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] 304H 2. Name of Operator 9. API Well No. 30-025-48203 [12361] KAISER FRANCIS OIL COMPANY 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory [98264] 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 SENW / 2420 FNL / 2106 FWL / LAT 32.2472033 / LONG -103.5278014 At proposed prod. zone SWSE / 100 FSL / 2290 FEL / LAT 32.2251115 / LONG -103.5249189 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* LEA NM 20 miles 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 220 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, 20 feet 11550 feet / 19709 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 3629 feet 10/01/2020 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) STORMI DAVIS / Ph: (918) 491-0000 07/15/2020 Title Regulatory Analyst Approved by (Signature) Name (Printed/Typed) Date (Electronic Submission) 11/23/2020 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 12/08/2020





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*(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.

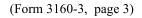
Additional Operator Remarks

Location of Well

0. SHL: SENW / 2420 FNL / 2106 FWL / TWSP: 24S / RANGE: 33E / SECTION: 1 / LAT: 32.2472033 / LONG: -103.5278014 (TVD: 0 feet, MD: 0 feet) PPP: NWNE / 0 FNL / 2270 FEL / TWSP: 24S / RANGE: 33E / SECTION: 12 / LAT: 32.2394 / LONG: -103.5249 (TVD: 11550 feet, MD: 14525 feet) PPP: NWSE / 2600 FSL / 2260 FEL / TWSP: 24S / RANGE: 33E / SECTION: 1 / LAT: 32.2465064 / LONG: -103.5248312 (TVD: 11550 feet, MD: 11925 feet) BHL: SWSE / 100 FSL / 2290 FEL / TWSP: 24S / RANGE: 33E / SECTION: 12 / LAT: 32.2251115 / LONG: -103.5249189 (TVD: 11550 feet, MD: 19709 feet)

BLM Point of Contact

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



Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.





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

Application Data Report

APD ID: 10400058965

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH

Well Type: OIL WELL

Submission Date: 07/15/2020

Well Number: 304H

Highlighted data reflects the most recent changes

Show Final Text

Well Work Type: Drill

Section 1 - General

APD ID:

10400058965

Tie to previous NOS? N

Submission Date: 07/15/2020

BLM Office: CARLSBAD

User: Stormi Davis

Title: Regulatory Analyst

Federal/Indian APD: FED

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

Lease number: 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

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: 304H

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: 304H

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: 1

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: 20 FT

Distance to lease line: 220 FT

Reservoir well spacing assigned acres Measurement: 480 Acres

Well plat:

BLUS 304H Pymt 20200713165829.pdf

BELL_LAKE_UNIT_SOUTH_304H_C102_20200713175927.pdf

Well work start Date: 10/01/2020

Duration: 40 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 Vertical Datum: NAVD88

Survey number: 6858 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?
SHL Leg #1	242 0	FNL	210 6	FW L	24S	33E	1	Aliquot SENW	32.24720 33	- 103.5278 014	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	362 9	0	0	N
KOP Leg #1	242 0	FNL	210 6	FW L	24S	33E	1	Aliquot SENW	32.24720 33	- 103.5278 014	LEA		NEW MEXI CO	S	STATE	- 733 1	110 05	109 60	N

Well Name: BELL LAKE UNIT SOUTH Well Number: 304H

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	260 0	FSL	226 0	FEL	24S	33E	1	Aliquot NWSE	32.24650 64	103.5248	LEA	NEW MEXI		S	STATE	- 792	119 25	115 50	Υ
#1-1										312		СО	СО			1			
PPP Leg	0	FNL	227 0	FEL	24S	33E	12	Aliquot NWNE	32.2394	- 103.5249	LEA	NEW MEXI	—	F	NMLC0 063798	- 792	145 25	115 50	Υ
#1-2												СО	CO		\ A	1			
EXIT Leg #1	100	FSL	229 0	FEL	24S	33E	12	Aliquot SWSE	32.22511 15	- 103.5249 189	LEA	NEW MEXI CO		L	NMLC0 063798	- 792 1	197 09	115 50	Υ
BHL Leg #1	100	FSL	229 0	FEL	24S	33E	12	Aliquot SWSE	32.22511 15	- 103.5249 189	LEA		NEW MEXI CO	F	NMLC0 063798	- 792 1	197 09	115 50	Υ



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

Mon, Jul 13, 2020 at 4:55 PM



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: 26PEC8UC Agency Tracking ID: 76015908032

Transaction Type: Sale

Transaction Date: 07/13/2020 06:55:33 PM EDT

Account Holder Name: George B Kaiser

Transaction Amount: \$10,230.00

Card Type: Visa

Card Number: ********0061

Company: Kaiser-Francis Oil Company

APD IDs: 10400058965

Lease Numbers: NMLC0063798

Well Numbers: 304H

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: 10400058965

Submission Date: 07/15/2020

Highlighted data reflects the most recent changes

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

Well Number: 304H

Show Final Text

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

ormation			True Vertical	Measured			Producin
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formatio
784578		3629	0	0	OTHER : Surface	NONE	N
784579	RUSTLER	2276	1353	1353	SANDSTONE	NONE	N
784580	SALADO	1896	1733	1733	SALT	NONE	N
784581	TOP SALT	1593	2036	2036	SALT	NONE	N
784582	BASE OF SALT	-1393	5022	5022	SALT	NONE	N
784583	LAMAR	-1593	5222	5222	SANDSTONE	NATURAL GAS, OIL	N
784584	BELL CANYON	-1690	5319	5319	SANDSTONE	NATURAL GAS, OIL	N
784585	CHERRY CANYON	-2540	6169	6169	SANDSTONE	NATURAL GAS, OIL	N
784586	BRUSHY CANYON	-3988	7617	7617	SANDSTONE	NATURAL GAS, OIL	N
784587	BONE SPRING	-5138	8767	8767	LIMESTONE	NATURAL GAS, OIL	N
784588	AVALON SAND	-5310	8939	8939	SANDSTONE	NATURAL GAS, OIL	N
784589	BONE SPRING 1ST	-6280	9909	9909	SANDSTONE	NATURAL GAS, OIL	N
784596	BONE SPRING 2ND	-6848	10477	10477	SANDSTONE	NATURAL GAS, OIL	N
784600	BONE SPRING LIME	-7315	10944	10944	LIMESTONE	NATURAL GAS, OIL	N
784601	BONE SPRING 3RD	-7775	11404	11404	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Well Name: BELL LAKE UNIT SOUTH Well Number: 304H

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_304H_Choke_Diagram_20200713140533.pdf

BOP Diagram Attachment:

BLUS 304H Wellhead 20200713140934.pdf

BLUS_304H_BOP_20200713141257.pdf

BLUS 304H Flex Hose Data 20200713141357.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	3629	2229	1400	J-55	54.5	BUTT	2.4	4.8	DRY	5.5	DRY	8.2
2		12.2 5	10.75	NEW	API	N	0	5317	0	5300		-1671	5317	HCP -110	45.5	BUTT	1.2	2.1	DRY	4.5	DRY	4.4
3	INTERMED IATE	9.87 5	7.625	NEW	API	N	0	10850	0	10800	3629	-7171	10850	HCP -110	29.7	BUTT	1.3	1.8	DRY	2.4	DRY	2.9
4	PRODUCTI ON	6.75	5.5	NEW	API	N	0	19709	0	11550		-7921	19709	P- 110		OTHER - Eagle SFH	1.8	2	DRY	2.7	DRY	3.2

Well Name: BELL LAKE UNIT SOUTH Well Number: 304H

Casing Attachments	
Casing ID: 1 String Type: SURFACE	
Inspection Document:	
Spec Document:	
Tapered String Spec:	
Casing Design Assumptions and Worksheet(s):	
BLUS_304H_Casing_Assumptions_20200715092535.pdf	
Casing ID: 2 String Type: INTERMEDIATE	
Inspection Document:	
Spec Document:	
Tapered String Spec:	
Casing Design Assumptions and Worksheet(s):	
BLUS_304H_Casing_Assumptions_20200715092507.pdf	
Casing ID: 3 String Type: INTERMEDIATE	
Inspection Document:	
Spec Document:	
Tapered String Spec:	
Casing Design Assumptions and Worksheet(s):	
BLUS_304H_Casing_Assumptions_20200715092554.pdf	

Well Name: BELL LAKE UNIT SOUTH Well Number: 304H

Casing Attachments

Casing ID: 4

String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

5.5_x_20_P110_HP_USS_EAGLE_SFH_Performance_Sheet_20200713142754.pdf

BLUS_304H_Casing_Assumptions_20200715092522.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Тор МБ	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead	. 4	0	1400	254	1.75	13.5	443	50	Halcem	Poly E Flake

INTERMEDIATE	Lead	0	5317	377	2.5	11.9	941	25	EconoCem	None
INTERMEDIATE	Tail	0	5317	232	1.33	14.8	310	25	Halcem	none
INTERMEDIATE	Lead	0	1085 0	457	3.52	10.5	1611	25	NeoCem	None
INTERMEDIATE	Tail	0	1085 0	1089	1.2	15.6	1302	25	Halcem	none
PRODUCTION	Lead	9000	1970 9	878	1.22	14.5	1073	20	Versacem	Halad

Well Name: BELL LAKE UNIT SOUTH Well Number: 304H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	НА	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1080 0	1155 0	OIL-BASED MUD	10	12)					
5300	1080 0	WATER-BASED MUD	8.8	9.2	1						
1400	5300	OTHER : Brine	8.7	9							
0	1400	OTHER : Fresh Water	8.4	9							

Section 6 - Test, Logging, Coring

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

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

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

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

Coring operation description for the well:

None planned

Well Name: BELL LAKE UNIT SOUTH Well Number: 304H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 7207

Anticipated Surface Pressure: 4665

Anticipated Bottom Hole Temperature(F): 199

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:

H2S_Contingency_Plan_NM_Bell_Lake_Unit_South_Pad_1_20200713143819.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

BLUS_304H_Directional_Plan_20200713143843.pdf

Other proposed operations facets description:

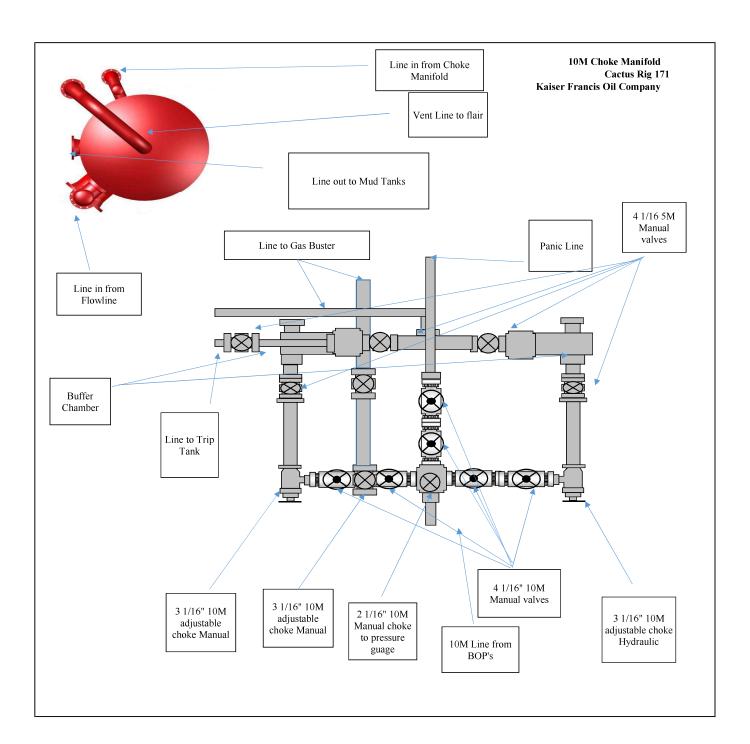
Gas Capture Plan attached

Other proposed operations facets attachment:

Gas_Capture_Plan_BLUS_Pad_1_20200713143853.pdf

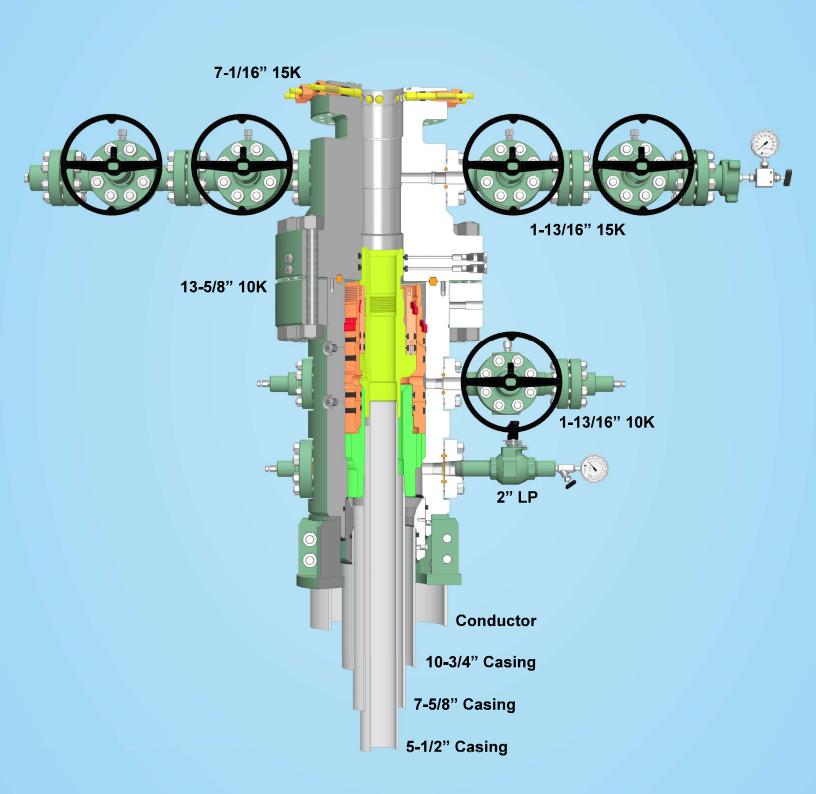
Other Variance attachment:

BLUS 304H Flex Hose Data 20200713143905.pdf





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



Kaiser-Francis Oil Company

Interval Conductor	Length	Casing Size	Weight (#/ft)	Grade	Thread	Condition New	Hole Size	TVD (ft)	Mud Type	Mud Weight Hole Control	Depth	Viscosity	Fluid Loss	Anticipated Mud Weight (ppg)		Collapse (psi)	Burst (psi)	Body Tensile Strength	Joint Tensile Strength	Collapse Safety Factor (Min 1.1)	Burst Safety Factor (Min 1.0)		Joint Tensile Safety Factor (Min 1.8)
Surface	1400	13-3/8"	54.5	J-55	BTC	New	17.5	1400	FW	8.4 - 9.0	910.0	32 - 34	NC	9	655	1580	3130	629000	420000	2.4	4.8	8.2	5.5
Intermediate	5317	10 3/4"	45.5	HCP-110	BTC	New	12.25	5300	Brine	8.7 - 9.0	5140.0	34.0	NC	9	2434	2940	5210	1040000	1063000	1.2	2.1	4.4	4.5
Intermediate	10850	7-5/8"	29.7	HCP110	BTC	New	9.875	10800	WBM	8.8-9.2	11700.0	34.0	NC	9.2	5167	6700	9460	940000	769000	1.3	1.8	2.9	2.4
Production	19709.21	5-1/2"	20	P110 HP	USS Eagle SFH	New	6.75	11550	OBM	10.0-12.0	19882'	45-52	<10	12	7207	13150	14360	729000	629000	1.8	2.0	3.2	2.7



U. S. Steel Tubular Products

5 1/2 20.00 lb (0.361) P110 HP

USS-EAGLE SFH™

CONNICCTION

	PIPE	CONNECTION	
MECHANICAL PROPERTIES			
Minimum Yield Strength	125,000		psi
Maximum Yield Strength	140,000		psi
Minimum Tensile Strength	130,000		psi
DIMENSIONS			
Outside Diameter	5.500	5.830	in.
Wall Thickness	0.361		in.
Inside Diameter	4.778	4.693	in.
Drift - API	4.653	4.653	in.
Nominal Linear Weight, T&C	20.00		lbs/ft
Plain End Weight	19.83		lbs/ft
SECTION AREA			
Cross Sectional Area Critical Area	5.828	5.027	sq. in.
Joint Efficiency		86.25	%
PERFORMANCE			
Minimum Collapse Pressure	13,150	13,150	psi
External Pressure Leak Resistance		10,000	psi
Minimum Internal Yield Pressure	14,360	14,360	psi
Minimum Pipe Body Yield Strength	729,000		lbs
Joint Strength		629,000	lbs
Compression Rating		629,000	lbs
Reference Length		21,146	ft
Maximum Uniaxial Bend Rating		89.9	deg/100 ft
MAKE-UP DATA			
Minimum Make-Up Torque		14,200	ft-lbs
Maximum Make-Up Torque		16,800	ft-lbs
Maximum Operating Torque		25,700	ft-lbs
Make-Up Loss		5.92	in.

DIDE

Notes:

- Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- 2) Compressive & Tensile Connection Efficiencies are calculated by dividing the connection critical area by the pipe body area.
- 3) Uniaxial bending rating shown is structural only, and equal to compression efficiency.
- 4) Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- 5) Reference length is calculated by joint strength divided by plain end weight with 1.5 safety factor.
- 6) Connection external pressure resistance has been verified to 10,000 psi (Fit-For-Service testing protocol).

Legal Notice: All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability, and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

Manuel USS Product Data Sheet 2017 rev26 (Sept)

Interval Conductor	Length	Casing Size	Weight (#/ft)	Grade	Thread	Condition New	Hole Size	TVD (ft)	Mud Type	Mud Weight Hole Control	Depth	Viscosity	Fluid Loss	Anticipated Mud Weight (ppg)		Collapse (psi)	Burst (psi)	Body Tensile Strength	Joint Tensile Strength	Collapse Safety Factor (Min 1.1)	Burst Safety Factor (Min 1.0)		Joint Tensile Safety Factor (Min 1.8)
Surface	1400	13-3/8"	54.5	J-55	BTC	New	17.5	1400	FW	8.4 - 9.0	910.0	32 - 34	NC	9	655	1580	3130	629000	420000	2.4	4.8	8.2	5.5
Intermediate	5317	10 3/4"	45.5	HCP-110	BTC	New	12.25	5300	Brine	8.7 - 9.0	5140.0	34.0	NC	9	2434	2940	5210	1040000	1063000	1.2	2.1	4.4	4.5
Intermediate	10850	7-5/8"	29.7	HCP110	BTC	New	9.875	10800	WBM	8.8-9.2	11700.0	34.0	NC	9.2	5167	6700	9460	940000	769000	1.3	1.8	2.9	2.4
Production	19709.21	5-1/2"	20	P110 HP	USS Eagle SFH	New	6.75	11550	OBM	10.0-12.0	19882'	45-52	<10	12	7207	13150	14360	729000	629000	1.8	2.0	3.2	2.7

Interval Conductor	Length	Casing Size	Weight (#/ft)	Grade	Thread	Condition New	Hole Size		Mud Type	Mud Weight Hole Control	Depth	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)		Body Tensile Safety Factor (Min 1.8)	
Surface	1400	13-3/8"	54.5	J-55	BTC	New	17.5	1400	FW	8.4 - 9.0	910.0	32 - 34	NC	9	655	1580	3130	629000	420000	2.4	4.8	8.2	5.5
Intermediate	5317	10 3/4"	45.5	HCP-110	BTC	New	12.25	5300	Brine	8.7 - 9.0	5140.0	34.0	NC	9	2434	2940	5210	1040000	1063000	1.2	2.1	4.4	4.5
Intermediate	10850	7-5/8"	29.7	HCP110	BTC	New	9.875	10800	WBM	8.8-9.2	11700.0	34.0	NC	9.2	5167	6700	9460	940000	769000	1.3	1.8	2.9	2.4
Production	19709.21	5-1/2"	20	P110 HP	USS Eagle SFH	New	6.75	11550	OBM	10.0-12.0	19882'	45-52	<10	12	7207	13150	14360	729000	629000	1.8	2.0	3.2	2.7

Interval Conductor	Length	Casing Size	Weight (#/ft)	Grade	Thread	Condition New	Hole Size	TVD (ft)	Mud Type	Mud Weight Hole Control	Depth	Viscosity	Fluid Loss	Anticipated Mud Weight (ppg)		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)	
Surface	1400	13-3/8"	54.5	J-55	BTC	New	17.5	1400	FW	8.4 - 9.0	910.0	32 - 34	NC	9	655	1580	3130	629000	420000	2.4	4.8	8.2	5.5
Intermediate	5317	10 3/4"	45.5	HCP-110	BTC	New	12.25	5300	Brine	8.7 - 9.0	5140.0	34.0	NC	9	2434	2940	5210	1040000	1063000	1.2	2.1	4.4	4.5
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Production	19709.21	5-1/2"	20	P110 HP	USS Eagle SFH	New	6.75	11550	OBM	10.0-12.0	19882'	45-52	<10	12	7207	13150	14360	729000	629000	1.8	2.0	3.2	2.7

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

BELL LAKE UNIT SOUTH Pad #1 SECTION 1 -T24S-R33E 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.

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Emergency Response Activation and General Responsibilities	3
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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 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	918/491-4337	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)

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

(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 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 **NOT** to make any statement to the media concerning the emergency incident. If a media representative contacts any employee, they should refer them to the designated Emergency Command Center where they should contact the Incident Commander or his designated relief for any information concerning the incident.

Received by OCD: 12/21/2020 5:45:17 PM Project: Permian NM E'83 Kaiser-Francis Oil Company County: Lea Directional Drillina Site: BLUS Pad 1 Well: Bell Lake Unit South 304H Wellbore: #304H OH Design: Plan #1 West(-)/East(+) (2000 usft/in) 750 Azimuths to Grid North 1000 2000 т ^G м True North: -0.439 Magnetic North: 6.16 13 3/8" Rustler Start DLS 10.00 TFO 110.37 1500.004 1000 1500 Start Build 1.00 Magnetic Field 7 5/8" Strength: 47564.8snT 10 3/4" Dip Angle: 59.95° Start 8931.48 hold at 2073.86 MD Top of Salt Start 8931.48 hold at 2073.86 MD Date: 12/07/2020 2072.91 -10 Start Build 1.00 - - -Model: IGRF2020 2250 BLUS 304H SL 13 3/8" US State Plane 1983 BLUS 304H-FTP New Mexico Eastern Zone Start 7783.83 hold at 11925.38 MD 32° 14' 49.932 N CASING DETAILS 103° 31' 40.085 W -1000 3000 TVD MD Name 1400.00 1400.00 13 3/8' 5300.00 5317.21 10 3/4" 10060.00 10101.19 -2000 South(-)/North(+) -3000 2000 3750 EST. FORMATION DETAILS **TVDPath** MDPath Formation 4500 1353.00 1353.00 Rustler 1733.00 1733.06 Salado 2036.00 2036.78 Top of Salt (2000 4000 O Base of Salt 5022.00 5037.81 Base of Salt 10 3/4" Lamar
Bell Canyon 5222.00 5238.82 Lamar 5250-5319.00 5336.31 Bell Canyon usft/in) 6169.00 6190.59 Cherry Canyon 7617.00 Brushy Canyon Bone Spring 7645.88 8801.68 8767.00 -5000 8939.00 8974.54 Avalon 6000 Cherry Canyon 9909.00 9949.43 1st BS 10477.00 10520.29 2nd BS 10944.00 10989.64 3rd BSL 10800-11404.00 11506.16 3rd BS -6000 6750 Start DLS 10.00 TFO 110.37 3rd BSL 10959.62 True Vertical Depth (1500 usft/in) 11000--7000 True Vertical Depth (400 usft/in) 7500 Brushy Canyon 10° BLUS 304H PBHL 20° TD at 19709.21 11200 8000 8250 3rd BS 100'FSL SECTION OFFSET Bone Spring ૺૢૺ૾ 11400 Avalon ô 9000 Start 7783.83 hold at 11925.38 MD 11550.00 250 11600 9750 1st BS 7 5/8"』 -200 200 400 800 -400 Vertical Section at 179.77° (400 usft/in) 2nd BS 10500 10959.62 Start DLS 10.00 TFO 110.37 3rd BSI 11250 3rd BS Start 7783.83 hold at 11925.38 MD 11550.00 - TD at 19709.21 BLUS 304H FTP BLUS 304H PBHL8034 12000 9750 -750 750 1500 2250 3000 3750 4500 5250 6000 6750 7500 9000 8250 DESIGN TARGET DETAILS Vertical Section at 179.77° (1500 usft/in) TVD +N/-S +F/-W Northina Easting Latitude Longitude 790374.07 32° 14' 49.932 N 03° 31' 40.085 W Name BLUS 304H SL 0.00 454600.07 0.00 0.00 BLUS 304H FTP 11550.00 -246.61 920.20 454353.46 791294.25 32° 14' 47.423 N 03° 31' 29.392 W BLUS 304H PBHL 11550.00 -8030.38 951.67 446569.85 791325.72 32° 13' 30.402 N 03° 31' 29.708 W SECTION DETAILS Sec MD Azi +E/-W **TFace** VSect Target S1-T24S-R33E SL 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2420'FNL 2106'FWL 2 1500.00 0.00 0.00 1500.00 0.00 0.00 0.00 0.00 0.00 S1-T24S-R33E FTP 3 2073.86 2072.91 5.74 69.30 10.15 26.86 1.00 69.30 -10.04 2600'FSL 2260'FEL 411005.34 5.74 69.30 10959.62 325.76 862.30 0.00 0.00 -322.30S12-T24S-R33E PBHL 90.00 250.31 511925.38 179.77 11550.00 -246.61920.20 10.00 110.37 179.77 11550.00 BLUS 304H PBHL 619709.21 90.00 -8030.38 951.67 0.00 8034.14 100'FSL 2290'FEL 0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83 BLUS Pad 1 Site:

Well: Bell Lake Unit South 304H

#304H OH Wellbore: Design: Plan #1

Local Co-ordinate Reference:

Well Bell Lake Unit South 304H est.GL+KB @ 3655.00usft (Planning) **TVD Reference:** est.GL+KB @ 3655.00usft (Planning) MD Reference:

North Reference:

Minimum Curvature **Survey Calculation Method:**

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 1, Centered on #204

Northing: 454,613.80 usft Site Position: Latitude: 32° 14' 50.065 N 790,411.60 usft 103° 31' 39.647 W From: Мар Easting: Longitude: 0.00 usft 13-3/16 " **Position Uncertainty:** Slot Radius: 0.43°

Grid Convergence:

Well Bell Lake Unit South 304H **Well Position** +N/-S 0.00 usft Northing: 454,600.07 usft Latitude: 32° 14' 49.932 N +E/-W 0.00 usft Easting: 790,374.07 usft Longitude: 103° 31' 40.085 W 0.00 usft Wellhead Elevation: usft Ground Level: 3,629.00 usft **Position Uncertainty**

Wellbore	#304H OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	12/07/20	6.59	59.95	47,564.82202216

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 0.00 179.77

anned 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	69.30	1,599.99	0.31	0.82	-0.31	1.00	1.00	0.00
1,700.00	2.00	69.30	1,699.96	1.23	3.27	-1.22	1.00	1.00	0.00
1,733.06	2.33	69.30	1,733.00	1.67	4.43	-1.66	1.00	1.00	0.00
Salado									
1,800.00	3.00	69.30	1,799.86	2.78	7.35	-2.75	1.00	1.00	0.00
1,900.00	4.00	69.30	1,899.68	4.93	13.06	-4.88	1.00	1.00	0.00
2,000.00	5.00	69.30	1,999.37	7.71	20.40	-7.62	1.00	1.00	0.00
2,036.78	5.37	69.30	2,036.00	8.88	23.50	-8.79	1.00	1.00	0.00
Top of Salt									
2,073.86	5.74	69.30	2,072.91	10.15	26.86	-10.04	1.00	1.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 1

Well: Bell Lake Unit South 304H

Wellbore: #304H OH
Design: Plan #1

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference:
MD Reference:

North Reference: Gri

Database:

Well Bell Lake Unit South 304H est.GL+KB @ 3655.00usft (Planning) est.GL+KB @ 3655.00usft (Planning)

Grid

Minimum Curvature EDM 5k-14

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)
2,100.00	5.74	69.30	2,098.91	11.07	29.31	-10.95	0.00	0.00	0.00
2,200.00	5.74	69.30	2,198.41	14.61	38.66	-14.45	0.00	0.00	0.00
2,300.00	5.74	69.30	2,297.91	18.14	48.01	-17.95	0.00	0.00	0.00
2,400.00	5.74	69.30	2,397.41	21.67	57.37	-21.44	0.00	0.00	0.00
2,500.00	5.74	69.30	2,496.91	25.21	66.72	-24.94	0.00	0.00	0.00
2,600.00	5.74	69.30	2,596.40	28.74	76.08	-28.43	0.00	0.00	0.00
2,700.00	5.74	69.30	2,695.90	32.27	85.43	-31.93	0.00	0.00	0.00
2,800.00	5.74	69.30	2,795.40	35.81	94.78	-35.43	0.00	0.00	0.00
2,900.00	5.74	69.30	2,894.90	39.34	104.14	-38.92	0.00	0.00	0.00
3,000.00	5.74	69.30	2,994.40	42.88	113.49	-42.42	0.00	0.00	0.00
3,100.00	5.74	69.30	3,093.90	46.41	122.84	-45.92	0.00	0.00	0.00
3,200.00		69.30	3,193.40	49.94	132.20	-49.41	0.00	0.00	0.00
3,300.00		69.30	3,292.90	53.48	141.55	-52.91	0.00	0.00	0.00
3,400.00	5.74	69.30	3.392.39	57.01	150.91	-56.40	0.00	0.00	0.00
3,500.00		69.30	3,491.89	60.54	160.26	-59.90	0.00	0.00	0.00
3,600.00		69.30	3,591.39	64.08	169.61	-63.40	0.00	0.00	0.00
3,700.00		69.30	3,690.89	67.61	178.97	-66.89	0.00	0.00	0.00
3,800.00		69.30	3,790.39	71.15	188.32	-70.39	0.00	0.00	0.00
3,900.00	5.74	69.30	3,889.89	74.68	197.68	-73.88	0.00	0.00	0.00
4,000.00	5.74	69.30	3,989.39	78.21	207.03	-77.38	0.00	0.00	0.00
4,100.00	5.74	69.30	4,088.89	81.75	216.38	-80.88	0.00	0.00	0.00
4,200.00		69.30	4,188.39	85.28	225.74	-84.37	0.00	0.00	0.00
4,300.00		69.30	4,287.88	88.81	235.09	-87.87	0.00	0.00	0.00
4,400.00	5.74	69.30	4,387.38	92.35	244.44	-91.37	0.00	0.00	0.00
4,500.00	5.74	69.30	4,486.88	95.88	253.80	-94.86	0.00	0.00	0.00
4,600.00	5.74	69.30	4,586.38	99.42	263.15	-98.36	0.00	0.00	0.00
4,700.00	5.74	69.30	4,685.88	102.95	272.51	-101.85	0.00	0.00	0.00
4,800.00	5.74	69.30	4,785.38	106.48	281.86	-105.35	0.00	0.00	0.00
4,900.00	5.74	69.30	4,884.88	110.02	291.21	-108.85	0.00	0.00	0.00
5,000.00	5.74	69.30	4,984.38	113.55	300.57	-112.34	0.00	0.00	0.00
5,037.8	1 5.74	69.30	5,022.00	114.89	304.10	-113.66	0.00	0.00	0.00
Base of Sa	alt								
5,100.00	5.74	69.30	5,083.88	117.08	309.92	-115.84	0.00	0.00	0.00
5,200.00		69.30	5,183.37	120.62	319.28	-119.33	0.00	0.00	0.00
5,238.82	2 5.74	69.30	5,222.00	121.99	322.91	-120.69	0.00	0.00	0.00
Lamar									
5,300.00		69.30	5,282.87	124.15	328.63	-122.83	0.00	0.00	0.00
5,317.2	1 5.74	69.30	5,300.00	124.76	330.24	-123.43	0.00	0.00	0.00
10 3/4"									
5,336.3 ²	1 5.74	69.30	5,319.00	125.43	332.03	-124.10	0.00	0.00	0.00
Bell Canyo	on								
5,400.00		69.30	5,382.37	127.68	337.98	-126.33	0.00	0.00	0.00
5,500.00	5.74	69.30	5,481.87	131.22	347.34	-129.82	0.00	0.00	0.00
5,600.00	5.74	69.30	5,581.37	134.75	356.69	-133.32	0.00	0.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 1

Well: Bell Lake Unit South 304H

Wellbore: #304H OH
Design: Plan #1

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference:
MD Reference:

North Reference: G

Database:

Well Bell Lake Unit South 304H est.GL+KB @ 3655.00usft (Planning) est.GL+KB @ 3655.00usft (Planning)

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Minimum Curvature

lanned	Survey									
1	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)
	5,700.00	5.74	69.30	5,680.87	138.29	366.04	-136.82	0.00	0.00	0.00
	5,800.00	5.74	69.30	5,780.37	141.82	375.40	-140.31	0.00	0.00	0.00
	5,900.00	5.74	69.30	5,879.87	145.35	384.75	-143.81	0.00	0.00	0.00
	6,000.00	5.74	69.30	5,979.36	148.89	394.11	-147.30	0.00	0.00	0.00
	6,100.00	5.74	69.30	6,078.86	152.42	403.46	-150.80	0.00	0.00	0.00
	6,190.59	5.74	69.30	6,169.00	155.62	411.93	-153.97	0.00	0.00	0.00
	Cherry Canyo	on								
	6,200.00	5.74	69.30	6,178.36	155.95	412.81	-154.30	0.00	0.00	0.00
	6,300.00	5.74	69.30	6,277.86	159.49	422.17	-157.79	0.00	0.00	0.00
	6,400.00	5.74	69.30	6,377.36	163.02	431.52	-161.29	0.00	0.00	0.00
	6,500.00	5.74	69.30	6,476.86	166.56	440.88	-164.78	0.00	0.00	0.00
	6,600.00	5.74	69.30	6,576.36	170.09	450.23	-168.28	0.00	0.00	0.00
	6,700.00	5.74	69.30	6,675.86	173.62	459.58	-171.78	0.00	0.00	0.00
	6,800.00	5.74	69.30	6,775.36	177.16	468.94	-175.27	0.00	0.00	0.00
	6,900.00	5.74	69.30	6,874.85	180.69	478.29	-178.77	0.00	0.00	0.00
	7,000.00	5.74	69.30	6,974.35	184.22	487.64	-182.27	0.00	0.00	0.00
	7,100.00	5.74	69.30	7,073.85	187.76	497.00	-185.76	0.00	0.00	0.00
	7,200.00	5.74	69.30	7,173.35	191.29	506.35	-189.26	0.00	0.00	0.00
	7,300.00	5.74	69.30	7,272.85	194.83	515.71	-192.75	0.00	0.00	0.00
	7,400.00	5.74	69.30	7,372.35	198.36	525.06	-196.25	0.00	0.00	0.00
	7,500.00	5.74	69.30	7,471.85	201.89	534.41	-199.75	0.00	0.00	0.00
	7,600.00	5.74	69.30	7,571.35	205.43	543.77	-203.24	0.00	0.00	0.00
	7,645.88	5.74	69.30	7,617.00	207.05	548.06	-204.85	0.00	0.00	0.00
	Brushy Cany	on								
	7,700.00	5.74	69.30	7,670.84	208.96	553.12	-206.74	0.00	0.00	0.00
	7,800.00	5.74	69.30	7,770.34	212.49	562.48	-210.24	0.00	0.00	0.00
	7,900.00	5.74	69.30	7,869.84	216.03	571.83	-213.73	0.00	0.00	0.00
	8,000.00	5.74	69.30	7,969.34	219.56	581.18	-217.23	0.00	0.00	0.00
	8,100.00	5.74	69.30	8,068.84	223.10	590.54	-220.72	0.00	0.00	0.00
	8,200.00	5.74	69.30	8,168.34	226.63	599.89	-224.22	0.00	0.00	0.00
	8,300.00	5.74	69.30	8,267.84	230.16	609.24	-227.72	0.00	0.00	0.00
	8,400.00	5.74	69.30	8,367.34	233.70	618.60	-231.21	0.00	0.00	0.00
	8,500.00	5.74	69.30	8,466.84	237.23	627.95	-234.71	0.00	0.00	0.00
	8,600.00	5.74	69.30	8,566.33	240.76	637.31	-238.20	0.00	0.00	0.00
	8,700.00	5.74	69.30	8,665.83	244.30	646.66	-241.70	0.00	0.00	0.00
	8,800.00	5.74	69.30	8,765.33	247.83	656.01	-245.20	0.00	0.00	0.00
	8,801.68	5.74	69.30	8,767.00	247.89	656.17	-245.26	0.00	0.00	0.00
	Bone Spring									
	8,900.00	5.74	69.30	8,864.83	251.37	665.37	-248.69	0.00	0.00	0.00
	8,974.54	5.74	69.30	8,939.00	254.00	672.34	-251.30	0.00	0.00	0.00
	Avalon									
	9,000.00	5.74	69.30	8,964.33	254.90	674.72	-252.19	0.00	0.00	0.00
	9,100.00	5.74	69.30	9,063.83	258.43	684.08	-255.69	0.00	0.00	0.00
	9,200.00	5.74	69.30	9,163.33	261.97	693.43	-259.18	0.00	0.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 1

Well: Bell Lake Unit South 304H

Wellbore: #304H OH
Design: Plan #1

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference:
MD Reference:

North Reference:

Database:

Well Bell Lake Unit South 304H est.GL+KB @ 3655.00usft (Planning)

est.GL+KB @ 3655.00usft (Planning)

Grid

Minimum Curvature

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)
9,300.00	5.74	69.30	9,262.83	265.50	702.78	-262.68	0.00	0.00	0.00
9,400.00	5.74	69.30	9,362.33	269.03	712.14	-266.17	0.00	0.00	0.00
9,500.00	5.74	69.30	9,461.82	272.57	721.49	-269.67	0.00	0.00	0.00
9,600.00	5.74	69.30	9,561.32	276.10	730.84	-273.17	0.00	0.00	0.00
9,700.00	5.74	69.30	9,660.82	279.64	740.20	-276.66	0.00	0.00	0.00
9,800.00	5.74	69.30	9,760.32	283.17	749.55	-280.16	0.00	0.00	0.00
9,900.00	5.74	69.30	9,859.82	286.70	758.91	-283.65	0.00	0.00	0.00
9,949.43	5.74	69.30	9,909.00	288.45	763.53	-285.38	0.00	0.00	0.00
1st BS									
10,000.00	5.74	69.30	9,959.32	290.24	768.26	-287.15	0.00	0.00	0.00
10,100.00	5.74	69.30	10,058.82	293.77	777.61	-290.65	0.00	0.00	0.00
10,101.19	5.74	69.30	10,060.00	293.81	777.73	-290.69	0.00	0.00	0.00
7 5/8"		22.25	10.150.05	007.00	7000=	004.43	0.05	2.25	2.55
10,200.00	5.74	69.30	10,158.32	297.30	786.97	-294.14	0.00	0.00	0.00
10,300.00	5.74	69.30	10,257.81	300.84	796.32	-297.64	0.00	0.00	0.00
10,400.00	5.74	69.30	10,357.31	304.37	805.68	-301.14	0.00	0.00	0.00
10,500.00	5.74	69.30	10,456.81	307.91	815.03	-304.63	0.00	0.00	0.00
10,520.29 2nd BS	5.74	69.30	10,477.00	308.62	816.93	-305.34	0.00	0.00	0.00
10,600.00	5.74	69.30	10,556.31	311.44	824.38	-308.13	0.00	0.00	0.00
10,700.00	5.74	69.30	10,655.81	314.97	833.74	-311.62	0.00	0.00	0.00
10,800.00	5.74	69.30	10,755.31	318.51	843.09	-315.12	0.00	0.00	0.00
10,900.00	5.74	69.30	10,854.81	322.04	852.44	-318.62	0.00	0.00	0.00
10,989.64	5.74	69.30	10,944.00	325.21	860.83	-321.75	0.00	0.00	0.00
3rd BSL									
11,005.34	5.74	69.30	10,959.62	325.76	862.30	-322.30	0.00	0.00	0.00
11,050.00	5.91	114.41	11,004.07	325.60	866.48	-322.12	10.00	0.39	101.01
11,100.00	9.19	144.18	11,053.65	321.30	871.17	-317.80	10.00	6.55	59.54
11,150.00	13.56	156.78	11,102.66	312.67	875.82	-309.15	10.00	8.73	25.21
11,200.00	18.25	163.18	11,150.74	299.78	880.40	-296.25	10.00	9.38	12.78
11,250.00	23.06	166.99	11,197.51	282.74	884.87	-279.18	10.00	9.64	7.64
11,300.00	27.94	169.54	11,242.63	261.66	889.20	-258.09	10.00	9.76	5.10
11,350.00	32.86	171.39	11,285.74	236.71	893.36	-233.12	10.00	9.83	3.68
11,400.00	37.79	172.79	11,326.53	208.08	897.32	-204.48	10.00	9.87	2.82
11,450.00	42.74	173.92	11,364.67	176.00	901.04	-172.38	10.00	9.89	2.25
11,500.00	47.69	174.85	11,399.88	140.69	904.50	-137.06	10.00	9.91	1.87
11,506.16	48.30	174.96	11,404.00	136.13	904.90	-132.50	10.00	9.92	1.70
3rd BS									
11,550.00	52.66	175.65	11,431.89	102.43	907.67	-98.79	10.00	9.93	1.58
11,600.00	57.62	176.35	11,460.46	61.52	910.52	-57.86	10.00	9.93	1.39
11,650.00	62.59	176.97	11,485.37	18.26	913.04	-14.59	10.00	9.94	1.25
11,700.00	67.57	177.54	11,506.43	-27.02	915.21	30.70	10.00	9.95	1.14
11,750.00	72.54	178.07	11,523.49	-73.97	917.00	77.65	10.00	9.95	1.06

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83 Site: BLUS Pad 1

Well: Bell Lake Unit South 304H

Wellbore: #304H OH Design: Plan #1

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference: MD Reference:

North Reference:

Database:

Well Bell Lake Unit South 304H est.GL+KB @ 3655.00usft (Planning)

est.GL+KB @ 3655.00usft (Planning)

Minimum Curvature

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,850.00	82.50	179.06	11,545.07	-171.46	919.43	175.15	10.00	9.95	0.97
11,900.00	87.47	179.53	11,549.44	-221.25	920.04	224.94	10.00	9.96	0.95
11,925.38	90.00	179.77	11,550.00	-246.61	920.20	250.31	10.00	9.96	0.94
12,000.00	90.00	179.77	11,550.00	-321.24	920.50	324.93	0.00	0.00	0.00
12,100.00	90.00	179.77	11,550.00	-421.24	920.90	424.93	0.00	0.00	0.00
12,200.00	90.00	179.77	11,550.00	-521.23	921.31	524.93	0.00	0.00	0.00
12,300.00	90.00	179.77	11,550.00	-621.23	921.71	624.93	0.00	0.00	0.00
12,400.00	90.00	179.77	11,550.00	-721.23	922.12	724.93	0.00	0.00	0.00
12,500.00	90.00	179.77	11,550.00	-821.23	922.52	824.93	0.00	0.00	0.00
12,600.00	90.00	179.77	11,550.00	-921.23	922.93	924.93	0.00	0.00	0.00
12,700.00	90.00	179.77	11,550.00	-1,021.23	923.33	1,024.93	0.00	0.00	0.00
12,800.00	90.00	179.77	11,550.00	-1,121.23	923.73	1,124.93	0.00	0.00	0.00
12,900.00	90.00	179.77	11,550.00	-1,221.23	924.14	1,224.93	0.00	0.00	0.00
13,000.00	90.00	179.77	11,550.00	-1,321.23	924.54	1,324.93	0.00	0.00	0.00
13,100.00	90.00	179.77	11,550.00	-1,421.23	924.95	1,424.93	0.00	0.00	0.00
13,200.00	90.00	179.77	11,550.00	-1,521.23	925.35	1,524.93	0.00	0.00	0.00
							0.00		0.00
13,300.00	90.00	179.77	11,550.00	-1,621.23	925.76	1,624.93		0.00	
13,400.00	90.00	179.77	11,550.00	-1,721.23	926.16	1,724.93	0.00	0.00	0.00
13,500.00	90.00	179.77	11,550.00	-1,821.22	926.56	1,824.93	0.00	0.00	0.00
13,600.00	90.00	179.77	11,550.00	-1,921.22	926.97	1,924.93	0.00	0.00	0.00
13,700.00	90.00	179.77	11,550.00	-2,021.22	927.37	2,024.93	0.00	0.00	0.00
13,800.00	90.00	179.77	11,550.00	-2,121.22	927.78	2,124.93	0.00	0.00	0.00
13,900.00	90.00	179.77	11,550.00	-2,221.22	928.18	2,224.93	0.00	0.00	0.00
14,000.00	90.00	179.77	11,550.00	-2,321.22	928.59	2,324.93	0.00	0.00	0.00
14,100.00	90.00	179.77	11,550.00	-2,421.22	928.99	2,424.93	0.00	0.00	0.00
14,200.00	90.00	179.77	11,550.00	-2,521.22	929.39	2,524.93	0.00	0.00	0.00
14,300.00	90.00	179.77	11,550.00	-2,621.22	929.80	2,624.93	0.00	0.00	0.00
14,400.00	90.00	179.77	11,550.00	-2,721.22	930.20	2,724.93	0.00	0.00	0.00
14,500.00	90.00	179.77	11,550.00	-2,721.22 -2,821.22	930.20	2,724.93	0.00	0.00	0.00
14,600.00	90.00	179.77	11,550.00	-2,921.22	931.01	2,924.93	0.00	0.00	0.00
14,700.00				-2,921.22 -3,021.21	931.42		0.00	0.00	0.00
,	90.00	179.77	11,550.00			3,024.93			
14,800.00	90.00	179.77	11,550.00	-3,121.21	931.82	3,124.93	0.00	0.00	0.00
14,900.00	90.00	179.77	11,550.00	-3,221.21	932.22	3,224.93	0.00	0.00	0.00
15,000.00	90.00	179.77	11,550.00	-3,321.21	932.63	3,324.93	0.00	0.00	0.00
15,100.00	90.00	179.77	11,550.00	-3,421.21	933.03	3,424.93	0.00	0.00	0.00
15,200.00	90.00	179.77	11,550.00	-3,521.21	933.44	3,524.93	0.00	0.00	0.00
15,300.00	90.00	179.77	11,550.00	-3,621.21	933.84	3,624.93	0.00	0.00	0.00
15,400.00	90.00	179.77	11,550.00	-3,721.21	934.25	3,724.93	0.00	0.00	0.00
15,500.00	90.00	179.77	11,550.00	-3,821.21	934.65	3,824.93	0.00	0.00	0.00
15,600.00	90.00	179.77	11,550.00	-3,921.21	935.06	3,924.93	0.00	0.00	0.00
15,700.00	90.00	179.77	11,550.00	-4,021.21	935.46	4,024.93	0.00	0.00	0.00
15,800.00	90.00	179.77	11,550.00	-4,121.21	935.86	4,124.93	0.00	0.00	0.00
15,900.00	90.00	179.77	11,550.00	-4,121.21 -4,221.20	936.27	4,124.93	0.00	0.00	0.00
		179.77			936.27			0.00	0.00
16,000.00	90.00	1/9.//	11,550.00	-4,321.20	930.07	4,324.93	0.00	0.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83
Site: BLUS Pad 1

Well: Bell Lake Unit South 304H

Wellbore: #304H OH
Design: Plan #1

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference:
MD Reference:

North Reference: Gri

Database:

Well Bell Lake Unit South 304H est.GL+KB @ 3655.00usft (Planning) est.GL+KB @ 3655.00usft (Planning)

Grid

Minimum Curvature

nned 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)
46 400 00	00.00	470 77	44 550 00	4 404 00	027.00	4 404 00	0.00	0.00	0.00
16,100.00	90.00	179.77	11,550.00	-4,421.20	937.08	4,424.93	0.00	0.00	0.00
16,200.00	90.00	179.77	11,550.00	-4,521.20	937.48	4,524.93	0.00	0.00	0.00
16,300.00	90.00	179.77	11,550.00	-4,621.20 4.721.20	937.89	4,624.93	0.00	0.00	0.00
16,400.00	90.00	179.77 179.77	11,550.00 11,550.00	-4,721.20 4.821.20	938.29	4,724.93	0.00 0.00	0.00 0.00	0.00
16,500.00	90.00	179.77	11,550.00	-4,821.20	938.69	4,824.93	0.00	0.00	0.00
16,600.00	90.00	179.77	11,550.00	-4,921.20	939.10	4,924.93	0.00	0.00	0.00
16,700.00	90.00	179.77	11,550.00	-5,021.20	939.50	5,024.93	0.00	0.00	0.00
16,800.00	90.00	179.77	11,550.00	-5,121.20	939.91	5,124.93	0.00	0.00	0.00
16,900.00	90.00	179.77	11,550.00	-5,221.20	940.31	5,224.93	0.00	0.00	0.00
17,000.00	90.00	179.77	11,550.00	-5,321.20	940.72	5,324.93	0.00	0.00	0.00
17,100.00	90.00	179.77	11.550.00	-5,421.19	941.12	5,424.93	0.00	0.00	0.00
17,200.00	90.00	179.77	11,550.00	-5,521.19	941.52	5,524.93	0.00	0.00	0.00
17,300.00	90.00	179.77	11,550.00	-5,621.19	941.93	5,624.93	0.00	0.00	0.00
17,400.00	90.00	179.77	11,550.00	-5,721.19	942.33	5,724.93	0.00	0.00	0.00
17,500.00	90.00	179.77	11,550.00	-5,821.19	942.74	5,824.93	0.00	0.00	0.00
17,600.00	90.00	179.77	11.550.00	-5,921.19	943.14	5,924.93	0.00	0.00	0.00
17,700.00	90.00	179.77	11,550.00	-6,021.19	943.55	6,024.93	0.00	0.00	0.00
17,800.00	90.00	179.77	11,550.00	-6,121.19	943.95	6,124.93	0.00	0.00	0.00
17,900.00	90.00	179.77	11,550.00	-6,221.19	944.35	6,224.93	0.00	0.00	0.00
18,000.00	90.00	179.77	11,550.00	-6,321.19	944.76	6,324.93	0.00	0.00	0.00
10,000.00	00.00	170.77	11,000.00	0,021.10	044.70	0,024.00	0.00	0.00	0.00
18,100.00	90.00	179.77	11,550.00	-6,421.19	945.16	6,424.93	0.00	0.00	0.00
18,200.00	90.00	179.77	11,550.00	-6,521.19	945.57	6,524.93	0.00	0.00	0.00
18,300.00	90.00	179.77	11,550.00	-6,621.19	945.97	6,624.93	0.00	0.00	0.00
18,400.00	90.00	179.77	11,550.00	-6,721.18	946.38	6,724.93	0.00	0.00	0.00
18,500.00	90.00	179.77	11,550.00	-6,821.18	946.78	6,824.93	0.00	0.00	0.00
18,600.00	90.00	179.77	11,550.00	-6,921.18	947.18	6,924.93	0.00	0.00	0.00
18,700.00	90.00	179.77	11,550.00	-7,021.18	947.59	7,024.93	0.00	0.00	0.00
18,800.00	90.00	179.77	11,550.00	-7,121.18	947.99	7,124.93	0.00	0.00	0.00
18,900.00	90.00	179.77	11,550.00	-7,221.18	948.40	7,224.93	0.00	0.00	0.00
19,000.00	90.00	179.77	11,550.00	-7,321.18	948.80	7,324.93	0.00	0.00	0.00
19,100.00	90.00	179.77	11,550.00	-7,421.18	949.21	7,424.93	0.00	0.00	0.00
19,200.00	90.00	179.77	11,550.00	-7,521.18	949.61	7,524.93	0.00	0.00	0.00
19,300.00	90.00	179.77	11,550.00	-7,621.18	950.01	7,624.93	0.00	0.00	0.00
19,400.00	90.00	179.77	11,550.00	-7,721.18	950.42	7,724.93	0.00	0.00	0.00
19,500.00	90.00	179.77	11,550.00	-7,821.18	950.82	7,824.93	0.00	0.00	0.00
19,600.00	90.00	179.77	11,550.00	-7,921.17	951.23	7,924.93	0.00	0.00	0.00
19,709.21	90.00	179.77	11,550.00	-8,030.38	951.67	8,034.14	0.00	0.00	0.00

Survey Report

Company: Kaiser-Francis Oil Company

Project: Permian NM E'83 Site: BLUS Pad 1

Well: Bell Lake Unit South 304H

#304H OH Wellbore: Plan #1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference:

est.GL+KB @ 3655.00usft (Planning) North Reference:

Survey Calculation Method: Minimum Curvature EDM 5k-14 Database:

Well Bell Lake Unit South 304H

est.GL+KB @ 3655.00usft (Planning)

Casing Points Vertical Casing Hole Measured Diameter Depth Depth Diameter (usft) (usft) Name (") (") 1,400.00 1,400.00 13 3/8" 13-3/8 17-1/2 5,317.21 5,300.00 10 3/4" 10-3/4 12-1/4 10,101.19 10,060.00 7 5/8" 7-5/8 9-7/8

Formations								
	Measured Depth (usft)	Vertical Depth (usft)	Na	ame	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					
	5,037.81	5,022.00	Base of Salt					
	5,238.82	5,222.00	Lamar					
	5,336.31	5,319.00	Bell Canyon					
	6,190.59	6,169.00	Cherry Canyon					
	7,645.88	7,617.00	Brushy Canyon					
	8,801.68	8,767.00	Bone Spring					
	8,974.54	8,939.00	Avalon					
	9,949.43	9,909.00	1st BS					
	10,520.29	10,477.00						
	10,989.64	10,944.00	3rd BSL					
	11,506.16	11,404.00	3rd BS					



Certificate of Registration

3042

This certifies that the quality management system of

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

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

ISO 9001:2015

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

Design and Manufacture of Oilfield, Marine and Other Industrial Hoses

APIQR® approves the organization's justification for excluding:

No Exclusions Identified as Applicable

Effective Date:

APRIL 21, 2019

Expiration Date:

APRIL 21, 2022

Registered Since:

APRIL 21, 2016

Dema Opflueija Vice President of Global Industry Services

Accredited by Member of the International Accreditation Forum Multilateral Recognition Arrangement for Quality Management Systems



This certificate is valid for the period specified herein. The registered organization must continually meet all requirements of APIQR's Registration Program and the requirements of the Registration Agreement. Registration is maintained and regularly monitored through annual full system audits. Further clarifications regarding the scope of this certificate and the applicability of ISO 9001 standard requirements may be obtained by consulting the registered organization. This certificate has been issued from APIQR offices located at 200 Massachusetts Avenue, NW Suite 1100, Washington, DC 20001-5571, U.S.A., it is the property of APIQR, and must be returned upon request. To verify the authenticity of this certificate, go to www.api.org/compositelist.



REGISTRATION NO. Q1-3217

Certificate of Registration

The American Petroleum Institute certifies that the quality management system of

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

has been assessed by the American Petroleum Institute and found to be in conformance with the following:

API Specification Q1

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

Design and Manufacture of Oilfield, Marine and Other Industrial Hoses

API approves the organization's justification for excluding:

No Exclusions Identified as Applicable

API Spec Q1 Registered

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

Vice President of Global Industry Services

Asma Chflusep

This certificate is valid for the period specified herein. The registered organization must continually meet all requirements of API Spec Q1, Specification for Quality Programs for the Petroleum, Petrochemical and Natural Gas Industry, and the requirements of the Registration Agreement. Registration is maintained and regularly monitored through annual full system audits. This certificate has been issued from API offices located at 200 Massachusetts Avenue, NW Suite 1100, Washington, DC 20001-5571, U.S.A. It is the property of API, and must be returned upon request. To verify the authenticity of this certificate, go to www.api.org/compositelist.

2018-154 | 02.19 | Digital

<u>District I</u>
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 <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

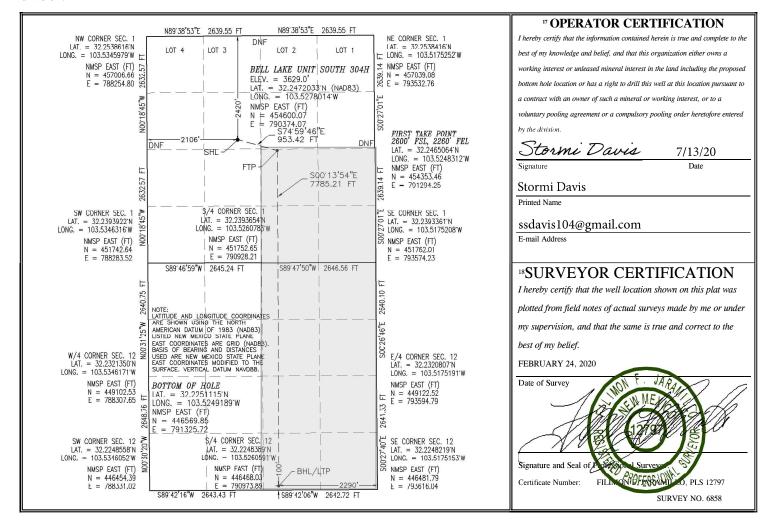
WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-482 30-025-		03 Pool Code	³ Pool Name		
		98264	ıth		
⁴ Property Code		⁵ Pr	⁶ Well Number		
316706		BELL LAF	304H		
ÖĞRİD No.			⁸ Operator Name		
12361		KAISER-FI	RANCIS OIL CO.	3629.0	

Surface Location

					Surrace	Location			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
\mathbf{F}	1	24 S	33 E		2420	NORTH	2106	WEST	LEA
-		•	п В	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	12	24 S	33 E		100	SOUTH	2290	EAST	LEA
12 Dedicated Acre	s ¹³ Joint	or Infill 14	Consolidation	1 Code	de ls 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.



District I
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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

Data: 01/10/2020

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

Dutc. 01/10/2020	
☑ 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 103H		1-24S-33E		2000	0	
Bell Lake Unit South 203H		1-24S-33E		2000	0	
Bell Lake Unit South 303H		1-24S-33E		2000	0	
Bell Lake Unit South 403H		1-24S-33E		2000	0	
Bell Lake Unit South 104H		1-24S-33E		2000	0	
Bell Lake Unit South 204H		1-24S-33E		2000	0	
Bell Lake Unit South 304H 3	0-025-48	203 24S-33E		2000	0	
Bell Lake Unit South 404H		1-24S-33E		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.__195_, 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</u>'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
 - 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 12841

CONDITIONS OF APPROVAL

Operator:			OGRID:	Action Number:	Action Type:
KAISER-FRANCIS OIL CO	P.O. Box 21468	Tulsa, OK74121	12361	12841	FORM 3160-3

OCD	Condition
Reviewer	Condition .
pkautz	Will require 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
pkautz	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.