Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
[316707]

2. Name of Operator **[12361]**

9. API Well No. **30-025-50889**

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool, or Exploratory **[98259]**
XXXX

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface
At proposed prod. zone

11. Sec., T. R. M. or Blk. and Survey or Area

14. Distance in miles and direction from nearest town or post office*

12. County or Parish

13. State

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
Title		
Approved by *(Signature)*	Name *(Printed/Typed)*	Date
Title	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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.

NGMP Rec 12/14/2022

KZ
12/22/2022

SL

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 12/31/2020

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	[2] Pool Code	[3] Pool Name
30-025-50889	98259	Ojo Chiso; Bone Spring, Southwest

[4] Property Code	[5] Property Name	[6] Well Number
316707	BELL LAKE UNIT NORTH	334H

[7] OGRID No.	[8] Operator Name	[9] Elevation
12361	KAISER-FRANCIS OIL CO.	3431.7

[10] Surface Location

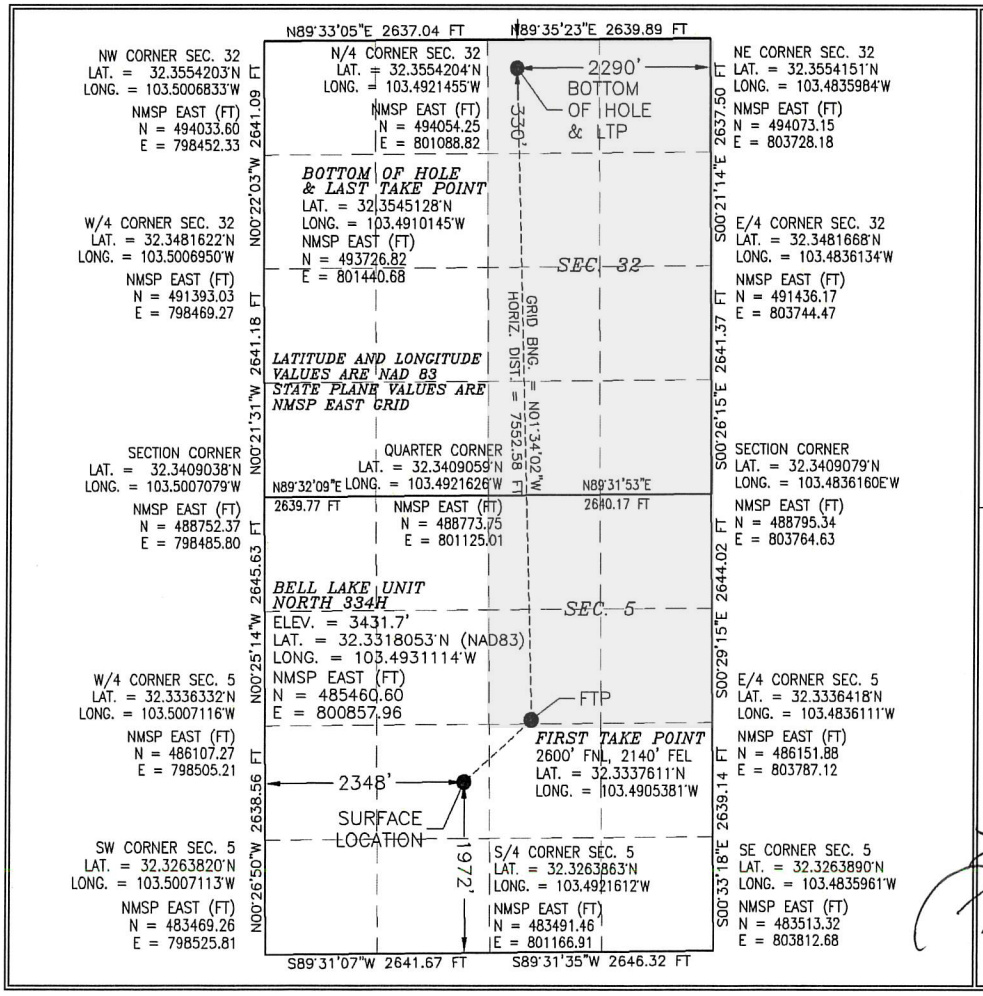
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	5	23 S	34 E		1972	SOUTH	2348	WEST	LEA

[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
B	32	22 S	34 E		330	NORTH	2290	EAST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
480			R-14527A

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.

Stormi Davis 10/7/19
Signature Date

Stormi Davis
Printed Name

ssdavis104@gmail.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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

FEBRUARY 20, 2019
Date of Survey

Signature and Seal of Professional Surveyor:

FILIMON F. JARAMILLO NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR

Certificate Number: FILIMON F. JARAMILLO, PLS 12797
SURVEY NO. 6972

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**KAISER FRANCIS OIL COMPANY**
LEASE NO.:	**NMNM0000587**
WELL NAME & NO.:	**BELL LAKE UNIT NORTH 334H**
SURFACE HOLE FOOTAGE:	1972'/S & 2348'/W
BOTTOM HOLE FOOTAGE	330'/N & 2290'/E
LOCATION:	Section 5, T.23 S., R.34 E., NMPM
COUNTY:	Lea County, New Mexico

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☐ COM	☑ Unit

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately **1515 feet** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8**

 Approval Date: 12/31/2020

hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.
e. Excess cement calculates to less than 25% ; More cement may be needed.

2. The **7-5/8** inch intermediate casing shall be set at **10465 feet**. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

- Excess cement calculates to less than 25% ; More cement may be needed.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

Option 1 (Single Stage):

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).

2. BOP Requirements

Option 1

a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.

b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **5000 (5M)** psi.

Option 2

Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months. (This is not necessary for secondary recovery unit wells)

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on

which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

    b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

    c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

    d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

    e. The results of the test shall be reported to the appropriate BLM office.

    f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

    g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to

the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

RI12222020

AFMSS
U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Application Data
12/14/2022

APD ID: 10400048776
Submission Date: 10/09/2019
Operator Name: KAISER FRANCIS OIL COMPANY
Well Name: BELL LAKE UNIT NORTH
Well Number: 334H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes
Show Final Text

Section 1 - General

APD ID: 10400048776
Tie to previous NOS? N
Submission Date: 10/09/2019
BLM Office: Carlsbad
User: Stormi Davis
Title: Regulatory Analyst
Federal/Indian APD: FED
Is the first lease penetrated for production Federal or Indian? FED
Lease number: NMNM0000587
Lease Acres:
Surface access agreement in place?
Allotted?
Reservation:
Agreement in place? YES
Federal or Indian agreement: FEDERAL
Agreement number: NMNM068292X
Agreement name: BELL LAKE
Keep application confidential? Y
Permitting Agent? NO
APD Operator: KAISER FRANCIS OIL COMPANY
Operator letter of

Operator Info

Operator Organization Name: KAISER FRANCIS OIL COMPANY
Operator Address: PO BOX 21468
Zip: 74121
Operator PO Box:
Operator City: TULSA
State: OK
Operator Phone: (918)491-4468
Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO
Master Development Plan name:
Well in Master SUPO? NO
Master SUPO name:
Well in Master Drilling Plan? NO
Master Drilling Plan name:
Well Name: BELL LAKE UNIT NORTH
Well Number: 334H
Well API Number:
Field/Pool or Exploratory? Field and Pool
Field Name: Ojo Chiso
Pool Name: Wolfcamp, Southwest

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** N **New surface disturbance?**

Type of Well Pad: MULTIPLE WELL **Multiple Well Pad Name:** NORTH BELL LAKE UNIT **Number:** 15

Well Class: HORIZONTAL **Number of Legs:** 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: EXPLORATORY (WILDCAT)

Describe sub-type:

Distance to town: 20 Miles **Distance to nearest well:** 30 FT **Distance to lease line:** 292 FT

Reservoir well spacing assigned acres Measurement: 480 Acres

Well plat: BLUN_334H_C102_20191007143618.pdf

Pay.gov_20191009133057.pdf

Well work start Date: 05/01/2020 **Duration:** 40 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: 6972 **Reference Datum:** GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
SHL Leg #1	1972	FSL	2348	FWL	23S	34E	5	Aliquot NESW	32.3318053	-103.4931114	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 0587	3432	0	0	N
KOP Leg #1	1972	FSL	2348	FWL	23S	34E	5	Aliquot NESW	32.3318053	-103.4931114	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 0587	-7047	10510	10479	N

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
PPP Leg #1-1	1972	FSL	2640	FEL	23S	34E	5	Aliquot NWSE	32.3317988	-103.4921504	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 01244A	-4252	7700	7684	N
PPP Leg #1-2	2640	FNL	2140	FEL	23S	34E	5	Aliquot SWNE	32.3336065	-103.4906081	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 0587	-7715	11618	11147	Y
PPP Leg #1-3	2600	FNL	2140	FEL	23S	34E	5	Aliquot SWNE	32.3337611	-103.4905381	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 0587	-7715	11658	11147	Y
EXIT Leg #1	330	FNL	2290	FEL	22S	34E	32	Aliquot NWNE	32.3545128	-103.4910145	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-7715	19213	11147	Y
BHL Leg #1	330	FNL	2290	FEL	22S	34E	32	Aliquot NWNE	32.3545128	-103.4910145	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-7715	19213	11147	Y

Gmail Melanie Wilson <nmogrservices@gmail.com>

Pay.gov Payment Confirmation: BLM Oil and Gas Online Payment

notification@pay.gov <notification@pay.gov> Wed, Oct 9, 2019 at 1:28 PM
To: nmogrservices@gmail.com

An official email of the United States government

Pay.gov

Your payment has been submitted to Pay.gov and the details are below. If you have any questions regarding this payment, please contact BLM OC CBS Customer Service at (303) 236-6795 or BLM_OC_CBS_Customer_Service@blm.gov.

Application Name: BLM Oil and Gas Online Payment
Pay.gov Tracking ID: 26KOEVGO
Agency Tracking ID: 75858759739
Transaction Type: Sale
Transaction Date: 10/09/2019 03:28:16 PM EDT
Account Holder Name: George B Kaiser
Transaction Amount: $10,230.00
Card Type: Visa
Card Number: **********0061

Company: Kaiser-Francis Oil Company
APD IDs: 10400048776
Lease Numbers: NMNM0000587
Well Numbers: 334H
Note: You will need your Pay.gov Tracking ID to complete your APD transaction in AFMSS II. Please ensure you write this number down upon completion of payment.

THIS IS AN AUTOMATED MESSAGE. PLEASE DO NOT REPLY.

Pay.gov is a program of the U.S. Department of the Treasury, Bureau of the Fiscal Service

AFMSS
U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Drilling Plan Data Report
12/14/2022

APD ID: 10400048776
Submission Date: 10/09/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH
Well Number: 334H

Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
555500	---	3432	0	0	OTHER : Surface	NONE	N
555501	RUSTLER	2210	1222	1222	SANDSTONE	NONE	N
555502	SALADO	1810	1622	1622	SALT	NONE	N
555503	TOP SALT	1610	1822	1822	SALT	NONE	N
555504	BASE OF SALT	-1290	4722	4722	SALT	NONE	N
555505	LAMAR	-1540	4972	4972	LIMESTONE	NATURAL GAS, OIL	N
555506	BELL CANYON	-1740	5172	5172	SANDSTONE	NATURAL GAS, OIL	N
555507	CHERRY CANYON	-2765	6197	6197	SANDSTONE	NATURAL GAS, OIL	N
555508	BRUSHY CANYON	-4090	7522	7522	SANDSTONE	NATURAL GAS, OIL	N
555509	BONE SPRING	-5190	8622	8622	SANDSTONE	NATURAL GAS, OIL	N
555510	AVALON SAND	-5263	8695	8695	SANDSTONE	NATURAL GAS, OIL	N
555511	BONE SPRING 1ST	-6115	9547	9547	SANDSTONE	NATURAL GAS, OIL	N
555518	BONE SPRING 2ND	-6595	10027	10027	SANDSTONE	NATURAL GAS, OIL	N
555519	BONE SPRING LIME	-7115	10547	10547	LIMESTONE	NATURAL GAS, OIL	N
555520	BONE SPRING 3RD	-7515	10947	10947	SANDSTONE	NATURAL GAS, OIL	Y
555521	WOLFCAMP	-7833	11265	11265	SANDSTONE	NATURAL GAS, OIL	N

Section 2 - Blowout Prevention

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Pressure Rating (PSI): 5M **Rating Depth:** 13000

Equipment: A 5M system will be installed according to Onshore Order #2 consisting of an Annular Preventer, BOP with two rams, a blind ram and safety valves and appropriate handles located on the rig floor. BOP will be equipped with 2 side outlets (choke side shall be a minimum 3 line, and kill side will be a minimum 2 line). Kill line will be installed with (2) valves and a check valve (2 min) of proper pressure rating for the system. Remote kill line (2 min) will be installed and ran to the outer edge of the substructure and be unobstructed. A manual and hydraulic valve (3 min) will be installed on the choke line, 3 chokes will be used with one being remotely controlled. Fill up line will be installed above the uppermost preventer. Pressure gauge of proper pressure rating will be installed on choke manifold. Upper and lower kelly cocks will be utilized with handles readily available in plain sight. A float sub will be available at all times. All connections subject to well pressure will be flanged, welded, or clamped.

Requesting Variance? YES

Variance request: Flex Hose Variance

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all of the components installed will be functional and tested.

Choke Diagram Attachment:

BLUN_334H_Choke_Manifold_20191007152601.pdf

BOP Diagram Attachment:

Cactus_Flex_Hose_16C_Certification_20200110101619.pdf

BLUN_334H_BOP_20200110101825.pdf

BLUN_334H_Multi_Bowl_Wellhead_20200110101946.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	14.75	10.75	NEW	API	N	0	1272	0	1272	3432	2160	1272	J-55	40.5	ST&C	2.7	5.3	DRY	8.2	DRY	12.2
2	INTERMEDIATE	9.875	7.625	NEW	API	N	0	10465	0	10434		-7002	10465	HCP-110	29.7	LT&C	1.4	1.9	DRY	2.5	DRY	3
3	PRODUCTION	6.75	5.5	NEW	API	N	0	19213	0	11147		-7715	19213	P-110	20	OTHER - Eagle SF	1.9	2.1	DRY	2.8	DRY	3.3

Casing Attachments

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BLUN_334H___Casing_Assumptions_20191007153232.pdf

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BLUN_334H___Casing_Assumptions_20191007152955.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BLUN_334H___Casing_Assumptions_20191007153128.pdf

5.5_x_20_P110_HP_USS_EAGLE_SFH_Performance_Sheet_20191007153129.pdf

Section 4 - Cement

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1272	613	1.7	13.5	1060	50	ExtendaCem	Poly E Flake
INTERMEDIATE	Lead		0	10465	800	2.7	11	2186	25	NeoCem	Extender
INTERMEDIATE	Tail		0	10465	546	1.2	15.6	653	25	Halcem	none
PRODUCTION	Lead		9000	19213	833	1.2	14.5	1019	15	Versacem	Halad

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times

Describe the mud monitoring system utilized: PVT/Pason/Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
10434	11147	OIL-BASED MUD	10	12							
1272	10434	OTHER : Diesel-Brine Emulsion	8.7	9							

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1272	OTHER : Fresh Water	8.4	9							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Top of cement on production casing will be determined by calculation.

List of open and cased hole logs run in the well:

DIRECTIONAL SURVEY,GAMMA RAY LOG,MUD LOG/GEOLOGIC LITHOLOGY LOG,

Coring operation description for the well:

None planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6956 **Anticipated Surface Pressure:** 4503

Anticipated Bottom Hole Temperature(F): 199

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

BLUN_Pad_15_H2S_Plan_20191007125628.pdf

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

BLUN_334H___Directional_Plan_20191007181948.pdf

Other proposed operations facets description:

Gas Capture Plan attached

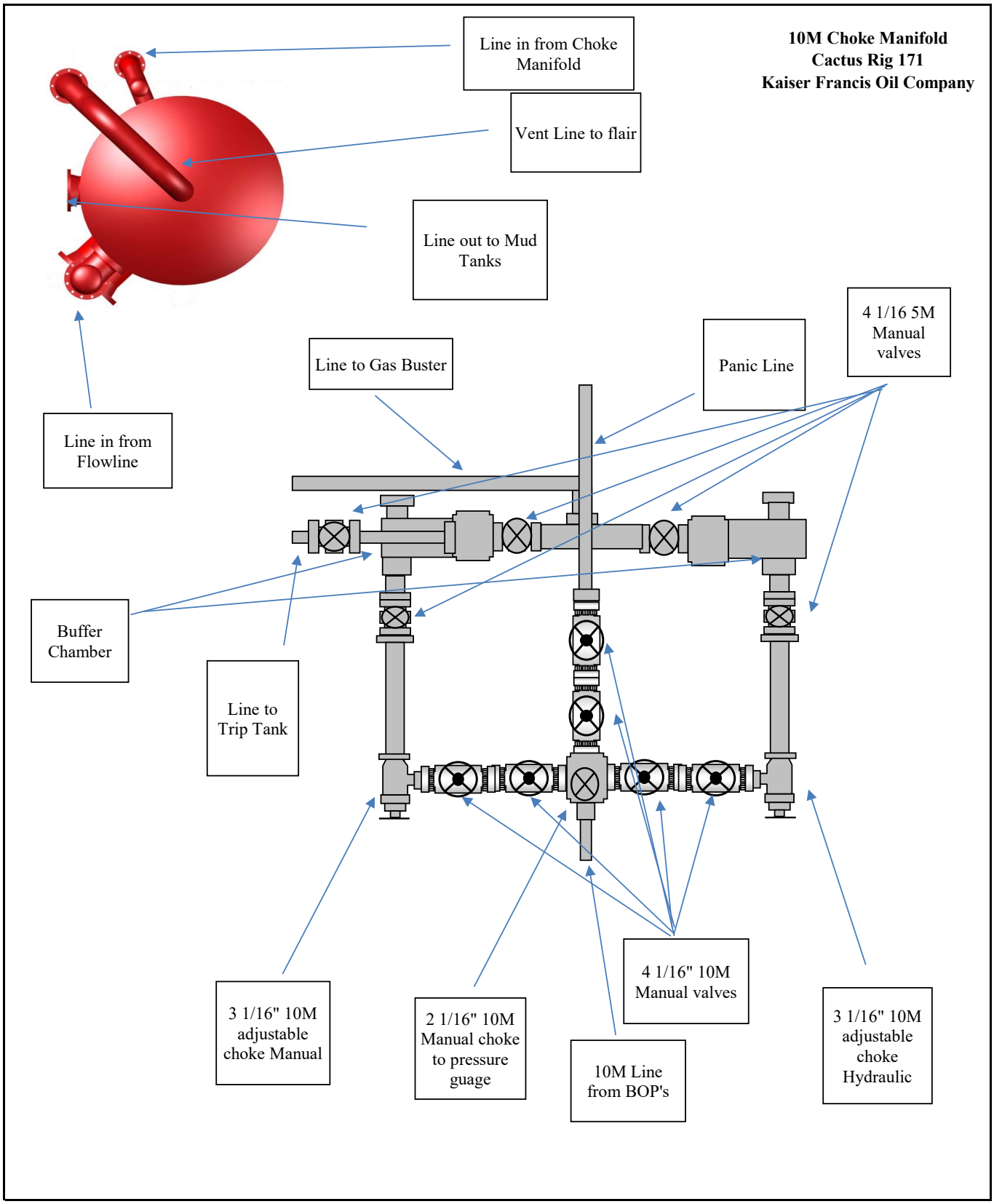
Other proposed operations facets attachment:

BLUN_Pad_15_GCP_20191007125653.pdf

Other Variance attachment:

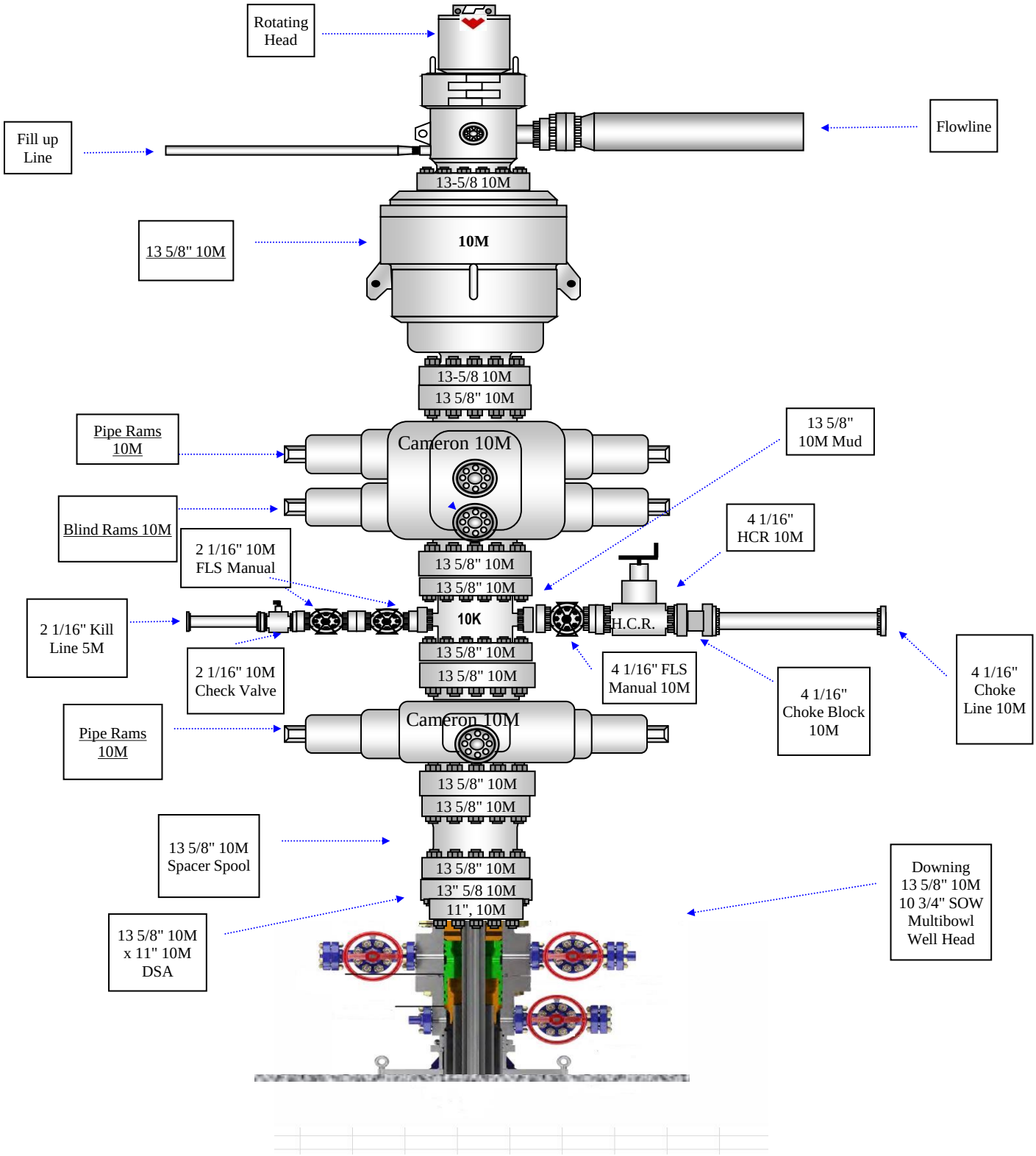
BLUN_334H_Flex_Hose_Data_20200110102242.pdf

10M Choke Manifold
Cactus Rig 171
Kaiser Francis Oil Company



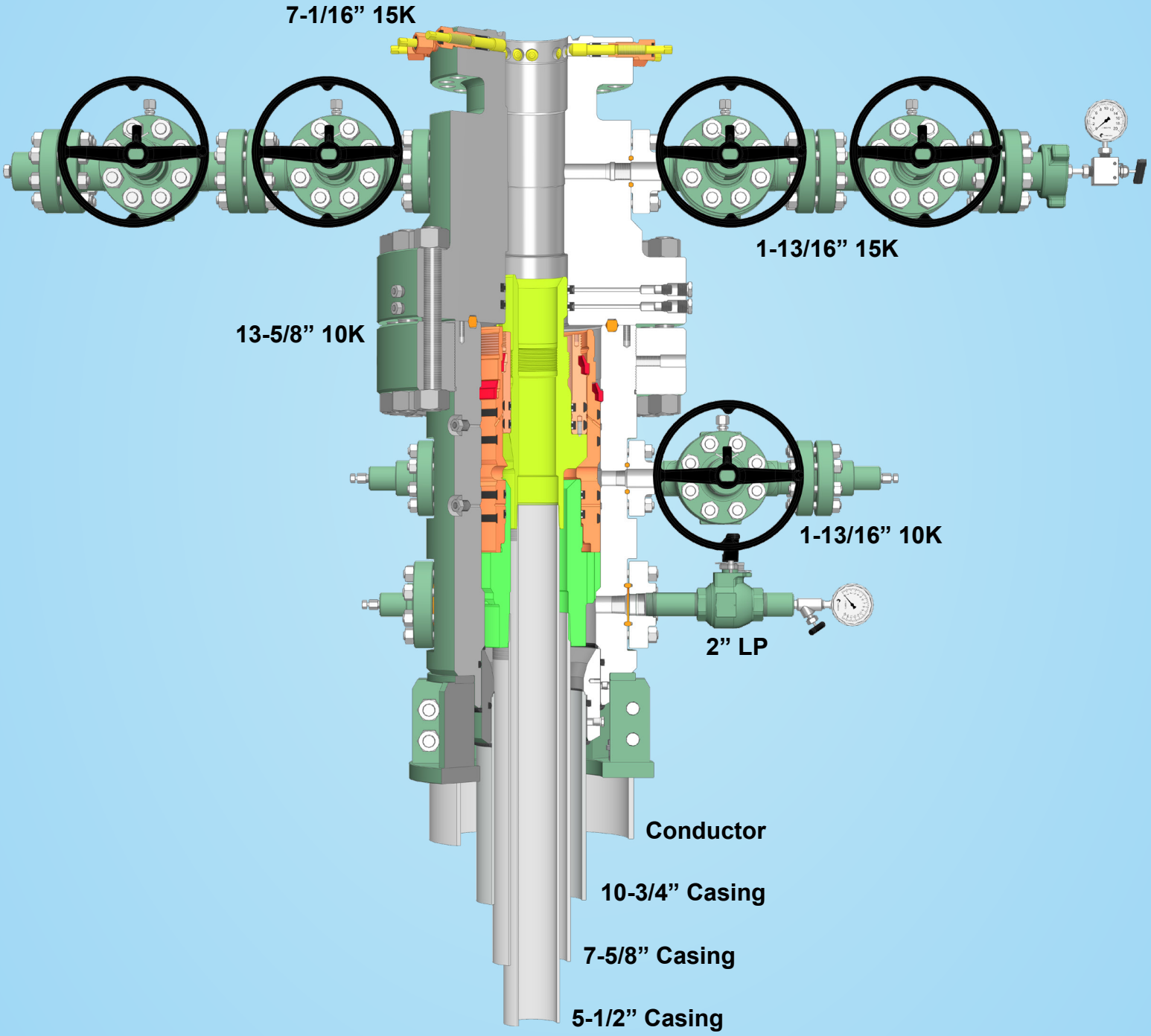
Cactus Rig 171
10M BOP with 10M Annular
Kaiser Francis Oil Company

Hole Sections Utilized
***9 7/8" Hole below Surface Casing**
***6 3/4"Hole below Intermediate casing**



CAMERON
A Schlumberger Company

13-5/8” 10K MN-DS Wellhead



Kaiser-Francis Oil Company

1678248

NOTE: All dimensions on this drawing are estimated measurements and should be evaluated by engineering.

KAISER-FRANCIS OIL COMPANY
HYDROGEN SULFIDE (H_2S) CONTINGENCY PLAN
FOR DRILLING/COMPLETION WORKOVER/FACILITY

Bell Lake Unit North
SECTION 1 -T23S-R33E
SECTION 6 -T23S-R34E
SECTION 5 -T23S-R34E

LEA COUNTY, NM

This well/facility is not expected to have H_2S, but due to the sensitive location, the following is submitted as requested.

TABLE OF CONTENTS

EMERGENCY RESPONSE ACTIVATION AND GENERAL RESPONSIBILITIES

Activation of the Emergency Action Plan

In the event of any emergency situation, all personnel on location should first ensure that the following items are initiated. After that, they should refer to the appropriate Specific Emergency Guidance sections below for further responsibilities:

1. Notify the senior ranking contract representative on site.
2. Notify Kaiser-Francis representative in charge.
3. Notify civil authorities if the Kaiser-Francis Representative cannot be contacted and the situation dictates.
4. Perform rescue and first aid as required (without jeopardizing additional personnel).

General Responsibilities

In the event of an H_2S emergency, the following plan will be initiated.

1) All personnel will immediately evacuate to an up-wind and if possible up-hill “safe area”.

2) If for any reason a person must enter the hazardous area, they must wear a SCBA (Self contained breathing apparatus).

3) Always use the “buddy system”.

4) Isolate the well/problem if possible.

5) Account for all personnel

6) Display the proper colors, warning all unsuspecting personnel of the danger at hand

7) Contact the Company personnel as soon as possible if not at the location. (use the enclosed call list as instructed)

At this point the company representative will evaluate the situation and coordinate the necessary duties to bring the situation under control, and if necessary, the notification of emergency response agencies and residents.

INDIVIDUAL RESPONSIBILITIES DURING AN H_2S RELEASE

The following procedures and responsibilities will be implemented on activation of the H_2S siren and lights.

All Personnel:

1. On alarm, don escape unit (if available) and report to upwind briefing area.

Rig Manager/Tool Pusher:

1. Check that all personnel are accounted for and their condition.
2. Administer or arrange for first aid treatment, and/or call EMTs as needed.
3. Identify two people best suited to secure well and perform rescue, and instruct them to don SCBA.
4. Notify Contract management and Kaiser-Francis Representative.
5. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.

Two People Responsible for Shut-in and Rescue:

1. Don SCBA and acquire tools to secure well and perform rescue, i.e., wrenches, retrieval ropes, etc.
2. Utilize the buddy system to secure well and perform rescue(s).
3. Return to the briefing area and stand by for further instructions.

All Other Personnel:

1. Isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

Kaiser-Francis Oil Company Representative:

1. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.
2. Notify company management or Local Incident Commander, and Police, Fire Department, or other local emergency services as required.

PROCEDURE FOR IGNITING AN UNCONTROLLABLE CONDITION:
Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police shall be the Incident Command of any major release.

The decision to ignite a well should be a last resort and one if not both of the following pertain.

1) Human life and/or property are in danger.

2) There is no hope of bringing the situation under control with the prevailing conditions at the site.

INSTRUCTIONS FOR IGNITION:

1) Two people are required. They must be equipped with positive pressure; self contained breathing apparatus and a "D"-ring style, full body, OSHA approved safety harness. Non-flammable rope will be attached.

2) One of the people will be a qualified safety person who will test the atmosphere for H_2S, Oxygen, & LFL. The other person will be the company supervisor; he is responsible for igniting the well.

3) Ignite up-wind from a distance no closer than necessary. Make sure that where you ignite from has the maximum escape avenue available. A 25mm flare gun shall be used, with a +/-500' range to ignite the gas.

4) Prior to ignition, make a final check for combustible gases.

5) Following ignition, continue with the emergency actions & procedures as before.

CONTACTING AUTHORITIES

Kaiser-Francis personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. This response plan must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER).

EMERGENCY CALL LIST: (Start and continue until ONE of these people have been reached)

	OFFCE	MOBILE
Kaiser-Francis Oil Co.	918/494-0000	
Bill Wilkinson	580/668-2335	580/221-4637
David Zerger	918/491-4350	918/557-6708
Charles Lock	918/491-4337	918/671-6510
Stuart Blake	918/491-4347	918/510-4126
Robert Sanford	918/491-4201	918/770-2682
Eric Hansen	918/491-4339	918/527-5260

EMERGENCY RESPONSE NUMBERS: Lea County, New Mexico

State Police – Artesia	575/748-9718
State Police – Hobbs	575/392-5580
State Police – Carlsbad	575/885-3138
Lea County Sheriff - Lovington	575/396-3611
Local Emergency Planning Center – Lea County	575/396-8607
Local Emergency Planning Center – Eddy County	575/885-3581
Fire Fighting, Rescue & Ambulance – Carlsbad	911 or 575/885-3125
Fire Fighting, Rescue & Ambulance – Hobbs	911 or 575/397-9308
Fire Fighting – Jal Volunteer Fire Department	911 or 505/395-2221
New Mexico Oil & Gas Commission – Artesia	575/748-1283
New Mexico Oil & Gas Commission – Hobbs	575/393-6161
Air Medical Transport Services – Hobbs	800/550-1025
Med Flight Air Ambulance – Albuquerque	505/842-4433
Angel MedFlight	844/553-9033
DXP	432/580-3770
BJ Services	575/392-5556
Halliburton	575/392-6531 800/844-8451

PROTECTION OF THE GENERAL PUBLIC/ROE:

In the event of a release with a concentration greater than 100 ppm H_2S, the ROE (Radius of Exposure) calculations will be done to determine if the following conditions have been met:

- Does the 100 ppm ROE include any public area (any place not associated with this site)
- Does the 500 ppm ROE include any public road (any road which the general public may travel)
- Is the 100 ppm ROE equal to or greater than 3000 feet

If any one of these conditions have been met then the Contingency Plan will be implemented. The following shows how to calculate the radius of exposure and an example.

Calculation for the 100 ppm ROE:

X = [(1.589)(concentration)(Q)] (0.6258)

(H2S concentrations in decimal form)
10,000 ppm +=1.+
1,000 ppm +=.1+
100 ppm +=.01+
10 ppm +=.001+

Calculation for the 500 ppm ROE:

X+[(0.4546)(concentration)(Q)] (.06258)

EXAMPLE: If a well/facility has been determined to have 150 ppm H_2S in the gas mixture and the well/facility is producing at a gas rate of 200 MCFPD then:

ROE for 100 PPM X=[(1.589)(.0150)(200)] (0.6258)
X=2.65'

ROE for 500 PPM X=[(.4546)(.0150)(200)] (0.6258)
X=1.2'

(These calculations will be forwarded to the appropriate District NMOCD office when applicable.)

PUBLIC EVACUATION PLAN:
(When the supervisor has determined that the General Public will be involved, the following plan will be implemented)

1) Notification of the emergency response agencies of the hazardous condition and Implement evacuation procedures.

2) A trained person in H_2S safety, shall monitor with detection equipment the H_2S Concentration, wind and area of exposure (ROE). This person will determine the outer perimeter of the hazardous area. The extent of the evacuation area will be determined from the data being collected. Monitoring shall continue until the situation has been resolved. **(All monitoring equipment will be UL approved, for use in class I groups A,B,C & D, Division I, hazardous locations. All monitors will have a minimum capability of measuring H_2S, oxygen, and flammable values.)**

3) Law enforcement shall be notified to set up necessary barriers and maintain such for the duration of the situation as well as aid in the evacuation procedure.

4) The company supervising personnel shall stay in communication with all agencies through out the duration of the situation and inform such agencies when the situation has been contained and the effected area(s) is safe to enter.

CHARACTERISTICS OF H_2S AND SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = 1	10 ppm	100 ppm	600 ppm
Sulfur Dioxide	SO_2	2.21 Air = 1	2 ppm	N/A	1000 ppm

TRAINING:

All responders must have training in the detection of H_2S measures for protection against the gas, equipment used for protection and emergency response. Weekly drills by all crews will be conducted and recorded in the IADC daily log. Additionally, responders must be equipped with H_2S monitors at all times.

PUBLIC RELATIONS

Kaiser-Francis recognizes that the news media have a legitimate interest in incidents at Kaiser-Francis facilities that could affect the public. It is to the company's benefit to cooperate with the news media when incidents occur because these media are our best liaison with the public.

Our objective is to see that all reports of any emergency are factual and represent the company's position fairly and accurately. Cooperation with news media representatives is the most reliable guarantee that this objective will be met.

All contract and Kaiser-Francis employees are instructed **NOT** to make any statement to the media concerning the emergency incident. If a media representative contacts any employee, they should refer them to the designated Emergency Command Center where they should contact the Incident Commander or his designated relief for any information concerning the incident.

KAISER-FRANCIS OIL COMPANY

Kaiser Francis

Bell Lake Unit North 334H
Bell Lake Unit North 334H
Bell Lake Unit North 334H
Bell Lake Unit North 334H

Plan: 190410 Bell Lake Unit North 334H

Morcor Standard Plan

11 April, 2019

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Project Bell Lake Unit North 334H

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Bell Lake Unit North 334H

Site Position:		**Northing:**	485,460.62 usft	**Latitude:**	32° 19' 54.499 N
From:	Lat/Long	**Easting:**	800,857.95 usft	**Longitude:**	103° 29' 35.201 W
Position Uncertainty:	1.0 usft	**Slot Radius:**	17-1/2 "	**Grid Convergence:**	0.45 °

Well Bell Lake Unit North 334H

Well Position	**+N/-S**	0.0 usft	**Northing:**	485,460.62 usft	**Latitude:**	32° 19' 54.499 N
	+E/-W	0.0 usft	**Easting:**	800,857.95 usft	**Longitude:**	103° 29' 35.201 W
Position Uncertainty		1.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,431.7 usft

Wellbore Bell Lake Unit North 334H

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/11/2019	6.59	60.10	47,906

Design 190410 Bell Lake Unit North 334H

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	4.03

Survey Tool Program **Date** 4/11/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	19,213.0	190410 Bell Lake Unit North 334H (Bell La	MWD	MWD - Standard

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
0.0	0.00	0.00	0.0	-3,453.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
50.0	0.00	0.00	50.0	-3,403.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
100.0	0.00	90.00	100.0	-3,353.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
120.0	0.00	90.00	120.0	-3,333.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
20" Conductor										
150.0	0.00	90.00	150.0	-3,303.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
200.0	0.00	90.00	200.0	-3,253.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
250.0	0.00	90.00	250.0	-3,203.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
300.0	0.00	90.00	300.0	-3,153.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
350.0	0.00	90.00	350.0	-3,103.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
400.0	0.00	90.00	400.0	-3,053.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
450.0	0.00	90.00	450.0	-3,003.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
500.0	0.00	90.00	500.0	-2,953.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
550.0	0.00	90.00	550.0	-2,903.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
600.0	0.00	90.00	600.0	-2,853.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
650.0	0.00	90.00	650.0	-2,803.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
700.0	0.00	90.00	700.0	-2,753.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
750.0	0.00	90.00	750.0	-2,703.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
800.0	0.00	90.00	800.0	-2,653.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
850.0	0.00	90.00	850.0	-2,603.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
900.0	0.00	90.00	900.0	-2,553.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
950.0	0.00	90.00	950.0	-2,503.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,000.0	0.00	90.00	1,000.0	-2,453.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,050.0	0.00	90.00	1,050.0	-2,403.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,100.0	0.00	90.00	1,100.0	-2,353.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,150.0	0.00	90.00	1,150.0	-2,303.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,200.0	0.00	90.00	1,200.0	-2,253.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
1,222.0	0.00	90.00	1,222.0	-2,231.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
Rustler										
1,250.0	0.00	90.00	1,250.0	-2,203.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,272.0	0.00	90.00	1,272.0	-2,181.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
10 3/4" Surface Casing										
1,300.0	0.00	90.00	1,300.0	-2,153.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,350.0	0.00	90.00	1,350.0	-2,103.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,400.0	0.00	90.00	1,400.0	-2,053.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,450.0	0.00	90.00	1,450.0	-2,003.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,500.0	0.00	90.00	1,500.0	-1,953.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,550.0	0.00	90.00	1,550.0	-1,903.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,600.0	0.00	90.00	1,600.0	-1,853.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,622.0	0.00	90.00	1,622.0	-1,831.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
Salado										
1,650.0	0.00	90.00	1,650.0	-1,803.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,700.0	0.00	90.00	1,700.0	-1,753.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,750.0	0.00	90.00	1,750.0	-1,703.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,800.0	0.00	90.00	1,800.0	-1,653.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,822.0	0.00	90.00	1,822.0	-1,631.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
Top of Salt										
1,850.0	0.00	90.00	1,850.0	-1,603.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,900.0	0.00	90.00	1,900.0	-1,553.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
1,950.0	0.00	90.00	1,950.0	-1,503.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,000.0	0.00	90.00	2,000.0	-1,453.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,050.0	0.00	90.00	2,050.0	-1,403.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,100.0	0.00	90.00	2,100.0	-1,353.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,150.0	0.00	90.00	2,150.0	-1,303.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,200.0	0.00	90.00	2,200.0	-1,253.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
2,250.0	0.00	90.00	2,250.0	-1,203.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,300.0	0.00	90.00	2,300.0	-1,153.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,350.0	0.00	90.00	2,350.0	-1,103.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,400.0	0.00	90.00	2,400.0	-1,053.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,450.0	0.00	90.00	2,450.0	-1,003.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,500.0	0.00	90.00	2,500.0	-953.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,550.0	0.00	90.00	2,550.0	-903.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,600.0	0.00	90.00	2,600.0	-853.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,650.0	0.00	90.00	2,650.0	-803.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,700.0	0.00	90.00	2,700.0	-753.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,750.0	0.00	90.00	2,750.0	-703.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,800.0	0.00	90.00	2,800.0	-653.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,850.0	0.00	90.00	2,850.0	-603.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,900.0	0.00	90.00	2,900.0	-553.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
2,950.0	0.00	90.00	2,950.0	-503.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,000.0	0.00	90.00	3,000.0	-453.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,050.0	0.00	90.00	3,050.0	-403.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,100.0	0.00	90.00	3,100.0	-353.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,150.0	0.00	90.00	3,150.0	-303.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,200.0	0.00	90.00	3,200.0	-253.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,250.0	0.00	90.00	3,250.0	-203.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,300.0	0.00	90.00	3,300.0	-153.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,350.0	0.00	90.00	3,350.0	-103.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,400.0	0.00	90.00	3,400.0	-53.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,450.0	0.00	90.00	3,450.0	-3.7	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,500.0	0.00	90.00	3,500.0	46.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,550.0	0.00	90.00	3,550.0	96.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
3,600.0	0.00	90.00	3,600.0	146.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,650.0	0.00	90.00	3,650.0	196.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,700.0	0.00	90.00	3,700.0	246.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,750.0	0.00	90.00	3,750.0	296.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,800.0	0.00	90.00	3,800.0	346.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,850.0	0.00	90.00	3,850.0	396.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,900.0	0.00	90.00	3,900.0	446.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
3,950.0	0.00	90.00	3,950.0	496.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,000.0	0.00	90.00	4,000.0	546.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,050.0	0.00	90.00	4,050.0	596.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,100.0	0.00	90.00	4,100.0	646.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,150.0	0.00	90.00	4,150.0	696.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,200.0	0.00	90.00	4,200.0	746.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,250.0	0.00	90.00	4,250.0	796.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,300.0	0.00	90.00	4,300.0	846.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,350.0	0.00	90.00	4,350.0	896.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,400.0	0.00	90.00	4,400.0	946.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,450.0	0.00	90.00	4,450.0	996.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,500.0	0.00	90.00	4,500.0	1,046.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,550.0	0.00	90.00	4,550.0	1,096.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,600.0	0.00	90.00	4,600.0	1,146.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,650.0	0.00	90.00	4,650.0	1,196.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,700.0	0.00	90.00	4,700.0	1,246.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
4,722.0	0.00	90.00	4,722.0	1,268.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
Base of Salt										
4,750.0	0.00	90.00	4,750.0	1,296.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
4,760.0	0.00	90.00	4,760.0	1,306.3	0.0	0.0	800,857.95	485,460.62	0.00	0.00
Start Build 3.00										
4,800.0	1.20	90.00	4,800.0	1,346.3	0.0	0.4	800,858.37	485,460.62	0.03	3.00
4,850.0	2.70	90.00	4,850.0	1,396.3	0.0	2.1	800,860.07	485,460.62	0.15	3.00
4,900.0	4.20	90.00	4,899.9	1,446.2	0.0	5.1	800,863.08	485,460.62	0.36	3.00
4,950.0	5.70	90.00	4,949.7	1,496.0	0.0	9.4	800,867.39	485,460.62	0.66	3.00
4,960.0	6.00	90.00	4,959.6	1,505.9	0.0	10.5	800,868.41	485,460.62	0.73	3.00
Start 5505.0 hold at 4960.0 MD										
4,972.4	6.00	90.00	4,972.0	1,518.3	0.0	11.8	800,869.71	485,460.62	0.83	0.00
Lamar										
5,000.0	6.00	90.00	4,999.4	1,545.7	0.0	14.6	800,872.59	485,460.62	1.03	0.00
5,050.0	6.00	90.00	5,049.1	1,595.4	0.0	19.9	800,877.82	485,460.62	1.40	0.00
5,100.0	6.00	90.00	5,098.9	1,645.2	0.0	25.1	800,883.04	485,460.62	1.76	0.00
5,150.0	6.00	90.00	5,148.6	1,694.9	0.0	30.3	800,888.27	485,460.62	2.13	0.00
5,173.5	6.00	90.00	5,172.0	1,718.3	0.0	32.8	800,890.73	485,460.62	2.30	0.00
Bell Canyon										
5,200.0	6.00	90.00	5,198.3	1,744.6	0.0	35.5	800,893.50	485,460.62	2.50	0.00
5,250.0	6.00	90.00	5,248.0	1,794.3	0.0	40.8	800,898.72	485,460.62	2.86	0.00
5,300.0	6.00	90.00	5,297.8	1,844.1	0.0	46.0	800,903.95	485,460.62	3.23	0.00
5,350.0	6.00	90.00	5,347.5	1,893.8	0.0	51.2	800,909.18	485,460.62	3.60	0.00
5,400.0	6.00	90.00	5,397.2	1,943.5	0.0	56.5	800,914.40	485,460.62	3.96	0.00
5,450.0	6.00	90.00	5,447.0	1,993.3	0.0	61.7	800,919.63	485,460.62	4.33	0.00
5,500.0	6.00	90.00	5,496.7	2,043.0	0.0	66.9	800,924.86	485,460.62	4.70	0.00
5,550.0	6.00	90.00	5,546.4	2,092.7	0.0	72.1	800,930.08	485,460.62	5.07	0.00
5,600.0	6.00	90.00	5,596.1	2,142.4	0.0	77.4	800,935.31	485,460.62	5.43	0.00
5,650.0	6.00	90.00	5,645.9	2,192.2	0.0	82.6	800,940.54	485,460.62	5.80	0.00
5,700.0	6.00	90.00	5,695.6	2,241.9	0.0	87.8	800,945.76	485,460.62	6.17	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
5,750.0	6.00	90.00	5,745.3	2,291.6	0.0	93.0	800,950.99	485,460.62	6.53	0.00
5,800.0	6.00	90.00	5,795.0	2,341.3	0.0	98.3	800,956.21	485,460.62	6.90	0.00
5,850.0	6.00	90.00	5,844.8	2,391.1	0.0	103.5	800,961.44	485,460.62	7.27	0.00
5,900.0	6.00	90.00	5,894.5	2,440.8	0.0	108.7	800,966.67	485,460.62	7.63	0.00
5,950.0	6.00	90.00	5,944.2	2,490.5	0.0	113.9	800,971.89	485,460.62	8.00	0.00
6,000.0	6.00	90.00	5,993.9	2,540.2	0.0	119.2	800,977.12	485,460.62	8.37	0.00
6,050.0	6.00	90.00	6,043.7	2,590.0	0.0	124.4	800,982.35	485,460.62	8.74	0.00
6,100.0	6.00	90.00	6,093.4	2,639.7	0.0	129.6	800,987.57	485,460.62	9.10	0.00
6,150.0	6.00	90.00	6,143.1	2,689.4	0.0	134.9	800,992.80	485,460.62	9.47	0.00
6,200.0	6.00	90.00	6,192.8	2,739.1	0.0	140.1	800,998.03	485,460.62	9.84	0.00
6,204.2	6.00	90.00	6,197.0	2,743.3	0.0	140.5	800,998.46	485,460.62	9.87	0.00
Cherry Canyon										
6,250.0	6.00	90.00	6,242.6	2,788.9	0.0	145.3	801,003.25	485,460.62	10.20	0.00
6,300.0	6.00	90.00	6,292.3	2,838.6	0.0	150.5	801,008.48	485,460.62	10.57	0.00
6,350.0	6.00	90.00	6,342.0	2,888.3	0.0	155.8	801,013.71	485,460.62	10.94	0.00
6,400.0	6.00	90.00	6,391.7	2,938.0	0.0	161.0	801,018.93	485,460.62	11.30	0.00
6,450.0	6.00	90.00	6,441.5	2,987.8	0.0	166.2	801,024.16	485,460.62	11.67	0.00
6,500.0	6.00	90.00	6,491.2	3,037.5	0.0	171.4	801,029.38	485,460.62	12.04	0.00
6,550.0	6.00	90.00	6,540.9	3,087.2	0.0	176.7	801,034.61	485,460.62	12.41	0.00
6,600.0	6.00	90.00	6,590.7	3,137.0	0.0	181.9	801,039.84	485,460.62	12.77	0.00
6,650.0	6.00	90.00	6,640.4	3,186.7	0.0	187.1	801,045.06	485,460.62	13.14	0.00
6,700.0	6.00	90.00	6,690.1	3,236.4	0.0	192.3	801,050.29	485,460.62	13.51	0.00
6,750.0	6.00	90.00	6,739.8	3,286.1	0.0	197.6	801,055.52	485,460.62	13.87	0.00
6,800.0	6.00	90.00	6,789.6	3,335.9	0.0	202.8	801,060.74	485,460.62	14.24	0.00
6,850.0	6.00	90.00	6,839.3	3,385.6	0.0	208.0	801,065.97	485,460.62	14.61	0.00
6,900.0	6.00	90.00	6,889.0	3,435.3	0.0	213.2	801,071.20	485,460.62	14.97	0.00
6,950.0	6.00	90.00	6,938.7	3,485.0	0.0	218.5	801,076.42	485,460.62	15.34	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
7,000.0	6.00	90.00	6,988.5	3,534.8	0.0	223.7	801,081.65	485,460.62	15.71	0.00
7,050.0	6.00	90.00	7,038.2	3,584.5	0.0	228.9	801,086.88	485,460.62	16.08	0.00
7,100.0	6.00	90.00	7,087.9	3,634.2	0.0	234.2	801,092.10	485,460.62	16.44	0.00
7,150.0	6.00	90.00	7,137.6	3,683.9	0.0	239.4	801,097.33	485,460.62	16.81	0.00
7,200.0	6.00	90.00	7,187.4	3,733.7	0.0	244.6	801,102.55	485,460.62	17.18	0.00
7,250.0	6.00	90.00	7,237.1	3,783.4	0.0	249.8	801,107.78	485,460.62	17.54	0.00
7,300.0	6.00	90.00	7,286.8	3,833.1	0.0	255.1	801,113.01	485,460.62	17.91	0.00
7,350.0	6.00	90.00	7,336.5	3,882.8	0.0	260.3	801,118.23	485,460.62	18.28	0.00
7,400.0	6.00	90.00	7,386.3	3,932.6	0.0	265.5	801,123.46	485,460.62	18.64	0.00
7,450.0	6.00	90.00	7,436.0	3,982.3	0.0	270.7	801,128.69	485,460.62	19.01	0.00
7,500.0	6.00	90.00	7,485.7	4,032.0	0.0	276.0	801,133.91	485,460.62	19.38	0.00
7,536.5	6.00	90.00	7,522.0	4,068.3	0.0	279.8	801,137.73	485,460.62	19.65	0.00
Brushy Canyon										
7,550.0	6.00	90.00	7,535.4	4,081.7	0.0	281.2	801,139.14	485,460.62	19.75	0.00
7,600.0	6.00	90.00	7,585.2	4,131.5	0.0	286.4	801,144.37	485,460.62	20.11	0.00
7,650.0	6.00	90.00	7,634.9	4,181.2	0.0	291.6	801,149.59	485,460.62	20.48	0.00
7,700.0	6.00	90.00	7,684.6	4,230.9	0.0	296.9	801,154.82	485,460.62	20.85	0.00
7,750.0	6.00	90.00	7,734.4	4,280.7	0.0	302.1	801,160.05	485,460.62	21.21	0.00
7,800.0	6.00	90.00	7,784.1	4,330.4	0.0	307.3	801,165.27	485,460.62	21.58	0.00
7,850.0	6.00	90.00	7,833.8	4,380.1	0.0	312.5	801,170.50	485,460.62	21.95	0.00
7,900.0	6.00	90.00	7,883.5	4,429.8	0.0	317.8	801,175.72	485,460.62	22.31	0.00
7,950.0	6.00	90.00	7,933.3	4,479.6	0.0	323.0	801,180.95	485,460.62	22.68	0.00
8,000.0	6.00	90.00	7,983.0	4,529.3	0.0	328.2	801,186.18	485,460.62	23.05	0.00
8,050.0	6.00	90.00	8,032.7	4,579.0	0.0	333.5	801,191.40	485,460.62	23.42	0.00
8,100.0	6.00	90.00	8,082.4	4,628.7	0.0	338.7	801,196.63	485,460.62	23.78	0.00
8,150.0	6.00	90.00	8,132.2	4,678.5	0.0	343.9	801,201.86	485,460.62	24.15	0.00
8,200.0	6.00	90.00	8,181.9	4,728.2	0.0	349.1	801,207.08	485,460.62	24.52	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
8,250.0	6.00	90.00	8,231.6	4,777.9	0.0	354.4	801,212.31	485,460.62	24.88	0.00
8,300.0	6.00	90.00	8,281.3	4,827.6	0.0	359.6	801,217.54	485,460.62	25.25	0.00
8,350.0	6.00	90.00	8,331.1	4,877.4	0.0	364.8	801,222.76	485,460.62	25.62	0.00
8,400.0	6.00	90.00	8,380.8	4,927.1	0.0	370.0	801,227.99	485,460.62	25.98	0.00
8,450.0	6.00	90.00	8,430.5	4,976.8	0.0	375.3	801,233.22	485,460.62	26.35	0.00
8,500.0	6.00	90.00	8,480.2	5,026.5	0.0	380.5	801,238.44	485,460.62	26.72	0.00
8,550.0	6.00	90.00	8,530.0	5,076.3	0.0	385.7	801,243.67	485,460.62	27.09	0.00
8,600.0	6.00	90.00	8,579.7	5,126.0	0.0	390.9	801,248.89	485,460.62	27.45	0.00
8,642.5	6.00	90.00	8,622.0	5,168.3	0.0	395.4	801,253.34	485,460.62	27.76	0.00
Bone Spring										
8,650.0	6.00	90.00	8,629.4	5,175.7	0.0	396.2	801,254.12	485,460.62	27.82	0.00
8,700.0	6.00	90.00	8,679.1	5,225.4	0.0	401.4	801,259.35	485,460.62	28.19	0.00
8,715.9	6.00	90.00	8,695.0	5,241.3	0.0	403.1	801,261.01	485,460.62	28.30	0.00
Avalon										
8,750.0	6.00	90.00	8,728.9	5,275.2	0.0	406.6	801,264.57	485,460.62	28.55	0.00
8,800.0	6.00	90.00	8,778.6	5,324.9	0.0	411.9	801,269.80	485,460.62	28.92	0.00
8,850.0	6.00	90.00	8,828.3	5,374.6	0.0	417.1	801,275.03	485,460.62	29.29	0.00
8,900.0	6.00	90.00	8,878.1	5,424.4	0.0	422.3	801,280.25	485,460.62	29.65	0.00
8,950.0	6.00	90.00	8,927.8	5,474.1	0.0	427.5	801,285.48	485,460.62	30.02	0.00
9,000.0	6.00	90.00	8,977.5	5,523.8	0.0	432.8	801,290.71	485,460.62	30.39	0.00
9,050.0	6.00	90.00	9,027.2	5,573.5	0.0	438.0	801,295.93	485,460.62	30.76	0.00
9,100.0	6.00	90.00	9,077.0	5,623.3	0.0	443.2	801,301.16	485,460.62	31.12	0.00
9,150.0	6.00	90.00	9,126.7	5,673.0	0.0	448.4	801,306.39	485,460.62	31.49	0.00
9,200.0	6.00	90.00	9,176.4	5,722.7	0.0	453.7	801,311.61	485,460.62	31.86	0.00
9,250.0	6.00	90.00	9,226.1	5,772.4	0.0	458.9	801,316.84	485,460.62	32.22	0.00
9,300.0	6.00	90.00	9,275.9	5,822.2	0.0	464.1	801,322.06	485,460.62	32.59	0.00
9,350.0	6.00	90.00	9,325.6	5,871.9	0.0	469.3	801,327.29	485,460.62	32.96	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
9,400.0	6.00	90.00	9,375.3	5,921.6	0.0	474.6	801,332.52	485,460.62	33.32	0.00
9,450.0	6.00	90.00	9,425.0	5,971.3	0.0	479.8	801,337.74	485,460.62	33.69	0.00
9,500.0	6.00	90.00	9,474.8	6,021.1	0.0	485.0	801,342.97	485,460.62	34.06	0.00
9,550.0	6.00	90.00	9,524.5	6,070.8	0.0	490.2	801,348.20	485,460.62	34.43	0.00
9,572.6	6.00	90.00	9,547.0	6,093.3	0.0	492.6	801,350.56	485,460.62	34.59	0.00
1st Bone Spring Sand										
9,600.0	6.00	90.00	9,574.2	6,120.5	0.0	495.5	801,353.42	485,460.62	34.79	0.00
9,650.0	6.00	90.00	9,623.9	6,170.2	0.0	500.7	801,358.65	485,460.62	35.16	0.00
9,700.0	6.00	90.00	9,673.7	6,220.0	0.0	505.9	801,363.88	485,460.62	35.53	0.00
9,750.0	6.00	90.00	9,723.4	6,269.7	0.0	511.2	801,369.10	485,460.62	35.89	0.00
9,800.0	6.00	90.00	9,773.1	6,319.4	0.0	516.4	801,374.33	485,460.62	36.26	0.00
9,850.0	6.00	90.00	9,822.8	6,369.1	0.0	521.6	801,379.56	485,460.62	36.63	0.00
9,900.0	6.00	90.00	9,872.6	6,418.9	0.0	526.8	801,384.78	485,460.62	36.99	0.00
9,950.0	6.00	90.00	9,922.3	6,468.6	0.0	532.1	801,390.01	485,460.62	37.36	0.00
10,000.0	6.00	90.00	9,972.0	6,518.3	0.0	537.3	801,395.23	485,460.62	37.73	0.00
10,050.0	6.00	90.00	10,021.8	6,568.1	0.0	542.5	801,400.46	485,460.62	38.10	0.00
10,055.3	6.00	90.00	10,027.0	6,573.3	0.0	543.1	801,401.01	485,460.62	38.13	0.00
2nd Bone Spring Sand										
10,100.0	6.00	90.00	10,071.5	6,617.8	0.0	547.7	801,405.69	485,460.62	38.46	0.00
10,150.0	6.00	90.00	10,121.2	6,667.5	0.0	553.0	801,410.91	485,460.62	38.83	0.00
10,200.0	6.00	90.00	10,170.9	6,717.2	0.0	558.2	801,416.14	485,460.62	39.20	0.00
10,250.0	6.00	90.00	10,220.7	6,767.0	0.0	563.4	801,421.37	485,460.62	39.56	0.00
10,300.0	6.00	90.00	10,270.4	6,816.7	0.0	568.6	801,426.59	485,460.62	39.93	0.00
10,350.0	6.00	90.00	10,320.1	6,866.4	0.0	573.9	801,431.82	485,460.62	40.30	0.00
10,400.0	6.00	90.00	10,369.8	6,916.1	0.0	579.1	801,437.05	485,460.62	40.66	0.00
10,450.0	6.00	90.00	10,419.6	6,965.9	0.0	584.3	801,442.27	485,460.62	41.03	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
10,465.0	6.00	90.00	10,434.5	6,980.8	0.0	585.9	801,443.84	485,460.62	41.14	0.00
Start DLS 4.23 TFO -65.69 - 7 5/8" Intermediate Casing										
10,500.0	6.74	78.44	10,469.3	7,015.6	0.4	589.7	801,447.68	485,461.03	41.82	4.23
10,510.0	7.00	75.63	10,479.2	7,025.5	0.7	590.9	801,448.85	485,461.30	42.17	4.23
Start DLS 5.56 TFO -79.17										
10,550.0	7.73	59.18	10,518.9	7,065.2	2.7	595.6	801,453.52	485,463.28	44.48	5.56
10,560.0	8.00	55.62	10,528.8	7,075.1	3.4	596.7	801,454.67	485,464.02	45.30	5.56
Start DLS 5.49 TFO -98.48										
10,578.4	7.91	48.34	10,547.0	7,093.3	5.0	598.7	801,456.68	485,465.59	47.00	5.49
3rd Bone Srping Lime										
10,600.0	7.98	39.77	10,568.4	7,114.7	7.1	600.8	801,458.75	485,467.73	49.28	5.49
10,650.0	8.75	21.58	10,617.9	7,164.2	13.3	604.4	801,462.36	485,473.93	55.72	5.49
10,660.0	9.00	18.40	10,627.7	7,174.0	14.8	604.9	801,462.89	485,475.38	57.20	5.49
Start DLS 6.67 TFO -7.18										
10,700.0	11.65	16.75	10,667.1	7,213.4	21.6	607.1	801,465.04	485,482.22	64.18	6.67
10,750.0	14.97	15.50	10,715.7	7,262.0	32.7	610.3	801,468.22	485,493.28	75.43	6.67
10,770.0	16.30	15.14	10,735.0	7,281.3	37.9	611.7	801,469.65	485,498.48	80.72	6.67
Start DLS 10.00 TFO -1.19										
10,800.0	19.30	14.95	10,763.6	7,309.9	46.7	614.1	801,472.03	485,507.33	89.72	10.00
10,850.0	24.30	14.74	10,810.0	7,356.3	64.7	618.8	801,476.78	485,525.28	107.95	10.00
10,900.0	29.30	14.59	10,854.6	7,400.9	86.5	624.5	801,482.48	485,547.08	130.10	10.00
10,950.0	34.30	14.49	10,897.1	7,443.4	112.0	631.1	801,489.09	485,572.58	156.00	10.00
11,000.0	39.30	14.41	10,937.1	7,483.4	140.9	638.6	801,496.56	485,601.57	185.45	10.00
11,012.9	40.59	14.39	10,947.0	7,493.3	149.0	640.7	801,498.63	485,609.60	193.60	10.00
First PP - 3rd Bone Spring Sand										
11,050.0	44.30	14.34	10,974.4	7,520.7	173.2	646.9	801,504.83	485,633.84	218.22	10.00
11,100.0	49.30	14.29	11,008.6	7,554.9	208.5	655.9	801,513.84	485,669.15	254.07	10.00
11,150.0	54.30	14.24	11,039.5	7,585.8	246.6	665.6	801,523.52	485,707.22	292.72	10.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
11,200.0	59.30	14.20	11,066.9	7,613.2	287.1	675.8	801,533.79	485,747.76	333.89	10.00
11,250.0	64.30	14.16	11,090.5	7,636.8	329.8	686.6	801,544.58	485,790.47	377.25	10.00
11,300.0	69.30	14.13	11,110.2	7,656.5	374.4	697.9	801,555.81	485,835.02	422.48	10.00
11,350.0	74.30	14.09	11,125.8	7,672.1	420.4	709.4	801,567.38	485,881.07	469.23	10.00
11,400.0	79.30	14.06	11,137.2	7,683.5	467.7	721.3	801,579.22	485,928.27	517.14	10.00
11,450.0	84.30	14.03	11,144.3	7,690.6	515.6	733.3	801,591.23	485,976.26	565.86	10.00
11,500.0	89.30	14.00	11,147.1	7,693.4	564.1	745.4	801,603.32	486,024.68	615.01	10.00
11,507.0	90.00	14.00	11,147.2	7,693.5	570.9	747.1	801,605.01	486,031.48	621.91	10.00
Start DLS 2.01 TFO -90.00										
11,550.0	90.00	13.14	11,147.2	7,693.5	612.7	757.1	801,615.10	486,073.28	664.31	2.01
11,600.0	90.00	12.13	11,147.2	7,693.5	661.4	768.1	801,626.04	486,122.06	713.75	2.01
11,650.0	90.00	11.13	11,147.2	7,693.5	710.4	778.2	801,636.12	486,171.04	763.31	2.01
11,658.0	90.00	10.97	11,147.2	7,693.5	718.3	779.7	801,637.65	486,178.89	771.25	2.01
First Take Point										
11,700.0	90.00	10.13	11,147.2	7,693.5	759.6	787.4	801,645.34	486,220.18	812.97	2.01
11,750.0	90.00	9.13	11,147.2	7,693.5	808.9	795.8	801,653.70	486,269.47	862.73	2.01
11,800.0	90.00	8.12	11,147.2	7,693.5	858.3	803.3	801,661.20	486,318.91	912.57	2.01
11,850.0	90.00	7.12	11,147.2	7,693.5	907.8	809.9	801,667.83	486,368.46	962.47	2.01
11,900.0	90.00	6.12	11,147.2	7,693.5	957.5	815.6	801,673.59	486,418.13	1,012.42	2.01
11,950.0	90.00	5.11	11,147.2	7,693.5	1,007.3	820.5	801,678.49	486,467.89	1,062.40	2.01
12,000.0	90.00	4.11	11,147.2	7,693.5	1,057.1	824.6	801,682.51	486,517.73	1,112.40	2.01
12,050.0	90.00	3.11	11,147.2	7,693.5	1,107.0	827.7	801,685.65	486,567.63	1,162.40	2.01
12,100.0	90.00	2.10	11,147.2	7,693.5	1,157.0	830.0	801,687.93	486,617.58	1,212.38	2.01
12,150.0	90.00	1.10	11,147.2	7,693.5	1,206.9	831.4	801,689.32	486,667.56	1,262.34	2.01
12,200.0	90.00	0.10	11,147.2	7,693.5	1,256.9	831.9	801,689.85	486,717.55	1,312.25	2.01
12,250.0	90.00	359.10	11,147.2	7,693.5	1,306.9	831.5	801,689.50	486,767.55	1,362.10	2.01
12,300.0	90.00	358.09	11,147.2	7,693.5	1,356.9	830.3	801,688.27	486,817.53	1,411.87	2.01

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
12,307.6	90.00	357.94	11,147.2	7,693.5	1,364.5	830.1	801,688.01	486,825.13	1,419.43	2.01
Start 6905.4 hold at 12307.6 MD										
12,350.0	90.00	357.94	11,147.2	7,693.5	1,406.9	828.5	801,686.48	486,867.50	1,461.59	0.00
12,400.0	90.00	357.94	11,147.2	7,693.5	1,456.9	826.7	801,684.69	486,917.47	1,511.31	0.00
12,450.0	90.00	357.94	11,147.2	7,693.5	1,506.8	824.9	801,682.89	486,967.44	1,561.03	0.00
12,500.0	90.00	357.94	11,147.2	7,693.5	1,556.8	823.1	801,681.09	487,017.41	1,610.74	0.00
12,550.0	90.00	357.94	11,147.2	7,693.5	1,606.8	821.3	801,679.29	487,067.37	1,660.46	0.00
12,600.0	90.00	357.94	11,147.2	7,693.5	1,656.7	819.5	801,677.50	487,117.34	1,710.18	0.00
12,650.0	90.00	357.94	11,147.2	7,693.5	1,706.7	817.8	801,675.70	487,167.31	1,759.90	0.00
12,700.0	90.00	357.94	11,147.2	7,693.5	1,756.7	816.0	801,673.90	487,217.28	1,809.62	0.00
12,750.0	90.00	357.94	11,147.2	7,693.5	1,806.6	814.2	801,672.10	487,267.24	1,859.33	0.00
12,800.0	90.00	357.94	11,147.2	7,693.5	1,856.6	812.4	801,670.31	487,317.21	1,909.05	0.00
12,850.0	90.00	357.94	11,147.2	7,693.5	1,906.6	810.6	801,668.51	487,367.18	1,958.77	0.00
12,900.0	90.00	357.94	11,147.2	7,693.5	1,956.5	808.8	801,666.71	487,417.15	2,008.49	0.00
12,950.0	90.00	357.94	11,147.2	7,693.5	2,006.5	807.0	801,664.91	487,467.11	2,058.21	0.00
13,000.0	90.00	357.94	11,147.2	7,693.5	2,056.5	805.2	801,663.12	487,517.08	2,107.93	0.00
13,050.0	90.00	357.94	11,147.2	7,693.5	2,106.4	803.4	801,661.32	487,567.05	2,157.64	0.00
13,100.0	90.00	357.94	11,147.2	7,693.5	2,156.4	801.6	801,659.52	487,617.02	2,207.36	0.00
13,150.0	90.00	357.94	11,147.2	7,693.5	2,206.4	799.8	801,657.73	487,666.99	2,257.08	0.00
13,200.0	90.00	357.94	11,147.2	7,693.5	2,256.3	798.0	801,655.93	487,716.95	2,306.80	0.00
13,250.0	90.00	357.94	11,147.2	7,693.5	2,306.3	796.2	801,654.13	487,766.92	2,356.52	0.00
13,300.0	90.00	357.94	11,147.2	7,693.5	2,356.3	794.4	801,652.33	487,816.89	2,406.23	0.00
13,350.0	90.00	357.94	11,147.2	7,693.5	2,406.2	792.6	801,650.54	487,866.86	2,455.95	0.00
13,400.0	90.00	357.94	11,147.2	7,693.5	2,456.2	790.8	801,648.74	487,916.82	2,505.67	0.00
13,450.0	90.00	357.94	11,147.2	7,693.5	2,506.2	789.0	801,646.94	487,966.79	2,555.39	0.00
13,500.0	90.00	357.94	11,147.2	7,693.5	2,556.1	787.2	801,645.14	488,016.76	2,605.11	0.00
13,550.0	90.00	357.94	11,147.2	7,693.5	2,606.1	785.4	801,643.35	488,066.73	2,654.82	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
13,600.0	90.00	357.94	11,147.2	7,693.5	2,656.1	783.6	801,641.55	488,116.69	2,704.54	0.00
13,650.0	90.00	357.94	11,147.2	7,693.5	2,706.0	781.8	801,639.75	488,166.66	2,754.26	0.00
13,700.0	90.00	357.94	11,147.2	7,693.5	2,756.0	780.0	801,637.96	488,216.63	2,803.98	0.00
13,750.0	90.00	357.94	11,147.2	7,693.5	2,806.0	778.2	801,636.16	488,266.60	2,853.70	0.00
13,800.0	90.00	357.94	11,147.2	7,693.5	2,855.9	776.4	801,634.36	488,316.57	2,903.42	0.00
13,850.0	90.00	357.94	11,147.2	7,693.5	2,905.9	774.6	801,632.56	488,366.53	2,953.13	0.00
13,900.0	90.00	357.94	11,147.2	7,693.5	2,955.9	772.8	801,630.77	488,416.50	3,002.85	0.00
13,950.0	90.00	357.94	11,147.2	7,693.5	3,005.8	771.0	801,628.97	488,466.47	3,052.57	0.00
14,000.0	90.00	357.94	11,147.2	7,693.5	3,055.8	769.2	801,627.17	488,516.44	3,102.29	0.00
14,050.0	90.00	357.94	11,147.2	7,693.5	3,105.8	767.4	801,625.37	488,566.40	3,152.01	0.00
14,100.0	90.00	357.94	11,147.2	7,693.5	3,155.8	765.6	801,623.58	488,616.37	3,201.72	0.00
14,150.0	90.00	357.94	11,147.2	7,693.5	3,205.7	763.8	801,621.78	488,666.34	3,251.44	0.00
14,200.0	90.00	357.94	11,147.2	7,693.5	3,255.7	762.0	801,619.98	488,716.31	3,301.16	0.00
14,250.0	90.00	357.94	11,147.2	7,693.5	3,305.7	760.2	801,618.19	488,766.27	3,350.88	0.00
14,300.0	90.00	357.94	11,147.2	7,693.5	3,355.6	758.4	801,616.39	488,816.24	3,400.60	0.00
14,350.0	90.00	357.94	11,147.2	7,693.5	3,405.6	756.6	801,614.59	488,866.21	3,450.31	0.00
14,400.0	90.00	357.94	11,147.2	7,693.5	3,455.6	754.8	801,612.79	488,916.18	3,500.03	0.00
14,450.0	90.00	357.94	11,147.2	7,693.5	3,505.5	753.0	801,611.00	488,966.15	3,549.75	0.00
14,500.0	90.00	357.94	11,147.2	7,693.5	3,555.5	751.2	801,609.20	489,016.11	3,599.47	0.00
14,550.0	90.00	357.94	11,147.2	7,693.5	3,605.5	749.5	801,607.40	489,066.08	3,649.19	0.00
14,600.0	90.00	357.94	11,147.2	7,693.5	3,655.4	747.7	801,605.60	489,116.05	3,698.91	0.00
14,650.0	90.00	357.94	11,147.2	7,693.5	3,705.4	745.9	801,603.81	489,166.02	3,748.62	0.00
14,700.0	90.00	357.94	11,147.2	7,693.5	3,755.4	744.1	801,602.01	489,215.98	3,798.34	0.00
14,750.0	90.00	357.94	11,147.2	7,693.5	3,805.3	742.3	801,600.21	489,265.95	3,848.06	0.00
14,800.0	90.00	357.94	11,147.2	7,693.5	3,855.3	740.5	801,598.41	489,315.92	3,897.78	0.00
14,850.0	90.00	357.94	11,147.2	7,693.5	3,905.3	738.7	801,596.62	489,365.89	3,947.50	0.00
14,900.0	90.00	357.94	11,147.2	7,693.5	3,955.2	736.9	801,594.82	489,415.85	3,997.21	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
14,950.0	90.00	357.94	11,147.2	7,693.5	4,005.2	735.1	801,593.02	489,465.82	4,046.93	0.00
15,000.0	90.00	357.94	11,147.2	7,693.5	4,055.2	733.3	801,591.23	489,515.79	4,096.65	0.00
15,050.0	90.00	357.94	11,147.2	7,693.5	4,105.1	731.5	801,589.43	489,565.76	4,146.37	0.00
15,100.0	90.00	357.94	11,147.2	7,693.5	4,155.1	729.7	801,587.63	489,615.73	4,196.09	0.00
15,150.0	90.00	357.94	11,147.2	7,693.5	4,205.1	727.9	801,585.83	489,665.69	4,245.80	0.00
15,200.0	90.00	357.94	11,147.2	7,693.5	4,255.0	726.1	801,584.04	489,715.66	4,295.52	0.00
15,250.0	90.00	357.94	11,147.2	7,693.5	4,305.0	724.3	801,582.24	489,765.63	4,345.24	0.00
15,300.0	90.00	357.94	11,147.2	7,693.5	4,355.0	722.5	801,580.44	489,815.60	4,394.96	0.00
15,350.0	90.00	357.94	11,147.2	7,693.5	4,404.9	720.7	801,578.64	489,865.56	4,444.68	0.00
15,400.0	90.00	357.94	11,147.2	7,693.5	4,454.9	718.9	801,576.85	489,915.53	4,494.40	0.00
15,450.0	90.00	357.94	11,147.2	7,693.5	4,504.9	717.1	801,575.05	489,965.50	4,544.11	0.00
15,500.0	90.00	357.94	11,147.2	7,693.5	4,554.8	715.3	801,573.25	490,015.47	4,593.83	0.00
15,550.0	90.00	357.94	11,147.2	7,693.5	4,604.8	713.5	801,571.46	490,065.43	4,643.55	0.00
15,600.0	90.00	357.94	11,147.2	7,693.5	4,654.8	711.7	801,569.66	490,115.40	4,693.27	0.00
15,650.0	90.00	357.94	11,147.2	7,693.5	4,704.7	709.9	801,567.86	490,165.37	4,742.99	0.00
15,700.0	90.00	357.94	11,147.2	7,693.5	4,754.7	708.1	801,566.06	490,215.34	4,792.70	0.00
15,750.0	90.00	357.94	11,147.2	7,693.5	4,804.7	706.3	801,564.27	490,265.31	4,842.42	0.00
15,800.0	90.00	357.94	11,147.2	7,693.5	4,854.7	704.5	801,562.47	490,315.27	4,892.14	0.00
15,850.0	90.00	357.94	11,147.2	7,693.5	4,904.6	702.7	801,560.67	490,365.24	4,941.86	0.00
15,900.0	90.00	357.94	11,147.2	7,693.5	4,954.6	700.9	801,558.87	490,415.21	4,991.58	0.00
15,950.0	90.00	357.94	11,147.2	7,693.5	5,004.6	699.1	801,557.08	490,465.18	5,041.30	0.00
16,000.0	90.00	357.94	11,147.2	7,693.5	5,054.5	697.3	801,555.28	490,515.14	5,091.01	0.00
16,050.0	90.00	357.94	11,147.2	7,693.5	5,104.5	695.5	801,553.48	490,565.11	5,140.73	0.00
16,100.0	90.00	357.94	11,147.2	7,693.5	5,154.5	693.7	801,551.68	490,615.08	5,190.45	0.00
16,150.0	90.00	357.94	11,147.2	7,693.5	5,204.4	691.9	801,549.89	490,665.05	5,240.17	0.00
16,200.0	90.00	357.94	11,147.2	7,693.5	5,254.4	690.1	801,548.09	490,715.01	5,289.89	0.00
16,250.0	90.00	357.94	11,147.2	7,693.5	5,304.4	688.3	801,546.29	490,764.98	5,339.60	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
16,300.0	90.00	357.94	11,147.2	7,693.5	5,354.3	686.5	801,544.50	490,814.95	5,389.32	0.00
16,350.0	90.00	357.94	11,147.2	7,693.5	5,404.3	684.7	801,542.70	490,864.92	5,439.04	0.00
16,400.0	90.00	357.94	11,147.2	7,693.5	5,454.3	683.0	801,540.90	490,914.89	5,488.76	0.00
16,450.0	90.00	357.94	11,147.2	7,693.5	5,504.2	681.2	801,539.10	490,964.85	5,538.48	0.00
16,500.0	90.00	357.94	11,147.2	7,693.5	5,554.2	679.4	801,537.31	491,014.82	5,588.19	0.00
16,550.0	90.00	357.94	11,147.2	7,693.5	5,604.2	677.6	801,535.51	491,064.79	5,637.91	0.00
16,600.0	90.00	357.94	11,147.2	7,693.5	5,654.1	675.8	801,533.71	491,114.76	5,687.63	0.00
16,650.0	90.00	357.94	11,147.2	7,693.5	5,704.1	674.0	801,531.91	491,164.72	5,737.35	0.00
16,700.0	90.00	357.94	11,147.2	7,693.5	5,754.1	672.2	801,530.12	491,214.69	5,787.07	0.00
16,750.0	90.00	357.94	11,147.2	7,693.5	5,804.0	670.4	801,528.32	491,264.66	5,836.79	0.00
16,800.0	90.00	357.94	11,147.2	7,693.5	5,854.0	668.6	801,526.52	491,314.63	5,886.50	0.00
16,850.0	90.00	357.94	11,147.2	7,693.5	5,904.0	666.8	801,524.73	491,364.59	5,936.22	0.00
16,900.0	90.00	357.94	11,147.2	7,693.5	5,953.9	665.0	801,522.93	491,414.56	5,985.94	0.00
16,950.0	90.00	357.94	11,147.2	7,693.5	6,003.9	663.2	801,521.13	491,464.53	6,035.66	0.00
17,000.0	90.00	357.94	11,147.2	7,693.5	6,053.9	661.4	801,519.33	491,514.50	6,085.38	0.00
17,050.0	90.00	357.94	11,147.2	7,693.5	6,103.8	659.6	801,517.54	491,564.46	6,135.09	0.00
17,100.0	90.00	357.94	11,147.2	7,693.5	6,153.8	657.8	801,515.74	491,614.43	6,184.81	0.00
17,150.0	90.00	357.94	11,147.2	7,693.5	6,203.8	656.0	801,513.94	491,664.40	6,234.53	0.00
17,200.0	90.00	357.94	11,147.2	7,693.5	6,253.7	654.2	801,512.14	491,714.37	6,284.25	0.00
17,250.0	90.00	357.94	11,147.2	7,693.5	6,303.7	652.4	801,510.35	491,764.34	6,333.97	0.00
17,300.0	90.00	357.94	11,147.2	7,693.5	6,353.7	650.6	801,508.55	491,814.30	6,383.68	0.00
17,350.0	90.00	357.94	11,147.2	7,693.5	6,403.7	648.8	801,506.75	491,864.27	6,433.40	0.00
17,400.0	90.00	357.94	11,147.2	7,693.5	6,453.6	647.0	801,504.96	491,914.24	6,483.12	0.00
17,450.0	90.00	357.94	11,147.2	7,693.5	6,503.6	645.2	801,503.16	491,964.21	6,532.84	0.00
17,500.0	90.00	357.94	11,147.2	7,693.5	6,553.6	643.4	801,501.36	492,014.17	6,582.56	0.00
17,550.0	90.00	357.94	11,147.2	7,693.5	6,603.5	641.6	801,499.56	492,064.14	6,632.28	0.00
17,600.0	90.00	357.94	11,147.2	7,693.5	6,653.5	639.8	801,497.77	492,114.11	6,681.99	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
17,650.0	90.00	357.94	11,147.2	7,693.5	6,703.5	638.0	801,495.97	492,164.08	6,731.71	0.00
17,700.0	90.00	357.94	11,147.2	7,693.5	6,753.4	636.2	801,494.17	492,214.04	6,781.43	0.00
17,750.0	90.00	357.94	11,147.2	7,693.5	6,803.4	634.4	801,492.37	492,264.01	6,831.15	0.00
17,800.0	90.00	357.94	11,147.2	7,693.5	6,853.4	632.6	801,490.58	492,313.98	6,880.87	0.00
17,850.0	90.00	357.94	11,147.2	7,693.5	6,903.3	630.8	801,488.78	492,363.95	6,930.58	0.00
17,900.0	90.00	357.94	11,147.2	7,693.5	6,953.3	629.0	801,486.98	492,413.92	6,980.30	0.00
17,950.0	90.00	357.94	11,147.2	7,693.5	7,003.3	627.2	801,485.18	492,463.88	7,030.02	0.00
18,000.0	90.00	357.94	11,147.2	7,693.5	7,053.2	625.4	801,483.39	492,513.85	7,079.74	0.00
18,050.0	90.00	357.94	11,147.2	7,693.5	7,103.2	623.6	801,481.59	492,563.82	7,129.46	0.00
18,100.0	90.00	357.94	11,147.2	7,693.5	7,153.2	621.8	801,479.79	492,613.79	7,179.17	0.00
18,150.0	90.00	357.94	11,147.2	7,693.5	7,203.1	620.0	801,478.00	492,663.75	7,228.89	0.00
18,200.0	90.00	357.94	11,147.2	7,693.5	7,253.1	618.2	801,476.20	492,713.72	7,278.61	0.00
18,250.0	90.00	357.94	11,147.2	7,693.5	7,303.1	616.5	801,474.40	492,763.69	7,328.33	0.00
18,300.0	90.00	357.94	11,147.2	7,693.5	7,353.0	614.7	801,472.60	492,813.66	7,378.05	0.00
18,350.0	90.00	357.94	11,147.2	7,693.5	7,403.0	612.9	801,470.81	492,863.62	7,427.77	0.00
18,400.0	90.00	357.94	11,147.2	7,693.5	7,453.0	611.1	801,469.01	492,913.59	7,477.48	0.00
18,450.0	90.00	357.94	11,147.2	7,693.5	7,502.9	609.3	801,467.21	492,963.56	7,527.20	0.00
18,500.0	90.00	357.94	11,147.2	7,693.5	7,552.9	607.5	801,465.41	493,013.53	7,576.92	0.00
18,550.0	90.00	357.94	11,147.2	7,693.5	7,602.9	605.7	801,463.62	493,063.50	7,626.64	0.00
18,600.0	90.00	357.94	11,147.2	7,693.5	7,652.8	603.9	801,461.82	493,113.46	7,676.36	0.00
18,650.0	90.00	357.94	11,147.2	7,693.5	7,702.8	602.1	801,460.02	493,163.43	7,726.07	0.00
18,700.0	90.00	357.94	11,147.2	7,693.5	7,752.8	600.3	801,458.23	493,213.40	7,775.79	0.00
18,750.0	90.00	357.94	11,147.2	7,693.5	7,802.7	598.5	801,456.43	493,263.37	7,825.51	0.00
18,800.0	90.00	357.94	11,147.2	7,693.5	7,852.7	596.7	801,454.63	493,313.33	7,875.23	0.00
18,850.0	90.00	357.94	11,147.2	7,693.5	7,902.7	594.9	801,452.83	493,363.30	7,924.95	0.00
18,900.0	90.00	357.94	11,147.2	7,693.5	7,952.6	593.1	801,451.04	493,413.27	7,974.67	0.00
18,950.0	90.00	357.94	11,147.2	7,693.5	8,002.6	591.3	801,449.24	493,463.24	8,024.38	0.00

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
19,000.0	90.00	357.94	11,147.2	7,693.5	8,052.6	589.5	801,447.44	493,513.20	8,074.10	0.00
19,050.0	90.00	357.94	11,147.2	7,693.5	8,102.6	587.7	801,445.64	493,563.17	8,123.82	0.00
19,100.0	90.00	357.94	11,147.2	7,693.5	8,152.5	585.9	801,443.85	493,613.14	8,173.54	0.00
19,150.0	90.00	357.94	11,147.2	7,693.5	8,202.5	584.1	801,442.05	493,663.11	8,223.26	0.00
19,200.0	90.00	357.94	11,147.2	7,693.5	8,252.5	582.3	801,440.25	493,713.08	8,272.97	0.00
19,213.0	90.00	357.94	11,147.2	7,693.5	8,265.4	581.8	801,439.78	493,726.07	8,285.90	0.00

TD at 19213.0 - Last Take Point - 5 1/2" Production Casing

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
120.0	120.0	20" Conductor	20	26
10,465.0	10,434.5	7 5/8" Intermediate Casing	7-5/8	9-7/8
19,213.0	11,147.2	5 1/2" Production Casing	5-1/2	6-3/4
1,272.0	1,272.0	10 3/4" Surface Casing	10-3/4	12-1/4

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
8,642.5	8,622.0	Bone Spring		0.00	
4,722.0	4,722.0	Base of Salt		0.00	
1,622.0	1,622.0	Salado		0.00	
1,822.0	1,822.0	Top of Salt		0.00	
9,572.6	9,547.0	1st Bone Spring Sand		0.00	
11,012.9	10,947.0	3rd Bone Spring Sand		0.00	
6,204.2	6,197.0	Cherry Canyon		0.00	
8,715.9	8,695.0	Avalon		0.00	
1,222.0	1,222.0	Rustler		0.00	
10,578.4	10,547.0	3rd Bone Srping Lime		0.00	
10,055.3	10,027.0	2nd Bone Spring Sand		0.00	
5,173.5	5,172.0	Bell Canyon		0.00	
7,536.5	7,522.0	Brushy Canyon		0.00	
4,972.4	4,972.0	Lamar		0.00	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
4,760.0	4,760.0	0.0	0.0	Start Build 3.00
4,960.0	4,959.6	0.0	10.5	Start 5505.0 hold at 4960.0 MD
10,465.0	10,434.5	0.0	585.9	Start DLS 4.23 TFO -65.69
10,510.0	10,479.2	0.7	590.9	Start DLS 5.56 TFO -79.17
10,560.0	10,528.8	3.4	596.7	Start DLS 5.49 TFO -98.48
10,660.0	10,627.7	14.8	604.9	Start DLS 6.67 TFO -7.18
10,770.0	10,735.0	37.9	611.7	Start DLS 10.00 TFO -1.19
11,012.9	10,947.0	149.0	640.7	First PP
11,507.0	11,147.2	570.9	747.1	Start DLS 2.01 TFO -90.00
11,658.0	11,147.2	718.3	779.7	First Take Point
12,307.6	11,147.2	1,364.5	830.1	Start 6905.4 hold at 12307.6 MD
19,213.0	11,147.2	8,265.4	581.8	TD at 19213.0 - Last Take Point

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 334H
Project:	Bell Lake Unit North 334H	**TVD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Site:	Bell Lake Unit North 334H	**MD Reference:**	WELL @ 3453.7usft (Original Well Elev)
Well:	Bell Lake Unit North 334H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 334H	**Survey Calculation Method:**	Minimum Curvature
Design:	190410 Bell Lake Unit North 334H	**Database:**	EDM 5000.1 Single User Db

Checked By: _____ Approved By: _____ Date: _____

AFMSS
U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

SUPO Data Report
12/14/2022

APD ID: 10400048776
Submission Date: 10/09/2019
Operator Name: KAISER FRANCIS OIL COMPANY
Well Name: BELL LAKE UNIT NORTH
Well Number: 334H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes
Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

BLUN_334H_Existing_Roads_20191007182055.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

BLUN_334H_Access_Road_20191007182204.pdf

New road type: RESOURCE

Length: 2102 Feet **Width (ft.):** 30

Max slope (%): 2 **Max grade (%):** 2

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 15

New road access erosion control: Road construction requirements and regular maintenance would alleviate potential impacts to the access road from water erosion damage.
New road access plan or profile prepared? N

New road access plan

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Access road engineering design? N

Access road engineering design

Turnout? N

Access surfacing type: OTHER

Access topsoil source: BOTH

Access surfacing type description: Native caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description: Material will be obtained from BLM caliche pit in SWSW Section 22-T24S-R34E or NENE Section 20-T23S-R33E
Onsite topsoil removal process: The top 6 inches of topsoil is pushed off and stockpiled along the side of the location. An approximate 160' X 160' area is used within the proposed well site to remove caliche. Subsoil is removed and stockpiled within the pad site to build the location and road. Then subsoil is pushed back in the hole and caliche is spread accordingly across proposed access road.
Access other construction information:

Access miscellaneous information:

Number of access turnouts: **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: Proposed access road will be crowned and ditched and constructed of 6 inch rolled and compacted caliche. Water will be diverted where necessary to avoid ponding, maintain good drainage, and to be consistentwith local drainage patterns.
Road Drainage Control Structures (DCS) description: The ditches will be 3' wide with 3:1 slopes

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

BLUN_334H_1_MILE_WELLS_20191007182251.pdf

BLUN_334H_1_Mile_Wells_Map_20191007182256.pdf

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? DEFER

Estimated Production Facilities description: Production facilities are planned for the north side of pad. Plan for initial wells: 2-1000 bbl water tanks and 5-1000 bbl oil tanks, a temporary 6X20 horizontal 3-phase sep, a 48" X 10' 3-phase sep, a 8 X 20' heater treater and a 48"X 10' 2-phase sep

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: OTHER

Describe type: BRINE WATER

Water source use type: INTERMEDIATE/PRODUCTION CASING

Source latitude:

Source longitude:

Source datum:

Water source permit type: PRIVATE CONTRACT

Water source transport method: TRUCKING

Source land ownership: PRIVATE

Source transportation land ownership: OTHER

Describe transportation land ownership: Source tra is a mixture of Federal, State and County.

Water source volume (barrels): 20000

Source volume (acre-feet): 2.577862

Source volume (gal): 840000

Water source type: OTHER

Describe type: FRESH WATER

Water source use type: OTHER

STIMULATION

SURFACE CASING

Describe use type: ROAD/PAD CONSTRUCTION AN

Source latitude:

Source longitude:

Source datum:

Water source permit type: PRIVATE CONTRACT

Water source transport method: TRUCKING

Source land ownership: PRIVATE

Source transportation land ownership: OTHER

Describe transportation land ownership: Source tra is a mixture of Federal, State and County.

Water source volume (barrels): 250000

Source volume (acre-feet): 32.223274

Source volume (gal): 10500000

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Water source and transportation

BLUN_Pad_15_Water_Source_Map_20191007130352.pdf

Water source comments: Source transportation land ownership is a mixture of Federal, State and County.

New water well? N

New Water Well Info

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

Est. depth to top of aquifer(ft): **Est thickness of aquifer:**

Aquifer comments:

Aquifer documentation:

Well depth (ft): **Well casing type:**

Well casing outside diameter (in.): **Well casing inside diameter (in.):**

New water well casing? **Used casing source:**

Drilling method: **Drill material:**

Grout material: **Grout depth:**

Casing length (ft.): **Casing top depth (ft.):**

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: On site caliche will be used for construction if sufficient. In the event insufficient quantities of caliche are available onsite, caliche will be trucked in from BLM's caliche pit in SWSW Section 22-T24-R34E or NENE Section 20-T23S-R33E.

Construction Materials source location

Section 7 - Methods for Handling

Waste type: DRILLING

Waste content description: Drilling fluids and cuttings

Amount of waste: 3900 barrels

Waste disposal frequency : One Time Only

Safe containment description: All drilling fluids will be stored safely and disposed of properly

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL
Disposal type description:

Disposal location description: Cuttings will be hauled to R360's facility on US 62/180 at Halfway, NM

Waste type: SEWAGE

Waste content description: Human waste and grey water

Amount of waste: 1000 gallons

Waste disposal frequency : One Time Only

Safe containment description: Waste material will be stored safely and disposed of properly

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL
Disposal type description:

Disposal location description: Trucked to an approved disposal facility

Waste type: GARBAGE

Waste content description: Miscellaneous trash

Amount of waste: 500 pounds

Waste disposal frequency : One Time Only

Safe containment description: Trash produced during drilling and completion operations will be collected in a trash container and disposed of properly
Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL
Disposal type description:

Disposal location description: Trucked to an approved disposal facility

Reserve Pit

Reserve Pit being used? N

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? Y

Description of cuttings location Cuttings will be stored in roll off bins and hauled to R360 on US 62/180 near Halfway.

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

BLUN_334H_Drlg_Layout_20191007182739.pdf

BLUN_334H_Well_Site_Layout___Certified_20191009075319.pdf

Comments:

Section 10 - Plans for Surface

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: NORTH BELL LAKE UNIT

Multiple Well Pad Number: 15

Recontouring

BLUN_334H_IR_20191007183623.pdf

Drainage/Erosion control construction: During construction proper erosion control methods will be used to control erosion, runoff and siltation of the surrounding area.

Drainage/Erosion control reclamation: Proper erosion control methods will be used on the area to control erosion, runoff and siltation of the surrounding area.

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Well pad proposed disturbance (acres): 5.97	**Well pad interim reclamation (acres):** 0.92	**Well pad long term disturbance (acres):** 5.05
Road proposed disturbance (acres): 1.144972	**Road interim reclamation (acres):** 0	**Road long term disturbance (acres):** 1.144972
Powerline proposed disturbance (acres): 0	**Powerline interim reclamation (acres):** 0	**Powerline long term disturbance (acres):** 0
Pipeline proposed disturbance (acres): 0	**Pipeline interim reclamation (acres):** 0	**Pipeline long term disturbance (acres):** 0
Other proposed disturbance (acres): 0	**Other interim reclamation (acres):** 0	**Other long term disturbance (acres):** 0
Total proposed disturbance: 7.114972	**Total interim reclamation:** 0.92	**Total long term disturbance:** 6.194972

Disturbance Comments:

Reconstruction method: The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.
Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations
Soil treatment: To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

Existing Vegetation at the well pad: The historic climax plant community is a grassland dominated by black grama, dropseeds, and blue stems with sand sage and shinnery oak distributed evenly throughout. Current landscape displays mesquite, shinnery oak, yucca, desert sage, fourwing saltbush, snakeweed, and bunch grasses

Existing Vegetation at the well pad

Existing Vegetation Community at the road: Refer to "Existing Vegetation at the well pad"

Existing Vegetation Community at the road

Existing Vegetation Community at the pipeline: Refer to "Existing Vegetation at the well pad"

Existing Vegetation Community at the pipeline

Existing Vegetation Community at other disturbances: None

Existing Vegetation Community at other disturbances

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description

Will seed be harvested for use in site reclamation? N

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Seed harvest description:

Seed harvest description attachment:

Seed

Seed Table

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation

Operator Contact/Responsible Official

First Name: **Last Name:**

Phone: **Email:**

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? N

Existing invasive species treatment description:

Existing invasive species treatment

Weed treatment plan description: No invasive species present. Standard regular maintenance to maintain a clear location and road.

Weed treatment plan

Monitoring plan description: Identify areas supporting weeds prior to construction; prevent the introduction and spread of weeds from construction equipment during construction; and contain weed seeds and propagules by preventing segregated topsoil from being spread to adjacent areas. No invasive species present. Standard regular maintenance to maintain a clear location and road.

Monitoring plan

Success standards: To maintain all disturbed areas as per Gold Book standards

Pit closure description: N/A

Pit closure attachment:

Section 11 - Surface

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT,PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: AGREEMENT

Surface Access Agreement Need description: Surface Use and Compensation Agreement exists between Limestone Basin Properties Ranch and Kaiser-Francis Oil Company

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Section 12 - Other

Right of Way needed? Y **Use APD as ROW?** Y

ROW Type(s): 281001 ROW - ROADS,289001 ROW- O&G Well Pad

ROW

SUPO Additional Information:

Use a previously conducted onsite? Y

Previous Onsite information: Onsite with William Degrush (BLM) and Eric Hansen (Kaiser-Francis) March 14, 2019.

Other SUPO

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

PWD Data Report

12/14/2022

APD ID: 10400048776 **Submission Date:** 10/09/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Well Type: OIL WELL **Well Work Type:** Drill

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined

Would you like to utilize Lined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit

Pit liner description:

Pit liner manufacturers

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule

Lined pit reclamation description:

Lined pit reclamation

Leak detection system description:

Leak detection system

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Lined pit Monitor description:

Lined pit Monitor

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information

Section 3 - Unlined

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD disturbance (acres): **PWD surface owner:**

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule

Unlined pit reclamation description:

Unlined pit reclamation

Unlined pit Monitor description:

Unlined pit Monitor

Do you propose to put the produced water to beneficial use?

Beneficial use user

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic

State

Unlined Produced Water Pit Estimated

Unlined pit: do you have a reclamation bond for the pit?

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information

Section 4 -

Would you like to utilize Injection PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: **Injection well name:**

Assigned injection well API number? **Injection well API number:**

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection

Underground Injection Control (UIC) Permit?

UIC Permit

Section 5 - Surface

Would you like to utilize Surface Discharge PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 -

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD discharge volume (bbl/day):

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 334H

Other PWD type description:

Other PWD type

Have other regulatory requirements been met?

Other regulatory requirements

AFMSS
U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Bond Info Data
12/14/2022

APD ID: 10400048776
Submission Date: 10/09/2019
Operator Name: KAISER FRANCIS OIL COMPANY
Well Name: BELL LAKE UNIT NORTH
Well Number: 334H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes
Show Final Text

Bond

Federal/Indian APD: FED

BLM Bond number: WYB000055

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: Kaiser-Francis Oil Company **OGRID:** 12361 **Date:** 12 / 14 / 2022

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Bell Lake Unit North 334H	30-025-50889	UL-K Sec 5-T23S-R34E	1972FSL 2348FWL	1800	3000	2000

IV. Central Delivery Point Name: pad site [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Bell Lake Unit North 334H	30-025-50889	TBD	TBD	TBD	TBD	TBD

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	**Christina Opfer**
Printed Name:	Christina Opfer
Title:	Regulatory Manager
E-mail Address:	ChristinaO@kfoc.net
Date:	12/14/2022
Phone:	918-491-4468

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

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 166743

CONDITIONS

Operator: KAISER-FRANCIS OIL CO PO Box 21468 Tulsa, OK 74121146	OGRID: 12361
	Action Number: 166743
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	12/22/2022
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	12/22/2022
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	12/22/2022
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	12/22/2022