Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. NMLC0063798 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. **✓** DRILL REENTER 1a. Type of work: BELL LAKE / NMNM 068292X 1b. Type of Well: Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing Single Zone Multiple Zone BELL LAKE UNIT SOUTH [316706] 106H 2. Name of Operator 9. API Well No. 30-025-48256 [12361] KAISER FRANCIS OIL COMPANY 10. Field and Pool, or Exploratory [98264] 3a. Address 3b. Phone No. (include area code) BELL LAKE/BONE SPRING, SOUTH 6733 S. Yale Ave., Tulsa, OK 74121 (918) 491-0000 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 1/T24S/R33E/NMP At surface SENE / 2576 FNL / 1286 FEL / LAT 32.246767 / LONG -103.5216819 At proposed prod. zone SESE / 100 FSL / 660 FEL / LAT 32.2251009 / LONG -103.519649 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* LEA NM 25 miles 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 2669 feet location to nearest 480.0 property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 30 feet 10200 feet / 18345 feet FED: WYB000055 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3631 feet 11/01/2020 40 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. SUPO must be filed with the appropriate Forest Service Office). 6. Such other site specific information and/or plans as may be requested by the 25. Signature Name (Printed/Typed) Date (Electronic Submission) MELANIE WILSON / Ph: (918) 491-0000 07/21/2020 Title Regulatory Analyst Approved by (Signature) Name (Printed/Typed) Date (Electronic Submission) 12/14/2020 Cody Layton / Ph: (575) 234-5959 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

GCP Rec 12/17/2020

SL

(Continued on page 2)



12/29/2020

*(Instructions on page 2)

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

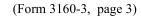
Additional Operator Remarks

Location of Well

0. SHL: SENE / 2576 FNL / 1286 FEL / TWSP: 24S / RANGE: 33E / SECTION: 1 / LAT: 32.246767 / LONG: -103.5216819 (TVD: 0 feet, MD: 0 feet) PPP: NENE / 0 FNL / 660 FEL / TWSP: 24S / RANGE: 33E / SECTION: 12 / LAT: 32.2393425 / LONG: -103.519721 (TVD: 10200 feet, MD: 13163 feet) PPP: NESE / 2600 FSL / 660 FEL / TWSP: 24S / RANGE: 33E / SECTION: 1 / LAT: 32.2464888 / LONG: -103.519657 (TVD: 10200 feet, MD: 10563 feet) BHL: SESE / 100 FSL / 660 FEL / TWSP: 24S / RANGE: 33E / SECTION: 12 / LAT: 32.2251009 / LONG: -103.519649 (TVD: 10200 feet, MD: 18345 feet)

BLM Point of Contact

Name: Gavin Mickwee Title: Land Law Examiner Phone: (575) 234-5972 Email: gmickwee@blm.gov





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

Application Data Report

APD ID: 10400059230 **Submission Date**: 07/21/2020

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH Well Number: 106H

Well Type: OIL WELL Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

BLM Office: CARLSBAD User: Melanie Wilson Title: Regulatory Analyst

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

Lease number: NMLC0063798 Lease Acres:

Surface access agreement in place? Allotted? Reservation:

Agreement in place? YES Federal or Indian agreement: FEDERAL

Agreement number: NMNM068292X

Agreement name: BELL LAKE

Keep application confidential? Y

Permitting Agent? 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 SOUTH Well Number: 106H Well API Number:

Field/Pool or Exploratory? Field and Pool Field Name: BELL LAKE Pool Name: BONE SPRING,

SOUTH

Zip: 74121

Is the proposed well in an area containing other mineral resources? POTASH

Well Name: BELL LAKE UNIT SOUTH Well Number: 106H

Is the proposed well in an area containing other mineral resources? POTASH

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: Number: 4

Well Class: HORIZONTAL SOUTH BELL LAKE UNIT 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: 25 Miles Distance to nearest well: 30 FT Distance to lease line: 2669 FT

Reservoir well spacing assigned acres Measurement: 480 Acres

Well plat: BLUS 106H C102 20200720134731.pdf

BLUS_106H_Pymt_20200721071748.pdf

Well work start Date: 11/01/2020 Duration: 40 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 Vertical Datum: NAVD88

Survey number: 8303 Reference Datum: GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
PPP	0	FNL	660	FEL	24S	33E	12	Aliquot	32.23934	l	LEA		' ' - ' '		NMLC0	-	131	102	Υ
Leg								NENE	25	103.5197			MEXI		063798	656	63	00	
#1-1										21		co	co			9			
EXIT	100	FSL	660	FEL	24S	33E	12	Aliquot	32.22510	-	LEA	NEW	NEW	F	NMLC0	-	183	102	Υ
Leg								SESE	09	103.5196		MEXI	MEXI		063798	656	45	00	
#1										49		СО	СО			9			

Well Name: BELL LAKE UNIT SOUTH Well Number: 106H

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?
BHL	100	FSL	660	FEL	24S	33E	12	Aliquot	32.22510	=	LEA	NEW	NEW	F	NMLC0	-	183	102	Υ
Leg								SESE	09	103.5196		MEXI	MEXI		063798	656	45	00	
#1										49		CO	co		- 7	9			

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

811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410

Phone: (505) 334-6178 Fax: (505) 334-6170 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462 State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

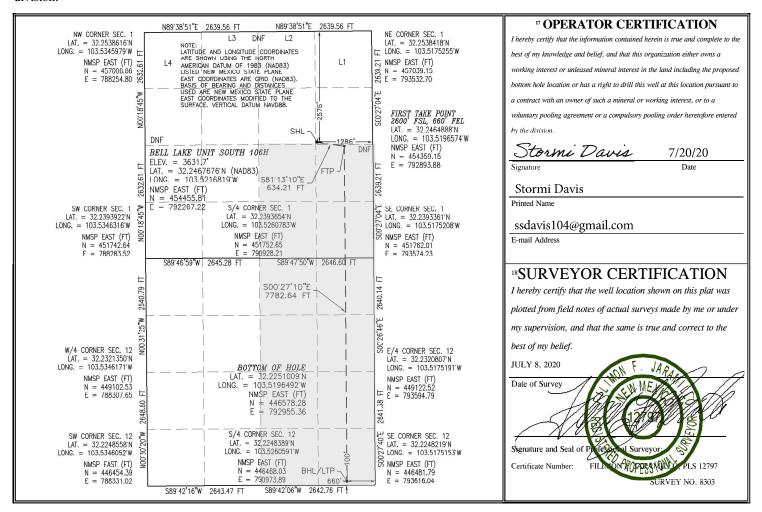
WELL LOCATION AND ACREAGE DEDICATION PLAT

	¹ API Numbe	er	² Pool Code						
	30-025		98264	Bell Lake; Bone Spring, South	one Spring, South				
	⁴ Property Code		⁵ Pr	operty Name	⁶ Well Number				
			BELL LAF	KE UNIT SOUTH	106H				
Ī	⁷ OGRID No.		8 OI	perator Name	⁹ Elevation				
	12361		KAISER-FI	RANCIS OIL CO.	3631.7				

Surface Location

					" Surface	Location							
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County				
H	1	24 S	33 E		2576	NORTH	1286	EAST	LEA				
		•	п В	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				
P	12	24 S	33 E		100	SOUTH	660	EAST	LEA				
12 Dedicated Acres	s 13 Joint	or Infill 14	Consolidation	1 Code	Code 15 Order No.								
480					R-14600								

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.





Melanie Wilson <nmogrservices@gmail.com>

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

notification@pay.gov < notification@pay.gov> To: nmogrservices@gmail.com

Tue, Jul 21, 2020 at 7:15 AM



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: 26PG53T1 Agency Tracking ID: 76017817918

Transaction Type: Sale

Transaction Date: 07/21/2020 09:15:35 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: 10400059230

Lease Numbers: NMLC0063798

Well Numbers: 106H

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.

[Quoted text hidden]



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

Well Name: BELL LAKE UNIT SOUTH

Drilling Plan Data Report

12/15/2020

APD ID: 10400059230

Submission Date: 07/21/2020

Highlighted data reflects the most recent changes

Operator Name: KAISER FRANCIS OIL COMPANY

Well Number: 106H

Show Final Text

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
791113		3631	Ö	Ö	OTHER : Surface	NONE	N
791114	RUSTLER	2231	1400	1400	SANDSTONE	NONE	N
791115	SALADO	1831	1800	1800	SALT	NONE	N
791116	TOP SALT	1506	2125	2125	SALT	NONE	N
791117	BASE OF SALT	-1469	5100	5100	SALT	NONE	N
791118	LAMAR	-1644	5275	5275	SANDSTONE	NATURAL GAS, OIL	N
791119	BELL CANYON	-1719	5350	5350	SANDSTONE	NATURAL GAS, OIL	N
791120	CHERRY CANYON	-2594	6225	6225	SANDSTONE	NATURAL GAS, OIL	N
791121	BRUSHY CANYON	-4069	7700	7700	SANDSTONE	NATURAL GAS, OIL	N
791122	BONE SPRING	-5169	8800	8800	LIMESTONE	NATURAL GAS, OIL	N
791123	AVALON SAND	-5342	8973	8973	SANDSTONE	NATURAL GAS, OIL	N
791124	BONE SPRING 1ST	-6269	9900	9900	SANDSTONE	NATURAL GAS, OIL	Y
791125	BONE SPRING 2ND	-6854	10485	10485	SANDSTONE	NATURAL GAS, OIL	N

Section 2 - Blowout Prevention

Well Name: BELL LAKE UNIT SOUTH Well Number: 106H

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

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

Requesting Variance? YES

Variance request: Flex Hose Variance

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

Choke Diagram Attachment:

BLUS 106H Choke Manifold 20200718052926.pdf

BOP Diagram Attachment:

BLUS_106H_Flex_Hose_Data_20200718052522.pdf

BLUS_106H_BOP_20200718052802.pdf

BLUS 106H Wellhead 20200718052934.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	1400	0	1400	3631	2231	1400	J-55	54.5	BUTT	1.7	4.2	DRY	11.9	DRY	11.2
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	5315	0	5300		-1669	5315	HCP -110	40	LT&C	1.7	3.2	DRY	6	DRY	5.9
3	PRODUCTI ON	8.75	5.5	NEW	API	N	0	18345	0	10200		-6569	18345	P- 110		OTHER - Eagle SF	2.4	2.7	DRY	3.3	DRY	3.1

Casing Attachments

Casing Attachments

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH Well Number: 106H

Casing ID: 1	String Type: SURFACE
Inspection Docume	ent:
Spec Document:	
Tapered String Spe	ec:
Casing Design Ass	umptions and Worksheet(s):
	Casing_Assumptions_20200720140458.pdf
Casing ID: 2	String Type: INTERMEDIATE

String Type: PRODUCTION

Casing Design Assumptions and Worksheet(s):

Inspection Document:

Tapered String Spec:

Spec Document:

Casing ID: 3

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BLUS_106H_Prod_Csg_Specs_20200718052957.pdf

Section 4 - Cement

Well Name: BELL LAKE UNIT SOUTH Well Number: 106H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1400	696	1.7	13.5	1216	75	HalCem	4% Bentonite
SURFACE	Tail		0	1400	365	1.3	14.8	486	75	HalCem	0.125 #/sk Poly Flake
INTERMEDIATE	Lead		0	5315	787	2.1	12.5	1644	50	Econocem	3 #/sk Kol Seal
INTERMEDIATE	Tail		0	5315	640	1.3	14.8	853	50	Halcem	none
PRODUCTION	Lead		4000	1834 5	416	3.4	10.5	1449	15	NeoCem	2 #/sk Kol Seal
PRODUCTION	Tail		4000	1834 5	2026	1.2	14.5	2478	15	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 times

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Hd	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
5300	1020 0	OIL-BASED MUD	8.7	8.9							
1400	5300	OTHER : Diesel- Brine Emulsion	8.7	8.9							
0	1400	OTHER : Fresh Water	8.4	9							

Well Name: BELL LAKE UNIT SOUTH Well Number: 106H

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:

GAMMA RAY LOG, MUD LOG/GEOLOGIC LITHOLOGY LOG,

Coring operation description for the well:

None planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4721 Anticipated Surface Pressure: 2476

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:

BLUS_Pad_4_H2S_Plan_20191210165726.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

BLUS_106H_Directional_Plan_20200720141130.pdf

Other proposed operations facets description:

Gas Capture Plan attached

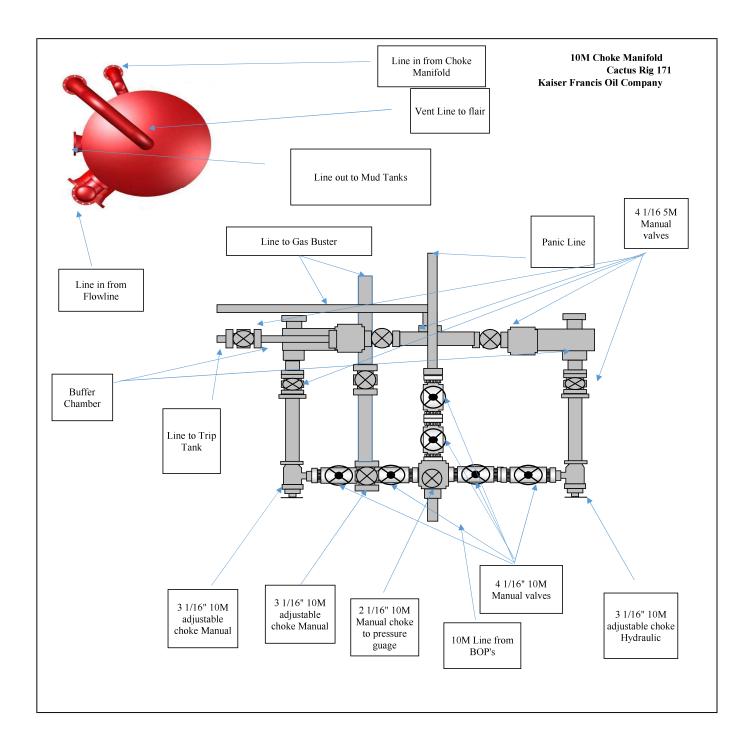
Other proposed operations facets attachment:

BLUS_106H_GCP_20200720141415.pdf

Other Variance attachment:

BLUS_106H_Wellhead_20200720141430.pdf
BLUS_106H_Flex_Hose_Data_20200720141450.pdf





Kaiser-Francis Oil Company Bell Lake Unit South 106H Casing Assumptions

Interval	Length	Casing Size	Weight (#/ft)		Thread	Condition	Hole Size	TVD (ft)		Mud Weight			Anticipated				Body	Joint	Collapse Safety	Burst Safety	Body Tensile Safety	Joint Tensile Safety
Conductor	120'	20"				New			Mud	Hole Control	Viscosity	Fluid Loss	Mud Weight (ppg)	Pressure (psi)	Collapse (psi)		Tensile Strength	Tensile Strength	Factor (Min 1.1)	Factor (Min 1.0)	Factor (Min 1.8)	Factor (Min 1.8)
Surface	1400	13-3/8"	54.5	J-55	втс	New	17-1/2"	1400	FW	8.4 - 9.0	32 - 34	NC	9	655	1130	2730	853000	909000	1.7	4.2	11.2	11.9
Intermediate	5315	9-5/8"	40	HCP-110	LTC	New	12-1/4"	5300	DBE	8.7-8.9	28	NC	8.9	2453	4230	7900	1260000	1266000	1.7	3.2	5.9	6.0
Production	18345	5-1/2"	20	P110	GBCD	New	8-3/4"	10200	ОВМ	8.7 - 8.9	28-29	NC	8.9	4721	11100	12640	641000	667000	2.4	2.7	3.1	3.3

KAISER-FRANCIS OIL COMPANY HYDROGEN SULFIDE (H₂S) CONTINGENCY PLAN FOR DRILLING/COMPLETION WORKOVER/FACILITY

Bell Lake Unit South SECTION 1 -T24S-R33E SECTION 6 -T24S-R34E SECTION 5 -T24S-R34E

LEA COUNTY, NM

This well/facility is not expected to have H₂S, 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 H₂S Release	4
Procedure For Igniting An Uncontrollable Condition	5
Emergency Phone Numbers	6
Protection Of The General Public/Roe	7
Characteristics Of H ₂ S And SO ₂	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 H₂S 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.
- 3. Identify two people best suited to secure well and perform rescue, and instruct them to don SCBA.
- 4. Notify Contract management and Kaiser-Francis Representative.
- 5. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.

Two People Responsible for Shut-in and Rescue:

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

All Other Personnel:

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

Kaiser-Francis Oil Company Representative:

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

PROCEDURE FOR IGNITING AN UNCONTROLLABLE CONDITION:

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police shall be the Incident Command of any major release.

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

- 1) Human life and/or property are in danger.
- 2) There is no hope of bringing the situation under control with the prevailing conditions at the site.

INSTRUCTIONS FOR IGNITION:

- 1) Two people are required. They must be equipped with positive pressure; self contained breathing apparatus and a "D"-ring style, full body, OSHA approved safety harness. Non-flammable rope will be attached.
- 2) One of the people will be a qualified safety person who will test the atmosphere for 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	<u>MOBILE</u>
Bill Wilkinson	580/668-2335	580/221-4637
David Zerger	918/491-4350	918/557-6708
Charles Lock	918/491-4337	918/671-6510
Stuart Blake	918/491-4347	918/510-4126
Robert Sanford	918/491-4201	918/770-2682
Eric Hansen	918/491-4339	918/527-5260

EMERGENCY RESPONSE NUMBERS: Lea County, New Mexico

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

PROTECTION OF THE GENERAL PUBLIC/ROE:

In the event of a release with a concentration greater than 100 ppm H₂S, the ROE (Radius of Exposure) calculations will be done to determine if the following conditions have been met:

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

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

Calculation for the 100 ppm ROE:

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

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

1,000 ppm += 1+

100 ppm += 01+

10 ppm +=.001+

Calculation for the 500 ppm ROE:

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

EXAMPLE: If a well/facility has been determined to have 150 ppm H₂S 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 H₂S safety, shall monitor with detection equipment the H₂S 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 H₂S, oxygen, and flammable values.)
- 3) Law enforcement shall be notified to set up necessary barriers and maintain such for the duration of the situation as well as aid in the evacuation procedure.
- 4) The company supervising personnel shall stay in communication with all agencies through out the duration of the situation and inform such agencies when the situation has been contained and the effected area(s) is safe to enter.

CHARACTERISTICS OF H2S AND SO2

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

TRAINING:

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

PUBLIC RELATIONS

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

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

All contract and Kaiser-Francis employees are instructed <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.

Received by OCD: 12/16/2020 11:05:54 AM Project: Permian NM E'83 Kaiser-Francis Oil Company County: Lea Directional Drilling Site: BLUS Pad 4 Well: Bell Lake Unit South 106H Wellbore: #106H OH Design: Plan #1 West(-)/East(+) (2000 usft/in) 2000 CASING DETAILS Azimuths to Grid North т ^G м True North: -0.43° Name Magnetic North: 6.15° Start DLS 10.00 TFO 128,87 1000 1400.00 13 3/8" 1400.00 Start 7583.75 hold at 2045.89 MD 5300.00 5315.65 9 5/8" Magnetic Field Strength: 47562.3snT Start Build 1.00 9 5/8" Dip Angle: 59.95° BLUS 106H SL Date: 12/17/2020 -0 Model: IGRF2020 Start 7781.26 hold at 10563.95 MD 750 US State Plane 1983 BLUS 106H FTP New Mexico Eastern Zone 13 3/8" 32° 14' 48.363 N -1000 Rustler 103° 31' 18.055 W **OFFSETS** 1500.00² 1500 Start Build 1.00 100'FSL 330'FEL Salado Top of Salt Start 7583.75 hold at 2045.89 MD 2045.06 -2000 South(-)/North(+) (2000 EST. FORMATION DETAILS 2250 TVDPath MDPath Formation 1353.00 1353.00 Rustler 1733.00 1733.06 Salado 3000 2036.00 2036.78 Top of Salt .4000 (2006 -4000 (2006) 5022.00 5036.39 Base of Salt 5222.00 5237.30 Lamar 5319.00 5334.74 Bell Canyon 3750 6169.00 6188.61 Cherry Canyon Brushy Canyon 7617 00 7643 21 8767.00 8798.45 Bone Spring -5000 8939.00 8971.23 Avalon 9909.00 9957.82 1st BS 4500 Base of Salt -6000 9594.41 -470 9 5/8" Lamar Bell Canyon Start DLS 10.00 TFO 128.87 9600 5250-10° -7000 True Vertical Depth (400 usft/in) 9800 20° 6000 BLUS 106H PBHL 1st BS Cherry Canyon 30° TD at 18345.21 True Vertical Depth (1500 usft/in) $^{\circ}_{\mathcal{Q}_{\mathbf{A}}}$ 8000 10000 ζŝ 6750 Start 7781.26 hold at 10563.95 MD 10200.00 102 10200 7500 Brushy Canyon BLUS 106H FTP 10400 8250 -800 -600 -200 400 600 0 200 Vertical Section at 179.55° (400 usft/in) Bone Spring Avalon 9000-9594.41 Start DLS 10.00 TFO 128.87 9750 1st BS 10200.00 Start 7781.26 hold at 10563.95 MD TD at 18345.21 BLUS 106H PBHL7883 BLUS 106H FTP -750 750 1500 2250 3000 3750 4500 5250 6000 6750 7500 8250 9000 9750 Vertical Section at 179.55° (1500 usft/in) DESIGN TARGET DETAILS +E/-W +N/-S Northing Easting Latitude 792267.22 32° 14' 48.363 N 03° 31' 18.055 W 792893.88 32° 14' 47.360 N 03° 31' 10.767 W 454455.81 BLUS 106H SL 0.00 0.00 0.00 BLUS 106H FTP 454359.15 10200.00 -96.66 626.67 792955.36 32° 13' 30.363 N 03° 31' 10.737 W BLUS 106H PBHL 10200.00 -7877.68 446578.28 688.15 SECTION DETAILS +N/-S +E/-W Sec Azi **TFace** VSect Target S1-T24S-R33E SL 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2576'FNL 1286'FEL 2 1500.00 0.00 0.00 1500.00 0.00 0.00 0.00 0.00 0.00 S1-T24S-R33E FTP 3 2045.89 5.46 50.55 2045.06 16.51 20.07 1.00 50.55 -16.35 2600'FSL 660'FEL Released to Imaging: 12/30/2020:63 5,46 50.55 9594.41 474 90 577.18 0.00 0.00 -470.35S12-T24S-R33E PBHL 128.87 101.58 -96.66 626.67 10.00 618345.21 90.00 179.55 10200.00 -7877.68 BLUS 106H PBHL 100'FSL 660'FEL 688.15 0.00 7882.84 0.00

Survey Report

Kaiser-Francis Oil Company Company:

Project: Permian NM E'83 BLUS Pad 4 Site:

Well: Bell Lake Unit South 106H

#106H OH Wellbore: Design: Plan #1

Local Co-ordinate Reference:

Survey Calculation Method:

Well Bell Lake Unit South 106H est.GL+KB @ 3656.00usft (Planning) **TVD Reference:** est.GL+KB @ 3656.00usft (Planning) MD Reference:

North Reference:

EDM 5k-14 Database:

Permian NM E'83 **Project**

US State Plane 1983 Map System: North American Datum 1983 Geo Datum: Map Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

Using geodetic scale factor

Minimum Curvature

Site BLUS Pad 4, Centered on 405H

Northing: 454,395.79 usft Latitude: 32° 14' 47.769 N Site Position: 792,267.83 usft 103° 31' 18.053 W From: Мар Easting: Longitude: **Position Uncertainty:** 0.00 usft Slot Radius: 13-3/16 " **Grid Convergence:** 0.43°

Well Bell Lake Unit South 106H **Well Position** +N/-S 0.00 usft Northing: 454,455.81 usft Latitude: 32° 14' 48.363 N +E/-W 0.00 usft Easting: 792,267.22 usft Longitude: 103° 31' 18.055 W 0.00 usft Ground Level: 3,631.70 usft **Position Uncertainty** Wellhead Elevation: usft

#106H OH Wellbore Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) IGRF2020 12/17/20 6.58 59.95 47,562.32352249

Plan #1 Design Audit Notes: PROTOTYPE Version: Phase: Tie On Depth: 0.00 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.00 0.00 0.00 179.55

07/17/20 **Survey Tool Program** Date From То (usft) (usft) Survey (Wellbore) **Tool Name** Description 0.00 18,345.21 Plan #1 (#106H OH) MWD MWD - Standard

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
1,353.00	0.00	0.00	1,353.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
13 3/8"									
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	1.00	50.55	1,599.99	0.55	0.67	-0.55	1.00	1.00	0.00
1,700.00	2.00	50.55	1,699.96	2.22	2.70	-2.20	1.00	1.00	0.00
1,733.06	2.33	50.55	1,733.00	3.01	3.66	-2.98	1.00	1.00	0.00
Salado									

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 4

Well: Bell Lake Unit South 106H

Wellbore: #106H OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference: Survey Calculation Method:

Database:

Well Bell Lake Unit South 106H est.GL+KB @ 3656.00usft (Planning)

est.GL+KB @ 3656.00usft (Planning)

Grid

Minimum Curvature

lanned 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)
1,800.00	3.00	50.55	1,799.86	4.99	6.06	-4.94	1.00	1.00	0.00
1,900.00	4.00	50.55	1,899.68	8.87	10.78	-8.78	1.00	1.00	0.00
2,000.00	5.00	50.55	1,999.37	13.85	16.84	-13.72	1.00	1.00	0.00
2,036.78	5.37	50.55	2,036.00	15.96	19.40	-15.81	1.00	1.00	0.00
Top of Salt									
2,045.89	5.46	50.55	2,045.06	16.51	20.07	-16.35	1.00	1.00	0.00
2,100.00	5.46	50.55	2,098.93	19.78	24.04	-19.59	0.00	0.00	0.00
2,200.00	5.46	50.55	2,198.48	25.83	31.39	-25.58	0.00	0.00	0.00
2,300.00	5.46	50.55	2,298.02	31.87	38.73	-31.56	0.00	0.00	0.00
2,400.00	5.46	50.55	2,397.57	37.91	46.08	-37.55	0.00	0.00	0.00
2,500.00	5.46	50.55	2,497.12	43.96	53.43	-43.54	0.00	0.00	0.00
2,600.00	5.46	50.55	2,596.66	50.00	60.77	-49.52	0.00	0.00	0.00
2,700.00	5.46	50.55	2,696.21	56.05	68.12	-55.51	0.00	0.00	0.00
2,800.00	5.46	50.55	2,795.75	62.09	75.46	-61.50	0.00	0.00	0.00
2,900.00	5.46	50.55	2,895.30	68.14	82.81	-67.48	0.00	0.00	0.00
3,000.00	5.46	50.55	2,994.85	74.18	90.16	-73.47	0.00	0.00	0.00
3,100.00	5.46	50.55	3,094.39	80.22	97.50	-79.46	0.00	0.00	0.00
3,200.00	5.46	50.55	3,193.94	86.27	104.85	-85.44	0.00	0.00	0.00
3,300.00	5.46	50.55	3,293.49	92.31	112.19	-91.43	0.00	0.00	0.00
3,400.00	5.46	50.55	3,393.03	98.36	119.54	-97.42	0.00	0.00	0.00
3,500.00	5.46	50.55	3,492.58	104.40	126.89	-103.40	0.00	0.00	0.00
3,600.00	5.46	50.55	3,592.13	110.45	134.23	-109.39	0.00	0.00	0.00
3,700.00	5.46	50.55	3,691.67	116.49	141.58	-115.37	0.00	0.00	0.00
3,800.00	5.46	50.55	3,791.22	122.53	148.92	-121.36	0.00	0.00	0.00
3,900.00	5.46	50.55	3,890.77	128.58	156.27	-127.35	0.00	0.00	0.00
4,000.00	5.46	50.55	3,990.31	134.62	163.62	-133.33	0.00	0.00	0.00
4,100.00	5.46	50.55	4,089.86	140.67	170.96	-139.32	0.00	0.00	0.00
4,200.00	5.46	50.55	4,189.41	146.71	178.31	-145.31	0.00	0.00	0.00
4,300.00	5.46	50.55	4,288.95	152.76	185.66	-151.29	0.00	0.00	0.00
4,400.00	5.46	50.55	4,388.50	158.80	193.00	-157.28	0.00	0.00	0.00
4,500.00	5.46	50.55	4,488.04	164.84	200.35	-163.27	0.00	0.00	0.00
4,600.00		50.55	4,587.59	170.89	207.69	-169.25	0.00	0.00	0.00
4,700.00		50.55	4,687.14	176.93	215.04	-175.24	0.00	0.00	0.00
4,800.00		50.55	4,786.68	182.98	222.39	-181.23	0.00	0.00	0.00
4,900.00	5.46	50.55	4,886.23	189.02	229.73	-187.21	0.00	0.00	0.00
5,000.00		50.55	4,985.78	195.07	237.08	-193.20	0.00	0.00	0.00
5,036.39	5.46	50.55	5,022.00	197.27	239.75	-195.38	0.00	0.00	0.00
Base of Sa	lt								
5,100.00	5.46	50.55	5,085.32	201.11	244.42	-199.18	0.00	0.00	0.00
5,200.00	5.46	50.55	5,184.87	207.15	251.77	-205.17	0.00	0.00	0.00
5,237.30	5.46	50.55	5,222.00	209.41	254.51	-207.40	0.00	0.00	0.00
Lamar									
5,300.00		50.55	5,284.42	213.20	259.12	-211.16	0.00	0.00	0.00
5,315.65	5.46	50.55	5,300.00	214.15	260.27	-212.09	0.00	0.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 4

Well: Bell Lake Unit South 106H

Wellbore: #106H OH
Design: Plan #1

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference:
MD Reference:

North Reference: Gri

Database:

Well Bell Lake Unit South 106H est.GL+KB @ 3656.00usft (Planning) est.GL+KB @ 3656.00usft (Planning)

Grid

Minimum Curvature

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)
9 5/8"									
5,334.74	5.46	50.55	5,319.00	215.30	261.67	-213.24	0.00	0.00	0.00
Bell Canyon									
5,400.00	5.46	50.55	5,383.96	219.24	266.46	-217.14	0.00	0.00	0.00
5,500.00	5.46	50.55	5,483.51	225.29	273.81	-223.13	0.00	0.00	0.00
5,600.00	5.46	50.55	5,583.06	231.33	281.15	-229.12	0.00	0.00	0.00
5,700.00	5.46	50.55	5,682.60	237.38	288.50	-235.10	0.00	0.00	0.00
5,800.00	5.46	50.55	5,782.15	243.42	295.85	-241.09	0.00	0.00	0.00
5,900.00	5.46	50.55	5,881.70	249.46	303.19	-247.08	0.00	0.00	0.00
6,000.00	5.46	50.55	5,981.24	255.51	310.54	-253.06	0.00	0.00	0.00
6,100.00	5.46	50.55	6,080.79	261.55	317.89	-259.05	0.00	0.00	0.00
6,188.61	5.46	50.55	6,169.00	266.91	324.39	-264.35	0.00	0.00	0.00
Cherry Cany	on								
6,200.00	5.46	50.55	6,180.33	267.60	325.23	-265.04	0.00	0.00	0.00
6,300.00	5.46	50.55	6,279.88	273.64	332.58	-271.02	0.00	0.00	0.00
6,400.00	5.46	50.55	6,379.43	279.69	339.92	-277.01	0.00	0.00	0.00
6,500.00	5.46	50.55	6,478.97	285.73	347.27	-282.99	0.00	0.00	0.00
6,600.00	5.46	50.55	6,578.52	291.77	354.62	-288.98	0.00	0.00	0.00
6,700.00	5.46	50.55	6,678.07	297.82	361.96	-294.97	0.00	0.00	0.00
6,800.00	5.46	50.55	6,777.61	303.86	369.31	-300.95	0.00	0.00	0.00
6,900.00	5.46	50.55	6,877.16	309.91	376.65	-306.94	0.00	0.00	0.00
7,000.00	5.46	50.55	6,976.71	315.95	384.00	-312.93	0.00	0.00	0.00
7,100.00	5.46	50.55	7,076.25	322.00	391.35	-318.91	0.00	0.00	0.00
7,200.00	5.46	50.55	7,175.80	328.04	398.69	-324.90	0.00	0.00	0.00
7,300.00	5.46	50.55	7,275.35	334.09	406.04	-330.89	0.00	0.00	0.00
7,400.00	5.46	50.55	7,374.89	340.13	413.38	-336.87	0.00	0.00	0.00
7,500.00	5.46	50.55	7,474.44	346.17	420.73	-342.86	0.00	0.00	0.00
7,600.00	5.46	50.55	7,573.99	352.22	428.08	-348.85	0.00	0.00	0.00
7,643.21	5.46	50.55	7,617.00	354.83	431.25	-351.43	0.00	0.00	0.00
Brushy Cany	on								
7,700.00	5.46	50.55	7,673.53	358.26	435.42	-354.83	0.00	0.00	0.00
7,800.00	5.46	50.55	7,773.08	364.31	442.77	-360.82	0.00	0.00	0.00
7,900.00	5.46	50.55	7,872.62	370.35	450.11	-366.80	0.00	0.00	0.00
8,000.00	5.46	50.55	7,972.17	376.40	457.46	-372.79	0.00	0.00	0.00
8,100.00	5.46	50.55	8,071.72	382.44	464.81	-378.78	0.00	0.00	0.00
8,200.00	5.46	50.55	8,171.26	388.48	472.15	-384.76	0.00	0.00	0.00
8,300.00	5.46	50.55	8,270.81	394.53	479.50	-390.75	0.00	0.00	0.00
8,400.00	5.46	50.55	8,370.36	400.57	486.85	-396.74	0.00	0.00	0.00
8,500.00	5.46	50.55	8,469.90	406.62	494.19	-402.72	0.00	0.00	0.00
8,600.00	5.46	50.55	8,569.45	412.66	501.54	-408.71	0.00	0.00	0.00
8,700.00	5.46	50.55	8,669.00	418.71	508.88	-414.70	0.00	0.00	0.00
8,798.45	5.46	50.55	8,767.00	424.66	516.12	-420.59	0.00	0.00	0.00
Bone Spring 8,800.00	5.46	50.55		424.75		-420.68	0.00	0.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 4

Well: Bell Lake Unit South 106H

Wellbore: #106H OH
Design: Plan #1

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference:
MD Reference:

North Reference: Gr

Database:

Well Bell Lake Unit South 106H est.GL+KB @ 3656.00usft (Planning) est.GL+KB @ 3656.00usft (Planning)

Grid

Minimum Curvature

n: Pi	all # I			Database:			EDIVI 5K-14		
ed Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,900.00	5.46	50.55	8,868.09	430.79	523.58	-426.67	0.00	0.00	0.00
8,971.23	5.46	50.55	8,939.00	435.10	528.81	-430.93	0.00	0.00	0.00
Avalon									
9,000.00	5.46	50.55	8,967.64	436.84	530.92	-432.66	0.00	0.00	0.00
9,100.00	5.46	50.55	9,067.18	442.88	538.27	-438.64	0.00	0.00	0.00
9,200.00	5.46	50.55	9,166.73	448.93	545.61	-444.63	0.00	0.00	0.00
9,300.00	5.46	50.55	9,266.28	454.97	552.96	-450.61	0.00	0.00	0.00
9,400.00	5.46	50.55	9,365.82	461.02	560.31	-456.60	0.00	0.00	0.00
9,500.00	5.46	50.55	9,465.37	467.06	567.65	-462.59	0.00	0.00	0.00
9,600.00	5.46	50.55	9,564.92	473.10	575.00	-468.57	0.00	0.00	0.00
9,629.63	5.46	50.55	9,594.41	474.90	577.18	-470.35	0.00	0.00	0.00
9,650.00	4.47	71.35	9,614.71	475.76	578.68	-471.21	10.00	-4.85	102.09
9,700.00	5.57	129.93	9,664.54	474.83	582.38	-470.24	10.00	2.20	117.17
9,750.00	9.59	153.47	9,714.11	469.54	586.11	-464.93	10.00	8.04	47.07
9,800.00	14.24	162.53	9,763.02	459.95	589.82	-455.30	10.00	9.30	18.13
9,850.00	19.07	167.14	9,810.91	446.11	593.48	-441.43	10.00	9.65	9.22
9,900.00	23.96	169.93	9,857.41	428.14	597.08	-423.44	10.00	9.79	5.58
9,950.00	28.89	171.81	9,902.18	406.17	600.58	-401.44	10.00	9.86	3.77
9,957.82	29.67	172.05	9,909.00	402.38	601.11	-397.65	10.00	9.88	3.10
1st BS			-,						
10,000.00	33.84	173.19	9,944.86	380.37	603.95	-375.62	10.00	9.90	2.69
10,050.00	38.80	174.25	9,985.13	350.95	607.18	-346.17	10.00	9.92	2.03
10,030.00	43.77	174.23	10,022.69	318.11	610.22	-313.30	10.00	9.94	1.71
10,150.00	48.74	175.10	10,022.09	282.11	613.08	-277.29	10.00	9.95	1.71
10,130.00	53.72	176.42	10,037.23	243.23	615.71	-217.29	10.00	9.95	1.42
10,200.00		170.42	10,000.55		013.71		10.00		
10,250.00	58.70	176.96	10,116.35	201.75	618.10	-196.89	10.00	9.96	1.07
10,300.00	63.68	177.44	10,140.43	158.01	620.24	-153.13	10.00	9.96	0.97
10,350.00	68.67	177.89	10,160.62	112.32	622.10	-107.43	10.00	9.97	0.89
10,400.00	73.65	178.30	10,176.77	65.04	623.67	-60.14	10.00	9.97	0.83
10,450.00	78.64	178.69	10,188.74	16.53	624.94	-11.62	10.00	9.97	0.79
10,500.00	83.62	179.07	10,196.44	-32.85	625.90	37.76	10.00	9.97	0.76
10,550.00	88.61	179.44	10,199.83	-82.71	626.55	87.63	10.00	9.97	0.74
10,563.95	90.00	179.55	10,200.00	-96.66	626.67	101.58	10.00	9.97	0.74
10,600.00	90.00	179.55	10,200.00	-132.71	626.96	137.63	0.00	0.00	0.00
10,700.00	90.00	179.55	10,200.00	-232.71	627.75	237.63	0.00	0.00	0.00
10,800.00	90.00	179.55	10,200.00	-332.70	628.54	337.63	0.00	0.00	0.00
10,900.00	90.00	179.55	10,200.00	-432.70	629.33	437.63	0.00	0.00	0.00
11,000.00	90.00	179.55	10,200.00	-532.70	630.12	537.63	0.00	0.00	0.00
11,100.00	90.00	179.55	10,200.00	-632.69	630.91	637.63	0.00	0.00	0.00
11,200.00	90.00	179.55	10,200.00	-732.69	631.70	737.63	0.00	0.00	0.00
11,300.00	90.00	179.55	10,200.00	-832.69	632.49	837.63	0.00	0.00	0.00
11,400.00	90.00	179.55	10,200.00	-932.69	633.28	937.63	0.00	0.00	0.00
11,500.00	90.00	179.55	10,200.00	-1,032.68	634.07	1,037.63	0.00	0.00	0.00
11,600.00	90.00	179.55	10,200.00	-1,132.68	634.86	1,137.63	0.00	0.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83 Site: BLUS Pad 4

Well: Bell Lake Unit South 106H

#106H OH Wellbore: Design: Plan #1

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference: MD Reference:

North Reference:

Database:

Well Bell Lake Unit South 106H est.GL+KB @ 3656.00usft (Planning)

est.GL+KB @ 3656.00usft (Planning)

Minimum Curvature

JII. 1 16									
ned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,700.00	90.00	179.55	10,200.00	-1,232.68	635.65	1,237.63	0.00	0.00	0.00
11,800.00	90.00	179.55	10,200.00	-1,332.67	636.44	1,337.63	0.00	0.00	0.00
11,900.00	90.00	179.55	10,200.00	-1,432.67	637.23	1,437.63	0.00	0.00	0.00
12,000.00	90.00	179.55	10,200.00	-1,532.67	638.02	1,537.63	0.00	0.00	0.00
12,100.00	90.00	179.55	10,200.00	-1,632.66	638.81	1,637.63	0.00	0.00	0.00
12,200.00	90.00	179.55	10,200.00	-1,732.66	639.60	1,737.63	0.00	0.00	0.00
12,300.00	90.00	179.55	10,200.00	-1,832.66	640.39	1,837.63	0.00	0.00	0.00
12,400.00	90.00	179.55	10,200.00	-1,932.65	641.18	1,937.63	0.00	0.00	0.00
12,500.00	90.00	179.55	10,200.00	-2,032.65	641.97	2,037.63	0.00	0.00	0.00
12,600.00	90.00	179.55	10,200.00	-2,132.65	642.76	2,137.63	0.00	0.00	0.00
12,700.00	90.00	179.55	10,200.00	-2,232.64	643.55	2,237.63	0.00	0.00	0.00
12,800.00	90.00	179.55	10,200.00	-2,332.64	644.34	2,337.63	0.00	0.00	0.00
12,900.00	90.00	179.55	10,200.00	-2,432.64	645.13	2,437.63	0.00	0.00	0.00
13,000.00	90.00	179.55	10,200.00	-2,532.64	645.92	2,537.63	0.00	0.00	0.00
13,100.00	90.00	179.55	10,200.00	-2,632.63	646.71	2,637.63	0.00	0.00	0.00
13,200.00	90.00	179.55	10,200.00	-2,732.63	647.50	2,737.63	0.00	0.00	0.00
13,300.00	90.00	179.55	10,200.00	-2,832.63	648.29	2,837.63	0.00	0.00	0.00
13,400.00	90.00	179.55	10,200.00	-2,932.62	649.08	2,937.63	0.00	0.00	0.00
13,500.00	90.00	179.55	10,200.00	-3,032.62	649.87	3,037.63	0.00	0.00	0.00
13,600.00	90.00	179.55	10,200.00	-3,132.62	650.66	3,137.63	0.00	0.00	0.00
13,700.00	90.00	179.55	10,200.00	-3,232.61	651.45	3,237.63	0.00	0.00	0.00
13,800.00	90.00	179.55	10,200.00	-3,332.61	652.24	3,337.63	0.00	0.00	0.00
13,900.00	90.00	179.55	10,200.00	-3,432.61	653.03	3,437.63	0.00	0.00	0.00
14,000.00	90.00	179.55	10,200.00	-3,532.60	653.82	3,537.63	0.00	0.00	0.00
14,100.00	90.00	179.55	10,200.00	-3,632.60	654.61	3,637.63	0.00	0.00	0.00
14,200.00	90.00	179.55	10,200.00	-3,732.60	655.40	3,737.63	0.00	0.00	0.00
14,300.00	90.00	179.55	10,200.00	-3,832.59	656.19	3,837.63	0.00	0.00	0.00
14,400.00	90.00	179.55	10,200.00	-3,932.59	656.98	3,937.63	0.00	0.00	0.00
14,500.00	90.00	179.55	10,200.00	-4,032.59	657.77	4,037.63	0.00	0.00	0.00
14,600.00	90.00	179.55	10,200.00	-4,032.59 -4,132.59	658.56	4,037.63	0.00	0.00	0.00
14,700.00	90.00	179.55	10,200.00	-4,232.58	659.35	4,237.63	0.00	0.00	0.00
14,800.00	90.00	179.55	10,200.00	-4,332.58	660.14	4,337.63	0.00	0.00	0.00
14,900.00	90.00	179.55	10,200.00	-4,432.58	660.93	4,337.63	0.00	0.00	0.00
15,000.00	90.00	179.55	10,200.00	-4,432.56 -4,532.57	661.72	4,437.63	0.00	0.00	0.00
15,100.00	90.00	179.55	10,200.00	-4,532.57 -4,632.57	662.51	4,637.63	0.00	0.00	0.00
15,200.00	90.00	179.55	10,200.00	-4,032.57 -4,732.57	663.30	4,737.63	0.00	0.00	0.00
10,200.00	30.00	173.33	10,200.00	7,102.01	000.00	7,707.00	0.00	0.00	0.00
15,300.00	90.00	179.55	10,200.00	-4,832.56	664.09	4,837.63	0.00	0.00	0.00
15,400.00	90.00	179.55	10,200.00	-4,932.56	664.88	4,937.63	0.00	0.00	0.00
15,500.00	90.00	179.55	10,200.00	-5,032.56	665.67	5,037.63	0.00	0.00	0.00
15,600.00	90.00	179.55	10,200.00	-5,132.55	666.46	5,137.63	0.00	0.00	0.00
15,700.00	90.00	179.55	10,200.00	-5,232.55	667.25	5,237.63	0.00	0.00	0.00
15,800.00	90.00	179.55	10,200.00	-5,332.55	668.04	5,337.63	0.00	0.00	0.00
15,900.00	90.00	179.55	10,200.00	-5,432.55	668.83	5,437.63	0.00	0.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 4

Well: Bell Lake Unit South 106H

Wellbore: #106H OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Well Bell Lake Unit South 106H est.GL+KB @ 3656.00usft (Planning) est.GL+KB @ 3656.00usft (Planning)

Grid

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)
				, ,					, ,
16,000.00	90.00	179.55	10,200.00	-5,532.54	669.62	5,537.63	0.00	0.00	0.00
16,100.00	90.00	179.55	10,200.00	-5,632.54	670.41	5,637.63	0.00	0.00	0.00
16,200.00	90.00	179.55	10,200.00	-5,732.54	671.20	5,737.63	0.00	0.00	0.00
16,300.00	90.00	179.55	10,200.00	-5,832.53	671.99	5,837.63	0.00	0.00	0.00
16,400.00	90.00	179.55	10,200.00	-5,932.53	672.78	5,937.63	0.00	0.00	0.00
16,500.00	90.00	179.55	10,200.00	-6,032.53	673.57	6,037.63	0.00	0.00	0.00
16,600.00	90.00	179.55	10,200.00	-6,132.52	674.36	6,137.63	0.00	0.00	0.00
16,700.00	90.00	179.55	10,200.00	-6,232.52	675.15	6,237.63	0.00	0.00	0.00
16,800.00	90.00	179.55	10,200.00	-6,332.52	675.94	6,337.63	0.00	0.00	0.00
16,900.00	90.00	179.55	10,200.00	-6,432.51	676.73	6,437.63	0.00	0.00	0.00
17,000.00	90.00	179.55	10,200.00	-6,532.51	677.52	6,537.63	0.00	0.00	0.00
17,100.00	90.00	179.55	10,200.00	-6,632.51	678.31	6,637.63	0.00	0.00	0.00
17,200.00	90.00	179.55	10,200.00	-6,732.50	679.10	6,737.63	0.00	0.00	0.00
17,300.00	90.00	179.55	10,200.00	-6,832.50	679.89	6,837.63	0.00	0.00	0.00
17,400.00	90.00	179.55	10,200.00	-6,932.50	680.68	6,937.63	0.00	0.00	0.00
17,500.00	90.00	179.55	10,200.00	-7,032.50	681.47	7,037.63	0.00	0.00	0.00
17,600.00	90.00	179.55	10,200.00	-7,132.49	682.26	7,137.63	0.00	0.00	0.00
17,700.00	90.00	179.55	10,200.00	-7,232.49	683.06	7,237.63	0.00	0.00	0.00
17,800.00	90.00	179.55	10,200.00	-7,332.49	683.85	7,337.63	0.00	0.00	0.00
17,900.00	90.00	179.55	10,200.00	-7,432.48	684.64	7,437.63	0.00	0.00	0.00
18,000.00	90.00	179.55	10,200.00	-7,532.48	685.43	7,537.63	0.00	0.00	0.00
18,100.00	90.00	179.55	10,200.00	-7,632.48	686.22	7,637.63	0.00	0.00	0.00
18,200.00	90.00	179.55	10,200.00	-7,732.47	687.01	7,737.63	0.00	0.00	0.00
18,300.00	90.00	179.55	10,200.00	-7,832.47	687.80	7,837.63	0.00	0.00	0.00
18,345.21	90.00	179.55	10,200.00	-7,877.68	688.15	7,882.84	0.00	0.00	0.00

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

Date: 07/02/2018

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	GAS	CAP	TURE	PL	4N
------------------	-----	-----	------	----	----

⊠ 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 (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Bell Lake Unit South 106H	N/A	H-1-24S-33E	2576' FNL/1286' FEL	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_, Twn.__198_, Rng._36E, __Lea__</u> County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

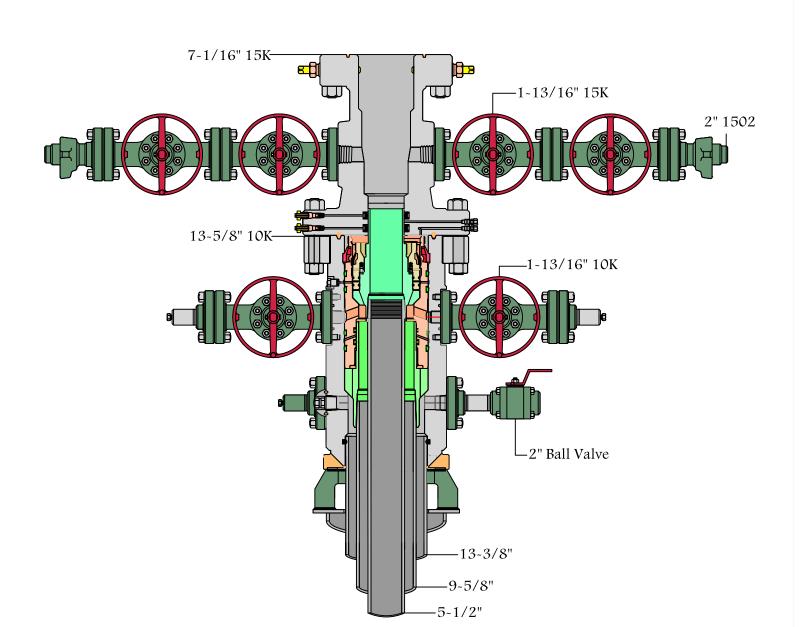
After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on <u>Targa</u> system at that time. Based on current information, it is <u>Kaiser-Francis Oil Company's</u> 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
 - o Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
 - o Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
 - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines



RKI

District J
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

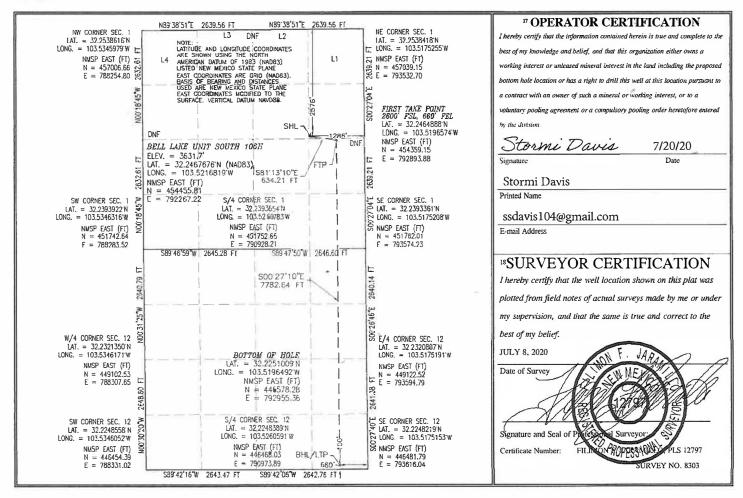
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	30-025-	48256	r #		Pool Code Pool Name 98264 Bell Lake; Bone Spring, South						
	4 Property (Code		•		5 Property	Name			6 1	Well Number
	316706				BI	ELL LAKE UI	NIT SOUTH				106Н
Г	OGRID 1	No.				, Elevation					
	12361	L		KAISER-FRANCIS OIL CO.							3631.7
		[*] Surface Location									
	UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County
	H	1	24 S	33 E		2576	NORTH	1286	EA	ST	LEA

	Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn Feet from the		North/South line	Feet from the	East/West line	County	
P	12	24 S 33 E			100	SOUTH	660	EAST	LEA	
12 Dedicated Acre	12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code			1 Code	·		15 Order No.	0.		
480			27				R-14600		DKI	

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.



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

Date: 07/02/2018

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

CAC	MA	PTIL	TT	TAT		M
(-A.	t A		CH.		. 4	. 10

□ Original □	Operator & OGRID No.: Kaiser-Francis Oil Company, 12361
☐ Amended - Reason for Amend	ment:
This Gas Capture Plan outlines ac	ctions to be taken by the Operator to reduce well/production facility flaring/venting fo
new completion (new drill, recom-	plete 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 South 106H	N/A	H-1-24S-33E	2576' FNL/1286' FEL	2000	0	
30	025-4825	6				
				-	<	
*						

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</u> County, 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</u> County, 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 <u>Targa</u> system at that time. Based on current information, it is <u>Kaiser-Francis</u> Oil Company's 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
 - o Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
 - o Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
 - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

Well Name: BELL LAKE UNIT SOUTH Well Number: 106H

Pressure Rating (PSI): 5M

Rating Depth: 13000

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

Requesting Variance? YES

Variance request: Flex Hose Variance

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

Choke Diagram Attachment:

BLUS_106H_Choke_Manifold_20200718052926.pdf

BOP Diagram Attachment:

BLUS 106H Flex Hose Data 20200718052522.pdf

BLUS 106H BOP 20200718052802.pdf

BLUS_106H_Wellhead_20200718052934.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	Ν	0	1400	0	1400	3631	2231	1400	J-55	54.5	BUTT	1.7	4.2	DRY	11.9	DRY	11.2
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	5315	0	5300		-1669	5315	HCP -110	40	LT&C	1.7	3.2	DRY	6	DRY	5.9
3	PRODUCTI ON	8.75	5.5	NEW	API	N	0	18345	0	10200		-6569	18345	P- 110		OTHER - Eagle SF	2.4	2.7	DRY	3.3	DRY	3.1

Casing Attachments

Well Name: BELL LAKE UNIT SOUTH W	/ell Number: 106H	,
Casing Attachments		
Casing ID: 1 String Type:SURFACE		
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Casing Design Assumptions and Worksheet(s):		
BLUS_106H_Casing_Assumptions_20200720140458	.pdf	
Casing ID: 2 String Type: INTERMEDIATE		,
Inspection Document:	*	
Spec Document:		×.
Tapered String Spec:		
Casing Design Assumptions and Worksheet(s):		,
Casing ID: 3 String Type:PRODUCTION		
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Casing Design Assumptions and Worksheet(s):		
BLUS_106H_Prod_Csg_Specs_20200718052957.pdf	f	

Section 4 - Cement

Well Name: BELL LAKE UNIT SOUTH

Well Number: 106H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1400	696	1.7	13.5	1216	75	HalCem	4% Bentonite
SURFACE	Tail		0	1400	365	1.3	14.8	486	75	HalCem	0.125 #/sk Poly Flake
INTERMEDIATE	Lead		0	5315	787	2.1	12.5	1644	50	Econocem	3 #/sk Kol Seal
INTERMEDIATE	Tail		0	5315	640	1.3	14.8	853	50	Halcem	none
PRODUCTION	Lead	ų.	4000	1834 5	416	3.4	10.5	1449	15	NeoCem	2 #/sk Kol Seal
PRODUCTION	Tail		4000	1834 5	2026	1.2	14.5	2478	15	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 mudproperties and meet minimum lost circulation and weight increase requirements will be kept on location at all times

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

Circulating Medium Table

						*					
Top Depth	Bottom Depth	Mud Type	·Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	НА	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
5300	1020 0	OIL-BASED MUD	8.7	8.9							
1400	5300	OTHER : Diesel- Brine Emulsion	8.7	8.9				•			
0	1400	OTHER : Fresh Water	8.4	9							

KAISER-FRANCIS OIL COMPANY

P.O. BOX 21468

TULSA, OKLAHOMA 74121-1468

6733 South Yale Avenue, 74136 (918) 494-0000

Date: 12/15/2020

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 South 106H SHL Sec. 1-24S-33E 2576' FNL & 1286' FEL 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 12281

CONDITIONS OF APPROVAL

Operator:			OGRID:	Action Number:	Action Type:
KAISER-FRANCIS OIL CO	P.O. Box 21468	Tulsa, OK74121	12361	12281	FORM 3160-3

OCD	Condition
Reviewer	
pkautz	Notify OCD 24 hours prior to casing &cement
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