Form 3160-3 (June 2015)  UNITED STATES  DEPARTMENT OF THE IN				FORM OMB N Expires: Ja 5. Lease Serial No.	o. 1004-	0137
BUREAU OF LAND MANA				NMNM0001244A	TP 11	
APPLICATION FOR PERMIT TO D	RILL OR	REENTER		6. If Indian, Allotee	or Tribe	Name
	EENTER ther			7. If Unit or CA Agr BELL LAKE / NMN		
	-	Multiple Zone		_		1_
2. Name of Operator KAISER ERANCIS OIL COMPANY [12361]				9. API Well No. <b>3</b>	0-025	5-48452
TO HOLITTY HOLO OLE COMM 7 HTT	2h Dhans M	- (:1. J	7-1	10. Field and Pool,		[01<=0=]
3a. Address 6733 S. Yale Ave., Tulsa, OK 74121	(918) 491-0	o. (include area cod 000	e)	OJO CHISO/BONI		
4. Location of Well (Report location clearly and in accordance w				11. Sec., T. R. M. or SEC 6/T23S/R34E		d Survey or Area
At surface SWNE / 2065 FNL / 1545 FEL / LAT 32.335 At proposed prod. zone SWSE / 100 FSL / 1410 FEL / L/			052443	020 0, 1200, 10 12	.,	
14. Distance in miles and direction from nearest town or post offi		35 / LONG - 103.50	002440	12. County or Parish	1	13. State
20 miles				LEA		NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No of ac	res in lease	17. Spaci 480.0	ng Unit dedicated to t	his well	
18 Distance from proposed location*	19. Proposed	d Depth	20. BLM	/BIA Bond No. in file		
to nearest well, drilling, completed, 30 feet applied for, on this lease, ft.	10226 feet	/ 18341 feet	FED: W	YB000055		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3460 feet	22. Approxis	nate date work will	start*	23. Estimated durati	on	
3400 leet	24. Attac	hments		40 days		
The following, completed in accordance with the requirements of (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 Syster SUPO must be filed with the appropriate Forest Service Office)	n Lands, the	4. Bond to cover th Item 20 above). 5. Operator certific 6. Such other site sp	e operation	Hydraulic Fracturing runs unless covered by aromation and/or plans as	n existing	g bond on file (see
25. Signature	Name	BLM. (Printed/Typed)			Date	
(Electronic Submission)		NIE WILSON / Ph	: (918) 49	91-0000	06/29/	2020
Title Regulatory Analyst						
Approved by (Signature) (Electronic Submission)	100	(Printed/Typed) _ayton / Ph: (575)	234-5959		Date 01/21/	2021
Title	Office	-ayton / 1 (0 / 0 /	20,0000			
Assistant Field Manager Lands & Minerals  Application approval does not warrant or certify that the applican applicant to conduct operations thereon.  Conditions of approval, if any, are attached.		ad Field Office or equitable title to the	nose rights	in the subject lease w	hich woo	uld entitle the
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, m of the United States any false, fictitious or fraudulent statements of				*	ıny depa	rtment or agency
GCP Rec 01/27/2021			and Committee		1/	
SL	arn Wi	TH CONDIT	IONS	0:	2/04/2	2021
(Continued on page 2)	val Date	01/21/2021		*(ln	structio	ons on page 2)



U/SS Department of the Interior BUREAU OF LAND MANAGEMENT Application Data Report

APD ID: 10400058309

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH

Well Type: OIL WELL

Submission Date: 06/29/2020

Highlighted data reflects the most recent changes

Well Number: 211H

Well Work Type: Drill

**Show Final Text** 

### Section 1 - General

APD ID:

10400058309

Tie to previous NOS? N

Submission Date: 06/29/2020

**BLM Office: CARLSBAD** 

User: Melanie Wilson

Title: Regulatory Analyst

Federal/Indian APD: FFD

Is the first lease penetrated for production Federal or Indian? FED

Lease Acres:

Surface access agreement in place?

Lease number: NMNM0001244A

Allotted?

Reservation:

Zip: 74121

Agreement in place? YES

Federal or Indian agreement: FEDERAL

Agreement number: NMNM068292X

Agreement name: BELL LAKE

Keep application confidential? Y

Permitting Agent? YES

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.

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 NORTH Well Number: 211H Well API Number:

Field/Pool or Exploratory? Field and Pool Field Name: OJO CHISO Pool Name: BONE SPRING,

SOUTHWEST

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

Page 1 of 3

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

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: 10

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: 575 FT

Reservoir well spacing assigned acres Measurement: 480 Acres

BLUN\_211H\_C102\_20200629062655.pdf

BLUN\_211H\_Pymt\_20200629064254.pdf

Well work start Date: 10/01/2020 **Duration: 40 DAYS** 

### **Section 3 - Well Location Table**

Survey Type: RECTANGULAR

**Describe Survey Type:** 

Datum: NAD83 Vertical Datum: NAVD88

Survey number: 7654 Reference Datum: GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	ease Type	ease Number	Elevation	MD	IVD	Will this well produce from this lease?
SHL Leg #1	206 5	FNL	154 5	FEL	23S	34E	6	Aliquot SWNE	32.33522 77	- 103.5057 118	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 000058 7	346	0	0	N
KOP Leg #1	206 5	FNL	154 5	FEL	238	34E	6	Aliquot SWNE	32.33522 77	- 103.5057 118	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 000058 7	346 0	0	0	N

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

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 lease?
PPP Leg #1-1	0	FSL	0	FEL				Aliquot NESE	32.33352 06	103.5049 541	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 000124 4A	- 676 6	105 63	102 26	Y
PPP Leg #1-2	0	FSL	219 0	FEL	23\$	34E	6	Aliquot NESE	32.33364 24	- 103.5049 511	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 000124 4A	- 676 3	105 23	102 23	Υ
PPP Leg #1-3	0	FNL	132 0	FEL	238	34E	7	Aliquot NWNE	32.32638 41	- 103.5050 519	LEA	NEW MEXI CO	NEW MEXI CO	F	NMLC0 065194		131 63	102 26	Υ
	264 0	FSL	137 0	FEL	238	34E	7	Aliquot NWSE	32.31912 9	- 103.5051 471	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	- 676 6	158 03	102 26	Υ
EXIT Leg #1	100	FSL	141 0	FEL	238	34E		Aliquot SWSE		- 103.5052 443	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	- 676 6	183 41	102 26	Υ
BHL Leg #1	100		141 0	FEL	238	34E				- 103.5052 443	LEA		NEW MEXI CO	S		- 676 6	183 41	102 26	Y

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: KAISER FRANCIS OIL COMPANY

LEASE NO.: | NMNM0001244A

WELL NAME & NO.: | BELL LAKE UNIT NORTH 211H

**SURFACE HOLE FOOTAGE:** 2065'/N & 1545'/E **BOTTOM HOLE FOOTAGE** 100'/S & 1410'/E

**LOCATION:** | Section 6, 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		← 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 13-3/8 inch surface casing shall be set at approximately 1250 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

Page 1 of 8

- **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.
- 2. The 9-5/8 inch intermediate casing shall be set at 4860 feet. The minimum required fill of cement behind the 9-5/8 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.
- 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.
- Excess cement calculates to less than 25%; More cement may be needed.

### 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 **2000 (2M)** psi.

Page 2 of 8

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

Page 3 of 8

### **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 2<sup>nd</sup> 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

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- 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.

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- 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.

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- 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

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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. <u>DRILLING MUD</u>

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

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### **Melanie Wilson**

From: notification@pay.gov

**Sent:** Monday, June 29, 2020 6:39 AM

To: mjp1692@gmail.com

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



An official email of the United States government



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: 26PA01GO Agency Tracking ID: 76011325640

Transaction Type: Sale

Transaction Date: 06/29/2020 08:39:11 AM 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: 10400058309

Lease Numbers: NMNM0001244A

Well Numbers: 211H

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



UISS Departmentlofitheelitlerior BUREAU OF LAND MANAGEMENT

Well Name: BELL LAKE UNIT NORTH

### Drilling Plan Data Report 01/22/2021

APD ID: 10400058309

Submission Date: 06/29/2020

Highlighted data reflects the most recent changes

Operator Name: KAISER FRANCIS OIL COMPANY

Well Number: 211H

Show Final Text

Well Type: OIL WELL

Well Work Type: Drill

### **Section 1 - Geologic Formations**

Formation			True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
767463		3460	0	0	OTHER : Surface	NONE	N
767464		2330	1130	1130	SANDSTONE	NONE	N
767465		1960	1500	1500	SALT	NONE	N
767466		1760	1700	1700	SALT	NONE	N
767467		-1140	4600	4600	SALT	NONE	N
767468		-1390	4850	4850	SANDSTONE	NATURAL GAS, OIL	N
767469		-1590	5050	5050	SANDSTONE	NATURAL GAS, OIL	N
767470		-2430	5890	5890	SANDSTONE	NATURAL GAS, OIL	N
767471		-3790	7250	7250	SANDSTONE	NATURAL GAS, OIL	N
767472		-5030	8490	8490	LIMESTONE	NATURAL GAS, OIL	N
767473	AVALON SAND	-5093	8553	8553	SANDSTONE	NATURAL GAS, OIL	N
767474		-6033	9493	9493	SANDSTONE	NATURAL GAS, OIL	N
767481		-6566	10026	10026	SANDSTONE	NATURAL GAS, OIL	Υ
767488		-7000	10460	10460	LIMESTONE	NATURAL GAS, OIL	N

**Section 2 - Blowout Prevention** 

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

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 MultiBowl Wellhead

**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 211H Choke Manifold 20200622164547.pdf

### **BOP Diagram Attachment:**

Cactus\_Flex\_Hose\_16C\_Certification\_20200206080210.pdf

BLUN\_211H\_BOP\_20200622164609.pdf

BLUN\_211H\_Wellhead\_20200622164757.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	1180	0	1180	3460	2280	1180	J-55	54.5	BUTT	2	4.9	DRY	14.1	DRY	13.3
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	4860	0	4850		-1390	4860	HCP -110		LT&C	1.9	3.5	DRY	6.5	DRY	6.5
3	PRODUCTI ON	8.75	5.5	NEW	API	N	0	18341	0	10226		-6766	18341	P- 110		OTHER - GBCD	2.3	2.7	DRY	3.3	DRY	3.1

### **Casing Attachments**

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

Casing	Attac	hments
--------	-------	--------

Casing ID: 1

String Type: SURFACE

Inspection Document:

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

BLUN\_211H\_Casing\_Assumptions\_20200629061257.pdf

Casing ID: 2

String Type: INTERMEDIATE

Inspection Document:

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

BLUN\_211H\_Casing\_Assumptions 20200629060751.pdf

Casing ID: 3

String Type: PRODUCTION

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

BLUN\_211H\_Prod\_Csg\_20200629061144.pdf

**Section 4 - Cement** 

Well Name: BELL LAKE UNIT NORTH

Well Number: 211H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1180	700	1.7	13.5	1223	75	Halcem	4% Bentonite
SURFACE	Tail		0	1180	248	1.3	14.8	331	75	Halcem	0.125#/sk Poly Flake
INTERMEDIATE	Lead		0	4860	790	2.1	12.5	1650	50	Econocem	3#/sk Kol Seal
NTERMEDIATE	Tail		0	4860	545	1.3	14.8	726	50	Halcem	none
PRODUCTION	Lead	4	1000	1834	397	3.5	10.5	1386	10	NeoCem	2#/sk Kol Seal
PRODUCTION	Tail	4	000	1834	1822	1.2	14.5	2228	10	Versacem	none

### **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 time.

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/gat)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characterístics
4850	1022 6	OIL-BASED MUD	8.7	8.9							
1180	4850	OTHER : Diesel- Brine Emulsion	8.7	8.9							
0	1180	OTHER : Fresh Water	8.4	9							

Page 4 of 6

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

### 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, MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

None planned

### **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 4733

**Anticipated Surface Pressure: 2483** 

Anticipated Bottom Hole Temperature(F): 165

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

BLUN\_H2S\_Plan\_20200114113955.pdf

### **Section 8 - Other Information**

Proposed horizontal/directional/multi-lateral plan submission:

BLUN\_211H\_Directional\_Plan\_20200629062539.pdf

Other proposed operations facets description:

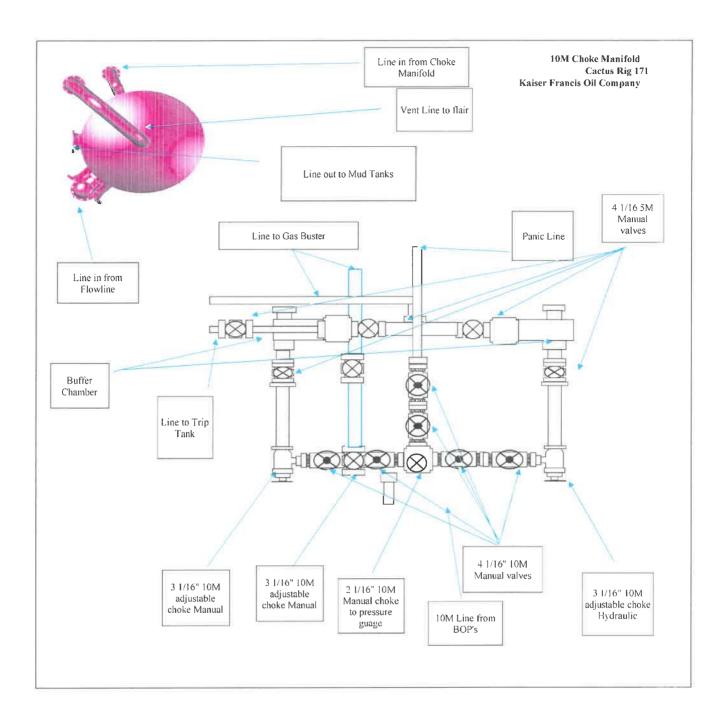
Gas Capture Plan attached

Other proposed operations facets attachment:

BLUN\_Pad\_10\_Gas\_Capture\_Plan 20200227085421.pdf

Other Variance attachment:

Cactus\_Flex\_Hose\_16C\_Certification\_20200206081511.pdf BLUN 211H Wellhead 20200629062611.pdf





# **Certificate of Registration**

APIQR REGISTRATION NUMBER

Bhis caertifies that the quality management system of

COPPER STATE RUBBER, INC. 10485 W. Roosevelt Street Avontale, AZ

has been assessed by the American Petroleum Institute Quality Registrar (APIQR®) and found it to be in conformance with the following standard:

ISO 9001:2015

The scope of this registration and the approved quality management system applies to the

Design and Manufacture of Oilfield, Marine and Other Industrial Heses

MIQR® approves the organization's justification for excluding:

No Exclusion Identified as Applicable

Effective Date:

APRIL 21, 2019

Expiration Date:

APRIL 21, 2022

Registered Since:

APRIL 21, 2016

Myse Of following

Industry Services

Vaccrdited hythorism of the laternation of tree-fillation From Millian childrenguister Arrangement for, Quildity Valungement Systems



This certain is additionally provide grant filter in the registered approximation of a constable turn of requirements of APOR site grant and the provided from the provided and a state of the provided from the p

QUALITY

2800HS2 E021H



REGISTRATION NO. 01-3217

# Certificate of Registration

The American Petroleum Institute as tifies that tiles quality management system of

COPPER STATE RUBBER, INC. 10485 W. Roosevelt Street Avondals, AZ

thes been assessed by the American Patroleum Institute and found to be in conformance with the following:

# **API Specification Q1**

The stope of this registration and the approxed quality management system applies to the

Design and Manufacture of Oilfield, Marine and Other Industrial Hoses

API approxes the organization's justification for excluding:

No Exclusions litentified as Applicable

APT Speci Q1.
Registered

Effective Data: Expiration Date: Registered Since: APEIL 21, 2019 APRIL 21, 2022 MAY 4, 2016

Vice President of Global Industry Services

felme Of fue

This certificate is veliditor the period specified herein. The registered organization must continually meet all requirements of API-Spec Q1, Specification for Quality Programs for the Patroleum, Petrochemical and Natural Gas Industry, and their equirements of the Registration Agreement. Registration is maintained and regularly monitored through annual full system audits. This certificate has been issued from API offices located at 200 Massachusetts Avenua, INW Suite 1100, Washington, DC 20001-5571, U.S.A. It is the property of API, and must be returned upon request. To varify the authoritistly of this certificate, go to washington glassystems.

.2018/154 | 02/19 | Digital

# Certificate of Authority to use the Official API Monogram

License Number: 16C-0383

ORIGINAL.

he American Petraleum Institute hereby grants to

# COPPER STATE RUBBER, INC. 10485 W. Roosevelt Street Avendale, AZ

the right to use the Official API Monograms on manufactured products under the conditions in the official publications of the American Petraleum Institute entitled API Spec 04" and API-16C and in accordance with the provisions of the License Agreement. In all eases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this Sertificate number: 16C-0332

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram er any reason satisfactory to the Board of Directors of the American Petroleum Institute

The scope of this license includes the following: Flexible Choke and Kill Lines atFSL 0, FSL 1, FSL 2, FSL 3

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: APRIL 21, 2019 Expiration Date: APRIL 21, 2022 To verify the authentisisy of this license, go to www.api.org/compositelist.

Aun Chilador

Vies President of Global Industry Services



14141 S. Wayside Drive Houston, Texas 77048

Phone 713-644-1491
Fax 713-644-9830
www.copperstaterubber.com
sales@copperstaterubber.com

October 7, 2019

Cactus Dulling UIR Fastener 111722 W. Hwy 80 E. Odessa, TX 79765

Subject:

Date: October 7. 2019

Specialties Company File No.: CSR-32367 / SPBCO-83336

Equipment:

Imapact, Boxescope, and Recenify Costomer's Chebe & Kill Hose, API 16C Mionogrammal, Fine Resistant, 10,000 PSI MAWP x 15,000 PSI Test, Complete With 4-1/16" 10,000 PSI API Flanged Ends (Swivel x Fixed).

IJEA: 3" IJD X 35 Ft.

(S/N-33974A)

### CHRICATULO PRODUPLIANCE

Ilhis is to certify the above referenced equipment meets or exceeds the following requirements and were manufactured from same material specification and manufacturing methods as prototype assemblies for referenced specifications.

- II. COMPLIENTE HOSE ASSEMBLY
  - A. API Certificate of Accorditation for Spec: Q1 (Quality Programs) and Spac:: 16C
    - 1. Conner State Rubber, Inc. Confiscate No.: 16C-0383
  - B. CSR Specification No.: 090-1915C-48
- III. PHYSICAL/CHEMICAL PROPERTIES OF METAL COMPONENTS
  - A. API Spec. 6A, latest edition
  - IB. API Spac. 16A, latest affiliem
  - C. NACE Standard MR0175; latest addition

Wyatt D. Lowe,
Tiechnical Department

Manime, Industrial, and Oilfeld Hose Made in the U.S.A.



Visual Inspection / Hydrostatic Test Report

Wanafacturer	Copper State Rubber Inc.	
Stone Type	Rotary Hose Re-Test	
Pressure Rating	10000FSHMAWP X 15,000 PSHTP	
Spec Muntoer	0904915/C-48	

Serial Munther	339740	-100
SizelD	311	8
Length	35'	
Date	Oktiolisen 3, 259199	
Strop Order Number	32367	

Connections Description: 411/16"10,000 PSI API SWWEL FLANGE

44 17/16" 10,000 PSI API FIXED FLANCE

Describility of Terminative Commentary

	linggod	Walle	SHIER	Female	Flanges	Hubs	Other
Commedian 1	1052				V4780	1	814014
Connector 2	1(4)(01)		West or constant of the consta		V5468	- Chart	11261

Commonte

(0:4)	lineate	Hima	ni hosoo

Fressure Control Call 242 Call baction Date				
	Fressure Remorder	CA. 1.24/2	Callination Date	8100019

"This reports ignifies that the product has been visually inspected for defects in the interior tube, recess, graded, cover and bear ding and all have been found to the conforming.

Commenties - Hhose recommendation of the modern treatment of the factory treat prossure as more

Higdicustratic Tessting Requirements

Lengtin after test

35

(DAL

155 (Min(2))

155(0000 posi((-0)/45000 posi))

Witness By:

Cyle Winters Same viscon

Final OK:

Fitotharit Shridler, Quality Manager

OF THRENGS IN



Borescope / Visual Inspection

	butescape / Visual Inspection
Wanufacturer	Copper State Rubber Inc.
Ніаве Туре	Vibrator // Rotary Hose
Phessure Rating	10,000 FSI MAWP X 15,000 PSI T/P
Spec Number	090-1315C - 48

Senial Manntoer	33974A	
Silze ID	3"	
Lengih	35'	
Date	October 3, 2019	

Gasket Faces Pass

Recesses Pass

Hose Bore Pass

Buildles or Bulges None Noted

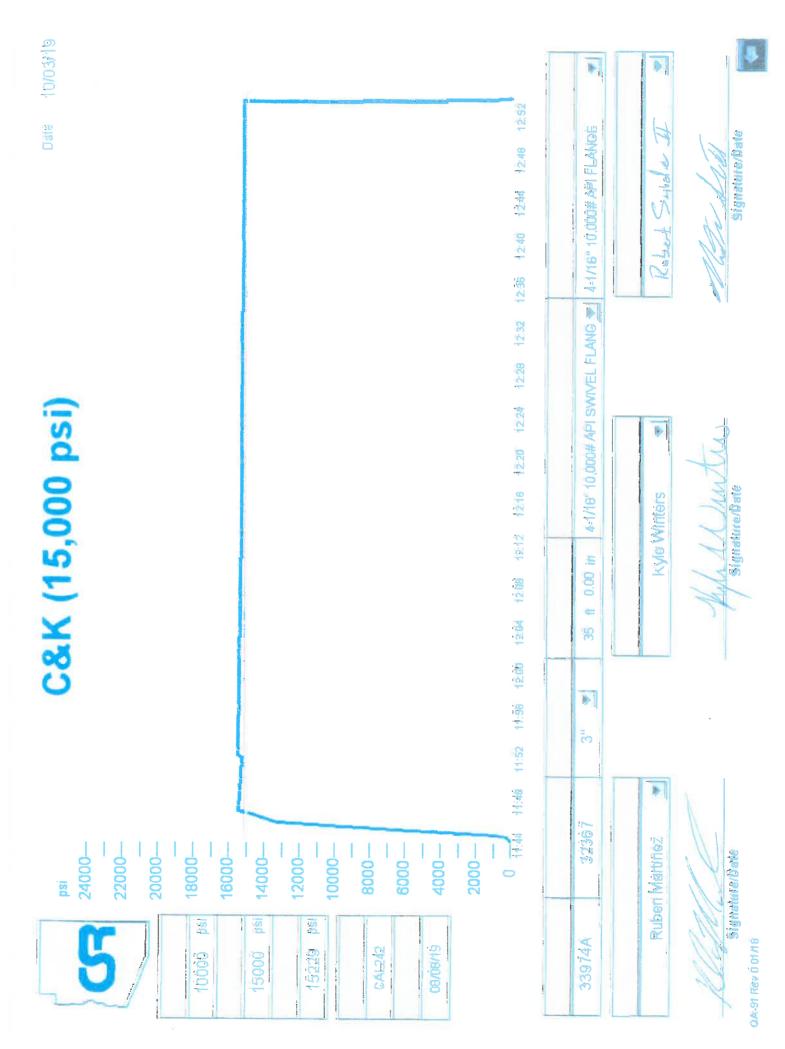
Visual Inspection Pass

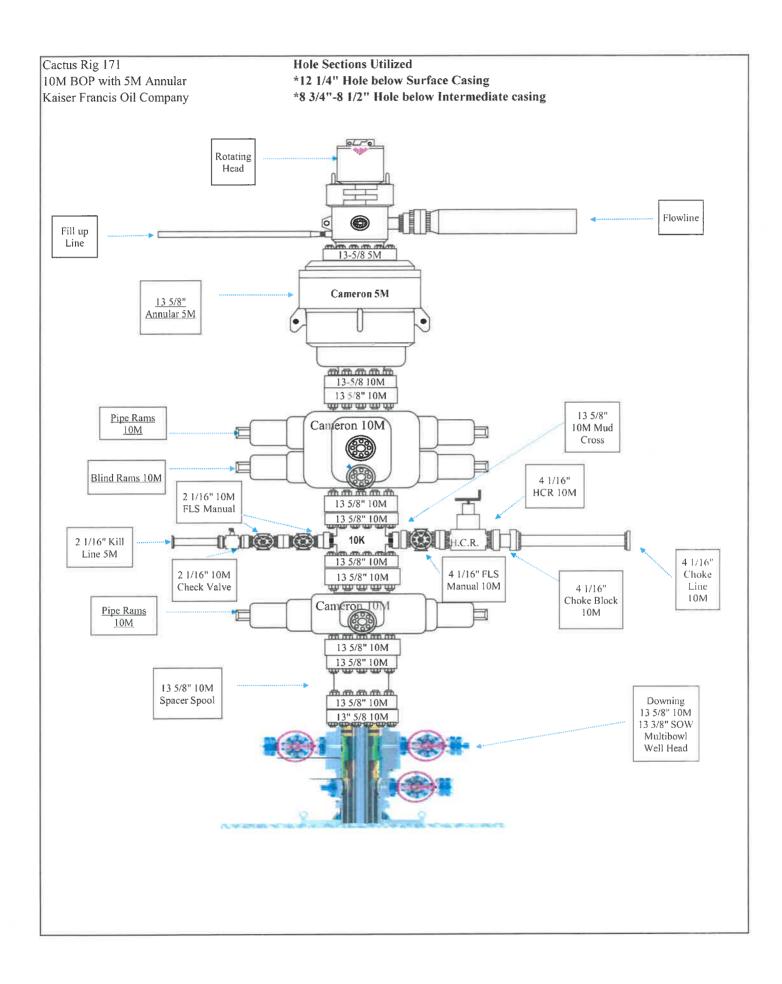
Comments: Hose is confirmed to be in factory new condition.

Witness By:

Robert Stridier, Quality Manager

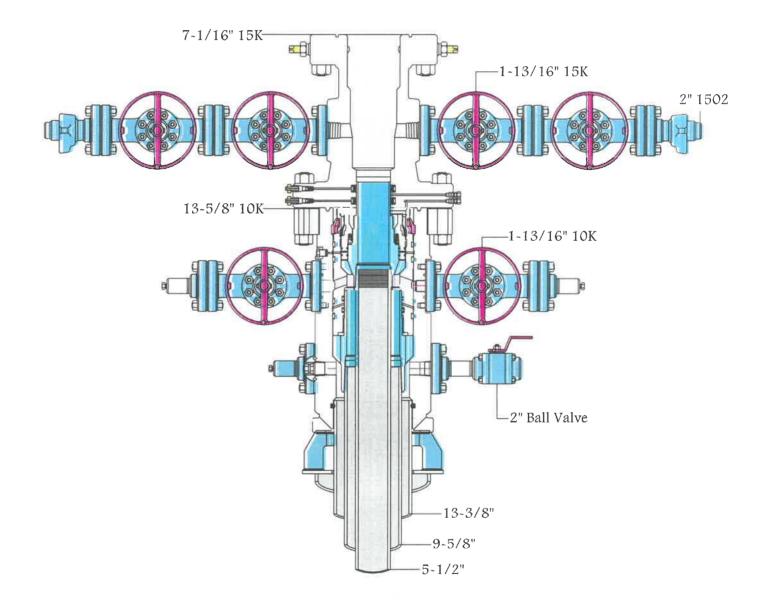
QA-78 REV-2-4/16







### 13-5/8" 10K MN-DS



**RKI** 

1537083-0

12-11-17

Brando

Kaiser-Francis Oil Company Bell Lake Unit North 211H Casing Assumptions

						_	_
Joint	Tensile	Safety	Factor (Min	1.8)	14.1	6.5	3.3
Body	Tensile		Factor	(Min 1.8)	13.3	6.5	3.1
		<b>Burst Safety</b>	Factor (Min	1.0)	4.9	3.5	2.7
		Collapse	Safety Factor Factor (Min	(Min 1.1)	2.0	1.9	2.3
			Body Tensile Joint Tensile	Strength	000606	1266000	000299
			Body Tensile	Strength	853000	1260000	641000
L			Burst	(bsi)	2730	7900	12640
			Collapse	(isd)	1130	4230	11100
			Pressure	(isd)	552	2245	4733
			Anticipated Mud	Weight (ppg)	6	8.9	8.9
Y			Fluid	Loss	SIC	Ŋ	NC
H				Viscosity	32 - 34	28	28-29
			Mud Weight	lole Control	8.4 - 9.0	8.7-8.9	8.7 - 8.9
1			Mud	Type	FW	DBE	ОВМ
		14/0/141	10000	120	1180	4850	10226
		tholo Ciro	azie alou		17-1/2"	12-1/4"	8-3/4"
		Condition Male Cire	COMMISSION	New	New	New	New
		Theread	200		втс	1TC	GBCD
		Chando	Grade		1-55	HCP-110	
	Mainlis	Wedgm.	(4/14)		54.5	40	20
		CarinerSian	azic Silican	20,,	13-3/8"	9-5/8"	5-1/2"
		Langth	רבוופונו	120'	1180	4860	18341
		Interior	t	Conductor	Surface	Intermediate	Production 18341

Kaiser-Francis Oil Company Bell Lake Unit North 211H Casing Assumptions

	dı	_ ;	Jin J	i			
Joint	Tensile	Safety	Factor (Min	1.8	14.1	6.5	3.3
Body	Tensile	Safety	Factor	(Min 1.8)	13.3	6.5	3.1
		Burst Safety	Factor (Min	1.0)	4.9	3.5	2.7
		Collapse	Safety Factor	(Min 1.1)	2.0	1.9	2.3
			Joint lensile	Strength	000606	1266000	000299
			Body Jensile Joint Jensile	Strength	853000	1260000	641000
		1	Burst	(lsd)	2730	7900	12640
			Collapse	(Jsd)	1130	4230	11100
		Max Pore	Pressure	(bsl)	552	2245	4733
			Anticipated Mud	Weight (ppg)	6	8.9	6.8
	Ī	(	Fluid	Loss	NC	NC	NC
				Viscosity	32 - 34	28	28-29
		1 1 100 1 11	Mud Weight	lole Control	8.4 - 9.0	8.7-8.9	8.7 - 8.9
		-	Mud	Type	FW	DBE	OBM
		TVD (ft)		120	1180	4850	10226
		Hole Size			17-1/5"	12-1/4"	8-3/4"
		Condition		New	New	New	New
		Thread			втс	LTC	GBCD
		ade			J-55	HCP-110	
	Weight	(#/ft)			54.5	40	20
		Casing Size (#/ft) Gi		.02	13-3/8"	.8/5-6	5-1/2"
		Length	0	120.	1180	4860	18341
		terval	t	nductor	urface	rmediate	oduction

### KAISER-FRANCIS OIL COMPANY HYDROGEN SULFIDE (H<sub>2</sub>S) 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<sub>2</sub>S, but due to the sensitive location, the following is submitted as requested.

### TABLE OF CONTENTS

Emergency Response Activation and General Responsibilities	3
Individual Responsibilities During An H <sub>2</sub> S Release	4
Procedure For Igniting An Uncontrollable Condition	5
Emergency Phone Numbers	6
Protection Of The General Public/Roe	7
Characteristics Of H <sub>2</sub> S And SO <sub>2</sub>	8
Training	8
Public Relations	8
Maps	

### 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 H2S RELEASE

The following procedures and responsibilities will be implemented on activation of the H₂S 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.
- 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:

- 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).
- Return to the briefing area and stand by for further instructions.

### All Other Personnel:

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<sub>2</sub>). 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.
- 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 H₂S, 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)

Kaiser-Francis Oil Co.	<u>OFFCE</u> 918/494-0000	MOBILE
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 State Police – Hobbs State Police – Carlsbad	575/748-9718 575/392-5580 575/885-3138
Lea County Sheriff - Lovington	575/396-3611
Local Emergency Planning Center – Lea County Local Emergency Planning Center – Eddy County	575/396-8607 575/885-3581
Fire Fighting, Rescue & Ambulance – Carlsbad Fire Fighting, Rescue & Ambulance – Hobbs Fire Fighting – Jal Volunteer Fire Department	911 or 575/885-3125 911 or 575/397-9308 911 or 505/395-2221
New Mexico Oil & Gas Commission – Artesia New Mexico Oil & Gas Commission – Hobbs	575/748-1283 575/393-6161
Air Medical Transport Services – Hobbs Med Flight Air Ambulance – Albuquerque Angel MedFlight	800/550-1025 505/842-4433 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<sub>2</sub>S, 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+

#### 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<sub>2</sub>S 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<sub>2</sub>S safety, shall monitor with detection equipment the H<sub>2</sub>S 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<sub>2</sub>S, 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.

100 ppm +=.01+ 10 ppm +=.001+

#### CHARACTERISTICS OF H2S AND SO2

Common	Chemical	Specific	Threshold	Hazardous	Lethal
Name	Formula	Gravity	Limit	Limit	Concentration
Hydrogen		1.189			
Sulfide	H <sub>2</sub> S	Air = 1	10 ppm	100 ppm	600 ppm
		2.21			
Sulfur Dioxide	SO <sub>2</sub>	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 quarantee that this objective will be met.

All contract and Kaiser-Francis employees are instructed <u>NOT</u> 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.

Survey Report

Company:

Kaiser-Francis Oil Company

Project:

Permian NM E'83

Site:

BLUN Pad 10

Well:

Bell Lake Unit North 211H

Wellbore: Design:

#211H OH Plan #1

Local Co-ordinate Reference:

TVD Reference:

Database:

MD Reference:

Well Bell Lake Unit North 211H

est.GL+KB @ 3486.00usft (planning) est.GL+KB @ 3486.00usft (planning)

North Reference:

**Survey Calculation Method:** 

EDM 5k-14

Grid

Project

Map System:

US State Plane 1983 North American Datum 1983

Permian NM E'83

Geo Datum: Map Zone:

New Mexico Eastern Zone

System Datum:

Mean Sea Level

Minimum Curvature

Using geodetic scale factor

Site

BLUN Pad 10, Centered on 211H

Site Position:

Мар

Northing: Easting:

486,675.39 usft 796,956.30 usft Latitude: Longitude: 32° 20' 6.820 N

Position Uncertainty:

0.00 usft Slot Radius: 13-3/16 "

Grid Convergence:

103° 30' 20.563 W 0.44 °

Well

Bell Lake Unit North 211H

Well Position

+N/-S +E/-W 0.00 usft 0.00 usft Northing:

Easting:

486,675.39 usft 796,956.30 usft Latitude: Longitude:

32° 20' 6.820 N 103° 30' 20.563 W

**Position Uncertainty** 

0.00 usft

IGRF2020

Wellhead Elevation:

11/12/20

0.00

usft

6.59

Ground Level:

3,459.70 usft

0.00

Wellbore

#211H OH

Magnetics

Model Name

Sample Date

Phase:

Declination (°)

Dip Angle

Field Strength (nT)

47,627.61378943

Design

Plan #1

Audit Notes:

Vertical Section:

Version:

Depth From (TVD) (usft)

PROTOTYPE

+N/-S

(usft)

0.00

Tie On Depth: +E/-W (usft)

0.00

Direction (°)

60.03

178.57

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
1,130.00	0.00	0.00	1,130.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
1,180.00	0.00	0.00	1,180.00	0.00	0.00	0.00	0.00	0.00	0.00
13 3/8"									
1,481.14	0.00	0.00	1,481.14	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.28	99.95	1,500.00	-0.01	0.05	0.01	1.50	1.50	0.00
Salado									
1,600.00	1.78	99.95	1,599.98	-0.32	1.82	0.36	1.50	1.50	0.00
1,700.00	3.28	99.95	1,699.88	-1.08	6.17	1.24	1.50	1.50	0.00
1,700.12	3.28	99.95	1,700.00	-1.08	6.18	1.24	0.00	0.00	0.00
Top of Salt									
1,800.00	4.78	99.95	1,799.63	-2.30	13.10	2.62	1.50	1.50	0.00
1,814.47	5.00	99.95	1,814.05	-2.51	14.32	2.87	1.50	1.50	0.00
1,900.00	5.00	99.95	1,899.25	-3.80	21.66	4.34	0.00	0.00	0.00
2,000.00	5.00	99.95	1,998.87	-5.31	30.24	6.06	0.00	0.00	0.00

Survey Report

Kaiser-Francis Oil Company Company:

Permian NM E'83 Project: Site: BLUN Pad 10

Bell Lake Unit North 211H Well:

#211H OH Wellbore: Plan #1 Design:

Local Co-ordinate Reference:

Well Bell Lake Unit North 211H est.GL+KB @ 3486.00usft (planning) **TVD Reference:** est.GL+KB @ 3486.00usft (planning) MD Reference:

Grid North Reference:

Survey Calculation Method: Minimum Curvature

Database: EDM 5k-14

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)
2,100.00	5.00	99.95	2,098.49	-6.81	38.83	7.78	0.00	0.00	0.00
2,200.00	5.00	99.95	2,198.11	-8.32	47.41	9.50	0.00	0.00	0.00
2,300.00	5.00	99.95	2,297.73	-9.82	56.00	11.22	0.00	0.00	0.00
2,400.00	5.00	99.95	2,397.35	-11.33	64.58	12.94	0.00	0.00	0.00
2,500.00	5.00	99.95	2,496.97	-12.84	73.17	14.66	0.00	0.00	0.00
2,600.00	5.00	99.95	2,596.59	-14.34	81.75	16.38	0.00	0.00	0.00
2,700.00	5.00	99.95	2,696.21	-15.85	90.33	18.09	0.00	0.00	0.00
2,800.00	5.00	99.95	2,795.83	-17.35	98.92	19.81	0.00	0.00	0.00
2,900.00	5.00	99.95	2,895.45	-18.86	107.50	21.53	0.00	0.00	0.00
3,000.00	5.00	99.95	2,995.07	-20.37	116.09	23.25	0.00	0.00	0.00
3,100.00	5.00	99.95	3,094.69	-21.87	124.67	24.97	0.00	0.00	0.00
3,200.00	5.00	99.95	3,194.30	-23.38	133.26	26.69	0.00	0.00	0.00
3,300.00	5.00	99.95	3,293.92	-24.88	141.84	28.41	0.00	0.00	0.00
3,400.00	5.00	99.95	3,393.54	-26.39	150.43	30.13	0.00	0.00	0.00
3,500.00	5.00	99.95	3,493.16	-27.90	159.01	31.85	0.00	0.00	0.00
3,600.00	5.00	99.95	3,592.78	-29.40	167.59	33.57	0.00	0.00	0.00
3,700.00	5.00	99.95	3,692.40	-30.91	176.18	35.29	0.00	0.00	0.00
3,800.00	5.00	99.95	3,792.02	-32.41	184.76	37.01	0.00	0.00	0.00
3,900.00	5.00	99.95	3,891.64	-33.92	193.35	38.73	0.00	0.00	0.00
4,000.00	5.00	99.95	3,991.26	-35.43	201.93	40.45	0.00	0.00	0.00
4,100.00	5.00	99.95	4,090.88	-36.93	210.52	42.17	0.00	0.00	0.00
4,200.00	5.00	99.95	4,190.50	-38.44	219.10	43.89	0.00	0.00	0.00
4,210.17	5.00	99.95	4,200.63	-38.59	219.98	44.06	0.00	0.00	0.00
4,300.00	4.10	99.95	4,290.18	-39.82	226.99	45.47	1.00	-1.00	0.00
4,400.00	3.10	99.95	4,389.98	-40.91	233.18	46.71	1.00	-1.00	0.00
4,500.00	2.10	99.95	4,489.87	-41.69	237.65	47.60	1.00	-1.00	0.00
4,600.00	1.10	99.95	4,589.83	-42.18	240.41	48.15	1.00	-1.00	0.00
4,610.17	1.00	99.95	4,600.00	-42.21	240.59	48.19	1.00	-1.00	0.00
Base of Salt									
4,700.00	0.10	99.95	4,689.83	-42.36	241.44	48.36	1.00	-1.00	0.00
4,710.17	0.00	0.00	4,700.00	-42.36	241.45	48.36	1.00	-1.00	0.00
4,800.00	0.00	0.00	4,789.83	-42.36	241.45	48.36	0.00	0.00	0.00
4,860.17	0.00	0.00	4,850.00	-42.36	241.45	48.36	0.00	0.00	0.00
Lamar - 9 5/8						_			
4,900.00	0.00	0.00	4,889.83	-42.36	241.45	48.36	0.00	0.00	0.00
5,000.00	0.00	0.00	4,989.83	-42.36	241.45	48.36	0.00	0.00	0.00
5,060.17	0.00	0.00	5,050.00	-42.36	241.45	48.36	0.00	0.00	0.00
Bell Canyon	i								
5,100.00	0.00	0.00	5,089.83	-42.36	241.45	48.36	0.00	0.00	0.00
5,200.00	0.00	0.00	5,189.83	-42.36	241.45	48.36	0.00	0.00	0.00
5,300.00	0.00	0.00	5,289.83	-42.36	241.45	48.36	0.00	0.00	0.00
5,400.00	0.00	0.00	5,389.83	-42.36	241.45	48.36	0.00	0.00	0.00
5,500.00	0.00	0.00	5,489.83	-42.36	241.45	48.36	0.00	0.00	0.00
5,600.00	0.00	0.00	5,589.83	-42.36	241.45	48.36	0.00	0.00	0.00

Survey Report

Company: Kaiser-Fran

Kaiser-Francis Oil Company

Project: Site: Permian NM E'83 BLUN Pad 10

Well:

Bell Lake Unit North 211H

Wellbore: Design: #211H OH Plan #1 Local Co-ordinate Reference:

TVD Reference:

Well Bell Lake Unit North 211 H est.GL+KB @ 3486.00usft (planning) est.GL+KB @ 3486.00usft (planning)

MD Reference:

Database:

Grid

North Reference:

Survey Calculation Method:

Minimum Curvature

EDM 5k-14

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
5,700.00	0.00	0.00	5,689.83	-42.36	241.45	48.36	0.00	0.00	0.00
5,800.00	0.00	0.00	5,789.83	-42.36	241.45	48.36	0.00	0.00	0.00
5,900.00	0.00	0.00	5,889.83	-42.36	241.45	48.36	0.00	0.00	0.00
5,900.17	0.00	0.00	5,890.00	-42.36	241.45	48.36	0.00	0.00	0.00
Cherry Cany		4.00	0,000.00	12.00	211.10	10.00	3.55	2.23	-
6,000.00	0.00	0.00	5,989.83	-42.36	241.45	48.36	0.00	0.00	0.00
6,100.00	0.00	0.00	6,089.83	-42.36	241.45	48.36	0.00	0.00	0.00
6,200.00	0.00	0.00	6,189.83	-42.36	241.45	48.36	0.00	0.00	0.00
0,200.00	0.00	0.00	0,100100	12.00					
6,300.00	0.00	0.00	6,289.83	-42.36	241.45	48.36	0.00	0.00	0.00
6,400.00	0.00	0.00	6,389.83	-42.36	241.45	48.36	0.00	0.00	0.00
6,500.00	0.00	0.00	6,489.83	-42.36	241.45	48.36	0.00	0.00	0.00
6,600.00	0.00	0.00	6,589.83	-42.36	241.45	48.36	0.00	0.00	0.00
6,700.00	0.00	0.00	6,689.83	-42.36	241.45	48.36	0.00	0.00	0.00
6,800.00	0.00	0.00	6,789.83	-42.36	241.45	48.36	0.00	0.00	0.00
6,900.00	0.00	0.00	6,889.83	-42.36	241.45	48.36	0.00	0.00	0.00
7,000.00	0.00	0.00	6,989.83	-42.36	241.45	48.36	0.00	0.00	0.00
7,100.00	0.00	0.00	7,089.83	-42.36	241.45	48.36	0.00	0.00	0.00
7,200.00	0.00	0.00	7,189.83	-42.36	241.45	48.36	0.00	0.00	0.00
7,260.17	0.00	0.00	7.250.00	-42.36	241.45	48.36	0.00	0.00	0.00
Brushy Cany									
7,300.00	0.00	0.00	7,289.83	-42.36	241.45	48.36	0.00	0.00	0.00
7,400.00	0.00	0.00	7,389.83	-42.36	241.45	48.36	0.00	0.00	0.00
7,500.00	0.00	0.00	7,489.83	-42.36	241.45	48.36	0.00	0.00	0.00
7,600.00	0.00	0.00	7,589.83	-42.36	241.45	48.36	0.00	0.00	0.00
7,700.00	0.00	0.00	7,689.83	-42.36	241.45	48.36	0.00	0.00	0.00
7,800.00	0.00	0.00	7,789.83	-42.36	241.45	48.36	0.00	0.00	0.00
7,900.00	0.00	0.00	7,889.83	-42.36	241.45	48.36	0.00	0.00	0.00
8,000.00	0.00	0.00	7,989.83	-42.36	241.45	48.36	0.00	0.00	0.00
8,100.00	0.00	0.00	8,089.83	-42.36	241.45	48.36	0.00	0.00	0.00
8,200.00	0.00	0.00	8,189.83	-42.36	241.45	48.36	0.00	0.00	0.00
8,300.00	0.00	0.00	8,289.83	-42.36	241.45	48.36	0.00	0.00	0.00
8,400.00	0.00	0.00	8,389.83	-42.36	241.45	48.36	0.00	0.00	0.00
8,500.00	0.00	0.00	8,489.83	-42.36	241.45	48.36	0.00	0.00	0.00
8,500.17	0.00	0.00	8,490.00	-42.36	241.45	48.36	0.00	0.00	0.00
Bone Spring			•						
8,563.17	0.00	0.00	8,553.00	-42.36	241.45	48.36	0.00	0.00	0.00
Avalon	2.20		_,						
8,600.00	0.00	0.00	8,589.83	-42.36	241.45	48.36	0.00	0.00	0.00
8,700.00	0.00	0.00	8,689.83	-42.36	241.45	48.36	0.00	0.00	0.00
8,800.00	0.00	0.00	8,789.83	-42.36	241.45	48.36	0.00	0.00	0.00
8,900.00	0.00	0.00	8,889.83	-42.36	241.45	48.36	0.00	0.00	0.00
0.000.00	0.00	0.00	0 000 00	40 oc	2/11/15	48.36	0.00	0.00	0.00
9,000.00	0.00	0.00	8,989.83	-42.36	241.45	48.36	0.00	0.00	0.00
9,100.00 9,200.00	0.00	0.00	9,089.83 9,189.83	-42.36	241.45 241.45	40.30	0.00	0.00	0.00

02/12/20 1:24:01PM Page 3 COMPASS 5000.14 Build 85F

Survey Report

Kaiser-Francis Oil Company Company:

Permian NM E'83 Project: BLUN Pad 10 Site:

Well: Bell Lake Unit North 211H

Wellbore: #211H OH Design: Plan #1

Local Co-ordinate Reference:

Well Bell Lake Unit North 211H est.GL+KB @ 3486.00usft (planning) TVD Reference: est.GL+KB @ 3486.00usft (planning) MD Reference:

North Reference: Grid

Minimum Curvature Survey Calculation Method: Database:

EDM 5k-14

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
9.300.00	0.00	0.00	9,289.83	-42.36	241.45	48.36	0.00	0.00	0.00
9,400.00	0.00	0.00	9,389.83	-42.36	241.45	48.36	0.00	0.00	0.00
0,700.00			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
9,500.00	0.00	0.00	9,489.83	-42.36	241.45	48.36	0.00	0.00	0.00
9,503.17	0.00	0.00	9,493.00	-42.36	241.45	48.36	0.00	0.00	0.00
1st Bone Sp	ring								
9,600.00	0.00	0.00	9,589.83	-42.36	241.45	48.36	0.00	0.00	0.00
9,663.22	0.00	0.00	9,653.04	-42.36	241.45	48.36	0.00	0.00	0.00
9,700.00	3.68	180.22	9,689.80	-43.54	241.45	49.54	10.00	10.00	0.00
0.750.00	0.60	180.22	9,739.50	-48.92	241.42	54.92	10.00	10.00	0.00
9,750.00	8.68	180.22	9,788.53	-46.92 -58.61	241.42	64.61	10.00	10.00	0.00
9,800.00 9,850.00	13.68 18.68	180.22	9,766.53	-36.61 -72.54	241.33	78.53	10.00	10.00	0.00
9,850.00	23.68	180.22	9,883.14	-90.59	241.33	96.58	10.00	10.00	0.00
9,950.00	28.68	180.22	9,928.00	-112.64	241.18	118.62	10.00	10.00	0.00
0,000.00	20.00	.00122	2,220.00	. 1	20				
10,000.00	33.68	180.22	9,970.77	-138.52	241.08	144.49	10.00	10.00	0.00
10,050.00	38.68	180.22	10,011.11	-168.03	240.97	173.98	10.00	10.00	0.00
10,069.34	40.61	180.22	10,026.00	-180.36	240.92	186.31	10.00	10.00	0.00
2nd Bone Sp	oring								
10,100.00	43.68	180.22	10,048.73	-200.94	240.84	206.88	10.00	10.00	0.00
10,150.00	48.68	180.22	10,083.34	-237.00	240.70	242.93	10.00	10.00	0.00
10,200.00	53.68	180.22	10,114.68	-275.94	240.55	281.85	10.00	10.00	0.00
10,250.00	58.68	180.22	10,142.50	-317.47	240.39	323.36	10.00	10.00	0.00
10,300.00	63.68	180.22	10,166.60	-361.26	240.22	367.14	10.00	10.00	0.00
10,350.00	68.68	180.22	10,186.78	-406.99	240.05	412.84	10.00	10.00	0.00
10,400.00	73.68	180.22	10,202.91	-454.30	239.86	460.13	10.00	10.00	0.00
10,450.00	78.68	180.22	10,214.85	-502.83	239.68	508.65	10.00	10.00	0.00
10,500.00	83.68	180.22	10,222.52	-552.23	239.49	558.02	10.00	10.00	0.00
10,550.00	88.68	180.22	10,225.85	-602.10	239.29	607.88	10.00	10.00	0.00
10,563.22	90.00	180.22	10,226.00	-615.31	239.24	621.08	10.00	10.00	0.00
10,600.00	90.00	180.22	10,226.00	-652.10	239.10	657.85	0.00	0.00	0.00
10,700.00	90.00	180.22	10,226.00	-752.10	238.72	757.81	0.00	0.00	0.00
10,800.00	90.00	180.22	10,226.00	-852.09	238.33	857.77	0.00	0.00	0.00
10,900.00	90.00	180.22	10,226.00	-952.09	237.95	957.73	0.00	0.00	0.00
11,000.00	90.00	180.22	10,226.00	-1,052.09	237.56	1,057.69	0.00	0.00	0.00
11,100.00	90.00	180.22	10,226.00	-1,152.09	237.18	1,157.65	0.00	0.00	0.00
11 200 00	90.00	180.22	10,226.00	-1,252.09	236.79	1,257.60	0.00	0.00	0.00
11,200.00 11,300.00	90.00	180.22	10,226.00	-1,252.09	236.41	1,357.56	0.00	0.00	0.00
11,400.00	90.00	180.22	10,226.00	-1,452.09	236.02	1,457.52	0.00	0.00	0.00
11,500.00	90.00	180.22	10,226.00	-1,552.09	235.63	1,557.48	0.00	0.00	0.00
11,600.00	90.00	180.22	10,226.00	-1,652.09	235.25	1,657.44	0.00	0.00	0.00
11,000.00	30.00	100.22	10,220.00	1,002.00	200.20	.,			2.00
11,700.00	90.00	180.22	10,226.00	-1,752.09	234.86	1,757.40	0.00	0.00	0.00
11,800.00	90.00	180.22	10,226.00	-1,852.09	234.48	1,857.36	0.00	0.00	0.00
11,900.00	90.00	180.22	10,226.00	-1,952.09	234.09	1,957.32	0.00	0.00	0.00
12,000.00	90.00	180.22	10,226.00	-2,052.09	233.71	2,057.27	0.00	0.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83 BLUN Pad 10 Site:

Bell Lake Unit North 211H Well:

Wellbore: #211H OH

Design: Plan #1 Local Co-ordinate Reference:

Well Bell Lake Unit North 211H est.GL+KB @ 3486.00usft (planning) TVD Reference: MD Reference: est.GL+KB @ 3486.00usft (planning)

North Reference:

Survey Calculation Method: Minimum Curvature

Database: EDM 5k-14

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
12,200.00	90.00	180.22	10,226.00	-2,252.08	232.94	2,257.19	0.00	0.00	0.00
12,200.00	90.00	180.22	10,226.00	-2,252.08	232.55	2,357.15	0.00	0.00	0.00
12,300.00	90.00	180.22	10,226.00	-2,352.08 -2,452.08	232.17	2,457.11	0.00	0.00	0.00
	90.00	180.22	10,226.00	-2,552.08	231.78	2,557.07	0.00	0.00	0.00
12,500.00 12,600.00	90.00	180.22	10,226.00	-2,652.08	231.70	2,657.07	0.00	0.00	0.00
12,700.00	90.00	180.22	10,226.00	-2,752.08	231.01	2,756.98	0.00	0.00	0.00
12,800.00	90.00	180.22	10,226.00	-2,852.08	230.63	2,856.94	0.00	0.00	0.00
12,900.00	90.00	180.22	10,226.00	-2,952.08	230.24	2,956.90	0.00	0.00	0.00
13,000.00	90.00	180.22	10,226.00	-3,052.08	229.86	3,056.86	0.00	0.00	0.00
13,100.00	90.00	180.22	10,226.00	-3,152.08	229.47	3,156.82	0.00	0.00	0.00
13,200.00	90.00	180.22	10,226.00	-3,252.08	229.09	3,256.78	0.00	0.00	0.00
13,300.00	90.00	180.22	10,226.00	-3,352.08	228.70	3,356.74	0.00	0.00	0.00
13,400.00	90.00	180.22	10,226.00	-3,452.08	228.32	3,456.69	0.00	0.00	0.00
13,500.00	90.00	180.22	10,226.00	-3,552.07	227.93	3,556.65	0.00	0.00	0.00
13,600.00	90.00	180.22	10,226.00	-3,652.07	227.55	3,656.61	0.00	0.00	0.00
13,700.00	90.00	180.22	10,226.00	-3,752.07	227.16	3,756.57	0.00	0.00	0.00
13,800.00	90.00	180.22	10,226.00	-3,852.07	226.78	3,856.53	0.00	0.00	0.00
13,900.00	90.00	180.22	10,226.00	-3,952.07	226.39	3,956.49	0.00	0.00	0.00
14,000.00	90.00	180.22	10,226.00	-4,052.07	226.01	4,056.45	0.00	0.00	0.00
14,100.00	90.00	180.22	10,226.00	-4,152.07	225.62	4,156.40	0.00	0.00	0.00
14,200.00	90.00	180.22	10,226.00	-4,252.07	225.24	4,256.36	0.00	0.00	0.00
14,300.00	90.00	180.22	10,226.00	-4,352.07	224.85	4,356.32	0.00	0.00	0.00
14,300.00	90.00	180.22	10,226.00	-4,452.07	224.46	4,456.28	0.00	0.00	0.00
14,400.00	90.00	180.22	10,226.00	-4,552.07	224.40	4,556.24	0.00	0.00	0.00
14,600.00	90.00	180.22	10,226.00	-4,652.07	223.69	4,656.20	0.00	0.00	0.00
14,000.00	50.00	100.22	10,220.00	1,002.01	220.00	1,000.20	0.00	0.00	0.50
14,700.00	90.00	180.22	10,226.00	-4,752.07	223.31	4,756.16	0.00	0.00	0.00
14,800.00	90.00	180.22	10,226.00	-4,852.07	222.92	4,856.11	0.00	0.00	0.00
14,900.00	90.00	180.22	10,226.00	-4,952.06	222.54	4,956.07	0.00	0.00	0.00
15,000.00	90.00	180.22	10,226.00	-5,052.06	222.15	5,056.03	0.00	0.00	0.00
15,100.00	90.00	180.22	10,226.00	-5,152.06	221.77	5,155.99	0.00	0.00	0.00
15,200.00	90.00	180.22	10,226.00	-5,252.06	221.38	5,255.95	0.00	0.00	0.00
15,300.00	90.00	180.22	10,226.00	-5,352.06	221.00	5,355.91	0.00	0.00	0.00
15,400.00	90.00	180.22	10,226.00	-5,452.06	220.61	5,455.87	0.00	0.00	0.00
15,500.00	90.00	180.22	10,226.00	-5,552.06	220.23	5,555.82	0.00	0.00	0.00
15,600.00	90.00	180.22	10,226.00	-5,652.06	219.84	5,655.78	0.00	0.00	0.00
15 700 00	00.00	190.22	10,226.00	-5,752.06	219.46	5,755.74	0.00	0.00	0.00
15,700.00	90.00	180.22				5,755.74		0.00	0.00
15,800.00	90.00	180.22	10,226.00	-5,852.06 -5,952.06	219.07	5,855.70	0.00		
15,900.00	90.00	180.22	10,226.00	,	218.69		0.00	0.00	0.00
16,000.00	90.00	180.22	10,226.00	-6,052.06	218.30	6,055.62	0.00	0.00	0.00
16,100.00	90.00	180.22	10,226.00	-6,152.06	217.92	6,155.58	0.00	0.00	0.00
16,200.00	90.00	180.22	10,226.00	-6,252.05	217.53	6,255.53	0.00	0.00	0.00
16,300.00	90.00	180.22	10,226.00	-6,352.05	217.15	6,355.49	0.00	0.00	0.00
16,400.00	90.00	180.22	10,226.00	-6,452.05	216.76	6,455.45	0.00	0.00	0.00

Survey Report

Company:

Kaiser-Francis Oil Company

Project:

Permian NM E'83 BLUN Pad 10

Site:

Well: Wellbore: Bell Lake Unit North 211H #211H OH

Design:

Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Database:

Well Bell Lake Unit North 211H

est.GL+KB @ 3486.00usft (planning) est.GL+KB @ 3486.00usft (planning)

Minimum Curvature

EDM 5k-14

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)
16,500.00	90.00	180.22	10,226.00	-6,552.05	216.38	6,555.41	0.00	0.00	0.00
16,600.00	90.00	180.22	10,226.00	-6,652.05	215.99	6,655.37	0.00	0.00	0.00
16,700.00	90.00	180.22	10,226.00	-6,752.05	215.61	6,755.33	0.00	0.00	0.00
16,800.00	90.00	180.22	10,226.00	-6,852.05	215.22	6,855.29	0.00	0.00	0.00
16,900.00	90.00	180.22	10,226.00	-6,952.05	214.84	6,955.24	0.00	0.00	0.00
17,000.00	90.00	180.22	10,226.00	-7,052.05	214.45	7,055.20	0.00	0.00	0.00
17,100.00	90.00	180.22	10,226.00	-7,152.05	214.07	7,155.16	0.00	0.00	0.00
17,200.00	90.00	180.22	10,226.00	-7,252.05	213.68	7,255.12	0.00	0.00	0.00
17,300.00	90.00	180.22	10,226.00	-7,352.05	213.29	7,355.08	0.00	0.00	0.00
17,400.00	90.00	180.22	10,226.00	-7,452.05	212.91	7,455.04	0.00	0.00	0.00
17,500.00	90.00	180.22	10,226.00	-7,552.05	212.52	7,555.00	0.00	0.00	0.00
17,600.00	90.00	180.22	10,226.00	-7,652.04	212.14	7,654.95	0.00	0.00	0.00
17,700.00	90.00	180.22	10,226.00	-7,752.04	211.75	7,754.91	0.00	0.00	0.00
17,800.00	90.00	180.22	10,226.00	-7,852.04	211.37	7,854.87	0.00	0.00	0.00
17,900.00	90.00	180.22	10,226.00	-7,952.04	210.98	7,954.83	0.00	0.00	0.00
18,000.00	90.00	180.22	10,226.00	-8,052.04	210.60	8,054.79	0.00	0.00	0.00
18,100.00	90.00	180.22	10,226.00	-8,152.04	210.21	8,154.75	0.00	0.00	0.00
18,200.00	90.00	180.22	10,226.00	-8,252.04	209.83	8,254.71	0.00	0.00	0.00
18,300.00	90.00	180.22	10,226.00	-8,352.04	209.44	8,354.66	0.00	0.00	0.00

Casing Points						
	Measured Depth (usft)	Vertical Depth (usft)		Name	Casing Diameter (")	Hole Diameter (")
	1,180.00	1,180.00	13 3/8"		13-3/8	17-1/2
	4,860.17	4,850.00	9 5/8"		9-5/8	12-1/4

Survey Report

Company:

Kaiser-Francis Oil Company

Project:

Permian NM E'83

Site:

BLUN Pad 10

Well:

Bell Lake Unit North 211H

Wellbore: Design:

#211H OH Plan #1

Local Co-ordinate Reference:

est.GL+KB @ 3486.00usft (planning) TVD Reference: est.GL+KB @ 3486.00usft (planning) MD Reference:

North Reference:

Grid

**Survey Calculation Method:** 

Minimum Curvature EDM 5k-14

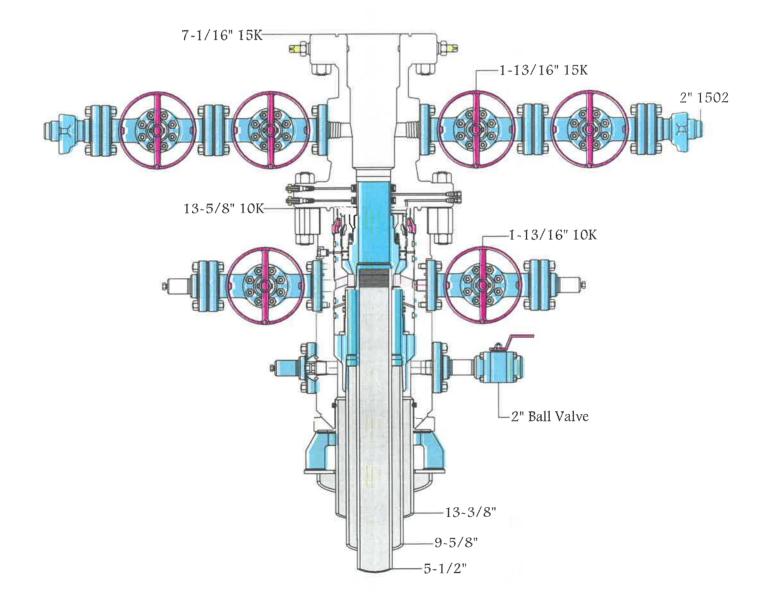
Well Bell Lake Unit North 211H

Database:

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,130.00	1,130.00	Rustler			
1,500.00	1,500.00	Salado			
1,700.12	1,700.00	Top of Salt			
4,610.17	4,600.00	Base of Salt			
4,860.17	4,850.00	Lamar			
5,060.17	5,050.00	Bell Canyon			
5,900.17	5,890.00	Cherry Canyon			
7,260.17	7,250.00	Brushy Canyon			
8,500.17	8,490.00	Bone Spring			
8,563.17	8,553.00	Avalon			
9,503.17	9,493.00	1st Bone Spring			
10,069.34	10,026.00	2nd Bone Spring			



# 13~5/8" 10K MN~DS



**RKI** 



U.I.S. Departmentlofitheihtleribr BURBAUOF-LANDMANAGEMENTI SUPO Data Report

APD ID: 10400058309

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH

Well Type: OIL WELL

Submission Date: 06/29/2020

Well Number: 211H

Highlighted data reflects the most

recent changes

**Show Final Text** 

Well Work Type: Drill

## **Section 1 - Existing Roads**

Will existing roads be used? YES

**Existing Road Map:** 

BLUN 211H Existing Roads 20200629062725.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\_211H\_Access\_Road\_20200629062741.pdf

New road type: RESOURCE

Length: 1137

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: 20

**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 attachment:

Access road engineering design? N

Access road engineering design attachment:

Page 1 of 10

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

**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: BLM's caliche pit in SWSW Section 22-T24-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:

BLUN 211H 1 Mile Radius\_Map\_20200629062808.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 south 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 48X 10 2-phase sep

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

## **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

Water source volume (barrels): 20000

Source volume (gal): 840000

Describe transportation land ownership: Source tran

is a mixture of Federal, State and County. **Source volume (acre-feet):** 2.57786193

Water source type: OTHER

Describe type: FRESH WATER

Water source use type: STIMULATION

OTHER Describe use type: ROAD/PAD CONSTRUCTION ANI

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

Water source volume (barrels): 250000

Source volume (gal): 10500000

Describe transportation land ownership: Source tran

is a mixture of Federal, State and County. **Source volume (acre-feet):** 32.223274

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

Water source and transportation map:

BLUN\_Pad\_10\_Water\_Source\_Map\_20200227092434.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.):

Well Production type:

Casing top depth (ft.):

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: Weekly

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

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

Safe containment attachment:

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

**FACILITY** 

Disposal type description:

Disposal location description: Cuttings will be hauled to R360's facility located in Section 27-T20S-R32E 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: Weekly

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

Safe containment attachment:

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

**FACILITY** 

Disposal type description:

Disposal location description: Trucked to an approved disposal facility (Carlsbad sewer plant SENW Section 10-T22S-

R27E)

Waste type: GARBAGE

Waste content description: Miscellaneous trash

Amount of waste: 500 pounds

Waste disposal frequency: Weekly

Safe containment description: Trash produced during drilling and completion operations will be collected in a trash

container and disposed of properly Safe containment attachment:

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

**FACILITY** 

Disposal type description:

Disposal location description: Trucked to an approved disposal facility (Sandpoint Landfill (solid materials dump) NW/4

Section 11-T21S-R28E)

## **Reserve Pit**

Reserve Pit being used? NO

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

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

Reserve pit liner specifications and installation description

## **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 located in Section 27-T20S-R32E 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?: N

**Ancillary Facilities attachment:** 

#### Comments:

## **Section 9 - Well Site Layout**

#### Well Site Layout Diagram:

BLUN\_211H\_Well\_Site\_Layout\_20200629063106.pdf
BLUS\_211\_Drilling\_Layout\_Amended\_20201103143335.pdf

#### Comments:

## **Section 10 - Plans for Surface Reclamation**

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: NORTH BELL LAKE UNIT

Multiple Well Pad Number: 10

#### Recontouring attachment:

BLUN\_211H\_IR\_Plat\_20200629063254.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.

Page 6 of 10

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

Well pad proposed disturbance

(acres): 5.97

Road proposed disturbance (acres):

Powerline proposed disturbance

(acres): 0

Pipeline proposed disturbance

(acres): 0

Other proposed disturbance (acres): 0

Total proposed disturbance: 6.753

Well pad interim reclamation (acres): Well pad long term disturbance

0.73

Road interim reclamation (acres): 0

Powerline interim reclamation (acres):

Pipeline interim reclamation (acres): 0

Other interim reclamation (acres): 0

Total interim reclamation: 0.73

(acres): 5.24

Road long term disturbance (acres):

0.783

Powerline long term disturbance

(acres): 0

Pipeline long term disturbance

(acres): 0

Other long term disturbance (acres): 0

Total long term disturbance:

6.0230000000000001

#### **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 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: Refer to "Existing Vegetation at the well pad"

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: None

Existing Vegetation Community at other disturbances attachment:

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? N

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

Seed harvest description:

Seed harvest description attachment:

**Seed Management** 

**Seed Table** 

Seed Summary
Seed Type Pounds/Acre

Total pounds/Acre:

Seed reclamation attachment:

**Operator Contact/Responsible Official Contact Info** 

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 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 COMP	ANY
Well Name: BELL LAKE UNIT NORTH	Well Number: 211H
Disturbance type: WELL PAD	
Describe:	
Surface Owner: STATE GOVERNMENT	
Other surface owner description:	
BIA Local Office:	
BOR Local Office:	
COE Local Office:	
DOD Local Office:	
NPS Local Office:	
State Local Office: NM STATE LAND OFFICE, 6	602 N CANAL ST B, CARLSBAD, NM 88220
Military Local Office:	
JSFWS Local Office:	
Other Local Office:	
JSFS Region:	
JSFS Forest/Grassland:	<b>USFS Ranger District:</b>
Disturbance type: NEW ACCESS ROAD	
Describe:	
Surface Owner: STATE GOVERNMENT	
Other surface owner description:	
BIA Local Office:	
BOR Local Office:	
COE Local Office:	
OOD Local Office:	
NPS Local Office:	
State Local Office: NM STATE LAND OFFICE, 6	302 N CANAL STE B, CARLSBAD NM 88220
Military Local Office:	
JSFWS Local Office:	
Other Local Office:	
JSFS Region:	
ISES Forest/Grassland	USFS Ranger District:

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

**Section 12 - Other Information** 

Right of Way needed? N

Use APD as ROW?

ROW Type(s):

**ROW Applications** 

**SUPO Additional Information:** 

Use a previously conducted onsite? Y

**Previous Onsite information:** Onsite conducted 10/24/2019 by Nik MacPhee (BLM), Eric Hansen (Kaiser-Francis) and Frank Jaramillo (Madron Surveying).

**Other SUPO Attachment** 





APD ID: 10400058309 Submission Date: 06/29/2020

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH

Well Number: 211H

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? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

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:

Decribe 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:

PWD disturbance (acres):

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

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? 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 specifications:

Precipitated solids disposal:

Decribe 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?

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

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? 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 attachment:

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

**UIC Permit attachment:** 

Section 5 - Surface Discharge

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 - Other

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):

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:



U.I.S. Departmentloffthedatlerior BUREAU OF LIAND MANAGEMENTI

# Bond Info Data Report

01/22/202

APD ID: 10400058309

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH

Well Type: OIL WELL

Submission Date: 06/29/2020

Well Number: 211H

Well Work Type: Drill

Highlighted data reflects the most

recent changes

**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:

District.+

1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax: (575) 393-0720
District.!!

811 S. First St., Artesia, NM 88210
Phone (575) 748-1283 Fax: (575) 748-9720
District.!!

1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax: (505) 334-6170
District.!V

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

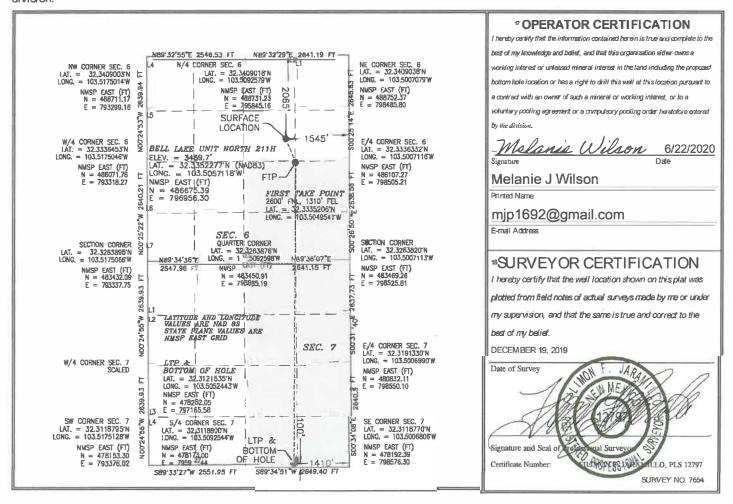
☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025-48452	<sup>2</sup> Pool Code 98259	Ojo Chiso;Bone Spring, Southwest			
<sup>4</sup> Property Code	5 Pr	operty Name	<sup>6</sup> Well Number		
316707	BELL LAK	E UNIT NORTH	211H		
7OGRID No.	<sup>8</sup> Op	perator Name	<sup>8</sup> Elevation		
12361	KAISER-FRAN	ICIS OIL COMPANY	3459.7		

					5 Surface	Location			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	6	23 S	34 E		2065	NORTH	1545	EAST	LEA
			# Bo	ottom Ho	ole Location	If Different Fro	om Surface		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	7	23 S	34 E		100	SOUTH	1410	EAST	LEA
Dedicated Acres	13 Joint	or Infill 14	Consolidation	Code			15 Order No.		
480	1						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.



Date: 01/10/2020

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

## State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

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

#### **GAS CAPTURE PLAN**

☑ Original	Operator & OGRID No.: Kaiser-Francis Oil Company, 12361
☐ Amended - Reason for Amendment:	

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

#### Well(s)/Production Facility - Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location	Footages	Expected	Flared or	Comments
		(ULSTR)		MCF/D	Vented	
Bell Lake Unit North 111H		6-23S-34E		2000	0	
Bell Lake Unit North 211H		6-23S-34E	30-025-48452	2000	0	
Bell Lake Unit North 311H		6-23S-34E		2000	0	
Bell Lake Unit North 411H		6-23S-34E		2000	0	
Bell Lake Unit North 011H		6-23S-34E		2000	0	

#### Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to <u>Targa</u> and will be connected to <u>Targa</u> low/high pressure gathering system located in <u>Lea\_County</u>, New Mexico. It will require <u>11,000</u>' of pipeline to connect the facility to low/high pressure gathering system. <u>Kaiser-Francis Oil Company</u> provides (periodically) to <u>Targa</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>Kaiser-Francis Oil Company</u> and <u>Targa</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>Targa</u> Processing Plant located in Sec. <u>36</u>, Twn. <u>19S</u>, Rng. <u>36E</u>, <u>Lea\_County</u>, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

#### Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on <a href="mailto:Targa">Targa</a> system at that time. Based on current information, it is <a href="mailto:Kaiser-Francis Oil Company's">Kaiser-Francis Oil Company's</a> belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

#### Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

Casing	Attach	ments
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Casing ID: 1 String Type: SURFACE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

BLUN\_211H\_Casing\_Assumptions\_20200629061257.pdf

Casing ID: 2

String Type: INTERMEDIATE

Inspection Document:

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

BLUN\_211H\_Casing\_Assumptions\_20200629060751.pdf

Casing ID: 3

String Type:PRODUCTION

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

BLUN\_211H\_Prod\_Csg\_20200629061144.pdf

**Section 4 - Cement** 

Well Name: BELL LAKE UNIT NORTH Well Number: 211H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1180	700	1.7	13.5	1223	75	Halcem	4% Bentonite
SURFACE	Tail		0	1180	248	1.3	14.8	331	75	Halcem	0.125#/sk Poly Flake
INTERMEDIATE	Lead		0	4860	790	2.1	12.5	1650	50	Econocem	3#/sk Kol Seal
INTERMEDIATE	Tail		0	4860	545	1.3	14.8	726	50	Halcem	none
PRODUCTION	Lead		4000	1834 1	397	3.5	10.5	1386	10	NeoCem	2#/sk Kol Seal
PRODUCTION	Tail		4000	1834 1	1822	1.2	14.5	2228	10	Versacem	none

# **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 time.

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)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
4850	1022 6	OIL-BASED MUD	8.7	8.9							
1180	4850	OTHER : Diesel- Brine Emulsion	8.7	8.9							
0	1180	OTHER : Fresh Water	8.4	9							

Date: January 26, 2021

To: NMOCD

From: Charlotte Van Valkenburg

Re: Closed-Loop System

It is the intention of Kaiser-Francis Oil Company to use a closed-loop system during drilling of the following well:

Bell Lake Unit North 211H Sec. 6-23S-34E Lea Co., NM

Charlotte Van Valkenburg

Mgr., Regulatory Compliance

Kaiser-Francis Oil Company

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

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

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 15688

#### **CONDITIONS OF APPROVAL**

Operator:			OGRID:		Action Number:	Action Type:
KAISER-FRANCIS OIL CO	P.O. Box 21468	Tulsa, OK74121	123	61	15688	FORM 3160-3

OCD Reviewer	Condition
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
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