

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

**HOBBS OCD**  
**DEC 18 2019**  
**RECEIVED**

5. Lease Serial No. NMLC0061374A
6. If Indian, Allottee or Tribe Name
7. If Unit or CA Agreement, Name and No. BELL LAKE / NMNM068292X
8. Lease Name and Well No. BELL LAKE UNIT SOUTH 233H

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER	9. API Well No. 70-025-46673
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	10. Field and Pool, or Exploratory BELL LAKE / WOLF CAMP, SOUTH
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone	11. Sec., T, R, M, or Bk. and Survey for Area SEC 5 / T24S / R34E / NMP
2. Name of Operator KAISER FRANCIS OIL COMPANY (12361)	
3a. Address 6733 S. Yale Ave. Tulsa OK 74121	3b. Phone No. (include area code) (918)491-0000
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NESW / 1862 FSL / 1945 FWL / LAT 32.244458 / LONG -103.494248 At proposed prod. zone NENW / 330 FNL / 2110 FWL / LAT 32.267438 / LONG -103.49377	

14. Distance in miles and direction from nearest town or post office* 19 miles	12. County or Parish LEA	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1862 feet	16. No of acres in lease 440	17. Spacing Unit dedicated to this well 240
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2100 feet	19. Proposed Depth 10862 feet / 18697 feet	20. BLM/BIA Bond No. in file FED: WYB000055
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3597 feet	22. Approximate date work will start* 04/01/2019	23. Estimated duration 40 days

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.	4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
2. A Drilling Plan.	5. Operator certification.
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)	6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature (Electronic Submission)	Name (Printed/Typed) Stormi Davis / Ph: (918)491-4339	Date 01/28/2019
Title Regulatory Analyst		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 12/13/2019
Title Assistant Field Manager Lands & Minerals	Office CARLSBAD	

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.

GCP Rec 12/18/19

**APPROVED WITH CONDITIONS**  
Approval Date: 12/13/2019

K2  
12/20/19

**PECOS DISTRICT  
DRILLING OPERATIONS  
CONDITIONS OF APPROVAL**

<b>OPERATOR'S NAME:</b>	<b>Kaiser Francis</b>
<b>LEASE NO.:</b>	<b>NMLC0061374A</b>
<b>WELL NAME &amp; NO.:</b>	<b>Bell Lake Unit South 233H</b>
<b>SURFACE HOLE FOOTAGE:</b>	<b>1862' FSL &amp; 1945' FWL</b>
<b>BOTTOM HOLE FOOTAGE</b>	<b>330' FNL &amp; 2110' FEL</b>
<b>LOCATION:</b>	<b>Section 5, T 24S, R 34E, NMPM</b>
<b>COUNTY:</b>	<b>Lea County, New Mexico</b>

H2S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit

**A. HYDROGEN SULFIDE**

1. A Hydrogen Sulfide (H2S) Drilling Plan shall be activated **500 feet** prior to drilling into the **Bell Lake** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

**B. CASING**

1. The **13-3/8"** surface casing shall be set at approximately **1350'** (a minimum of 25' into the Rustler Anhydrite and above the salt) and cemented to surface.
  - a. **If cement does not circulate to 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 **6 hours** after pumping cement, ideally between 8-10 hours after.
  - b. WOC time for a primary cement job will be a minimum of **8 hours** or **500 psi** compressive strength, whichever is greater. This is to include the lead cement.
  - c. If cement falls back, remedial cementing will be done prior to drilling out the shoe.
  - d. WOC time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.

2. The **9-5/8"** intermediate casing shall be cemented to surface.
  - a. **If cement does not circulate to surface**, see B.1.a, c & d.
3. The **5-1/2"** production casing shall be cemented with at least **200' tie-back** into the previous casing. Operator shall provide method of verification.

**C. PRESSURE CONTROL**

1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
2. 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.
3. Variance for the use of a flex hose between the BOP and choke manifold is approved, however, the hose must meet API 16C specification as described in the attachments following these conditions.

**D. SPECIAL REQUIREMENTS**

1. 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 once it has been established.
  - a. A commercial well determination shall be submit after production has been established for at least six months. Secondary recovery unit wells are exempt from this requirement.

**DR 11/5/2019**

## GENERAL REQUIREMENTS

1. The BLM is to be notified in advance for a representative to witness:
  - a. Spudding the well (minimum of 24 hours)
  - b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
  - c. BOP/BOPE tests (minimum of 4 hours)
    - Eddy County: Call the Carlsbad Field Office, (575) 361-2822
    - Lea County: Call the Hobbs Field Station, (575) 393-3612
2. 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:
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
3. 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.
4. 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 available upon request. 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 integrity 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 integrity 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 the portion of 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. 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. 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 Onshore Order 2 III.A.2.i must be followed.
4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the BOP/BOPE 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 which 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. The results of the test shall be made available upon request.
  - 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 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. This test shall be performed prior to the test at full stack pressure.

- f. BOP/BOPE must be tested 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**

1. 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**

1. 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.
2. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.



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

# Operator Certification Data Report

12/16/2019

## Operator Certification

*I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.*

**NAME:** Stormi Davis

**Signed on:** 12/07/2018

**Title:** Regulatory Analyst

**Street Address:**

**City:**

**State:**

**Zip:**

**Phone:** (918)491-4339

**Email address:** erich@kfoc.net

## Field Representative

**Representative Name:**

**Street Address:** P.O. Box 21468

**City:** Tulsa

**State:** OK

**Zip:** 74121-1468

**Phone:** (918)527-5260

**Email address:**



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

# Application Data Report

12/16/2019

APD ID: 10400038392

Submission Date: 01/28/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Highlighted data  
affects the most  
recent changes

Well Name: BELL LAKE UNIT SOUTH

Well Number: 233H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

## Section 1 - General

APD ID: 10400038392

Tie to previous NOS?

Submission Date: 01/28/2019

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: NMLC0061374A

Lease Acres: 440

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? YES

Federal or Indian agreement: FEDERAL

Agreement number: NMNM068292X

Agreement name:

Keep application confidential? YES

Permitting Agent? NO

APD Operator: KAISER FRANCIS OIL COMPANY

Operator letter of designation:

## Operator Info

Operator Organization Name: KAISER FRANCIS OIL COMPANY

Operator Address: 6733 S. Yale Ave.

Zip: 74121

Operator PO Box: PO Box 21468

Operator City: Tulsa

State: OK

Operator Phone: (918)491-0000

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 SOUTH

Well Number: 233H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: BELL LAKE

Pool Name: WOLFCAMP,  
SOUTH

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

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH

Well Number: 233H

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? NO New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name:  
SOUTH BELL LAKE UNIT  
Number of Legs: 1

Number: 13

Well Class: HORIZONTAL

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: EXPLORATORY (WILDCAT)

Describe sub-type:

Distance to town: 19 Miles

Distance to nearest well: 2100 FT

Distance to lease line: 1862 FT

Reservoir well spacing assigned acres Measurement: 240 Acres

Well plat: BLUS\_233H\_C102\_20190124074920.pdf

BLUS\_233H\_Pymt\_Receipt\_20190128081807.pdf

Well work start Date: 04/01/2019

Duration: 40 DAYS

### Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number: 17110850

Reference Datum:

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
SHL Leg #1	186 2	FSL	194 5	FWL	24S	34E	5	Aliquot NESW	32.24445 8	- 103.4942 48	LEA	NEW MEXI CO	NEW MEXI CO	F	NMLCO 061374 A	359 7	0	0
KOP Leg #1	219 9	FSL	225 4	FWL	24S	34E	5	Aliquot NESW	32.24537 74	- 103.4932 384	LEA	NEW MEXI CO	NEW MEXI CO	F	NMLCO 061374 A	- 678 8	103 97	103 85

**Operator Name: KAISER FRANCIS OIL COMPANY**

**Well Name: BELL LAKE UNIT SOUTH**

**Well Number: 233H**

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
PPP Leg #1-1	0	FNL	2167	FWL	23S	34E	32	Aliquot SESW	32.253843	-103.4934451	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-7265	13750	10862
PPP Leg #1-2	1320	FNL	2204	FWL	24S	34E	5	Aliquot NENW	32.2502498	-103.4933553	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 0002335B	-7265	12450	10862
PPP Leg #1-3	2674	FSL	2250	FWL	24S	34E	5	Aliquot SENW	32.246689	-103.49327	LEA	NEW MEXICO	NEW MEXICO	F	NMLCO 061374A	-7265	11148	10862
EXIT Leg #1	330	FNL	2110	FWL	23S	34E	32	Aliquot NENW	32.267438	-103.49377	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-7265	18697	10862
BHL Leg #1	330	FNL	2110	FWL	23S	34E	32	Aliquot NENW	32.267438	-103.49377	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-7265	18697	10862



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

# Drilling Plan Data Report

12/16/2019

APD ID: 10400038392

Submission Date: 01/28/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH

Well Number: 233H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

## Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	--	3597	0	0		NONE	N
2	RUSTLER	2197	1400	1400		NONE	N
3	SALADO	1797	1800	1800		NONE	N
4	TOP SALT	1472	2125	2125		NONE	N
5	BASE OF SALT	-1503	5100	5100		NONE	N
6	LAMAR	-1678	5275	5275		NATURAL GAS,OIL	N
7	BELL CANYON	-1753	5350	5350		NATURAL GAS,OIL	N
8	CHERRY CANYON	-2628	6225	6225		NATURAL GAS,OIL	N
9	BRUSHY CANYON	-4103	7700	7700		NATURAL GAS,OIL	N
10	BONE SPRING	-5203	8800	8800		NATURAL GAS,OIL	N
11	AVALON SAND	-5376	8973	8973		NATURAL GAS,OIL	N
12	BONE SPRING 1ST	-6303	9900	9900		NATURAL GAS,OIL	N
13	BONE SPRING 2ND	-6888	10485	10485		NATURAL GAS,OIL	Y
14	BONE SPRING LIME	-7363	10960	10960		NATURAL GAS,OIL	N
15	BONE SPRING 3RD	-7673	11270	11270		NATURAL GAS,OIL	N
16	WOLFCAMP	-8138	11735	11735		NATURAL GAS,OIL	N

## Section 2 - Blowout Prevention

**Operator Name:** KAISER FRANCIS OIL COMPANY

**Well Name:** BELL LAKE UNIT SOUTH

**Well Number:** 233H

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

**Rating Depth:** 18000

**Equipment:** A 10M system will be installed according to Onshore Order #2 consisting of an Annular Preventer, BOP with two rams and a blind ram. 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:**

BLUS\_233H\_\_Choke\_Manifold\_20190125104719.pdf

**BOP Diagram Attachment:**

BLUS\_233H\_\_Wellhead\_Diagram\_20190125104909.pdf

BLUS\_233H\_\_BOP\_20190125104957.pdf

Cactus\_Flex\_Hose\_16C\_Certification\_20191018091942.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	17.5	13.375	NEW	API	N	0	1350	0	1350			1350	J-55	54.5	OTHER - BTC	1.8	4.3	DRY	7	DRY	11.6
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	5200	0	5200			5200	HCP-110	40	LT&C	1.8	3.3	DRY	6.1	DRY	6.1
3	PRODUCTION	8.75	5.5	NEW	API	N	0	18697	0	10862			18697	P-110	20	OTHER - GBCD	2.2	2.5	DRY	2.5	DRY	3

**Casing Attachments**

**Operator Name:** KAISER FRANCIS OIL COMPANY

**Well Name:** BELL LAKE UNIT SOUTH

**Well Number:** 233H

**Casing Attachments**

---

**Casing ID:** 1      **String Type:** SURFACE

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

BLUS\_233H\_Casing\_Assumptions\_20190125105133.pdf

---

**Casing ID:** 2      **String Type:** INTERMEDIATE

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

BLUS\_233H\_Casing\_Assumptions\_20190125105229.pdf

---

**Casing ID:** 3      **String Type:** PRODUCTION

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

BLUS\_233H\_Casing\_Assumptions\_20190125105429.pdf

BLUS\_233H\_\_Casing\_Specs\_20190125105432.pdf

---

**Section 4 - Cement**

**Operator Name:** KAISER FRANCIS OIL COMPANY

**Well Name:** BELL LAKE UNIT SOUTH

**Well Number:** 233H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead					1.75					

INTERMEDIATE	Lead					2.09					
INTERMEDIATE	Tail										
PRODUCTION	Lead					3.49					
PRODUCTION	Tail										

### 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
5200	1869 7	OTHER : Cut Brine	8.7	8.9							
1350	5200	OTHER : Brine	8.7	8.9							
0	1350	OTHER : Fresh Water	8.4	9							

**Operator Name:** KAISER FRANCIS OIL COMPANY

**Well Name:** BELL LAKE UNIT SOUTH

**Well Number:** 233H

### 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:**

DS,GR,MUDLOG

**Coring operation description for the well:**

None planned

### Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 5027

**Anticipated Surface Pressure:** 2637.36

**Anticipated Bottom Hole Temperature(F):** 165

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

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards attachment:**

**Hydrogen Sulfide drilling operations plan required?** YES

**Hydrogen sulfide drilling operations plan:**

BLUS\_233H\_H2S\_Contingency\_Plan\_PAD\_13\_20190125105822.pdf

### Section 8 - Other Information

**Proposed horizontal/directional/multi-lateral plan submission:**

BLUS\_233H\_\_\_Directional\_Plan\_20190125105853.pdf

**Other proposed operations facets description:**

Gas Capture Plan attached

**Other proposed operations facets attachment:**

BLUS\_233H\_Pad\_13\_Gas\_Capture\_Plan\_20190125105936.pdf

**Other Variance attachment:**

Cactus\_Flex\_Hose\_16C\_Certification\_20191018092017.pdf

Interval	Length	Casing Size	Weight (#/ft)	Grade	Thread	Condition	Hole Size	TVD (ft)
Conductor	120'	20"				New		120
Surface	1350'	13-3/8"	54.5	J-55	BTC	New	17-1/2"	1350
Intermediate	5200'	9-5/8"	40	HCP-110	LTC	New	12-1/4"	5200
Production	18697'	5-1/2"	20	P110	GBCD	New	8-3/4"	10862

Mud Type	Mud Weight Hole Control	Viscosity	Fluid Loss
FW	8.4 - 9.0	32 - 34	NC
Brine	8.7 - 8.9	28	NC
Cut Brine	8.7 - 8.9	28-29	NC

Anticipated Mud Weight (ppg)	Max Pore Pressure (psi)	Collapse (psi)	Burst (psi)	Body Tensile Strength	Joint Tensile Strength
9	632	1130	2730	853000	514000
8.9	2407	4230	7900	1260000	1266000
8.9	5027	11100	12640	641000	548000

Collapse Safety Factor (Min 1.1)	Burst Safety Factor (Min 1.0)	Body Tensile Safety Factor (Min 1.8)	Joint Tensile Safety Factor (Min 1.8)
1.8	4.3	11.6	7.0
1.8	3.3	6.1	6.1
2.2	2.5	3.0	2.5



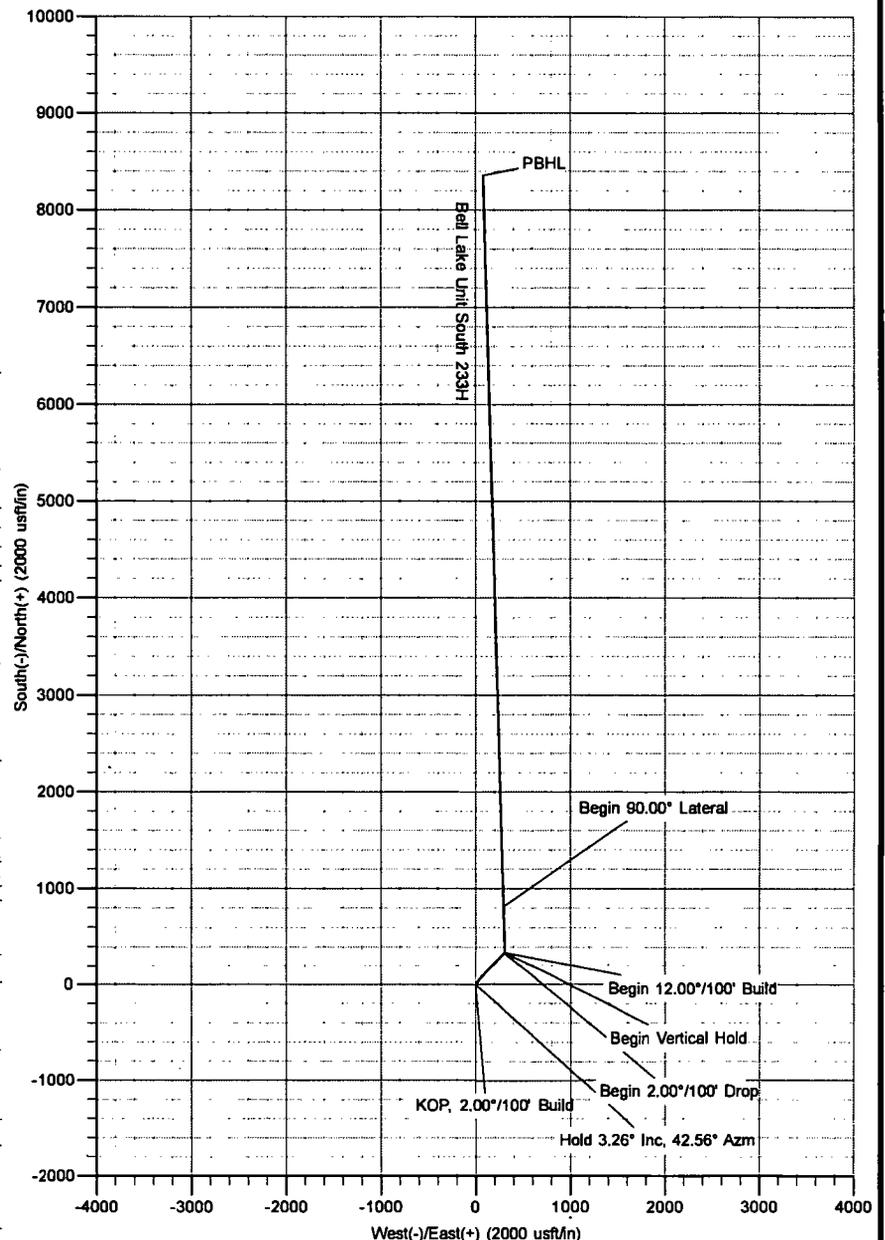
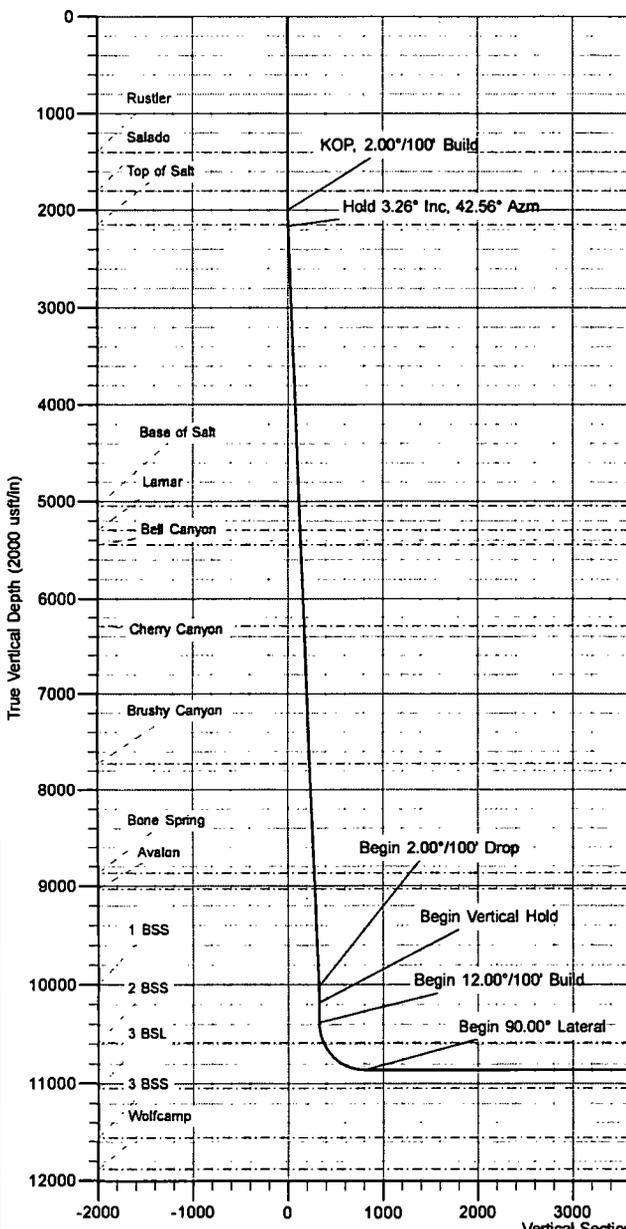
Azimuths to Grid North  
 True North: -0.45°  
 Magnetic North: 6.39°  
 Magnetic Field  
 Strength: 47847.8nT  
 Dip Angle: 60.03°  
 Date: 11/20/2018  
 Model: BGGM2018

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	KOP, 2.00°/100' Build
2163.25	3.27	42.56	2163.16	3.42	3.15	3.33	4.65	Hold 3.26° Inc, 42.56° Azm
10034.24	3.27	42.56	10021.38	333.60	306.37	324.81	452.94	Begin 2.00°/100' Drop
10197.49	0.00	0.00	10184.54	337.03	309.51	328.14	457.59	Begin Vertical Hold
10397.49	0.00	0.00	10384.54	337.03	309.51	328.14	457.59	Begin 12.00°/100' Build
11147.49	90.00	358.38	10862.00	814.30	296.00	805.61	935.05	Begin 90.00° Lateral
18697.51	90.00	358.38	10862.00	8361.30	82.30	8355.63	8485.08	PBHL

US State Plane 1983  
 New Mexico Eastern Zone

Created By: JA  
 Date: 16:05, October 19 2018  
 Plan: Design #1



The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented.

Any decisions made or wells drilled utilizing this or any other information supplied by MS Directional are at the sole risk and responsibility of the customer. MS Directional is not responsible for the accuracy of this schematic or the information contained herein.

Kaiser-Francis Oil Company

---

## **Kaiser-Francis**

Lea County, New Mexico (NAD 83)

Bell Lake Unit South 233H

Bell Lake Unit South 233H

Wellbore #1

Plan: Design #1

## **Standard Planning Report**

19 October, 2018

**MS** *Directional*

<b>Database:</b>	EDM 5000.14 Conroe Db	<b>Local Co-ordinate Reference:</b>	Well Bell Lake Unit South 233H
<b>Company:</b>	Kaiser-Francis	<b>TVD Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Project:</b>	Lea County, New Mexico (NAD 83)	<b>MD Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Site:</b>	Bell Lake Unit South 233H	<b>North Reference:</b>	Grid
<b>Well:</b>	Bell Lake Unit South 233H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

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

<b>Site</b>	Bell Lake Unit South 233H		
<b>Site Position:</b>	<b>Northing:</b>	453,680.70 usft	<b>Latitude:</b> 32° 14' 40.048 N
<b>From:</b> Map	<b>Easting:</b>	800,755.50 usft	<b>Longitude:</b> 103° 29' 39.293 W
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "

<b>Well</b>	Bell Lake Unit South 233H		
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b> 453,680.70 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b> 800,755.50 usft
			<b>Latitude:</b> 32° 14' 40.048 N
			<b>Longitude:</b> 103° 29' 39.293 W
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	usft
<b>Grid Convergence:</b>	0.448 °		
<b>Ground Level:</b>	3,597.40 usft		

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2018	11/20/2018	6.835	60.031	47,847.87

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	358.38

<b>Plan Survey Tool Program</b>	<b>Date</b>	10/19/2018		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	18,697.51	Design #1 (Wellbore #1)	MWD OWSG MWD - Standard

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.000	
2,163.25	3.27	42.56	2,163.16	3.42	3.15	2.00	2.00	0.00	42.563	
10,034.24	3.27	42.56	10,021.38	333.60	306.37	0.00	0.00	0.00	0.000	
10,197.49	0.00	0.00	10,184.54	337.03	309.51	2.00	-2.00	0.00	180.000	VP BLUS 233
10,397.49	0.00	0.00	10,384.54	337.03	309.51	0.00	0.00	0.00	0.000	
11,147.49	90.00	358.38	10,862.00	814.30	296.00	12.00	12.00	0.00	358.378	
18,697.51	90.00	358.38	10,862.00	8,361.30	82.30	0.00	0.00	0.00	0.000	PBHL BLUS 233

<b>Database:</b>	EDM 5000.14 Conroe Db	<b>Local Co-ordinate Reference:</b>	Well Bell Lake Unit South 233H
<b>Company:</b>	Kaiser-Francis	<b>TVD Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Project:</b>	Lea County, New Mexico (NAD 83)	<b>MD Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Site:</b>	Bell Lake Unit South 233H	<b>North Reference:</b>	Grid
<b>Well:</b>	Bell Lake Unit South 233H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Rustler</b>										
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Salado</b>										
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>KOP, 2.00°/100' Build</b>										
2,100.00	2.00	42.56	2,099.98	1.29	1.18	1.25	2.00	2.00	0.00	0.00
2,150.07	3.00	42.56	2,150.00	2.89	2.66	2.82	2.00	2.00	0.00	0.00
<b>Top of Salt</b>										
2,163.25	3.27	42.56	2,163.16	3.42	3.15	3.33	2.00	2.00	0.00	0.00
<b>Hold 3.26° Inc, 42.56° Azm</b>										
2,200.00	3.27	42.56	2,199.85	4.97	4.56	4.84	0.00	0.00	0.00	0.00
2,300.00	3.27	42.56	2,299.69	9.16	8.41	8.92	0.00	0.00	0.00	0.00
2,400.00	3.27	42.56	2,399.53	13.36	12.27	13.00	0.00	0.00	0.00	0.00
2,500.00	3.27	42.56	2,499.37	17.55	16.12	17.09	0.00	0.00	0.00	0.00
2,600.00	3.27	42.56	2,599.20	21.75	19.97	21.17	0.00	0.00	0.00	0.00
2,700.00	3.27	42.56	2,699.04	25.94	23.82	25.26	0.00	0.00	0.00	0.00
2,800.00	3.27	42.56	2,798.88	30.14	27.68	29.34	0.00	0.00	0.00	0.00
2,900.00	3.27	42.56	2,898.72	34.33	31.53	33.43	0.00	0.00	0.00	0.00
3,000.00	3.27	42.56	2,998.55	38.53	35.38	37.51	0.00	0.00	0.00	0.00
3,100.00	3.27	42.56	3,098.39	42.72	39.23	41.59	0.00	0.00	0.00	0.00
3,200.00	3.27	42.56	3,198.23	46.92	43.09	45.68	0.00	0.00	0.00	0.00
3,300.00	3.27	42.56	3,298.07	51.11	46.94	49.76	0.00	0.00	0.00	0.00
3,400.00	3.27	42.56	3,397.90	55.30	50.79	53.85	0.00	0.00	0.00	0.00
3,500.00	3.27	42.56	3,497.74	59.50	54.64	57.93	0.00	0.00	0.00	0.00
3,600.00	3.27	42.56	3,597.58	63.69	58.50	62.02	0.00	0.00	0.00	0.00
3,700.00	3.27	42.56	3,697.42	67.89	62.35	66.10	0.00	0.00	0.00	0.00
3,800.00	3.27	42.56	3,797.25	72.08	66.20	70.18	0.00	0.00	0.00	0.00
3,900.00	3.27	42.56	3,897.09	76.28	70.05	74.27	0.00	0.00	0.00	0.00
4,000.00	3.27	42.56	3,996.93	80.47	73.90	78.35	0.00	0.00	0.00	0.00
4,100.00	3.27	42.56	4,096.77	84.67	77.76	82.44	0.00	0.00	0.00	0.00
4,200.00	3.27	42.56	4,196.61	88.86	81.61	86.52	0.00	0.00	0.00	0.00
4,300.00	3.27	42.56	4,296.44	93.06	85.46	90.61	0.00	0.00	0.00	0.00
4,400.00	3.27	42.56	4,396.28	97.25	89.31	94.69	0.00	0.00	0.00	0.00
4,500.00	3.27	42.56	4,496.12	101.45	93.17	98.77	0.00	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.14 Conroe Db	<b>Local Co-ordinate Reference:</b>	Well Bell Lake Unit South 233H
<b>Company:</b>	Kaiser-Francis	<b>TVD Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Project:</b>	Lea County, New Mexico (NAD 83)	<b>MD Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Site:</b>	Bell Lake Unit South 233H	<b>North Reference:</b>	Grid
<b>Well:</b>	Bell Lake Unit South 233H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,600.00	3.27	42.56	4,595.96	105.64	97.02	102.86	0.00	0.00	0.00	
4,700.00	3.27	42.56	4,695.79	109.84	100.87	106.94	0.00	0.00	0.00	
4,800.00	3.27	42.56	4,795.63	114.03	104.72	111.03	0.00	0.00	0.00	
4,900.00	3.27	42.56	4,895.47	118.23	108.58	115.11	0.00	0.00	0.00	
5,000.00	3.27	42.56	4,995.31	122.42	112.43	119.20	0.00	0.00	0.00	
5,054.78	3.27	42.56	5,050.00	124.72	114.54	121.43	0.00	0.00	0.00	
<b>Base of Salt</b>										
5,100.00	3.27	42.56	5,095.14	126.62	116.28	123.28	0.00	0.00	0.00	
5,200.00	3.27	42.56	5,194.98	130.81	120.13	127.36	0.00	0.00	0.00	
5,300.00	3.27	42.56	5,294.82	135.01	123.99	131.45	0.00	0.00	0.00	
5,305.19	3.27	42.56	5,300.00	135.22	124.19	131.66	0.00	0.00	0.00	
<b>Lamar</b>										
5,400.00	3.27	42.56	5,394.66	139.20	127.84	135.53	0.00	0.00	0.00	
5,455.43	3.27	42.56	5,450.00	141.53	129.97	137.80	0.00	0.00	0.00	
<b>Bell Canyon</b>										
5,500.00	3.27	42.56	5,494.50	143.40	131.69	139.62	0.00	0.00	0.00	
5,600.00	3.27	42.56	5,594.33	147.59	135.54	143.70	0.00	0.00	0.00	
5,700.00	3.27	42.56	5,694.17	151.79	139.40	147.78	0.00	0.00	0.00	
5,800.00	3.27	42.56	5,794.01	155.98	143.25	151.87	0.00	0.00	0.00	
5,900.00	3.27	42.56	5,893.85	160.18	147.10	155.95	0.00	0.00	0.00	
6,000.00	3.27	42.56	5,993.68	164.37	150.95	160.04	0.00	0.00	0.00	
6,100.00	3.27	42.56	6,093.52	168.57	154.81	164.12	0.00	0.00	0.00	
6,200.00	3.27	42.56	6,193.36	172.76	158.66	168.21	0.00	0.00	0.00	
6,300.00	3.27	42.56	6,293.20	176.96	162.51	172.29	0.00	0.00	0.00	
6,306.81	3.27	42.56	6,300.00	177.24	162.77	172.57	0.00	0.00	0.00	
<b>Cherry Canyon</b>										
6,400.00	3.27	42.56	6,393.03	181.15	166.36	176.37	0.00	0.00	0.00	
6,500.00	3.27	42.56	6,492.87	185.35	170.22	180.46	0.00	0.00	0.00	
6,600.00	3.27	42.56	6,592.71	189.54	174.07	184.54	0.00	0.00	0.00	
6,700.00	3.27	42.56	6,692.55	193.73	177.92	188.63	0.00	0.00	0.00	
6,800.00	3.27	42.56	6,792.39	197.93	181.77	192.71	0.00	0.00	0.00	
6,900.00	3.27	42.56	6,892.22	202.12	185.62	196.80	0.00	0.00	0.00	
7,000.00	3.27	42.56	6,992.06	206.32	189.48	200.88	0.00	0.00	0.00	
7,100.00	3.27	42.56	7,091.90	210.51	193.33	204.96	0.00	0.00	0.00	
7,200.00	3.27	42.56	7,191.74	214.71	197.18	209.05	0.00	0.00	0.00	
7,300.00	3.27	42.56	7,291.57	218.90	201.03	213.13	0.00	0.00	0.00	
7,400.00	3.27	42.56	7,391.41	223.10	204.89	217.22	0.00	0.00	0.00	
7,500.00	3.27	42.56	7,491.25	227.29	208.74	221.30	0.00	0.00	0.00	
7,600.00	3.27	42.56	7,591.09	231.49	212.59	225.39	0.00	0.00	0.00	
7,700.00	3.27	42.56	7,690.92	235.68	216.44	229.47	0.00	0.00	0.00	
7,739.14	3.27	42.56	7,730.00	237.33	217.95	231.07	0.00	0.00	0.00	
<b>Brushy Canyon</b>										
7,800.00	3.27	42.56	7,790.76	239.88	220.30	233.55	0.00	0.00	0.00	
7,900.00	3.27	42.56	7,890.60	244.07	224.15	237.64	0.00	0.00	0.00	
8,000.00	3.27	42.56	7,990.44	248.27	228.00	241.72	0.00	0.00	0.00	
8,100.00	3.27	42.56	8,090.28	252.46	231.85	245.81	0.00	0.00	0.00	
8,200.00	3.27	42.56	8,190.11	256.66	235.71	249.89	0.00	0.00	0.00	
8,300.00	3.27	42.56	8,289.95	260.85	239.56	253.98	0.00	0.00	0.00	
8,400.00	3.27	42.56	8,389.79	265.05	243.41	258.06	0.00	0.00	0.00	
8,500.00	3.27	42.56	8,489.63	269.24	247.26	262.14	0.00	0.00	0.00	
8,600.00	3.27	42.56	8,589.46	273.44	251.12	266.23	0.00	0.00	0.00	
8,700.00	3.27	42.56	8,689.30	277.63	254.97	270.31	0.00	0.00	0.00	
8,800.00	3.27	42.56	8,789.14	281.83	258.82	274.40	0.00	0.00	0.00	

<b>Database:</b>	EDM 5000.14 Conroe Db	<b>Local Co-ordinate Reference:</b>	Well Bell Lake Unit South 233H
<b>Company:</b>	Kaiser-Francis	<b>TVD Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Project:</b>	Lea County, New Mexico (NAD 83)	<b>North Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Site:</b>	Bell Lake Unit South 233H	<b>MD Reference:</b>	Grid
<b>Well:</b>	Bell Lake Unit South 233H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,880.99	3.27	42.56	8,870.00	285.22	261.94	277.71	0.00	0.00	0.00	
<b>Bone Spring</b>										
9,000.00	3.27	42.56	8,888.98	286.02	262.67	278.48	0.00	0.00	0.00	
9,000.00	3.27	42.56	8,988.81	290.22	266.53	282.57	0.00	0.00	0.00	
9,041.25	3.27	42.56	9,030.00	291.95	268.11	284.25	0.00	0.00	0.00	
<b>Avalon</b>										
9,100.00	3.27	42.56	9,088.65	294.41	270.38	286.65	0.00	0.00	0.00	
9,200.00	3.27	42.56	9,188.49	298.61	274.23	290.73	0.00	0.00	0.00	
9,300.00	3.27	42.56	9,288.33	302.80	278.08	294.82	0.00	0.00	0.00	
9,400.00	3.27	42.56	9,388.17	307.00	281.94	298.90	0.00	0.00	0.00	
9,500.00	3.27	42.56	9,488.00	311.19	285.79	302.99	0.00	0.00	0.00	
9,600.00	3.27	42.56	9,587.84	315.39	289.64	307.07	0.00	0.00	0.00	
9,700.00	3.27	42.56	9,687.68	319.58	293.49	311.16	0.00	0.00	0.00	
9,800.00	3.27	42.56	9,787.52	323.78	297.35	315.24	0.00	0.00	0.00	
9,900.00	3.27	42.56	9,887.35	327.97	301.20	319.32	0.00	0.00	0.00	
10,000.00	3.27	42.56	9,987.19	332.17	305.05	323.41	0.00	0.00	0.00	
10,012.83	3.27	42.56	10,000.00	332.70	305.54	323.93	0.00	0.00	0.00	
<b>1 BSS</b>										
10,034.24	3.27	42.56	10,021.38	333.60	306.37	324.81	0.00	0.00	0.00	
<b>Begin 2.00°/100' Drop</b>										
10,100.00	1.95	42.56	10,087.07	335.80	308.39	326.95	2.00	-2.00	0.00	
10,197.49	0.00	0.00	10,184.54	337.03	309.51	328.14	2.00	-2.00	0.00	
<b>Begin Vertical Hold - VP BLUS 233</b>										
10,200.00	0.00	0.00	10,187.05	337.03	309.51	328.14	0.00	0.00	0.00	
10,300.00	0.00	0.00	10,287.05	337.03	309.51	328.14	0.00	0.00	0.00	
10,397.49	0.00	0.00	10,384.54	337.03	309.51	328.14	0.00	0.00	0.00	
<b>Begin 12.00°/100' Build</b>										
10,400.00	0.30	358.38	10,387.05	337.03	309.51	328.15	12.00	12.00	0.00	
10,425.00	3.30	358.38	10,412.03	337.82	309.49	328.93	12.00	12.00	0.00	
10,450.00	6.30	358.38	10,436.94	339.91	309.43	331.03	12.00	12.00	0.00	
10,475.00	9.30	358.38	10,461.71	343.30	309.34	334.42	12.00	12.00	0.00	
10,500.00	12.30	358.38	10,486.26	347.98	309.20	339.10	12.00	12.00	0.00	
10,525.00	15.30	358.38	10,510.54	353.95	309.04	345.07	12.00	12.00	0.00	
10,550.00	18.30	358.38	10,534.47	361.17	308.83	352.29	12.00	12.00	0.00	
10,575.00	21.30	358.38	10,557.99	369.63	308.59	360.76	12.00	12.00	0.00	
10,600.00	24.30	358.38	10,581.03	379.32	308.32	370.45	12.00	12.00	0.00	
10,609.89	25.49	358.38	10,590.00	383.48	308.20	374.61	12.00	12.00	0.00	
<b>2 BSS</b>										
10,625.00	27.30	358.38	10,603.53	390.19	308.01	381.33	12.00	12.00	0.00	
10,650.00	30.30	358.38	10,625.44	402.23	307.67	393.37	12.00	12.00	0.00	
10,675.00	33.30	358.38	10,646.68	415.40	307.30	406.54	12.00	12.00	0.00	
10,700.00	36.30	358.38	10,667.21	429.66	306.89	420.81	12.00	12.00	0.00	
10,725.00	39.30	358.38	10,686.96	444.97	306.46	436.13	12.00	12.00	0.00	
10,750.00	42.30	358.38	10,705.88	461.30	306.00	452.47	12.00	12.00	0.00	
10,775.00	45.30	358.38	10,723.93	478.60	305.51	469.77	12.00	12.00	0.00	
10,800.00	48.30	358.38	10,741.04	496.81	304.99	487.99	12.00	12.00	0.00	
10,825.00	51.30	358.38	10,757.17	515.90	304.45	507.08	12.00	12.00	0.00	
10,850.00	54.30	358.38	10,772.28	535.80	303.89	527.00	12.00	12.00	0.00	
10,875.00	57.30	358.38	10,786.33	556.47	303.30	547.67	12.00	12.00	0.00	
10,900.00	60.30	358.38	10,799.28	577.84	302.70	569.05	12.00	12.00	0.00	
10,925.00	63.30	358.38	10,811.09	599.86	302.07	591.08	12.00	12.00	0.00	
10,950.00	66.30	358.38	10,821.74	622.47	301.43	613.70	12.00	12.00	0.00	
10,975.00	69.30	358.38	10,831.18	645.61	300.78	636.85	12.00	12.00	0.00	

<b>Database:</b>	EDM 5000.14 Conroe Db	<b>Local Co-ordinate Reference:</b>	Well Bell Lake Unit South 233H
<b>Company:</b>	Kaiser-Francis	<b>TVD Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Project:</b>	Lea County, New Mexico (NAD 83)	<b>MD Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Site:</b>	Bell Lake Unit South 233H	<b>North Reference:</b>	Grid
<b>Well:</b>	Bell Lake Unit South 233H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
11,000.00	72.30	358.38	10,839.40	669.20	300.11	660.45	12.00	12.00	0.00	
11,025.00	75.30	358.38	10,846.37	693.20	299.43	684.46	12.00	12.00	0.00	
11,050.00	78.30	358.38	10,852.08	717.53	298.74	708.79	12.00	12.00	0.00	
11,075.00	81.30	358.38	10,856.51	742.12	298.04	733.40	12.00	12.00	0.00	
11,100.00	84.30	358.38	10,859.64	766.91	297.34	758.20	12.00	12.00	0.00	
11,125.00	87.30	358.38	10,861.47	791.83	296.64	783.13	12.00	12.00	0.00	
11,147.49	90.00	358.38	10,862.00	814.30	296.00	805.61	12.00	12.00	0.00	
<b>Begin 90.00° Lateral - FTP BLUS 233</b>										
11,200.00	90.00	358.38	10,862.00	866.79	294.51	858.12	0.00	0.00	0.00	
11,300.00	90.00	358.38	10,862.00	966.75	291.68	958.12	0.00	0.00	0.00	
11,400.00	90.00	358.38	10,862.00	1,066.71	288.85	1,058.12	0.00	0.00	0.00	
11,500.00	90.00	358.38	10,862.00	1,166.67	286.02	1,158.12	0.00	0.00	0.00	
11,600.00	90.00	358.38	10,862.00	1,266.63	283.19	1,258.12	0.00	0.00	0.00	
11,700.00	90.00	358.38	10,862.00	1,366.59	280.36	1,358.12	0.00	0.00	0.00	
11,800.00	90.00	358.38	10,862.00	1,466.55	277.53	1,458.12	0.00	0.00	0.00	
11,900.00	90.00	358.38	10,862.00	1,566.51	274.70	1,558.12	0.00	0.00	0.00	
12,000.00	90.00	358.38	10,862.00	1,666.47	271.87	1,658.12	0.00	0.00	0.00	
12,100.00	90.00	358.38	10,862.00	1,766.43	269.04	1,758.12	0.00	0.00	0.00	
12,200.00	90.00	358.38	10,862.00	1,866.39	266.21	1,858.12	0.00	0.00	0.00	
12,300.00	90.00	358.38	10,862.00	1,966.35	263.38	1,958.12	0.00	0.00	0.00	
12,400.00	90.00	358.38	10,862.00	2,066.31	260.55	2,058.12	0.00	0.00	0.00	
12,500.00	90.00	358.38	10,862.00	2,166.27	257.72	2,158.12	0.00	0.00	0.00	
12,600.00	90.00	358.38	10,862.00	2,266.23	254.89	2,258.12	0.00	0.00	0.00	
12,700.00	90.00	358.38	10,862.00	2,366.19	252.06	2,358.12	0.00	0.00	0.00	
12,800.00	90.00	358.38	10,862.00	2,466.15	249.23	2,458.12	0.00	0.00	0.00	
12,900.00	90.00	358.38	10,862.00	2,566.11	246.40	2,558.12	0.00	0.00	0.00	
13,000.00	90.00	358.38	10,862.00	2,666.07	243.57	2,658.12	0.00	0.00	0.00	
13,100.00	90.00	358.38	10,862.00	2,766.03	240.74	2,758.12	0.00	0.00	0.00	
13,200.00	90.00	358.38	10,862.00	2,865.99	237.90	2,858.12	0.00	0.00	0.00	
13,300.00	90.00	358.38	10,862.00	2,965.95	235.07	2,958.12	0.00	0.00	0.00	
13,400.00	90.00	358.38	10,862.00	3,065.91	232.24	3,058.12	0.00	0.00	0.00	
13,500.00	90.00	358.38	10,862.00	3,165.87	229.41	3,158.12	0.00	0.00	0.00	
13,600.00	90.00	358.38	10,862.00	3,265.83	226.58	3,258.12	0.00	0.00	0.00	
13,700.00	90.00	358.38	10,862.00	3,365.79	223.75	3,358.12	0.00	0.00	0.00	
13,800.00	90.00	358.38	10,862.00	3,465.75	220.92	3,458.12	0.00	0.00	0.00	
13,900.00	90.00	358.38	10,862.00	3,565.71	218.09	3,558.12	0.00	0.00	0.00	
14,000.00	90.00	358.38	10,862.00	3,665.67	215.26	3,658.12	0.00	0.00	0.00	
14,100.00	90.00	358.38	10,862.00	3,765.63	212.43	3,758.12	0.00	0.00	0.00	
14,200.00	90.00	358.38	10,862.00	3,865.59	209.60	3,858.12	0.00	0.00	0.00	
14,300.00	90.00	358.38	10,862.00	3,965.55	206.77	3,958.12	0.00	0.00	0.00	
14,400.00	90.00	358.38	10,862.00	4,065.51	203.94	4,058.12	0.00	0.00	0.00	
14,500.00	90.00	358.38	10,862.00	4,165.47	201.11	4,158.12	0.00	0.00	0.00	
14,600.00	90.00	358.38	10,862.00	4,265.43	198.28	4,258.12	0.00	0.00	0.00	
14,700.00	90.00	358.38	10,862.00	4,365.39	195.45	4,358.12	0.00	0.00	0.00	
14,800.00	90.00	358.38	10,862.00	4,465.35	192.62	4,458.12	0.00	0.00	0.00	
14,900.00	90.00	358.38	10,862.00	4,565.31	189.79	4,558.12	0.00	0.00	0.00	
15,000.00	90.00	358.38	10,862.00	4,665.27	186.96	4,658.12	0.00	0.00	0.00	
15,100.00	90.00	358.38	10,862.00	4,765.23	184.13	4,758.12	0.00	0.00	0.00	
15,200.00	90.00	358.38	10,862.00	4,865.19	181.30	4,858.12	0.00	0.00	0.00	
15,300.00	90.00	358.38	10,862.00	4,965.15	178.47	4,958.12	0.00	0.00	0.00	
15,400.00	90.00	358.38	10,862.00	5,065.11	175.63	5,058.12	0.00	0.00	0.00	
15,500.00	90.00	358.38	10,862.00	5,165.07	172.80	5,158.12	0.00	0.00	0.00	
15,600.00	90.00	358.38	10,862.00	5,265.03	169.97	5,258.12	0.00	0.00	0.00	
15,700.00	90.00	358.38	10,862.00	5,364.99	167.14	5,358.12	0.00	0.00	0.00	

<b>Database:</b>	EDM 5000.14 Conroe Db	<b>Local Co-ordinate Reference:</b>	Well Bell Lake Unit South 233H
<b>Company:</b>	Kaiser-Francis	<b>TVD Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Project:</b>	Lea County, New Mexico (NAD 83)	<b>MD Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Site:</b>	Bell Lake Unit South 233H	<b>North Reference:</b>	Grid
<b>Well:</b>	Bell Lake Unit South 233H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

**Planned Survey**

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,800.00	90.00	358.38	10,862.00	5,464.95	164.31	5,458.12	0.00	0.00	0.00
15,900.00	90.00	358.38	10,862.00	5,564.91	161.48	5,558.12	0.00	0.00	0.00
16,000.00	90.00	358.38	10,862.00	5,664.87	158.65	5,658.12	0.00	0.00	0.00
16,100.00	90.00	358.38	10,862.00	5,764.83	155.82	5,758.12	0.00	0.00	0.00
16,200.00	90.00	358.38	10,862.00	5,864.79	152.99	5,858.12	0.00	0.00	0.00
16,300.00	90.00	358.38	10,862.00	5,964.75	150.16	5,958.12	0.00	0.00	0.00
16,400.00	90.00	358.38	10,862.00	6,064.71	147.33	6,058.12	0.00	0.00	0.00
16,500.00	90.00	358.38	10,862.00	6,164.67	144.50	6,158.12	0.00	0.00	0.00
16,600.00	90.00	358.38	10,862.00	6,264.63	141.67	6,258.12	0.00	0.00	0.00
16,700.00	90.00	358.38	10,862.00	6,364.59	138.84	6,358.12	0.00	0.00	0.00
16,800.00	90.00	358.38	10,862.00	6,464.55	136.01	6,458.12	0.00	0.00	0.00
16,900.00	90.00	358.38	10,862.00	6,564.51	133.18	6,558.12	0.00	0.00	0.00
17,000.00	90.00	358.38	10,862.00	6,664.47	130.35	6,658.12	0.00	0.00	0.00
17,100.00	90.00	358.38	10,862.00	6,764.43	127.52	6,758.12	0.00	0.00	0.00
17,200.00	90.00	358.38	10,862.00	6,864.39	124.69	6,858.12	0.00	0.00	0.00
17,300.00	90.00	358.38	10,862.00	6,964.35	121.86	6,958.12	0.00	0.00	0.00
17,400.00	90.00	358.38	10,862.00	7,064.31	119.03	7,058.12	0.00	0.00	0.00
17,500.00	90.00	358.38	10,862.00	7,164.27	116.20	7,158.12	0.00	0.00	0.00
17,600.00	90.00	358.38	10,862.00	7,264.23	113.36	7,258.12	0.00	0.00	0.00
17,700.00	90.00	358.38	10,862.00	7,364.19	110.53	7,358.12	0.00	0.00	0.00
17,800.00	90.00	358.38	10,862.00	7,464.15	107.70	7,458.12	0.00	0.00	0.00
17,900.00	90.00	358.38	10,862.00	7,564.11	104.87	7,558.12	0.00	0.00	0.00
18,000.00	90.00	358.38	10,862.00	7,664.07	102.04	7,658.12	0.00	0.00	0.00
18,100.00	90.00	358.38	10,862.00	7,764.03	99.21	7,758.12	0.00	0.00	0.00
18,200.00	90.00	358.38	10,862.00	7,863.99	96.38	7,858.12	0.00	0.00	0.00
18,300.00	90.00	358.38	10,862.00	7,963.95	93.55	7,958.12	0.00	0.00	0.00
18,400.00	90.00	358.38	10,862.00	8,063.91	90.72	8,058.12	0.00	0.00	0.00
18,500.00	90.00	358.38	10,862.00	8,163.87	87.89	8,158.12	0.00	0.00	0.00
18,600.00	90.00	358.38	10,862.00	8,263.83	85.06	8,258.12	0.00	0.00	0.00
18,697.51	90.00	358.38	10,862.00	8,361.30	82.30	8,355.63	0.00	0.00	0.00

PBHL - PBHL BLUS 233

**Design Targets**

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
VP BLUS 233 - hit/miss target - Shape - Point	0.00	0.00	10,184.54	337.03	309.51	454,017.73	801,065.01	32° 14' 43.359 N	103° 29' 35.658 W
PBHL BLUS 233 - plan hits target center - Point	0.00	0.00	10,862.00	8,361.30	82.30	462,042.00	800,837.80	32° 16' 2.776 N	103° 29' 37.573 W
FTP BLUS 233 - plan hits target center - Point	0.00	0.00	10,862.00	814.30	296.00	454,495.00	801,051.50	32° 14' 48.083 N	103° 29' 35.772 W

<b>Database:</b>	EDM 5000.14 Conroe Db	<b>Local Co-ordinate Reference:</b>	Well Bell Lake Unit South 233H
<b>Company:</b>	Kaiser-Francis	<b>TVD Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Project:</b>	Lea County, New Mexico (NAD 83)	<b>MD Reference:</b>	22 KB + 3597.4 @ 3619.40usft (Cactus 171)
<b>Site:</b>	Bell Lake Unit South 233H	<b>North Reference:</b>	Grid
<b>Well:</b>	Bell Lake Unit South 233H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,400.00	1,400.00	Rustler		0.000	358.38
1,800.00	1,800.00	Salado		0.000	358.38
2,150.07	2,150.00	Top of Salt		0.000	358.38
5,054.78	5,050.00	Base of Salt		0.000	358.38
5,305.19	5,300.00	Lamar		0.000	358.38
5,455.43	5,450.00	Bell Canyon		0.000	358.38
6,306.81	6,300.00	Cherry Canyon		0.000	358.38
7,739.14	7,730.00	Brushy Canyon		0.000	358.38
8,880.99	8,870.00	Bone Spring		0.000	358.38
9,041.25	9,030.00	Avalon		0.000	358.38
10,012.83	10,000.00	1 BSS		0.000	358.38
10,609.89	10,590.00	2 BSS		0.000	358.38

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
2,000.00	2,000.00	0.00	0.00	KOP, 2.00°/100' Build	
2,163.25	2,163.16	3.42	3.15	Hold 3.26° Inc, 42.56° Azm	
10,034.24	10,021.38	333.60	306.37	Begin 2.00°/100' Drop	
10,197.49	10,184.54	337.03	309.51	Begin Vertical Hold	
10,397.49	10,384.54	337.03	309.51	Begin 12.00°/100' Build	
11,147.49	10,862.00	814.30	296.00	Begin 90.00° Lateral	
18,697.51	10,862.00	8,361.30	82.30	PBHL	



APD ID: 10400038392

Submission Date: 01/28/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH

Well Number: 233H

Well Type: OIL WELL

Well Work Type: Drill

Show Final Text

**Section 1 - Existing Roads**

Will existing roads be used? YES

Existing Road Map:

BLUS\_233H\_Existing\_Roads\_20190125110034.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:

BLUS\_233H\_Access\_Road\_20191025112541.pdf

New road type: RESOURCE

Feet

Max slope (%): 2

Max grade (%): 2

Army Corp of Engineers (ACOE) permit required? NO

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? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

**Operator Name:** KAISER FRANCIS OIL COMPANY

**Well Name:** BELL LAKE UNIT SOUTH

**Well Number:** 233H

**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 consistent with 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:**

BLUS\_233H\_1\_Mile\_Wells\_20190125111333.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 SOUTH

**Well Number:** 233H

**Section 5 - Location and Types of Water Supply**

**Water Source Table**

**Water source type:** OTHER

**Describe type:** FRESH WATER

**Water source use type:** STIMULATION

OTHER

**Describe use type:** ROAD/PAD CONSTRUCTION /

SURFACE 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:**

**Water source volume (barrels):** 250000

**Source volume (acre-feet):** 32.223274

**Source volume (gal):** 10500000

---

**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:**

**Water source volume (barrels):** 20000

**Source volume (acre-feet):** 2.577862

**Source volume (gal):** 840000

---

**Operator Name:** KAISER FRANCIS OIL COMPANY

**Well Name:** BELL LAKE UNIT SOUTH

**Well Number:** 233H

**Water source and transportation map:**

BLUS\_233H\_Water\_Source\_Map\_20190125111517.pdf

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

**New water well?** NO

**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 attachment:**

**Section 7 - Methods for Handling Waste**

**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

**Safe containmant attachment:**

**Operator Name:** KAISER FRANCIS OIL COMPANY

**Well Name:** BELL LAKE UNIT SOUTH

**Well Number:** 233H

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

**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 FACILITY

**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 FACILITY

**Disposal type description:**

**Disposal location description:** Trucked to an approved disposal facility

**Reserve Pit**

**Reserve Pit being used?** NO

**Temporary disposal of produced water into reserve pit?**

**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 SOUTH

**Well Number:** 233H

### Cuttings Area

**Cuttings Area being used?** NO

**Are you storing cuttings on location?** YES

**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 Facilities

**Are you requesting any Ancillary Facilities?:** NO

**Ancillary Facilities attachment:**

**Comments:**

### Section 9 - Well Site Layout

**Well Site Layout Diagram:**

BLUS\_233H\_Drilling\_Layout\_20190125111935.pdf

BLUS\_233H\_Well\_Pad\_Layout\_20191025112637.pdf

**Comments:**

### Section 10 - Plans for Surface Reclamation

**Type of disturbance:** New Surface Disturbance

**Multiple Well Pad Name:** SOUTH BELL LAKE UNIT

**Multiple Well Pad Number:** 13

**Recontouring attachment:**

BLUS\_233H\_IR\_Diagram\_20191025112659.pdf

**Drainage/Erosion control construction:** During construction proper erosion control methods will be used to control erosion, runoff and siltation of the surrounding area. As per request of rancher, a berm will be constructed along the east side of well pad.

**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 SOUTH

**Well Number:** 233H

<b>Well pad proposed disturbance (acres):</b> 5.97	<b>Well pad interim reclamation (acres):</b> 0.918	<b>Well pad long term disturbance (acres):</b> 5.052
<b>Road proposed disturbance (acres):</b> 0.147383	<b>Road interim reclamation (acres):</b> 0	<b>Road long term disturbance (acres):</b> 0.147383
<b>Powerline proposed disturbance (acres):</b> 0	<b>Powerline interim reclamation (acres):</b> 0	<b>Powerline long term disturbance (acres):</b> 0
<b>Pipeline proposed disturbance (acres):</b> 0	<b>Pipeline interim reclamation (acres):</b> 0	<b>Pipeline long term disturbance (acres):</b> 0
<b>Other proposed disturbance (acres):</b> 0	<b>Other interim reclamation (acres):</b> 0	<b>Other long term disturbance (acres):</b> 0
<b>Total proposed disturbance:</b> 6.117383	<b>Total interim reclamation:</b> 0.918	<b>Total long term disturbance:</b> 5.199383

**Disturbance Comments:** Plan to reclaim 130' on the north side and 80' on the east side of well pad.

**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 attachment:**

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

**Existing Vegetation Community at the road attachment:**

**Existing Vegetation Community at the pipeline:**

**Existing Vegetation Community at the pipeline attachment:**

**Existing Vegetation Community at other disturbances:**

**Existing Vegetation Community at other disturbances attachment:**

**Non native seed used?** NO

**Non native seed description:**

**Seedling transplant description:**

**Will seedlings be transplanted for this project?** NO

**Seedling transplant description attachment:**

**Will seed be harvested for use in site reclamation?** NO

**Operator Name:** KAISER FRANCIS OIL COMPANY

**Well Name:** BELL LAKE UNIT SOUTH

**Well Number:** 233H

**Seed harvest description:**

**Seed harvest description attachment:**

**Seed Management**

**Seed Table**

**Seed Summary**

**Total pounds/Acre:**

**Seed Type**

**Pounds/Acre**

**Seed reclamation attachment:**

**Operator Contact/Responsible Official Contact Info**

**First Name:**

**Last Name:**

**Phone:** (432)684-9696

**Email:**

**Seedbed prep:**

**Seed BMP:**

**Seed method:**

**Existing invasive species? NO**

**Existing invasive species treatment description:**

**Existing invasive species treatment attachment:**

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

**Weed treatment plan attachment:**

**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 attachment:**

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

**Pit closure description:** N/A

**Pit closure attachment:**

**Section 11 - Surface Ownership**

**Operator Name:** KAISER FRANCIS OIL COMPANY

**Well Name:** BELL LAKE UNIT SOUTH

**Well Number:** 233H

**Disturbance type:** WELL PAD

**Describe:**

**Surface Owner:** 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:**

**Fee Owner:** COG Operating LLC

**Fee Owner Address:** 600 W Illinois Ave

**Phone:** (432)683-7443

**Email:**

**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 COG Operating LLC 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:** PRIVATE OWNERSHIP

**Other surface owner description:**

**BIA Local Office:**

**Operator Name: KAISER FRANCIS OIL COMPANY**

**Well Name: BELL LAKE UNIT SOUTH**

**Well Number: 233H**

**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 Information**

**Right of Way needed? NO**

**Use APD as ROW?**

**ROW Type(s):**

**ROW Applications**

**SUPO Additional Information:**

**Use a previously conducted onsite? NO**

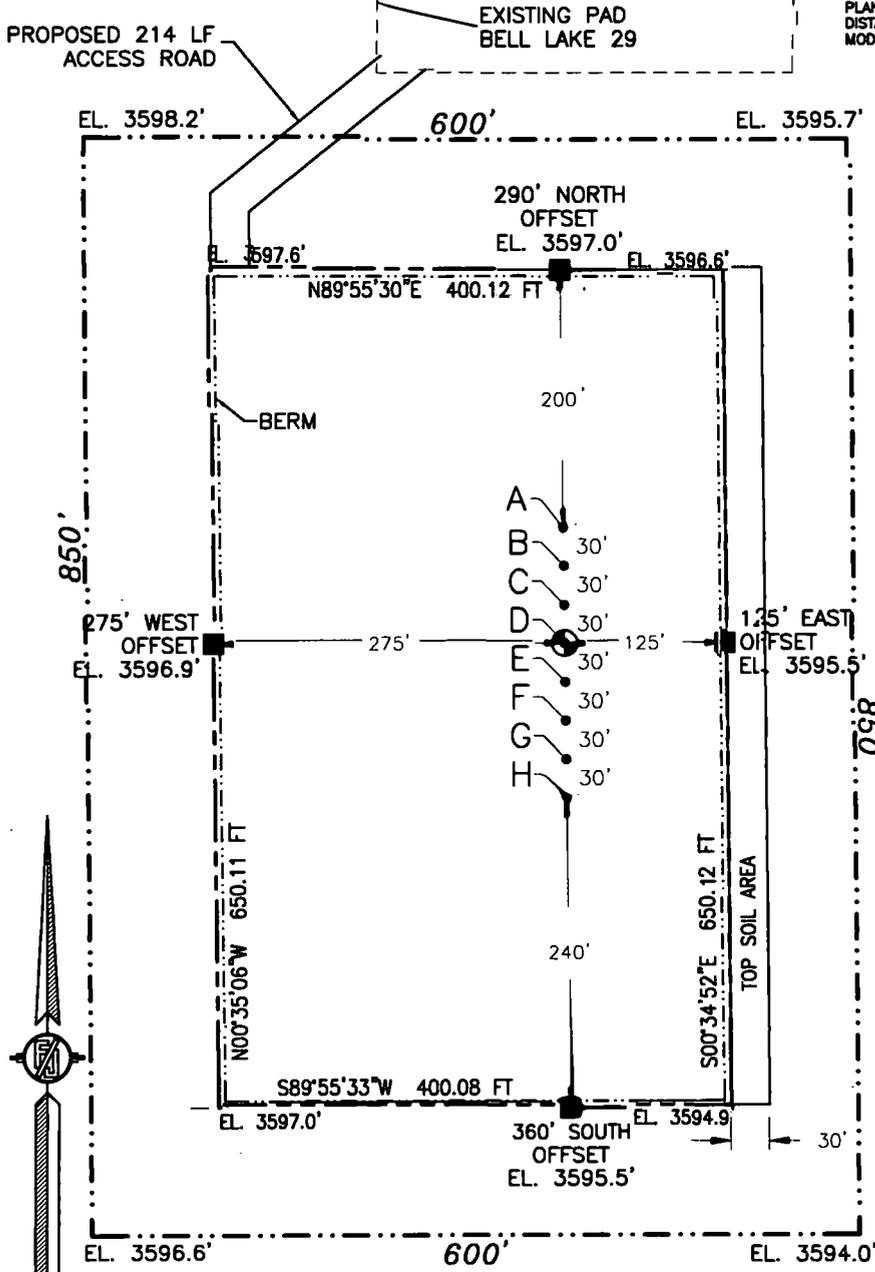
**Previous Onsite information:**

**Other SUPO Attachment**

SECTION 5, TOWNSHIP 24 SOUTH, RANGE 34 EAST, N.M.P.M.  
LEA COUNTY, STATE OF NEW MEXICO

SITE MAP

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83) LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE. ELEVATION VALUES ARE NAVD88.



**BELL LAKE UNIT SOUTH 233H**  
ELEV. = 3596.3'  
5.971± ACRES  
LAT. = 32.2441809°N (NAD83)  
LONG. = 103.4942493°W  
NMSP EAST (FT)  
N = 453579.98  
E = 800755.87

- A - BELL LAKE UNIT SOUTH 233H
- B - BELL LAKE UNIT SOUTH 232H
- C - BELL LAKE UNIT SOUTH 333H
- D - BELL LAKE UNIT SOUTH 332H
- E - BELL LAKE UNIT SOUTH 433H
- F - BELL LAKE UNIT SOUTH 432H
- G - BELL LAKE UNIT SOUTH 133H
- H - BELL LAKE UNIT SOUTH 132H

0 15 75 150 300

SCALE 1" = 150'

**DIRECTIONS TO LOCATION**  
FROM THE INTERSECTION OF STATE HIGHWAY 128 AND CR 21 (DELAWARE BASIN ROAD) GO NORTH ON CR 21 APPROX. 3.0 MILES TO CR J-21 (SHELL ROAD) TURN RIGHT ON LEASE ROAD AND GO EAST APPROX. 0.9 OF A MILE, TURN RIGHT AND GO SOUTH APPROX. 0.5 OF A MILE TO "Y". KEEP LEFT AND GO SOUTHEAST APPROX. 575' TO AN EXISTING PAD, THEN FROM THE SOUTHWEST PAD CORNER GO SOUTHWEST-SOUTH 214' TO THE NORTHWEST PAD CORNER FOR THIS LOCATION.

I, FILMON F. JARAMA, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFICATE NO. 1779, HEREBY CERTIFY AND AM RESPONSIBLE FOR THIS SURVEY. THIS SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND PLAT MEET THE MINIMUM STANDARDS.



9/18/19

DATE

SEPTEMBER 18, 2019

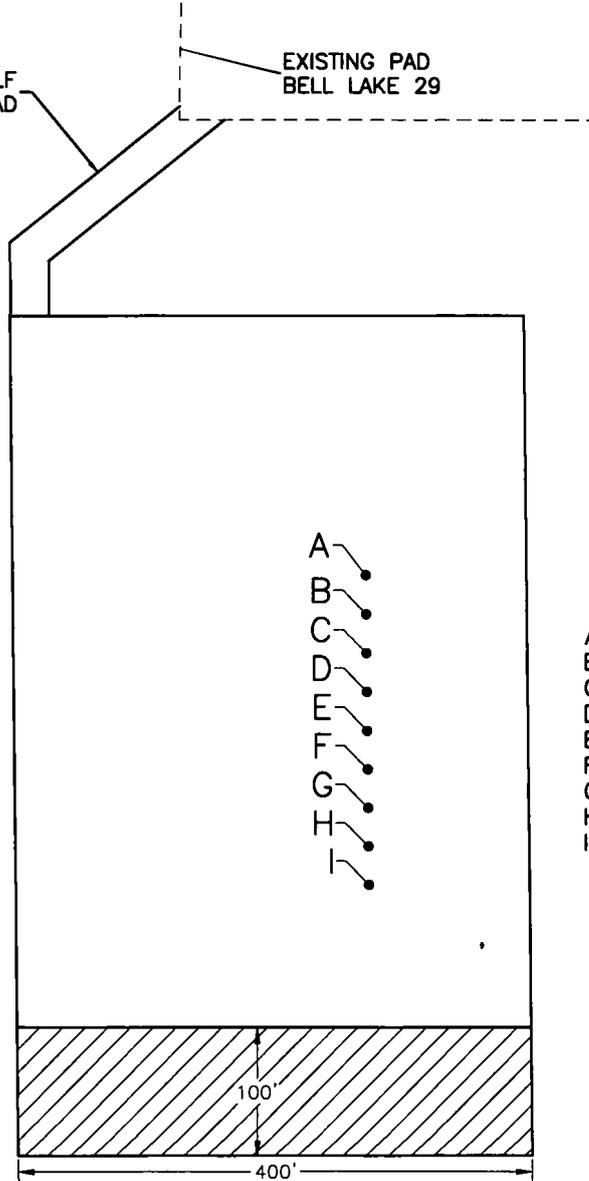
SURVEY NO. 6765A

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

SECTION 5, TOWNSHIP 24 SOUTH, RANGE 34 EAST, N.M.P.M.  
 LEA COUNTY, STATE OF NEW MEXICO  
 INTERIM SITE BUILD PLAN

PROPOSED 214 LF  
 ACCESS ROAD

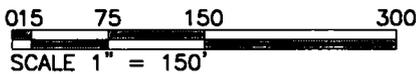
EXISTING PAD  
 BELL LAKE 29



- A - BELL LAKE UNIT SOUTH 233H
- B - BELL LAKE UNIT SOUTH 232H
- C - BELL LAKE UNIT SOUTH 333H
- D - BELL LAKE UNIT SOUTH 332H
- E - BELL LAKE UNIT SOUTH 433H
- F - BELL LAKE UNIT SOUTH 432H
- G - BELL LAKE UNIT SOUTH 133H
- H - BELL LAKE UNIT SOUTH 331H
- I - BELL LAKE UNIT SOUTH 431H



DENOTES INTERIM PAD  
 RECLAMATION AREA  
 0.918± ACRES



**KAISER-FRANCIS OIL CO.**  
**BELL LAKE UNIT SOUTH 233H**  
 LOCATED 1862 FT. FROM THE SOUTH  
 LINE AND 1945 FT. FROM THE WEST LINE  
 OF SECTION 5, TOWNSHIP 24 SOUTH,  
 RANGE 34 EAST, N.M.P.M.  
 LEA COUNTY, STATE OF NEW MEXICO

SEPTEMBER 18, 2019

SURVEY NO. 6765A

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



APD ID: 10400038392

Submission Date: 01/28/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH

Well Number: 233H

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 Pits

Would you like to utilize Lined Pit PWD options? NO

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 specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

**Operator Name: KAISER FRANCIS OIL COMPANY**

**Well Name: BELL LAKE UNIT SOUTH**

**Well Number: 233H**

**Lined pit Monitor description:**

**Lined pit Monitor attachment:**

**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 attachment:**

### **Section 3 - Unlined Pits**

**Would you like to utilize Unlined Pit PWD options? NO**

**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 specifications:**

**Precipitated solids disposal:**

**Describe precipitated solids disposal:**

**Precipitated solids disposal permit:**

**Unlined pit precipitated solids disposal schedule:**

**Unlined pit precipitated solids disposal schedule attachment:**

**Unlined pit reclamation description:**

**Unlined pit reclamation attachment:**

**Unlined pit Monitor description:**

**Unlined pit Monitor attachment:**

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

**Beneficial use user confirmation:**

**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 evidence:**

**State authorization:**

**Unlined Produced Water Pit Estimated percolation:**

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

**Operator Name:** KAISER FRANCIS OIL COMPANY

**Well Name:** BELL LAKE UNIT SOUTH

**Well Number:** 233H

**Is the reclamation bond a rider under the BLM bond?**

**Unlined pit bond number:**

**Unlined pit bond amount:**

**Additional bond information attachment:**

### **Section 4 - Injection**

**Would you like to utilize Injection PWD options?** NO

**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 attachment:**

**Underground Injection Control (UIC) Permit?**

**UIC Permit attachment:**

### **Section 5 - Surface Discharge**

**Would you like to utilize Surface Discharge PWD options?** NO

**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 - Other**

**Would you like to utilize Other PWD options?** NO

**Produced Water Disposal (PWD) Location:**

**PWD surface owner:**

**PWD disturbance (acres):**

**Operator Name: KAISER FRANCIS OIL COMPANY**

**Well Name: BELL LAKE UNIT SOUTH**

**Well Number: 233H**

**Other PWD type description:**

**Other PWD type attachment:**

**Have other regulatory requirements been met?**

**Other regulatory requirements attachment:**



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

# Bond Info Data Report

12/16/2019

APD ID: 10400038392

Submission Date: 01/28/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH

Well Number: 233H

Well Type: OIL WELL

Well Work Type: Drill

[Show Final Text](#)

## Bond Information

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 attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment: