.00	0.00
1,400.00	4.00	65.11	1,399.68	5.87	12.66	-5.75	1.00	1.00	0.00
1,500.12	5.00	65.11	1,499.49	9.18	19.79	-8.99	1.00	1.00	0.00
Begin 5.00° Tangent									
1,600.00	5.00	65.11	1,598.98	12.85	27.69	-12.58	0.00	0.00	0.00
1,700.00	5.00	65.11	1,698.60	16.52	35.59	-16.17	0.00	0.00	0.00
1,800.00	5.00	65.11	1,798.22	20.18	43.50	-19.76	0.00	0.00	0.00
1,900.00	5.00	65.11	1,897.84	23.85	51.41	-23.35	0.00	0.00	0.00
2,000.00	5.00	65.11	1,997.46	27.52	59.32	-26.94	0.00	0.00	0.00
2,100.00	5.00	65.11	2,097.08	31.19	67.22	-30.53	0.00	0.00	0.00
2,200.00	5.00	65.11	2,196.70	34.86	75.13	-34.13	0.00	0.00	0.00
2,300.00	5.00	65.11	2,296.32	38.53	83.04	-37.72	0.00	0.00	0.00
2,400.00	5.00	65.11	2,395.94	42.20	90.95	-41.31	0.00	0.00	0.00
2,500.00	5.00	65.11	2,495.56	45.87	98.86	-44.90	0.00	0.00	0.00
2,600.00	5.00	65.11	2,595.18	49.54	106.76	-48.49	0.00	0.00	0.00
2,700.00	5.00	65.11	2,694.80	53.21	114.67	-52.09	0.00	0.00	0.00
2,800.00	5.00	65.11	2,794.42	56.88	122.58	-55.68	0.00	0.00	0.00
2,900.00	5.00	65.11	2,894.04	60.55	130.49	-59.27	0.00	0.00	0.00
3,000.00	5.00	65.11	2,993.66	64.22	138.39	-62.86	0.00	0.00	0.00
3,100.00	5.00	65.11	3,093.27	67.89	146.30	-66.45	0.00	0.00	0.00
3,200.00	5.00	65.11	3,192.89	71.56	154.21	-70.04	0.00	0.00	0.00
3,300.00	5.00	65.11	3,292.51	75.22	162.12	-73.64	0.00	0.00	0.00
3,400.00	5.00	65.11	3,392.13	78.89	170.03	-77.23	0.00	0.00	0.00
3,500.00	5.00	65.11	3,491.75	82.56	177.93	-80.82	0.00	0.00	0.00
3,600.00	5.00	65.11	3,591.37	86.23	185.84	-84.41	0.00	0.00	0.00
3,700.00	5.00	65.11	3,690.99	89.90	193.75	-88.00	0.00	0.00	0.00
3,800.00	5.00	65.11	3,790.61	93.57	201.66	-91.60	0.00	0.00	0.00
3,900.00	5.00	65.11	3,890.23	97.24	209.57	-95.19	0.00	0.00	0.00
4,000.00	5.00	65.11	3,989.85	100.91	217.47	-98.78	0.00	0.00	0.00
4,100.00	5.00	65.11	4,089.47	104.58	225.38	-102.37	0.00	0.00	0.00
4,200.00	5.00	65.11	4,189.09	108.25	233.29	-105.96	0.00	0.00	0.00
4,300.00	5.00	65.11	4,288.71	111.92	241.20	-109.56	0.00	0.00	0.00
4,400.00	5.00	65.11	4,388.33	115.59	249.10	-113.15	0.00	0.00	0.00
4,500.00	5.00	65.11	4,487.94	119.26	257.01	-116.74	0.00	0.00	0.00
4,600.00	5.00	65.11	4,587.56	122.93	264.92	-120.33	0.00	0.00	0.00
4,700.00	5.00	65.11	4,687.18	126.60	272.83	-123.92	0.00	0.00	0.00
4,800.00	5.00	65.11	4,786.80	130.26	280.74	-127.51	0.00	0.00	0.00
4,900.00	5.00	65.11	4,886.42	133.93	288.64	-131.11	0.00	0.00	0.00
5,000.00	5.00	65.11	4,986.04	137.60	296.55	-134.70	0.00	0.00	0.00

Kaiser-Francis Oil Company

MS Directional
Planning Report

Database:	EDM 5000.14 Conroe DB	Local Co-ordinate Reference:	Well Red Hills 503H
Company:	Kaiser-Francis	TVD Reference:	WELL @ 3441.00usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3441.00usft (Cactus 171)
Site:	Red Hills 603H - 001H	North Reference:	Grid
Well:	Red Hills 503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.00	5.00	65.11	5,085.66	141.27	304.46	-138.29	0.00	0.00	0.00
5,200.00	5.00	65.11	5,185.28	144.94	312.37	-141.88	0.00	0.00	0.00
5,300.00	5.00	65.11	5,284.90	148.61	320.27	-145.47	0.00	0.00	0.00
5,400.00	5.00	65.11	5,384.52	152.28	328.18	-149.07	0.00	0.00	0.00
5,500.00	5.00	65.11	5,484.14	155.95	336.09	-152.66	0.00	0.00	0.00
5,600.00	5.00	65.11	5,583.76	159.62	344.00	-156.25	0.00	0.00	0.00
5,700.00	5.00	65.11	5,683.38	163.29	351.91	-159.84	0.00	0.00	0.00
5,800.00	5.00	65.11	5,783.00	166.96	359.81	-163.43	0.00	0.00	0.00
5,900.00	5.00	65.11	5,882.61	170.63	367.72	-167.02	0.00	0.00	0.00
6,000.00	5.00	65.11	5,982.23	174.30	375.63	-170.62	0.00	0.00	0.00
6,100.00	5.00	65.11	6,081.85	177.97	383.54	-174.21	0.00	0.00	0.00
6,200.00	5.00	65.11	6,181.47	181.63	391.45	-177.80	0.00	0.00	0.00
6,300.00	5.00	65.11	6,281.09	185.30	399.35	-181.39	0.00	0.00	0.00
6,354.63	5.00	65.11	6,335.52	187.31	403.67	-183.35	0.00	0.00	0.00
Begin 1.00°/100' Drop									
6,400.00	4.55	65.11	6,380.73	188.90	407.10	-184.91	1.00	-1.00	0.00
6,500.00	3.55	65.11	6,480.48	191.87	413.50	-187.82	1.00	-1.00	0.00
6,600.00	2.55	65.11	6,580.33	194.11	418.32	-190.01	1.00	-1.00	0.00
6,700.00	1.55	65.11	6,680.27	195.61	421.56	-191.48	1.00	-1.00	0.00
6,800.00	0.55	65.11	6,780.25	196.38	423.22	-192.23	1.00	-1.00	0.00
6,854.75	0.00	0.00	6,835.00	196.49	423.46	-192.34	1.00	-1.00	0.00
Begin Vertical Hold									
6,900.00	0.00	0.00	6,880.25	196.49	423.46	-192.34	0.00	0.00	0.00
7,000.00	0.00	0.00	6,980.25	196.49	423.46	-192.34	0.00	0.00	0.00
7,100.00	0.00	0.00	7,080.25	196.49	423.46	-192.34	0.00	0.00	0.00
7,200.00	0.00	0.00	7,180.25	196.49	423.46	-192.34	0.00	0.00	0.00
7,300.00	0.00	0.00	7,280.25	196.49	423.46	-192.34	0.00	0.00	0.00
7,400.00	0.00	0.00	7,380.25	196.49	423.46	-192.34	0.00	0.00	0.00
7,500.00	0.00	0.00	7,480.25	196.49	423.46	-192.34	0.00	0.00	0.00
7,600.00	0.00	0.00	7,580.25	196.49	423.46	-192.34	0.00	0.00	0.00
7,700.00	0.00	0.00	7,680.25	196.49	423.46	-192.34	0.00	0.00	0.00
7,800.00	0.00	0.00	7,780.25	196.49	423.46	-192.34	0.00	0.00	0.00
7,900.00	0.00	0.00	7,880.25	196.49	423.46	-192.34	0.00	0.00	0.00
8,000.00	0.00	0.00	7,980.25	196.49	423.46	-192.34	0.00	0.00	0.00
8,100.00	0.00	0.00	8,080.25	196.49	423.46	-192.34	0.00	0.00	0.00
8,200.00	0.00	0.00	8,180.25	196.49	423.46	-192.34	0.00	0.00	0.00
8,300.00	0.00	0.00	8,280.25	196.49	423.46	-192.34	0.00	0.00	0.00
8,400.00	0.00	0.00	8,380.25	196.49	423.46	-192.34	0.00	0.00	0.00
8,500.00	0.00	0.00	8,480.25	196.49	423.46	-192.34	0.00	0.00	0.00
8,600.00	0.00	0.00	8,580.25	196.49	423.46	-192.34	0.00	0.00	0.00
8,700.00	0.00	0.00	8,680.25	196.49	423.46	-192.34	0.00	0.00	0.00
8,800.00	0.00	0.00	8,780.25	196.49	423.46	-192.34	0.00	0.00	0.00
8,900.00	0.00	0.00	8,880.25	196.49	423.46	-192.34	0.00	0.00	0.00
9,000.00	0.00	0.00	8,980.25	196.49	423.46	-192.34	0.00	0.00	0.00
9,100.00	0.00	0.00	9,080.25	196.49	423.46	-192.34	0.00	0.00	0.00
9,200.00	0.00	0.00	9,180.25	196.49	423.46	-192.34	0.00	0.00	0.00
9,300.00	0.00	0.00	9,280.25	196.49	423.46	-192.34	0.00	0.00	0.00
9,400.00	0.00	0.00	9,380.25	196.49	423.46	-192.34	0.00	0.00	0.00
9,500.00	0.00	0.00	9,480.25	196.49	423.46	-192.34	0.00	0.00	0.00
9,600.00	0.00	0.00	9,580.25	196.49	423.46	-192.34	0.00	0.00	0.00
9,700.00	0.00	0.00	9,680.25	196.49	423.46	-192.34	0.00	0.00	0.00
9,800.00	0.00	0.00	9,780.25	196.49	423.46	-192.34	0.00	0.00	0.00
9,900.00	0.00	0.00	9,880.25	196.49	423.46	-192.34	0.00	0.00	0.00
10,000.00	0.00	0.00	9,980.25	196.49	423.46	-192.34	0.00	0.00	0.00

Kaiser-Francis Oil Company

MS Directional
Planning Report

Database:	EDM 5000.14 Conroe DB	Local Co-ordinate Reference:	Well Red Hills 503H
Company:	Kaiser-Francis	TVD Reference:	WELL @ 3441.00usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3441.00usft (Cactus 171)
Site:	Red Hills 603H - 001H	North Reference:	Grid
Well:	Red Hills 503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,100.00	0.00	0.00	10,080.25	196.49	423.46	-192.34	0.00	0.00	0.00
10,200.00	0.00	0.00	10,180.25	196.49	423.46	-192.34	0.00	0.00	0.00
10,300.00	0.00	0.00	10,280.25	196.49	423.46	-192.34	0.00	0.00	0.00
10,400.00	0.00	0.00	10,380.25	196.49	423.46	-192.34	0.00	0.00	0.00
10,500.00	0.00	0.00	10,480.25	196.49	423.46	-192.34	0.00	0.00	0.00
10,600.00	0.00	0.00	10,580.25	196.49	423.46	-192.34	0.00	0.00	0.00
10,700.00	0.00	0.00	10,680.25	196.49	423.46	-192.34	0.00	0.00	0.00
10,800.00	0.00	0.00	10,780.25	196.49	423.46	-192.34	0.00	0.00	0.00
10,900.00	0.00	0.00	10,880.25	196.49	423.46	-192.34	0.00	0.00	0.00
11,000.00	0.00	0.00	10,980.25	196.49	423.46	-192.34	0.00	0.00	0.00
11,100.00	0.00	0.00	11,080.25	196.49	423.46	-192.34	0.00	0.00	0.00
11,200.00	0.00	0.00	11,180.25	196.49	423.46	-192.34	0.00	0.00	0.00
11,300.00	0.00	0.00	11,280.25	196.49	423.46	-192.34	0.00	0.00	0.00
11,400.00	0.00	0.00	11,380.25	196.49	423.46	-192.34	0.00	0.00	0.00
11,500.00	0.00	0.00	11,480.25	196.49	423.46	-192.34	0.00	0.00	0.00
11,600.00	0.00	0.00	11,580.25	196.49	423.46	-192.34	0.00	0.00	0.00
11,700.00	0.00	0.00	11,680.25	196.49	423.46	-192.34	0.00	0.00	0.00
11,800.00	0.00	0.00	11,780.25	196.49	423.46	-192.34	0.00	0.00	0.00
11,900.00	0.00	0.00	11,880.25	196.49	423.46	-192.34	0.00	0.00	0.00
11,946.79	0.00	0.00	11,927.04	196.49	423.46	-192.34	0.00	0.00	0.00
Begin 10.00°/100' Build									
11,950.00	0.32	179.44	11,930.25	196.48	423.46	-192.33	10.00	10.00	0.00
12,000.00	5.32	179.44	11,980.17	194.02	423.48	-189.87	10.00	10.00	0.00
12,050.00	10.32	179.44	12,029.69	187.22	423.55	-183.07	10.00	10.00	0.00
12,100.00	15.32	179.44	12,078.43	176.13	423.66	-171.98	10.00	10.00	0.00
12,150.00	20.32	179.44	12,126.02	160.83	423.81	-156.68	10.00	10.00	0.00
12,200.00	25.32	179.44	12,172.09	141.45	424.00	-137.30	10.00	10.00	0.00
12,250.00	30.32	179.44	12,216.29	118.12	424.23	-113.97	10.00	10.00	0.00
12,300.00	35.32	179.44	12,258.30	91.03	424.49	-86.88	10.00	10.00	0.00
12,350.00	40.32	179.44	12,297.78	60.38	424.79	-56.23	10.00	10.00	0.00
12,400.00	45.32	179.44	12,334.45	26.41	425.12	-22.25	10.00	10.00	0.00
12,450.00	50.32	179.44	12,368.01	-10.63	425.48	14.79	10.00	10.00	0.00
12,500.00	55.32	179.44	12,398.21	-50.45	425.87	54.61	10.00	10.00	0.00
12,550.00	60.32	179.44	12,424.83	-92.76	426.29	96.92	10.00	10.00	0.00
12,600.00	65.32	179.44	12,447.67	-137.22	426.72	141.38	10.00	10.00	0.00
12,650.00	70.32	179.44	12,466.53	-183.50	427.17	187.67	10.00	10.00	0.00
12,700.00	75.32	179.44	12,481.30	-231.25	427.64	235.42	10.00	10.00	0.00
12,750.00	80.32	179.44	12,491.84	-280.11	428.12	284.28	10.00	10.00	0.00
12,800.00	85.32	179.44	12,498.09	-329.70	428.60	333.87	10.00	10.00	0.00
12,846.79	90.00	179.44	12,500.00	-376.44	429.06	380.62	10.00	10.00	0.00
Begin 90.00° Lateral									
12,900.00	90.00	179.44	12,500.00	-429.64	429.58	433.82	0.00	0.00	0.00
13,000.00	90.00	179.44	12,500.00	-529.64	430.56	533.82	0.00	0.00	0.00
13,100.00	90.00	179.44	12,500.00	-629.63	431.53	633.82	0.00	0.00	0.00
13,200.00	90.00	179.44	12,500.00	-729.63	432.51	733.82	0.00	0.00	0.00
13,300.00	90.00	179.44	12,500.00	-829.63	433.49	833.82	0.00	0.00	0.00
13,400.00	90.00	179.44	12,500.00	-929.62	434.46	933.82	0.00	0.00	0.00
13,500.00	90.00	179.44	12,500.00	-1,029.62	435.44	1,033.82	0.00	0.00	0.00
13,600.00	90.00	179.44	12,500.00	-1,129.61	436.42	1,133.82	0.00	0.00	0.00
13,700.00	90.00	179.44	12,500.00	-1,229.61	437.39	1,233.82	0.00	0.00	0.00
13,800.00	90.00	179.44	12,500.00	-1,329.60	438.37	1,333.82	0.00	0.00	0.00
13,900.00	90.00	179.44	12,500.00	-1,429.60	439.35	1,433.82	0.00	0.00	0.00
14,000.00	90.00	179.44	12,500.00	-1,529.59	440.33	1,533.82	0.00	0.00	0.00
14,100.00	90.00	179.44	12,500.00	-1,629.59	441.30	1,633.82	0.00	0.00	0.00

Kaiser-Francis Oil Company

MS Directional
Planning Report

Database:	EDM 5000.14 Conroe DB	Local Co-ordinate Reference:	Well Red Hills 503H
Company:	Kaiser-Francis	TVD Reference:	WELL @ 3441.00usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3441.00usft (Cactus 171)
Site:	Red Hills 603H - 001H	North Reference:	Grid
Well:	Red Hills 503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,200.00	90.00	179.44	12,500.00	-1,729.58	442.28	1,733.82	0.00	0.00	0.00
14,300.00	90.00	179.44	12,500.00	-1,829.58	443.26	1,833.82	0.00	0.00	0.00
14,400.00	90.00	179.44	12,500.00	-1,929.57	444.23	1,933.82	0.00	0.00	0.00
14,500.00	90.00	179.44	12,500.00	-2,029.57	445.21	2,033.82	0.00	0.00	0.00
14,600.00	90.00	179.44	12,500.00	-2,129.56	446.19	2,133.82	0.00	0.00	0.00
14,700.00	90.00	179.44	12,500.00	-2,229.56	447.17	2,233.82	0.00	0.00	0.00
14,800.00	90.00	179.44	12,500.00	-2,329.55	448.14	2,333.82	0.00	0.00	0.00
14,900.00	90.00	179.44	12,500.00	-2,429.55	449.12	2,433.82	0.00	0.00	0.00
15,000.00	90.00	179.44	12,500.00	-2,529.54	450.10	2,533.82	0.00	0.00	0.00
15,100.00	90.00	179.44	12,500.00	-2,629.54	451.07	2,633.82	0.00	0.00	0.00
15,200.00	90.00	179.44	12,500.00	-2,729.53	452.05	2,733.82	0.00	0.00	0.00
15,300.00	90.00	179.44	12,500.00	-2,829.53	453.03	2,833.82	0.00	0.00	0.00
15,400.00	90.00	179.44	12,500.00	-2,929.53	454.00	2,933.82	0.00	0.00	0.00
15,500.00	90.00	179.44	12,500.00	-3,029.52	454.98	3,033.82	0.00	0.00	0.00
15,600.00	90.00	179.44	12,500.00	-3,129.52	455.96	3,133.82	0.00	0.00	0.00
15,700.00	90.00	179.44	12,500.00	-3,229.51	456.94	3,233.82	0.00	0.00	0.00
15,800.00	90.00	179.44	12,500.00	-3,329.51	457.91	3,333.82	0.00	0.00	0.00
15,900.00	90.00	179.44	12,500.00	-3,429.50	458.89	3,433.82	0.00	0.00	0.00
16,000.00	90.00	179.44	12,500.00	-3,529.50	459.87	3,533.82	0.00	0.00	0.00
16,100.00	90.00	179.44	12,500.00	-3,629.49	460.84	3,633.82	0.00	0.00	0.00
16,200.00	90.00	179.44	12,500.00	-3,729.49	461.82	3,733.82	0.00	0.00	0.00
16,300.00	90.00	179.44	12,500.00	-3,829.48	462.80	3,833.82	0.00	0.00	0.00
16,400.00	90.00	179.44	12,500.00	-3,929.48	463.78	3,933.82	0.00	0.00	0.00
16,500.00	90.00	179.44	12,500.00	-4,029.47	464.75	4,033.82	0.00	0.00	0.00
16,600.00	90.00	179.44	12,500.00	-4,129.47	465.73	4,133.82	0.00	0.00	0.00
16,700.00	90.00	179.44	12,500.00	-4,229.46	466.71	4,233.82	0.00	0.00	0.00
16,800.00	90.00	179.44	12,500.00	-4,329.46	467.68	4,333.82	0.00	0.00	0.00
16,900.00	90.00	179.44	12,500.00	-4,429.45	468.66	4,433.82	0.00	0.00	0.00
17,000.00	90.00	179.44	12,500.00	-4,529.45	469.64	4,533.82	0.00	0.00	0.00
17,100.00	90.00	179.44	12,500.00	-4,629.44	470.61	4,633.82	0.00	0.00	0.00
17,200.00	90.00	179.44	12,500.00	-4,729.44	471.59	4,733.82	0.00	0.00	0.00
17,300.00	90.00	179.44	12,500.00	-4,829.43	472.57	4,833.82	0.00	0.00	0.00
17,400.00	90.00	179.44	12,500.00	-4,929.43	473.55	4,933.82	0.00	0.00	0.00
17,500.00	90.00	179.44	12,500.00	-5,029.42	474.52	5,033.82	0.00	0.00	0.00
17,600.00	90.00	179.44	12,500.00	-5,129.42	475.50	5,133.82	0.00	0.00	0.00
17,700.00	90.00	179.44	12,500.00	-5,229.42	476.48	5,233.82	0.00	0.00	0.00
17,800.00	90.00	179.44	12,500.00	-5,329.41	477.45	5,333.82	0.00	0.00	0.00
17,900.00	90.00	179.44	12,500.00	-5,429.41	478.43	5,433.82	0.00	0.00	0.00
18,000.00	90.00	179.44	12,500.00	-5,529.40	479.41	5,533.82	0.00	0.00	0.00
18,100.00	90.00	179.44	12,500.00	-5,629.40	480.39	5,633.82	0.00	0.00	0.00
18,200.00	90.00	179.44	12,500.00	-5,729.39	481.36	5,733.82	0.00	0.00	0.00
18,300.00	90.00	179.44	12,500.00	-5,829.39	482.34	5,833.82	0.00	0.00	0.00
18,400.00	90.00	179.44	12,500.00	-5,929.38	483.32	5,933.82	0.00	0.00	0.00
18,500.00	90.00	179.44	12,500.00	-6,029.38	484.29	6,033.82	0.00	0.00	0.00
18,600.00	90.00	179.44	12,500.00	-6,129.37	485.27	6,133.82	0.00	0.00	0.00
18,700.00	90.00	179.44	12,500.00	-6,229.37	486.25	6,233.82	0.00	0.00	0.00
18,800.00	90.00	179.44	12,500.00	-6,329.36	487.22	6,333.82	0.00	0.00	0.00
18,900.00	90.00	179.44	12,500.00	-6,429.36	488.20	6,433.82	0.00	0.00	0.00
19,000.00	90.00	179.44	12,500.00	-6,529.35	489.18	6,533.82	0.00	0.00	0.00
19,100.00	90.00	179.44	12,500.00	-6,629.35	490.16	6,633.82	0.00	0.00	0.00
19,200.00	90.00	179.44	12,500.00	-6,729.34	491.13	6,733.82	0.00	0.00	0.00
19,300.00	90.00	179.44	12,500.00	-6,829.34	492.11	6,833.82	0.00	0.00	0.00
19,400.00	90.00	179.44	12,500.00	-6,929.33	493.09	6,933.82	0.00	0.00	0.00
19,500.00	90.00	179.44	12,500.00	-7,029.33	494.06	7,033.82	0.00	0.00	0.00

Kaiser-Francis Oil Company

MS Directional
Planning Report

Database:	EDM 5000.14 Conroe DB	Local Co-ordinate Reference:	Well Red Hills 503H
Company:	Kaiser-Francis	TVD Reference:	WELL @ 3441.00usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3441.00usft (Cactus 171)
Site:	Red Hills 603H - 001H	North Reference:	Grid
Well:	Red Hills 503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,600.00	90.00	179.44	12,500.00	-7,129.32	495.04	7,133.82	0.00	0.00	0.00
19,700.00	90.00	179.44	12,500.00	-7,229.32	496.02	7,233.82	0.00	0.00	0.00
19,800.00	90.00	179.44	12,500.00	-7,329.32	497.00	7,333.82	0.00	0.00	0.00
19,900.00	90.00	179.44	12,500.00	-7,429.31	497.97	7,433.82	0.00	0.00	0.00
20,000.00	90.00	179.44	12,500.00	-7,529.31	498.95	7,533.82	0.00	0.00	0.00
20,042.04	90.00	179.44	12,500.00	-7,571.34	499.36	7,575.86	0.00	0.00	0.00
PBHL									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
VP v2 - Red Hills 503I - plan hits target center - Point	0.00	0.00	6,835.00	196.49	423.46	396,048.10	723,353.85	32° 5' 12.477 N	103° 36' 43.750 W
PBHL v2 - Red Hills 5 - plan hits target center - Point	0.00	0.00	12,500.00	-7,571.34	499.36	388,280.27	723,429.75	32° 3' 55.603 N	103° 36' 43.472 W

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,000.00	1,000.00	0.00	0.00	KOP, 1.00°/100' Build
1,500.12	1,499.49	9.18	19.79	Begin 5.00° Tangent
6,354.63	6,335.52	187.31	403.67	Begin 1.00°/100' Drop
6,854.75	6,835.00	196.49	423.46	Begin Vertical Hold
11,946.79	11,927.04	196.49	423.46	Begin 10.00°/100' Build
12,846.79	12,500.00	-376.44	429.06	Begin 90.00° Lateral
20,042.04	12,500.00	-7,571.34	499.36	PBHL

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 162644

CONDITIONS

Operator: KAISER-FRANCIS OIL CO PO Box 21468 Tulsa, OK 74121146	OGRID: 12361
	Action Number: 162644
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	12/1/2022