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. NMLC0061374A 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 116H 2. Name of Operator 9. API Well No. KAISER FRANCIS OIL COMPANY 30-025-48175 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 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 5/T24S/R34E/NMP At surface SENE / 1982 FNL / 1237 FEL / LAT 32.2484335 / LONG -103.4875015 At proposed prod. zone SWSE / 330 FSL / 2290 FEL / LAT 32.2257281 / LONG -103.490852 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office\* LEA NM 20 miles 17. Spacing Unit dedicated to this well 15. Distance from proposed\* 16. No of acres in lease 1237 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 / 18168 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 3581 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. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date (Electronic Submission) MELANIE WILSON / Ph: (918) 491-0000 07/16/2020 Title Regulatory Analyst Approved by (Signature) Name (Printed/Typed) Date (Electronic Submission) 11/23/2020 Cody Layton / Ph: (575) 234-5959 Title Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Carlsbad Field Office

Conditions of approval, if any, are attached

Assistant Field Manager Lands & Minerals

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 12/07/2020





SL

(Continued on page 2)

\*(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.



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

# Application Data Report

Submission Date: 07/16/2020

Highlighted data reflects the most recent changes

**Show Final Text** 

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH

Well Type: OIL WELL

APD ID: 10400059082

Well Number: 116H

Well Work Type: Drill

# **Section 1 - General**

APD ID: 10400059082 Tie to previous NOS? N

Submission Date: 07/16/2020

**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: NMLC0061374A

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

**Zip:** 74121

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: 116H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: BELL LAKE

Pool Name: BONE SPRING,

SOUTH

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

Well Name: BELL LAKE UNIT SOUTH Well Number: 116H

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:** SOUTH BELL LAKE UNIT Number: 14

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: 1237 FT

Reservoir well spacing assigned acres Measurement: 480 Acres

Well plat:

BLUS 116H C102 20200715125815.pdf

BLUS\_116H\_Pymt\_20200716091914.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: 6777

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	DVT	Will this well produce from this lease?
SHL Leg #1	198 2	FNL	123 7	FEL	24S	34E	5	Aliquot SENE	32.24843 35	- 103.4875 015	LEA	NEW MEXI CO		F	FEE	358 1	0	0	N
KOP Leg #1	198 2	FNL	123 7	FEL	24S	34E	5	Aliquot SENE	32.24843 35	- 103.4875 015	LEA	NEW MEXI CO	NEW MEXI CO	F	FEE	- 605 7	968 1	963 8	N

Well Name: BELL LAKE UNIT SOUTH Well Number: 116H

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	260 0	FSL	214 0	FEL	24S	34E	5	Aliquot NWSE	32.24660 14	- 103.4904 01	LEA	MEXI CO	MEXI CO	F	FEE	- 661 9	105 73	102 00	Υ
PPP Leg #1-2	0	FNL	215 8	FEL	24S	34E	8	Aliquot NWNE	32.23943 92	- 103.4905 547	LEA	NEW MEXI CO	NEW MEXI CO	F	NMLC0 061374 A	- 661 9	131 73	102 00	Y
PPP Leg #1-3	132 0	FNL	217 2	FEL	24S	34E	8	Aliquot SWNE	32.23586 66	- 103.4906 329	LEA	NEW MEXI CO		F		- 661 9	144 93	102 00	Y
PPP Leg #1-4	264 0	FSL	218 7	FEL	24S	34E	8	Aliquot NWSE	32.23215 63	- 103.4907 141	LEA	NEW MEXI CO	NEW MEXI CO	F	FEE	- 661 9	158 13	102 00	Y
EXIT Leg #1	330	FSL	229 0	FEL	24S	34E	8	Aliquot SWSE	32.22572 81	- 103.4908 52	LEA	NEW MEXI CO	NEW MEXI CO	F	FEE	- 661 9	181 68	102 00	Y
BHL Leg #1	330	FSL	229 0	FEL	24S	34E	8	Aliquot SWSE	32.22572 81	- 103.4908 52	LEA	NEW MEXI CO	NEW MEXI CO	F	FEE	- 661 9	181 68	102 00	Y

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

Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

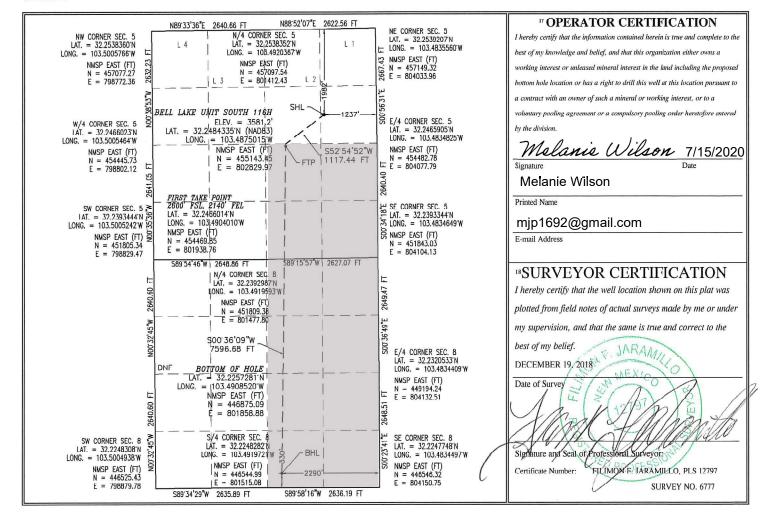
# WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number	<sup>2</sup> Pool Code	<sup>3</sup> Pool Name				
30-025-	98264	BELL LAKE; BONE SPRIN	IG, SOUTH			
<sup>4</sup> Property Code	5 Pr	operty Name	<sup>6</sup> Well Number			
316706	BELL LAF	KE UNIT SOUTH	116H			
7 OGRID No.	8 OI	perator Name	<sup>9</sup> Elevation			
12361	3581.2					
	10 Cire	face 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				
Н	5	24 S	34 E		1982	NORTH	1237	EAST	LEA				
			" B	ottom Ho	ole Location	If Different Fr	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	8	24 S	34 E		330	SOUTH	2290	EAST	LEA				
12 Dedicated Acre	s 3 Joint	or Infill	Consolidation	1 Code	de 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.



# mjp1692@gmail.com

From: notification@pay.gov

**Sent:** Thursday, July 16, 2020 9:18 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: 26PF0R16 Agency Tracking ID: 76016559558

Transaction Type: Sale

Transaction Date: 07/16/2020 11:18:03 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: 10400059082

Lease Numbers: NMLC0061374A

Well Numbers: 116H

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



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

# Drilling Plan Data Report

11/24/2020

**APD ID:** 10400059082

Submission Date: 07/16/2020

Highlighted data reflects the most recent changes

Operator Name: KAISER FRANCIS OIL COMPANY
Well Name: BELL LAKE UNIT SOUTH

Well Number: 116H

**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
788260		3581	Ö	Ö	OTHER : None	NONE	N
788261	RUSTLER	2209	1372	1372	SANDSTONE	NONE	N
788262	SALADO	1834	1747	1747	SALT	NONE	N
788263	TOP SALT	1509	2072	2072	SALT	NONE	N
788264	BASE OF SALT	-1466	5047	5047	SALT	NONE	N
788265	LAMAR	-1691	5272	5272	SANDSTONE	NATURAL GAS, OIL	N
788266	BELL CANYON	-1766	5347	5347	SANDSTONE	NATURAL GAS, OIL	N
788267	CHERRY CANYON	-2616	6197	6197	SANDSTONE	NATURAL GAS, OIL	N
788268	BRUSHY CANYON	-4066	7647	7647	SANDSTONE	NATURAL GAS, OIL	N
788269	BONE SPRING	-5191	8772	8772	LIMESTONE	NATURAL GAS, OIL	N
788270	AVALON SAND	-5501	9082	9082	SANDSTONE	NATURAL GAS, OIL	N
788271	BONE SPRING 1ST	-6391	9972	9972	SANDSTONE	NATURAL GAS, OIL	Y
788272	BONE SPRING 2ND	-6936	10517	10517	SANDSTONE	NATURAL GAS, OIL	N

# **Section 2 - Blowout Prevention**

Well Name: BELL LAKE UNIT SOUTH Well Number: 116H

Pressure Rating (PSI): 5M Rating Depth: 18000

**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 116H Choke Manifold 20200715132333.pdf

# **BOP Diagram Attachment:**

BLUS\_116H\_BOP\_20200715132359.pdf

BLUS\_116H\_Well\_Head\_Diagram\_20200715132400.pdf

BLUS 116H Flex Hose Specs 20200715132400.pdf

# **Section 3 - Casing**

		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
	SURFACE	17.5	13.375	NEW	API	N	0	1400	0	1400	3581	2181	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	5300	0	5300		-1719	5300	HCP -110	40	LT&C	1.7	3.2	DRY	6	DRY	5.9
(	PRODUCTI ON	8.75	5.5	NEW	API	N	0	18168	0	10200		-6619	18168	P- 110		OTHER - GBCD	2.4	2.7	DRY	3.3	DRY	3.1

### **Casing Attachments**

Well Name: BELL LAKE UNIT SOUTH Well Number: 116H

Casing Att	achments	
Casing	<b>ID</b> : 1	String Type:SURFACE
Inspect	ion Document:	
Spec D	ocument:	
Tapere	d String Spec:	
Casing	Design Assump	otions and Worksheet(s):
В	LUS_116H_Casi	ng_Assumptions_20200715132747.pdf
Casing	<b>ID</b> : 2	String Type: INTERMEDIATE
Inspect	tion Document:	
Spec D	ocument:	
Tapere	d String Spec:	
Casing	Design Assump	otions and Worksheet(s):
В	LUS_116H_Casi	ng_Assumptions_20200715132546.pdf
Casing	<b>ID</b> : 3	String Type: PRODUCTION
Inspect	tion Document:	
Spec D	ocument:	
Tapere	d String Spec:	
Casing	Design Assump	otions and Worksheet(s):
В	LUS 116H Prod	Csq Specs 20200715132637.pdf

**Section 4 - Cement** 

Well Name: BELL LAKE UNIT SOUTH Well Number: 116H

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	5300	787	2.1	12.5	1644	50	Econocem	3 #/sk Kol Seal
INTERMEDIATE	Tail		0	5300	635	1.3	14.8	846	50	Halcem	none
PRODUCTION	Lead		4000	1816 8	416	3.5	10.5	1449	15	NeoCem	2 #/sk Kol Seal
PRODUCTION	Tail		4000	1816 8	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 (Ibs/gal)	Max Weight (Ibs/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: 116H

# **Section 6 - Test, Logging, Coring**

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

TOC 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\_14\_H2S\_Contingency\_Plan\_20191206105203.pdf

# **Section 8 - Other Information**

Proposed horizontal/directional/multi-lateral plan submission:

BLUS\_116H\_Directional\_Plan\_20200715133247.pdf

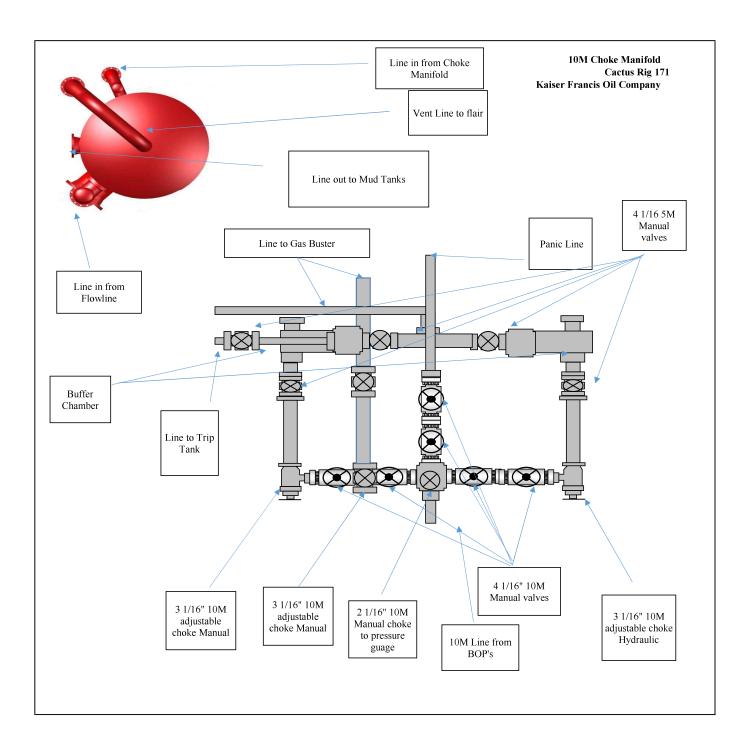
Other proposed operations facets description:

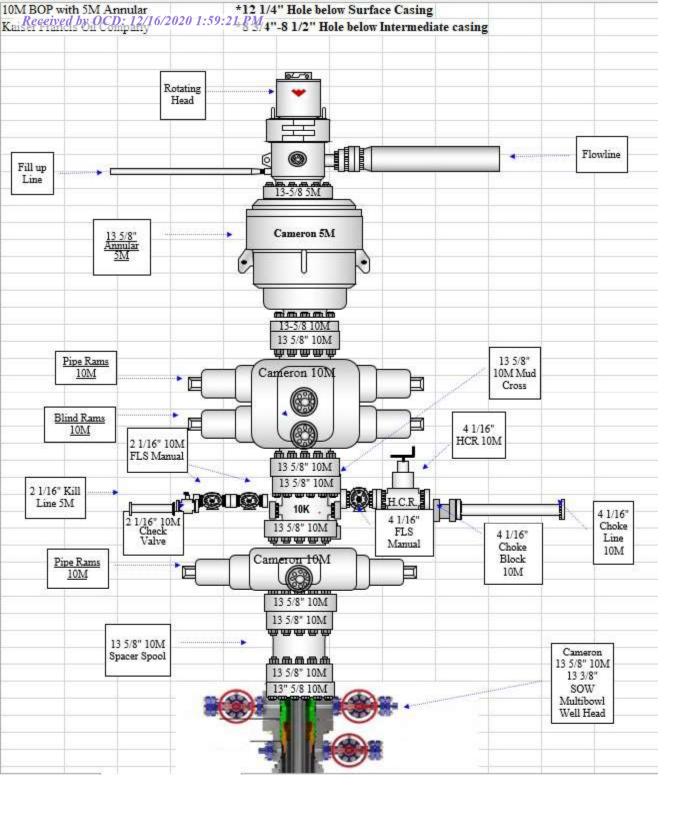
Gas Capture Plan attached

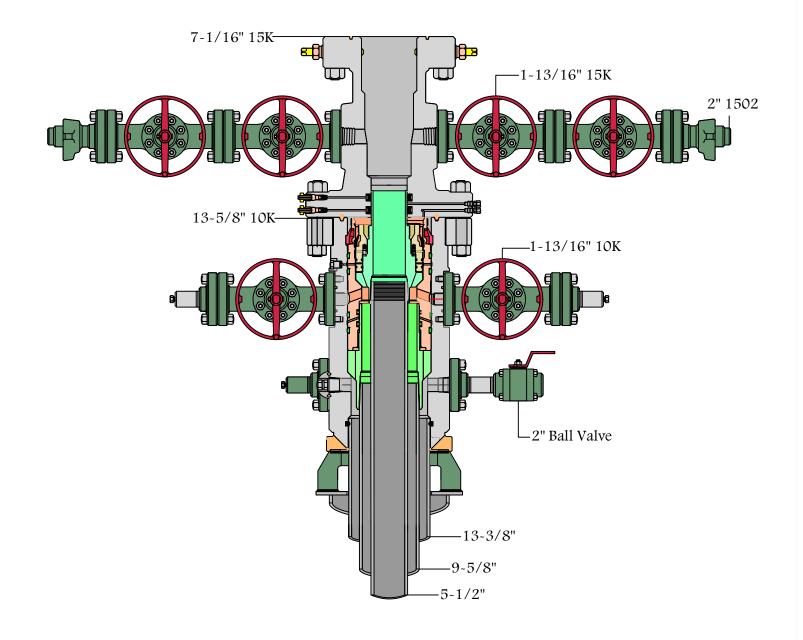
Other proposed operations facets attachment:

BLUS\_Pad\_14\_GCP\_20200715133259.pdf

Other Variance attachment:







**RKI** 

### Kaiser-Francis Oil Company Bell Lake Unit South 116H Casing Assumptions

Interval Conductor	Length	Casing Size 20"	Weight (#/ft)	Grade	Thread	<b>Condition</b> New	Hole Size	TVD (ft)	Mud Type	"	Viscosity	Fluid Loss	Anticipated Mud Weight (ppg)	Max Pore Pressure (psi)	Collapse (psi)	Burst (psi)	Body Tensile Strength	Joint Tensile Strength	Collapse Safety Factor (Min 1.1)	Burst Safety Factor (Min 1.0)	Body Tensile Safety Factor (Min 1.8)	Joint Tensile Safety Factor (Min 1.8)
Surface	1400	13-3/8"	54.5	J-55	BTC	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	5300	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	18168	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 (H<sub>2</sub>S) 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  $H_2S$ , but due to the sensitive location, the following is submitted as requested.

# TABLE OF CONTENTS

Emergency Response Activation and General Responsibilities	3
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Emergency Phone Numbers	6
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Characteristics Of H <sub>2</sub> S And SO <sub>2</sub>	8
Training	8
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# **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<sub>2</sub>S 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 H<sub>2</sub>S siren and lights.

## All Personnel:

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

# Rig Manager/Tool Pusher:

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

# Two People Responsible for Shut-in and Rescue:

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

## All Other Personnel:

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

# Kaiser-Francis Oil Company Representative:

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

### PROCEDURE FOR IGNITING AN UNCONTROLLABLE CONDITION:

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<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.
- 2) There is no hope of bringing the situation under control with the prevailing conditions at the site.

# **INSTRUCTIONS FOR IGNITION:**

- 1) Two people are required. They must be equipped with positive pressure; self contained breathing apparatus and a "D"-ring style, full body, OSHA approved safety harness. Non-flammable rope will be attached.
- 2) One of the people will be a qualified safety person who will test the atmosphere for H<sub>2</sub>S, 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 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+

100 ppm +=.01+

10 ppm +=.001+

# Calculation for the 500 ppm ROE:

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

EXAMPLE: If a well/facility has been determined to have 150 ppm H<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)

 $X = \hat{1}.2'$ 

(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.

# 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**:

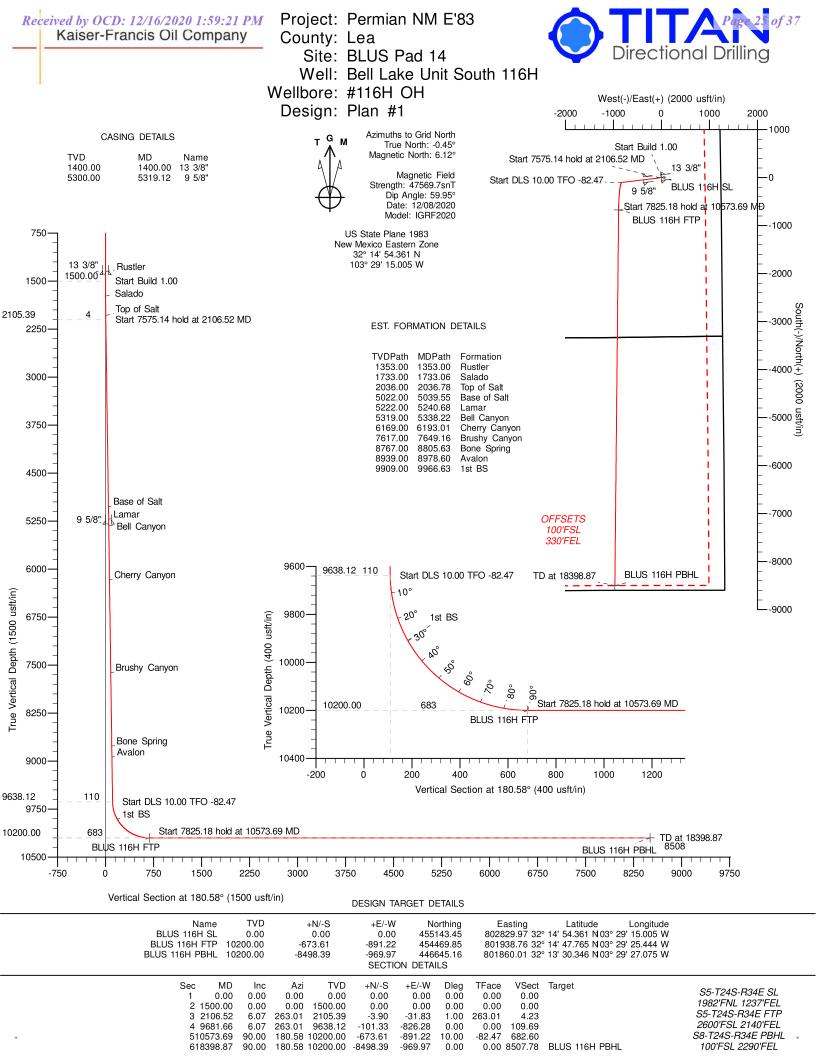
All responders must have training in the detection of  $H_2S$  measures for protection against the gas, equipment used for protection and emergency response. Weekly drills by all crews will be conducted and recorded in the IADC daily log. Additionally, responders must be equipped with  $H_2S$  monitors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



Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83 BLUS Pad 14 Site:

Well: Bell Lake Unit South 116H

#116H OH Wellbore: Design: Plan #1

Local Co-ordinate Reference:

Well Bell Lake Unit South 116H est>GL+KB @ 3606.00usft (Planning) **TVD Reference:** est>GL+KB @ 3606.00usft (Planning) MD Reference:

North Reference: **Survey Calculation Method:** Minimum Curvature

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

Site BLUS Pad 14, Centered on 116H

Northing: 455,143.45 usft Site Position: Latitude: 32° 14' 54.361 N 103° 29' 15.005 W 802,829.97 usft From: Мар Easting: Longitude: 0.00 usft **Position Uncertainty:** Slot Radius: 13-3/16 " **Grid Convergence:** 0.45°

Well Bell Lake Unit South 116H **Well Position** +N/-S 0.00 usft Northing: 455,143.45 usft Latitude: 32° 14' 54.361 N +E/-W 0.00 usft Easting: 802,829.97 usft Longitude: 103° 29' 15.005 W 0.00 usft Wellhead Elevation: usft **Ground Level:** 3,581.20 usft **Position Uncertainty** 

#116H OH Wellbore Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) IGRF2020 12/08/20 6.57 59.95 47,569.73576082

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 0.00 180.58

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	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									

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 14

Well: Bell Lake Unit South 116H

Wellbore: #116H OH
Design: Plan #1

Local Co-ordinate Reference:

**Survey Calculation Method:** 

TVD Reference:
MD Reference:
North Reference:

Database:

Well Bell Lake Unit South 116H est>GL+KB @ 3606.00usft (Planning) est>GL+KB @ 3606.00usft (Planning)

Grid

Minimum Curvature

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)
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"	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
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	263.01	1,599.99	-0.11	-0.87	0.11	1.00	1.00	0.00
1,700.00	2.00	263.01	1,699.96	-0.42	-3.46	0.46	1.00	1.00	0.00
1,733.06	2.33	263.01	1,733.00	-0.58	-4.70	0.62	1.00	1.00	0.00
Salado									
1,800.00	3.00	263.01	1,799.86	-0.96	-7.79	1.03	1.00	1.00	0.00
1,900.00	4.00	263.01	1,899.68	-1.70	-13.85	1.84	1.00	1.00	0.00
2,000.00	5.00	263.01	1,999.37	-2.65	-21.64	2.87	1.00	1.00	0.00
2,036.78	5.37	263.01	2,036.00	-3.06	-24.94	3.31	1.00	1.00	0.00
Top of Salt									
2,106.52	6.07	263.01	2,105.39	-3.90	-31.83	4.23	1.00	1.00	0.00
2,200.00	6.07	263.01	2,198.34	-5.11	-41.64	5.53	0.00	0.00	0.00
2,300.00	6.07	263.01	2,297.78	-6.39	-52.13	6.92	0.00	0.00	0.00
2,400.00	6.07	263.01	2,397.23	-7.68	-62.61	8.31	0.00	0.00	0.00
2,500.00	6.07	263.01	2,496.67	-8.96	-73.10	9.70	0.00	0.00	0.00
2,600.00	6.07	263.01	2,596.11	-10.25	-83.59	11.10	0.00	0.00	0.00
2,700.00	6.07	263.01	2,695.55	-11.54	-94.08	12.49	0.00	0.00	0.00
2,800.00	6.07	263.01	2,794.99	-12.82	-104.56	13.88	0.00	0.00	0.00
2,900.00	6.07	263.01	2,894.43	-14.11	-115.05	15.27	0.00	0.00	0.00
3,000.00	6.07	263.01	2,993.87	-15.40	-125.54	16.67	0.00	0.00	0.00
3,100.00	6.07	263.01	3,093.31	-16.68	-136.03	18.06	0.00	0.00	0.00
3,200.00	6.07	263.01	3,192.75	-17.97	-146.51	19.45	0.00	0.00	0.00
3,300.00	6.07	263.01	3,292.19	-19.25	-157.00	20.84	0.00	0.00	0.00
3,400.00	6.07	263.01	3,391.63	-20.54	-167.49	22.23	0.00	0.00	0.00
3,500.00	6.07	263.01	3,491.07	-21.83	-177.98	23.63	0.00	0.00	0.00
3,600.00	6.07	263.01	3,590.51	-23.11	-188.46	25.02	0.00	0.00	0.00
3,700.00	6.07	263.01	3,689.95	-24.40	-198.95	26.41	0.00	0.00	0.00
3,800.00	6.07	263.01	3,789.39	-25.68	-209.44	27.80	0.00	0.00	0.00
3,900.00	6.07	263.01	3,888.83	-26.97	-219.93	29.20	0.00	0.00	0.00
4,000.00	6.07	263.01	3,988.27	-28.26	-230.41	30.59	0.00	0.00	0.00
4,100.00	6.07	263.01	4,087.71	-29.54	-240.90	31.98	0.00	0.00	0.00
4,200.00	6.07	263.01	4,187.15	-30.83	-251.39	33.37	0.00	0.00	0.00
4,300.00	6.07	263.01	4,286.59	-32.12	-261.88	34.76	0.00	0.00	0.00
4,400.00	6.07	263.01	4,386.03	-33.40	-272.36	36.16	0.00	0.00	0.00
4,500.00	6.07	263.01	4,485.47	-34.69	-282.85	37.55	0.00	0.00	0.00
4,600.00	6.07	263.01	4,584.91	-35.97	-293.34	38.94	0.00	0.00	0.00
4,700.00	6.07	263.01	4,684.35	-37.26	-303.83	40.33	0.00	0.00	0.00
4,800.00	6.07	263.01	4,783.79	-38.55	-314.31	41.73	0.00	0.00	0.00
4,900.00	6.07	263.01	4,883.23	-39.83	-324.80	43.12	0.00	0.00	0.00
5,000.00	6.07	263.01	4,982.67	-41.12	-335.29	44.51	0.00	0.00	0.00
	6.07	263.01	5,022.00	-41.63	-339.44	45.06	0.00	0.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 14

Well: Bell Lake Unit South 116H

Wellbore: #116H OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Database:

**Survey Calculation Method:** 

Well Bell Lake Unit South 116H est>GL+KB @ 3606.00usft (Planning) est>GL+KB @ 3606.00usft (Planning)

Grid

Minimum Curvature

ng		1 77 1			Database.			LBW OK 14		
nned Si	urvey									
	easured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	5,100.00	6.07	263.01	5,082.11	-42.40	-345.78	45.90	0.00	0.00	0.00
	5,200.00	6.07	263.01	5,181.55	-43.69	-356.26	47.29	0.00	0.00	0.00
	5,240.68	6.07	263.01	5,222.00	-44.21	-360.53	47.86	0.00	0.00	0.00
1	.amar	0.07	200.01	0,222.00	11.21	000.00	17.00	0.00	0.00	0.00
_	5,300.00	6.07	263.01	5,280.99	-44.98	-366.75	48.69	0.00	0.00	0.00
	5,319.12	6.07	263.01	5,300.00	-45.22	-368.75	48.95	0.00	0.00	0.00
9	5/8"									
	5,338.22	6.07	263.01	5,319.00	-45.47	-370.76	49.22	0.00	0.00	0.00
В	Bell Canyon									
	5,400.00	6.07	263.01	5,380.43	-46.26	-377.24	50.08	0.00	0.00	0.00
	5,500.00	6.07	263.01	5,479.87	-47.55	-387.73	51.47	0.00	0.00	0.00
	5,600.00	6.07	263.01	5,579.31	-48.83	-398.21	52.86	0.00	0.00	0.00
	5,700.00	6.07	263.01	5,678.75	-50.12	-408.70	54.26	0.00	0.00	0.00
	5,800.00	6.07	263.01	5,778.19	-51.41	-419.19	55.65	0.00	0.00	0.00
	5,900.00	6.07	263.01	5,877.63	-52.69	-429.68	57.04	0.00	0.00	0.00
	6,000.00	6.07	263.01	5,977.07	-53.98	-440.16	58.43	0.00	0.00	0.00
	6,100.00	6.07	263.01	6,076.51	-55.27	-450.65	59.82	0.00	0.00	0.00
	6.193.01	6.07	263.01	6,169.00	-56.46	-460.40	61.12	0.00	0.00	0.00
С	herry Cany			•						
	, ,									
	6,200.00	6.07	263.01	6,175.95	-56.55	-461.14	61.22	0.00	0.00	0.00
	6,300.00	6.07	263.01	6,275.39	-57.84	-471.63	62.61	0.00	0.00	0.00
	6,400.00	6.07	263.01	6,374.83	-59.12	-482.11	64.00	0.00	0.00	0.00
	6,500.00	6.07	263.01	6,474.27	-60.41	-492.60	65.39	0.00	0.00	0.00
	6,600.00	6.07	263.01	6,573.71	-61.70	-503.09	66.79	0.00	0.00	0.00
	6,700.00	6.07	263.01	6,673.15	-62.98	-513.58	68.18	0.00	0.00	0.00
	6,800.00	6.07	263.01	6,772.60	-64.27	-524.06	69.57	0.00	0.00	0.00
	6,900.00	6.07	263.01	6,872.04	-65.55	-534.55	70.96	0.00	0.00	0.00
	7,000.00	6.07	263.01	6,971.48	-66.84	-545.04	72.35	0.00	0.00	0.00
	7,100.00	6.07	263.01	7,070.92	-68.13	-555.53	73.75	0.00	0.00	0.00
	7,200.00	6.07	263.01	7,170.36	-69.41	-566.01	75.14	0.00	0.00	0.00
	7,300.00	6.07	263.01	7,269.80	-70.70	-576.50	76.53	0.00	0.00	0.00
	7,400.00	6.07	263.01	7,369.24	-71.99	-586.99	77.92	0.00	0.00	0.00
	7,500.00	6.07	263.01	7,468.68	-73.27	-597.48	79.32	0.00	0.00	0.00
	7,600.00	6.07	263.01	7,568.12	-74.56	-607.96	80.71	0.00	0.00	0.00
	7,649.16	6.07	263.01	7,617.00	-75.19	-613.12	81.39	0.00	0.00	0.00
В	Brushy Cany			.,55			555	5,53	5.50	3.33
	7,700.00	6.07	263.01	7,667.56	-75.84	-618.45	82.10	0.00	0.00	0.00
	7,800.00	6.07	263.01	7,767.00	-77.13	-628.94	83.49	0.00	0.00	0.00
	7,900.00	6.07	263.01	7,866.44	-78.42	-639.43	84.88	0.00	0.00	0.00
	8,000.00	6.07	263.01	7,965.88	-79.70	-649.91	86.28	0.00	0.00	0.00
	8,100.00	6.07	263.01	8,065.32	-80.99	-660.40	87.67	0.00	0.00	0.00
	8,200.00	6.07	263.01	8,164.76	-82.27	-670.89	89.06	0.00	0.00	0.00
	8,300.00	6.07	263.01	8,264.20	-83.56	-681.38	90.45	0.00	0.00	0.00
	8,400.00	6.07	263.01	8,363.64	-84.85	-691.86	91.85	0.00	0.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 14

Well: Bell Lake Unit South 116H

Wellbore: #116H OH
Design: Plan #1

Local Co-ordinate Reference:

**Survey Calculation Method:** 

TVD Reference:
MD Reference:
North Reference:

Database:

est>GL+KB @ 3606.00usft (Planning) est>GL+KB @ 3606.00usft (Planning)

Well Bell Lake Unit South 116H

Grid

Minimum Curvature

aigii.		· // ·			Database.			EDIVIOR 1-1		
nned Surv	ey									
De	sured pth sft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,	500.00	6.07	263.01	8,463.08	-86.13	-702.35	93.24	0.00	0.00	0.00
8,	600.00	6.07	263.01	8,562.52	-87.42	-712.84	94.63	0.00	0.00	0.00
8,	700.00	6.07	263.01	8,661.96	-88.71	-723.33	96.02	0.00	0.00	0.00
8,	800.00	6.07	263.01	8,761.40	-89.99	-733.81	97.41	0.00	0.00	0.00
8,	805.63	6.07	263.01	8,767.00	-90.06	-734.40	97.49	0.00	0.00	0.00
Bon	e Spring									
8,	900.00	6.07	263.01	8,860.84	-91.28	-744.30	98.81	0.00	0.00	0.00
8,	978.60	6.07	263.01	8,939.00	-92.29	-752.54	99.90	0.00	0.00	0.00
Ava	lon									
9,	00.00	6.07	263.01	8,960.28	-92.56	-754.79	100.20	0.00	0.00	0.00
	100.00	6.07	263.01	9,059.72	-93.85	-765.28	101.59	0.00	0.00	0.00
	200.00	6.07	263.01	9,159.16	-95.14	-775.76	102.98	0.00	0.00	0.00
9,	300.00	6.07	263.01	9,258.60	-96.42	-786.25	104.38	0.00	0.00	0.00
9,	400.00	6.07	263.01	9,358.04	-97.71	-796.74	105.77	0.00	0.00	0.00
9,	500.00	6.07	263.01	9,457.48	-98.99	-807.23	107.16	0.00	0.00	0.00
9,	600.00	6.07	263.01	9,556.92	-100.28	-817.71	108.55	0.00	0.00	0.00
9,	681.66	6.07	263.01	9,638.12	-101.33	-826.28	109.69	0.00	0.00	0.00
9,	700.00	6.56	246.89	9,656.35	-101.86	-828.20	110.24	10.00	2.71	-87.90
9,	750.00	9.70	218.59	9,705.86	-106.28	-833.46	114.71	10.00	6.29	-56.58
9,	800.00	13.97	205.63	9,754.80	-115.02	-838.70	123.50	10.00	8.53	-25.93
9,	850.00	18.60	198.82	9,802.78	-128.01	-843.89	136.55	10.00	9.26	-13.62
9,	900.00	23.38	194.68	9,849.46	-145.17	-848.98	153.75	10.00	9.56	-8.28
9,	950.00	28.23	191.89	9,894.46	-166.35	-853.93	174.98	10.00	9.70	-5.58
	966.63	29.85	191.15	9,909.00	-174.26	-855.54	182.91	10.00	9.76	-4.45
1st		22.42	400.07	0.027.45	404.20	-858.71	200.07	40.00	0.00	2.05
	000.00	33.12 38.04	189.87 188.31	9,937.45 9,978.11	-191.39 -220.11	-863.28	200.07 228.84	10.00 10.00	9.80 9.84	-3.85 -3.11
·	100.00	42.97	187.07	10,016.11	-252.28	-867.61	261.05	10.00	9.87	-3.11 -2.49
	150.00	47.92	186.03	10,051.18	-287.67	-871.66	296.48	10.00	9.89	-2.49
10,	200.00	52.87	185.15	10,083.05	-326.00	-875.40	334.84	10.00	9.91	-1.77
10,	250.00	57.83	184.38	10,111.46	-366.98	-878.81	375.85	10.00	9.92	-1.55
	300.00	62.79	183.68	10,136.22	-410.29	-881.85	419.20	10.00	9.93	-1.39
10,	350.00	67.76	183.04	10,157.13	-455.62	-884.51	464.55	10.00	9.93	-1.27
10,	400.00	72.73	182.45	10,174.02	-502.61	-886.76	511.56	10.00	9.94	-1.18
10,	450.00	77.70	181.89	10,186.77	-550.90	-888.59	559.87	10.00	9.94	-1.12
10,	500.00	82.67	181.35	10,195.29	-600.13	-889.99	609.11	10.00	9.94	-1.08
10,	550.00	87.64	180.82	10,199.51	-649.93	-890.93	658.92	10.00	9.94	-1.06
10,	573.69	90.00	180.58	10,200.00	-673.61	-891.22	682.60	10.00	9.94	-1.05
10,	600.00	90.00	180.58	10,200.00	-699.92	-891.49	708.91	0.00	0.00	0.00
	700.00	90.00	180.58	10,200.00	-799.92	-892.49	808.91	0.00	0.00	0.00
	800.00	90.00	180.58	10,200.00	-899.91	-893.50	908.91	0.00	0.00	0.00
	900.00	90.00	180.58	10,200.00	-999.91	-894.50	1,008.91	0.00	0.00	0.00
	00.000	90.00	180.58	10,200.00	-1,099.90	-895.51	1,108.91	0.00	0.00	0.00
11,	100.00	90.00	180.58	10,200.00	-1,199.90	-896.52	1,208.91	0.00	0.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 14

Well: Bell Lake Unit South 116H

Wellbore: #116H OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Well Bell Lake Unit South 116H est>GL+KB @ 3606.00usft (Planning) est>GL+KB @ 3606.00usft (Planning)

Grid

Survey Calculation Method: Minimum Curvature

Database: EDM 5k-14

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
11,200.00	90.00	180.58	10,200.00	-1,299.89	-897.52	1,308.91	0.00	0.00	0.00
11,300.00	90.00	180.58	10,200.00	-1,399.89	-898.53	1,408.91	0.00	0.00	0.00
11,400.00	90.00	180.58	10,200.00	-1,499.88	-899.54	1,508.91	0.00	0.00	0.00
11,500.00	90.00	180.58	10,200.00	-1,599.88	-900.54	1,608.91	0.00	0.00	0.00
11,600.00	90.00	180.58	10,200.00	-1,699.87	-901.55	1,708.91	0.00	0.00	0.00
11,700.00	90.00	180.58	10,200.00	-1,799.87	-902.56	1,808.91	0.00	0.00	0.00
11,800.00	90.00	180.58	10,200.00	-1,899.86	-903.56	1,908.91	0.00	0.00	0.00
11,900.00	90.00	180.58	10,200.00	-1,999.86	-904.57	2,008.91	0.00	0.00	0.00
12,000.00	90.00	180.58	10,200.00	-2,099.85	-905.57	2,108.91	0.00	0.00	0.00
12,100.00	90.00	180.58	10,200.00	-2,199.85	-906.58	2,208.91	0.00	0.00	0.00
12,200.00	90.00	180.58	10,200.00	-2,299.84	-907.59	2,308.91	0.00	0.00	0.00
12,300.00	90.00	180.58	10,200.00	-2,399.84	-908.59	2,408.91	0.00	0.00	0.00
12,400.00	90.00	180.58	10,200.00	-2,499.83	-909.60	2,508.91	0.00	0.00	0.00
12,500.00	90.00	180.58	10,200.00	-2,599.82	-910.61	2,608.91	0.00	0.00	0.00
12,600.00	90.00	180.58	10,200.00	-2,699.82	-911.61	2,708.91	0.00	0.00	0.00
12,700.00	90.00	180.58	10,200.00	-2,799.81	-912.62	2,808.91	0.00	0.00	0.00
12,800.00	90.00	180.58	10,200.00	-2,899.81	-913.62	2,908.91	0.00	0.00	0.00
12,900.00	90.00	180.58	10,200.00	-2,999.80	-914.63	3,008.91	0.00	0.00	0.00
13,000.00	90.00	180.58	10,200.00	-3,099.80	-915.64	3,108.91	0.00	0.00	0.00
13,100.00	90.00	180.58	10,200.00	-3,199.79	-916.64	3,208.91	0.00	0.00	0.00
13,200.00	90.00	180.58	10,200.00	-3,299.79	-917.65	3,308.91	0.00	0.00	0.00
13,300.00	90.00	180.58	10,200.00	-3,399.78	-918.66	3,408.91	0.00	0.00	0.00
13,400.00	90.00	180.58	10,200.00	-3,499.78	-919.66	3,508.91	0.00	0.00	0.00
13,500.00	90.00	180.58	10,200.00	-3,599.77	-920.67	3,608.91	0.00	0.00	0.00
13,600.00	90.00	180.58	10,200.00	-3,699.77	-921.68	3,708.91	0.00	0.00	0.00
13,700.00	90.00	180.58	10,200.00	-3,799.76	-922.68	3,808.91	0.00	0.00	0.00
13,800.00	90.00	180.58	10,200.00	-3,899.76	-923.69	3,908.91	0.00	0.00	0.00
13,900.00	90.00	180.58	10,200.00	-3,999.75	-924.69	4,008.91	0.00	0.00	0.00
14,000.00	90.00	180.58	10,200.00	-4,099.75	-925.70	4,108.91	0.00	0.00	0.00
14,100.00	90.00	180.58	10,200.00	-4,199.74	-926.71	4,208.91	0.00	0.00	0.00
14,200.00	90.00	180.58	10,200.00	-4,299.74	-927.71	4,308.91	0.00	0.00	0.00
14,300.00	90.00	180.58	10,200.00	-4,399.73	-928.72	4,408.91	0.00	0.00	0.00
14,400.00	90.00	180.58	10,200.00	-4,499.73	-929.73	4,508.91	0.00	0.00	0.00
14,500.00	90.00	180.58	10,200.00	-4,599.72	-930.73	4,608.91	0.00	0.00	0.00
14,600.00	90.00	180.58	10,200.00	-4,699.72	-931.74	4,708.91	0.00	0.00	0.00
14,700.00	90.00	180.58	10,200.00	-4,799.71	-932.74	4,808.91	0.00	0.00	0.00
14,800.00	90.00	180.58	10,200.00	-4,899.71	-933.75	4,908.91	0.00	0.00	0.00
14,900.00	90.00	180.58	10,200.00	-4,999.70	-934.76	5,008.91	0.00	0.00	0.00
15,000.00	90.00	180.58	10,200.00	-5,099.70	-935.76	5,108.91	0.00	0.00	0.00
15,100.00	90.00	180.58	10,200.00	-5,199.69	-936.77	5,208.91	0.00	0.00	0.00
15,200.00	90.00	180.58	10,200.00	-5,299.69	-937.78	5,308.91	0.00	0.00	0.00
15,300.00	90.00	180.58	10,200.00	-5,399.68	-938.78	5,408.91	0.00	0.00	0.00
15,400.00	90.00	180.58	10,200.00	-5,499.68	-939.79	5,508.91	0.00	0.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 14

Well: Bell Lake Unit South 116H

Wellbore: #116H OH
Design: Plan #1

Local Co-ordinate Reference:

**Survey Calculation Method:** 

TVD Reference:
MD Reference:

North Reference: G

Database:

Well Bell Lake Unit South 116H est>GL+KB @ 3606.00usft (Planning) est>GL+KB @ 3606.00usft (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)
15,500.00	90.00	180.58	10,200.00	-5,599.67	-940.80	5,608.91	0.00	0.00	0.00
15,600.00	90.00	180.58	10,200.00	-5,699.67	-941.80	5,708.91	0.00	0.00	0.00
15,700.00	90.00	180.58	10,200.00	-5,799.66	-942.81	5,808.91	0.00	0.00	0.00
15,800.00	90.00	180.58	10,200.00	-5,899.66	-943.81	5,908.91	0.00	0.00	0.00
15,900.00	90.00	180.58	10,200.00	-5,999.65	-944.82	6,008.91	0.00	0.00	0.00
16,000.00	90.00	180.58	10,200.00	-6,099.65	-945.83	6,108.91	0.00	0.00	0.00
16,100.00	90.00	180.58	10,200.00	-6,199.64	-946.83	6,208.91	0.00	0.00	0.00
16,200.00	90.00	180.58	10,200.00	-6,299.64	-947.84	6,308.91	0.00	0.00	0.00
16,300.00	90.00	180.58	10,200.00	-6,399.63	-948.85	6,408.91	0.00	0.00	0.00
16,400.00	90.00	180.58	10,200.00	-6,499.63	-949.85	6,508.91	0.00	0.00	0.00
16,500.00	90.00	180.58	10,200.00	-6,599.62	-950.86	6,608.91	0.00	0.00	0.00
16,600.00	90.00	180.58	10,200.00	-6,699.62	-951.86	6,708.91	0.00	0.00	0.00
16.700.00	90.00	180.58	10,200.00	-6,799.61	-952.87	6,808.91	0.00	0.00	0.00
16,800.00	90.00	180.58	10,200.00	-6,899.61	-953.88	6,908.91	0.00	0.00	0.00
16,900.00	90.00	180.58	10,200.00	-6,999.60	-954.88	7,008.91	0.00	0.00	0.00
17.000.00	90.00	180.58	10,200.00	-7.099.60	-955.89	7.108.91	0.00	0.00	0.00
17,100.00	90.00	180.58	10,200.00	-7,199.59	-956.90	7,208.91	0.00	0.00	0.00
17,200.00	90.00	180.58	10,200.00	-7,299.59	-957.90	7,308.91	0.00	0.00	0.00
17,300.00	90.00	180.58	10,200.00	-7,399.58	-958.91	7,408.91	0.00	0.00	0.00
17,400.00	90.00	180.58	10,200.00	-7,499.58	-959.92	7,508.91	0.00	0.00	0.00
17,500.00	90.00	180.58	10,200.00	-7,599.57	-960.92	7,608.91	0.00	0.00	0.00
17,600.00	90.00	180.58	10,200.00	-7,699.57	-961.93	7,708.91	0.00	0.00	0.00
17,700.00	90.00	180.58	10,200.00	-7,799.56	-962.93	7,808.91	0.00	0.00	0.00
17,800.00	90.00	180.58	10,200.00	-7,899.56	-963.94	7.908.91	0.00	0.00	0.00
17,900.00	90.00	180.58	10,200.00	-7,999.55	-964.95	8,008.91	0.00	0.00	0.00
18,000.00	90.00	180.58	10,200.00	-8,099.55	-965.95	8,108.91	0.00	0.00	0.00
18,100.00	90.00	180.58	10,200.00	-8,199.54	-966.96	8,208.91	0.00	0.00	0.00
18,200.00	90.00	180.58	10,200.00	-8,299.54	-967.97	8,308.91	0.00	0.00	0.00
18,300.00	90.00	180.58	10,200.00	-8,399.53	-968.97	8,408.91	0.00	0.00	0.00
18,398.87	90.00	180.58	10,200.00	-8,498.39	-969.97	8,507.78	0.00	0.00	0.00

Casing Points							
	Measured Depth (usft)	Vertical Depth (usft)		Name	Casing Diameter (")	Hole Diameter (")	
	1,400.00	1,400.00	13 3/8"	Nume	13-3/8	17-1/2	
	5,319.12	5,300.00	9 5/8"		9-5/8	12-1/4	

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 14

Well: Bell Lake Unit South 116H

Wellbore: #116H OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Well Bell Lake Unit South 116H est>GL+KB @ 3606.00usft (Planning) est>GL+KB @ 3606.00usft (Planning)

Grid

Survey Calculation Method: Minimum Curvature

Database: EDM 5k-14

Formations								
	Measured Depth (usft)	Vertical Depth (usft)		Name	Lithology	Dip (°)	Dip Direction (°)	
	1,353.00	1,353.00	Rustler					
	1,733.06	1,733.00	Salado					
	2,036.78	2,036.00	Top of Salt					
	5,039.55	5,022.00	Base of Salt					
	5,240.68	5,222.00	Lamar					
	5,338.22	5,319.00	Bell Canyon					
	6,193.01	6,169.00	Cherry Canyon					
	7,649.16	7,617.00	Brushy Canyon					
	8,805.63	8,767.00	Bone Spring					
	8,978.60	8,939.00	Avalon					
	9,966.63	9,909.00	1st BS					

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT SUPO Data Report

**Operator Name: KAISER FRANCIS OIL COMPANY** 

Well Name: BELL LAKE UNIT SOUTH

Well Type: OIL WELL

APD ID: 10400059082

Submission Date: 07/16/2020

Well Number: 116H

Well Work Type: Drill

Highlighted data reflects the most

recent changes

**Show Final Text** 

# **Section 1 - Existing Roads**

Will existing roads be used? YES

**Existing Road Map:** 

BLUS \_116H\_Existing\_Roads\_20200715133326.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

**Existing Road Improvement Description:** 

**Existing Road Improvement Attachment:** 

# Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

BLUS\_116H\_Access\_Road\_20200715133343.pdf

New road type: RESOURCE

**Length: 3170** 

Feet

Width (ft.): 30

Max slope (%): 2

Max grade (%): 2

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 15

New road access erosion control: Road construction requirements and regular maintenance would alleviate potential impacts to the access road from water erosion damage.

New road access plan or profile prepared? N

New road access plan attachment:

Access road engineering design? N

Access road engineering design attachment:

Well Name: BELL LAKE UNIT SOUTH Well Number: 116H

Turnout? N

Access surfacing type: OTHER

Access topsoil source: BOTH

Access surfacing type description: Native caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description: Material will be obtained from BLM caliche pit in SWSW Section 22-T24S-R34E or

NENE Section 20-T23S-R33E

**Onsite topsoil removal process:** The top 6 inches of topsoil is pushed off and stockpiled along the side of the location. An approximate 160' X 160' area is used within the proposed well site to remove caliche. Subsoil is removed and stockpiled within the pad site to build the location and road. Then subsoil is pushed back in the hole and caliche is spread accordingly across proposed access road.

Access other construction information:

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

# **Drainage Control**

New road drainage crossing: OTHER

**Drainage Control comments:** Proposed access road will be crowned and ditched and constructed of 6 inch rolled and compacted caliche. Water will be diverted where necessary to avoid ponding, maintain good drainage, and to be consistentwith local drainage patterns.

Road Drainage Control Structures (DCS) description: The ditches will be 3' wide with 3:1 slopes

Road Drainage Control Structures (DCS) attachment:

# **Access Additional Attachments**

# **Section 3 - Location of Existing Wells**

Existing Wells Map? YES

Attach Well map:

BLUS\_116H\_1\_Mile\_Map\_20200715133417.pdf BLUS\_116H\_1\_Mile\_Data\_20200715133417.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 west side of pad. Plan for initial wells: 2-1000 bbl water tanks and 5-1000 bbl oil tanks, a temporary 6X20 horizontal 3-phase sep, a 48" X 10' 3-phase sep, a 8 X 20' heater treater and a 48"X 10' 2-phase sep

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District.II
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District.III
1000 Rio Brazos Road, Azrec, 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

UL or lot no.

Township

Range

Section

# 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

County

# WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	<sup>2</sup> Pool Code	<sup>3</sup> Pool 1	Name		
30-025-48175	98264	BELL LAKE; BONE SPRING, SOUTH			
1 Property Code	<sup>5</sup> Propert	<sup>6</sup> Well Number			
316706	BELL LAKE I	UNIT SOUTH	116H		
OGRID No.	<sup>8</sup> Operato	<sup>9</sup> Elevation			
12361	KAISER-FRAN	3581.2			
	16 Curfood	Location			

\*\* Surface Location

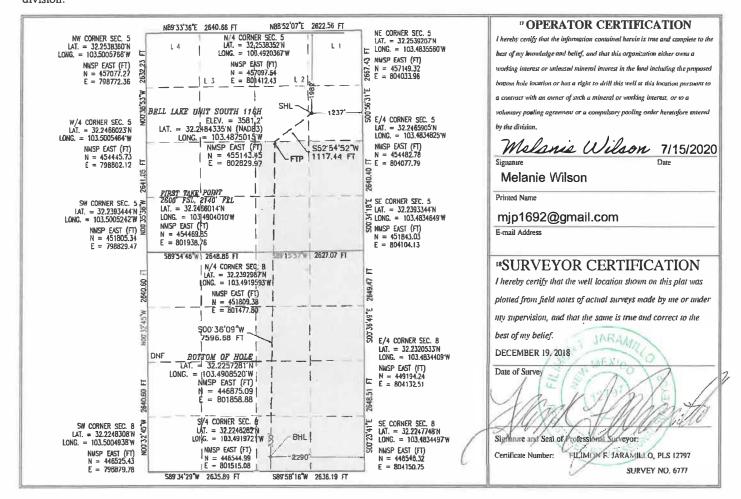
Lot Idn Feet from the North/South line

Feet from the

East/West line

Н	5	24 S	34 E		1982	NORTH	1237	EAST	LEA
			"B	ottom H	ole Location	If Different Fr	om Surface		
UL or lot no.	Section	Townshi	p Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	8	24 S	34 E		330	SOUTH	2290	EAST	LEA
12 Dedicated Acre	s <sup>13</sup> Joint	or Infill	14 Consolidation	n Code			<sup>15</sup> 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.



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# 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

Date: 01/26/2018	
☑ 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 South 116H		5-24S-34E		2000	0 30-	025-48175
Bell Lake Unit South 216H		5-24S-34E		2000	0	
Bell Lake Unit South 217H		5-24S-34E		2000	0	
Bell Lake Unit South 316H		5-24S-34E		2000	0	
Bell Lake Unit South 317H		5-24S-34E		2000	0	
Bell Lake Unit South 416H		5-24S-34E		2000	0	
Bell Lake Unit South 417H		5-24S-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\_, Twn.\_\_19S\_, 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

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# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 12325

## **CONDITIONS OF APPROVAL**

Operator:			OGRID:	Action Number:	Action Type:
KAISER-FRANCIS OIL CO	P.O. Box 21468	Tulsa, OK74121	12361	12325	FORM 3160-3

OCD	Condition
Reviewer	
pkautz	Will require a directional survey with the C-104
	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
	Oil base muds are not to be used until freshwater zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.