Form 3160-3
(June 2015)

OCD – HOBBS
10/07/2020
RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMLC0068387

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.
BELL LAKE / NMNM 068292X

8. Lease Name and Well No.
BELL LAKE UNIT NORTH [316707]
421H

2. Name of Operator
KAISER FRANCIS OIL COMPANY [12361]

9. API Well No. 30-025-47818

3a. Address
6733 S. Yale Ave., Tulsa, OK 74121

3b. Phone No. *(include area code)*
(918) 491-0000

10. Field and Pool, or Exploratory [98265]
OJO CHISO/WOLFCAMP, SOUTHWEST

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface NWSE / 1962 FSL / 2206 FEL / LAT 32.3317996 / LONG -103.5246456
At proposed prod. zone NWNE / 330 FNL / 2110 FEL / LAT 32.3545228 / LONG -103.5243486

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 1/T23S/R33E/NMP

14. Distance in miles and direction from nearest town or post office*
20 miles

12. County or Parish
LEA

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
434 feet

16. No of acres in lease
315.57

17. Spacing Unit dedicated to this well
480.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
30 feet

19. Proposed Depth
11822 feet / 19834 feet

20. BLM/BIA Bond No. in file
FED: WYB000055

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3529 feet

22. Approximate date work will start*
03/01/2020

23. Estimated duration
40 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	STORMI DAVIS / Ph: (918) 491-0000	10/10/2019

Title: Regulatory Analyst

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575) 234-5959	09/29/2020

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 10/07/2020

SL

APPROVED WITH CONDITIONS

KZ 10/15/2020

Approval Date: 09/29/2020

(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.

(Continued on page 3)

APD ID: 10400049061 **Submission Date:** 10/10/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 421H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400049061 **Tie to previous NOS?** N **Submission Date:** 10/10/2019

BLM Office: CARLSBAD **User:** Stormi Davis **Title:** Regulatory Analyst

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

Lease number: NMLC0068387 **Lease Acres:** 315.57

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.

Zip: 74121

Operator PO Box: PO Box 21468

Operator City: Tulsa **State:** OK

Operator Phone: (918)491-0000

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO **Master Development Plan name:**

Well in Master SUPO? NO **Master SUPO name:**

Well in Master Drilling Plan? NO **Master Drilling Plan name:**

Well Name: BELL LAKE UNIT NORTH **Well Number:** 421H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** OJO CHISO **Pool Name:** WOLFCAMP, SOUTHWEST

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

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 421H

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

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** N **New surface disturbance?**

Type of Well Pad: MULTIPLE WELL **Multiple Well Pad Name:** NORTH BELL LAKE UNIT **Number:** 3

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:** 434 FT

Reservoir well spacing assigned acres Measurement: 480 Acres

Well plat: BLUN_421H_C102_20191009192311.pdf

Pay.gov_20191010150137.pdf

Well work start Date: 03/01/2020 **Duration:** 40 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: 5768A **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	1962	FSL	2206	FEL	23S	33E	1	Aliquot NWSE	32.3317996	-103.5246456	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0066438	3529	0	0	N
KOP Leg #1	1962	FSL	2206	FEL	23S	33E	1	Aliquot NWSE	32.3317996	-103.5246456	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0066438	-7471	11000	11000	N

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 421H

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	2640	FNL	2130	FEL	23S	33E	1	Aliquot SWNE	32.33378	-103.52445	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0068387	-8293	12244	11822	Y
PPP Leg #1-2	2600	FNL	2130	FEL	23S	33E	1	Aliquot SWNE	32.3337702	-103.5243992	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0068387	-8293	12284	11822	Y
PPP Leg #1-3	0	FSL	2120	FEL	22S	33E	36	Aliquot SWSE	32.3408911	-103.5243819	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-8293	14884	11822	Y
EXIT Leg #1	330	FNL	2110	FEL	22S	33E	36	Aliquot NWNE	32.3545228	-103.5243486	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-8293	19834	11822	Y
BHL Leg #1	330	FNL	2110	FEL	22S	33E	36	Aliquot NWNE	32.3545228	-103.5243486	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-8293	19834	11822	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

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-	98265	Ojo Chiso; Wolfcamp, Southwest

[4] Property Code	[5] Property Name	[6] Well Number
	BELL LAKE UNIT NORTH	421H

[7] OGRID No.	[8] Operator Name	[9] Elevation
12361	KAISER-FRANCIS OIL CO.	3529.6

[10] Surface Location

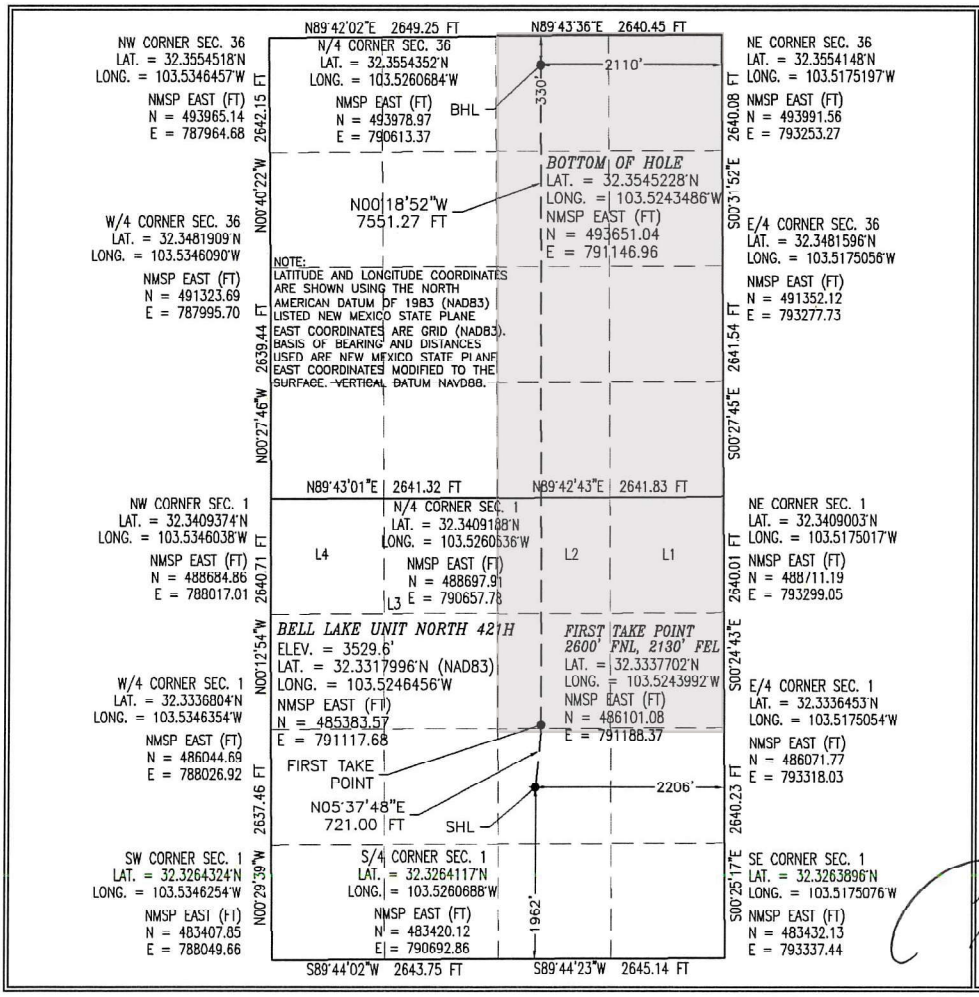
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	1	23 S	33 E		1962	SOUTH	2206	EAST	LEA

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	36	22 S	33 E		330	NORTH	2110	EAST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
480			R-14602

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.



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Stormi Davis 10/9/19
Signature Date

Stormi Davis
Printed Name

ssdavis104@gmail.com
E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

MARCH 21, 2019
Date of Survey

FILIMON F. JARAMILLO
NEW MEXICO
AZTEC
REGISTERED PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

Certificate Number FILIMON F. JARAMILLO, PLS 12797
SURVEY NO. 5768A

Gmail Melanie Wilson <nmogrservices@gmail.com>

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

notification@pay.gov <notification@pay.gov> Thu, Oct 10, 2019 at 3:00 PM
To: nmogrservices@gmail.com

An official email of the United States government

Pay.gov

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: 26KP7PHP
Agency Tracking ID: 75859511041
Transaction Type: Sale
Transaction Date: 10/10/2019 05:00:15 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: 10400049061
Lease Numbers: NMLC0068387
Well Numbers: 421H
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

APD ID: 10400049061 **Submission Date:** 10/10/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 421H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
559020	---	3529	0	0	OTHER : Surface	NONE	N
559021	RUSTLER	2307	1222	1222	SANDSTONE	NONE	N
559022	SALADO	2057	1472	1472	SALT	NONE	N
559023	TOP SALT	1732	1797	1797	SALT	NONE	N
559024	BASE OF SALT	-1218	4747	4747	SALT	NONE	N
559025	LAMAR	-1493	5022	5022	SANDSTONE	NATURAL GAS, OIL	N
559026	BELL CANYON	-1793	5322	5322	SANDSTONE	NATURAL GAS, OIL	N
559027	CHERRY CANYON	-3043	6572	6572	SANDSTONE	NATURAL GAS, OIL	N
559028	BRUSHY CANYON	-4693	8222	8222	SANDSTONE	NATURAL GAS, OIL	N
559029	BONE SPRING	-4918	8447	8447	LIMESTONE	NATURAL GAS, OIL	N
559030	AVALON SAND	-5273	8802	8802	SANDSTONE	NATURAL GAS, OIL	N
559031	BONE SPRING 1ST	-6218	9747	9747	SANDSTONE	NATURAL GAS, OIL	N
559038	BONE SPRING 2ND	-6743	10272	10272	SANDSTONE	NATURAL GAS, OIL	N
559098	BONE SPRING LIME	-7243	10772	10772	LIMESTONE	NATURAL GAS, OIL	N
559099	BONE SPRING 3RD	-7773	11302	11302	SANDSTONE	NATURAL GAS, OIL	N
559100	WOLFCAMP	-8093	11622	11622	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 421H

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:

BLUN_421H__Choke_Manifold_20191009185730.pdf

BOP Diagram Attachment:

BLUN_421H_BOP_20200225074554.pdf

BLUN_421H_Wellhead_20200225074556.pdf

Cactus_Flex_Hose_16C_Certification_20200225074622.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	14.75	10.75	NEW	API	N	0	1272	0	1272	3529	2257	1272	J-55	40.5	ST&C	2.7	5.3	DRY	8.2	DRY	12.2
2	INTERMEDIATE	9.875	7.625	NEW	API	N	0	11000	0	11000		-7471	11000	HCP-110	29.7	LT&C	1.3	1.8	DRY	2.4	DRY	2.9
3	PRODUCTION	6.75	5.5	NEW	API	N	0	19834	0	11822		-8293	19834	P-110	20	OTHER - USS Eagle SFH	1.8	1.9	DRY	2.7	DRY	3.1

Casing Attachments

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 421H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BLUN_421H_Casing_Assumptions_20191009190436.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BLUN_421H_Casing_Assumptions_20191009190008.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BLUN_421H_Casing_Assumptions_20191009190251.pdf

5.5_x_20_P110_HP_USS_EAGLE_SFH_Performance_Sheet_20191009190252.pdf

Section 4 - Cement

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 421H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1272	613	1.72	13.5	1060	50	ExtendaCem	Poly E Flake
INTERMEDIATE	Lead		0	11000	832	2.73	11	2273	25	NeoCem	Extender
INTERMEDIATE	Tail		0	11000	568	1.2	15.6	679	25	Halcem	none
PRODUCTION	Lead		9000	19834	850	1.22	14.5	1040	15	VersaCem	Halad

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
11000	11822	OIL-BASED MUD	10	12							
1272	11000	OTHER : Brine	8.7	8.9							
0	1272	OTHER : Fresh Water	8.4	9							

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH **Well Number:** 421H

Section 6 - Test, Logging, Coring

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

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

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

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

Coring operation description for the well:

None planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 7377 **Anticipated Surface Pressure:** 4776

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_BLUN_20190926073105.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

BLUN_421H___Directional_Plan_20191009191229.pdf

Other proposed operations facets description:

Gas Capture Plan attached

Other proposed operations facets attachment:

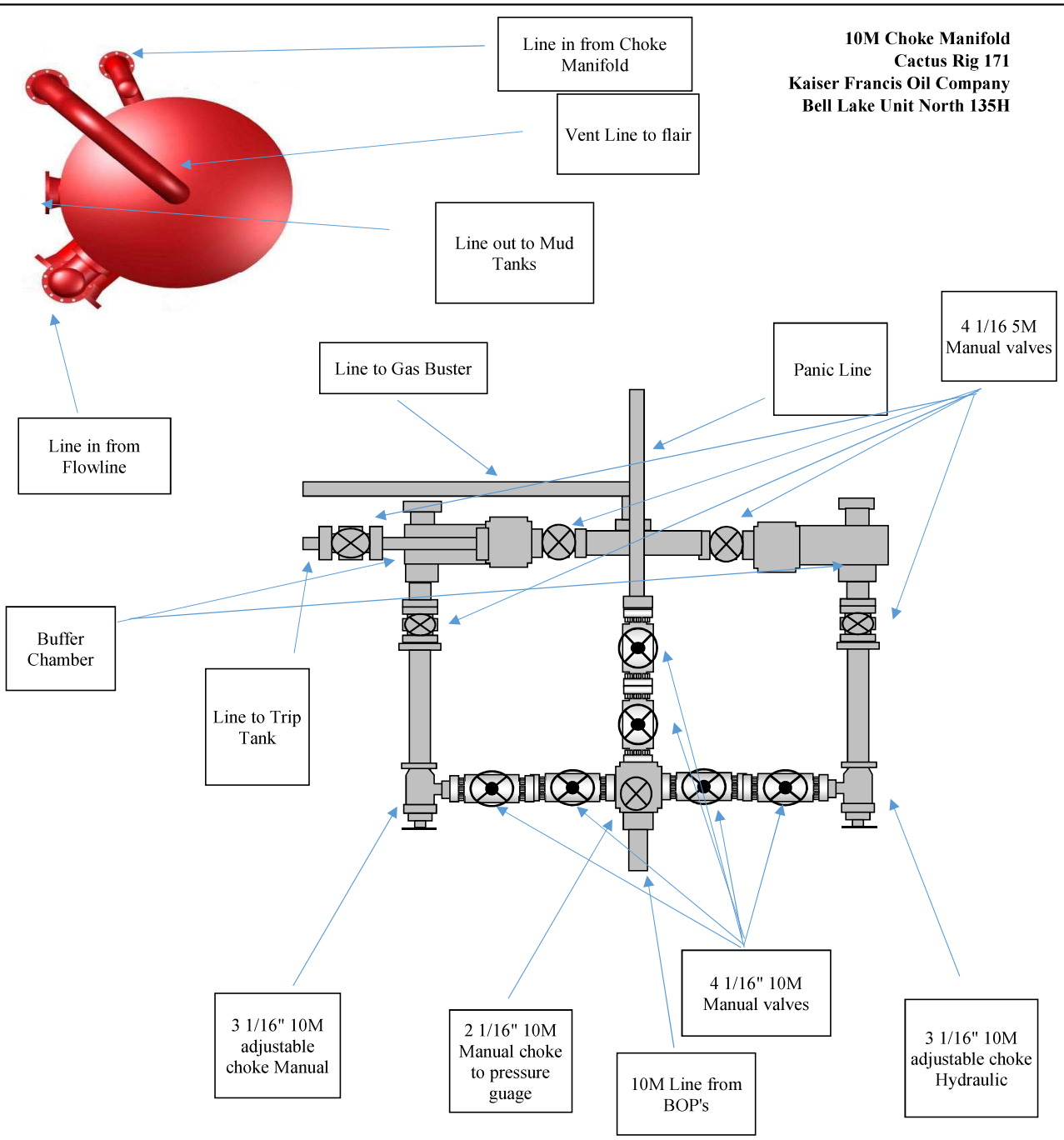
BLUN_421H_GCP_20191009191240.pdf

Other Variance attachment:

Cactus_Flex_Hose_16C_Certification_20200225074936.pdf

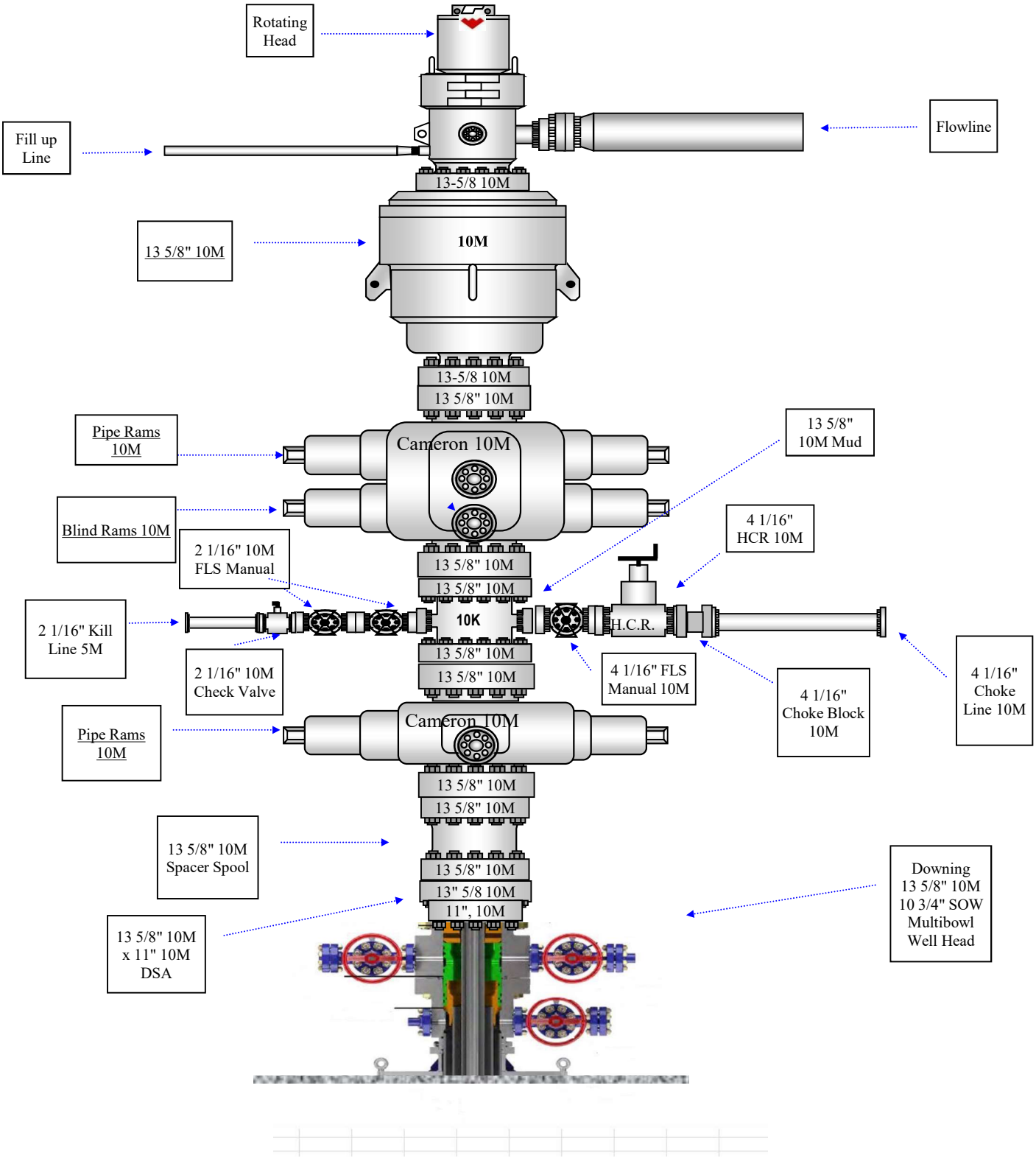
BLUN_421H_Wellhead_20200225074952.pdf

10M Choke Manifold
Cactus Rig 171
Kaiser Francis Oil Company
Bell Lake Unit North 135H



Cactus Rig 171
10M BOP with 10M Annular
Kaiser Francis Oil Company

Hole Sections Utilized
***9 7/8" Hole below Surface Casing**
***6 3/4"Hole below Intermediate casing**



CHARACTERISTICS OF H_2S AND SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = 1	10 ppm	100 ppm	600 ppm
Sulfur Dioxide	SO_2	2.21 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.

KAISER-FRANCIS OIL COMPANY

Kaiser Francis

Bell Lake Unit North 421H
Bell Lake Unit North 421H
Bell Lake Unit North 421H
Bell Lake Unit North 421H

Plan: Bell Lake Unit North 421H

Morcor Standard Plan

13 April, 2019

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
Project:	Bell Lake Unit North 421H	**TVD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Project Bell Lake Unit North 421H

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Bell Lake Unit North 421H

Site Position:		**Northing:**	485,383.57 usft	**Latitude:**	32° 19' 54.478 N
From:	Map	**Easting:**	791,117.68 usft	**Longitude:**	103° 31' 28.724 W
Position Uncertainty:	1.0 usft	**Slot Radius:**	17-1/2 "	**Grid Convergence:**	0.43 °

Well Bell Lake Unit North 421H

Well Position	**+N/-S**	0.0 usft	**Northing:**	485,383.57 usft	**Latitude:**	32° 19' 54.478 N
	+E/-W	0.0 usft	**Easting:**	791,117.68 usft	**Longitude:**	103° 31' 28.724 W
Position Uncertainty		1.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,529.6 usft

Wellbore Bell Lake Unit North 421H

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/13/2019	6.60	60.09	47,902

Design Bell Lake Unit North 421H

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	0.20

Survey Tool Program **Date** 4/13/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	19,834.5	Bell Lake Unit North 421H (Bell Lake Unit	MWD	MWD - Standard

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Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
0.0	0.00	0.00	0.0	-3,551.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
50.0	0.00	0.00	50.0	-3,501.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
100.0	0.00	58.60	100.0	-3,451.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
120.0	0.00	58.60	120.0	-3,431.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
20" Conductor										
150.0	0.00	58.60	150.0	-3,401.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
200.0	0.00	58.60	200.0	-3,351.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
250.0	0.00	58.60	250.0	-3,301.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
300.0	0.00	58.60	300.0	-3,251.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
350.0	0.00	58.60	350.0	-3,201.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
400.0	0.00	58.60	400.0	-3,151.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
450.0	0.00	58.60	450.0	-3,101.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
500.0	0.00	58.60	500.0	-3,051.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
550.0	0.00	58.60	550.0	-3,001.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
600.0	0.00	58.60	600.0	-2,951.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
650.0	0.00	58.60	650.0	-2,901.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
700.0	0.00	58.60	700.0	-2,851.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
750.0	0.00	58.60	750.0	-2,801.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
800.0	0.00	58.60	800.0	-2,751.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
850.0	0.00	58.60	850.0	-2,701.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
900.0	0.00	58.60	900.0	-2,651.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
950.0	0.00	58.60	950.0	-2,601.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,000.0	0.00	58.60	1,000.0	-2,551.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,050.0	0.00	58.60	1,050.0	-2,501.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,100.0	0.00	58.60	1,100.0	-2,451.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,150.0	0.00	58.60	1,150.0	-2,401.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,200.0	0.00	58.60	1,200.0	-2,351.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00

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Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
1,222.0	0.00	58.60	1,222.0	-2,329.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
Rustler										
1,250.0	0.00	58.60	1,250.0	-2,301.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,272.0	0.00	58.60	1,272.0	-2,279.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10 3/4" Surface Casing										
1,300.0	0.00	58.60	1,300.0	-2,251.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,350.0	0.00	58.60	1,350.0	-2,201.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,400.0	0.00	58.60	1,400.0	-2,151.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,450.0	0.00	58.60	1,450.0	-2,101.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,472.0	0.00	58.60	1,472.0	-2,079.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
Salado										
1,500.0	0.00	58.60	1,500.0	-2,051.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,550.0	0.00	58.60	1,550.0	-2,001.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,600.0	0.00	58.60	1,600.0	-1,951.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,650.0	0.00	58.60	1,650.0	-1,901.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,700.0	0.00	58.60	1,700.0	-1,851.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,750.0	0.00	58.60	1,750.0	-1,801.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,797.0	0.00	58.60	1,797.0	-1,754.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
Top of Salt										
1,800.0	0.00	58.60	1,800.0	-1,751.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,850.0	0.00	58.60	1,850.0	-1,701.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,900.0	0.00	58.60	1,900.0	-1,651.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1,950.0	0.00	58.60	1,950.0	-1,601.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,000.0	0.00	58.60	2,000.0	-1,551.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,050.0	0.00	58.60	2,050.0	-1,501.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,100.0	0.00	58.60	2,100.0	-1,451.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,150.0	0.00	58.60	2,150.0	-1,401.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,200.0	0.00	58.60	2,200.0	-1,351.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00

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Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
2,250.0	0.00	58.60	2,250.0	-1,301.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,300.0	0.00	58.60	2,300.0	-1,251.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,350.0	0.00	58.60	2,350.0	-1,201.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,400.0	0.00	58.60	2,400.0	-1,151.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,450.0	0.00	58.60	2,450.0	-1,101.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,500.0	0.00	58.60	2,500.0	-1,051.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,550.0	0.00	58.60	2,550.0	-1,001.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,600.0	0.00	58.60	2,600.0	-951.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,650.0	0.00	58.60	2,650.0	-901.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,700.0	0.00	58.60	2,700.0	-851.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,750.0	0.00	58.60	2,750.0	-801.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,800.0	0.00	58.60	2,800.0	-751.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,850.0	0.00	58.60	2,850.0	-701.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,900.0	0.00	58.60	2,900.0	-651.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2,950.0	0.00	58.60	2,950.0	-601.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,000.0	0.00	58.60	3,000.0	-551.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,050.0	0.00	58.60	3,050.0	-501.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,100.0	0.00	58.60	3,100.0	-451.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,150.0	0.00	58.60	3,150.0	-401.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,200.0	0.00	58.60	3,200.0	-351.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,250.0	0.00	58.60	3,250.0	-301.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,300.0	0.00	58.60	3,300.0	-251.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,350.0	0.00	58.60	3,350.0	-201.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,400.0	0.00	58.60	3,400.0	-151.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,450.0	0.00	58.60	3,450.0	-101.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,500.0	0.00	58.60	3,500.0	-51.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,550.0	0.00	58.60	3,550.0	-1.6	0.0	0.0	791,117.68	485,383.57	0.00	0.00

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Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
3,600.0	0.00	58.60	3,600.0	48.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,650.0	0.00	58.60	3,650.0	98.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,700.0	0.00	58.60	3,700.0	148.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,750.0	0.00	58.60	3,750.0	198.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,800.0	0.00	58.60	3,800.0	248.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,850.0	0.00	58.60	3,850.0	298.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,900.0	0.00	58.60	3,900.0	348.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3,950.0	0.00	58.60	3,950.0	398.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,000.0	0.00	58.60	4,000.0	448.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,050.0	0.00	58.60	4,050.0	498.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,100.0	0.00	58.60	4,100.0	548.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,150.0	0.00	58.60	4,150.0	598.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,200.0	0.00	58.60	4,200.0	648.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,250.0	0.00	58.60	4,250.0	698.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,300.0	0.00	58.60	4,300.0	748.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,350.0	0.00	58.60	4,350.0	798.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,400.0	0.00	58.60	4,400.0	848.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,450.0	0.00	58.60	4,450.0	898.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,500.0	0.00	58.60	4,500.0	948.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,550.0	0.00	58.60	4,550.0	998.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,600.0	0.00	58.60	4,600.0	1,048.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,650.0	0.00	58.60	4,650.0	1,098.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,700.0	0.00	58.60	4,700.0	1,148.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,747.0	0.00	58.60	4,747.0	1,195.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
Base of Salt										
4,750.0	0.00	58.60	4,750.0	1,198.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,800.0	0.00	58.60	4,800.0	1,248.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00

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Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
4,850.0	0.00	58.60	4,850.0	1,298.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,900.0	0.00	58.60	4,900.0	1,348.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
4,950.0	0.00	58.60	4,950.0	1,398.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,000.0	0.00	58.60	5,000.0	1,448.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,022.0	0.00	58.60	5,022.0	1,470.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
Lamar										
5,050.0	0.00	58.60	5,050.0	1,498.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,100.0	0.00	58.60	5,100.0	1,548.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,150.0	0.00	58.60	5,150.0	1,598.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,200.0	0.00	58.60	5,200.0	1,648.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,250.0	0.00	58.60	5,250.0	1,698.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,300.0	0.00	58.60	5,300.0	1,748.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,322.0	0.00	58.60	5,322.0	1,770.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
Bell Canyon										
5,350.0	0.00	58.60	5,350.0	1,798.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,400.0	0.00	58.60	5,400.0	1,848.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,450.0	0.00	58.60	5,450.0	1,898.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,500.0	0.00	58.60	5,500.0	1,948.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,550.0	0.00	58.60	5,550.0	1,998.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,600.0	0.00	58.60	5,600.0	2,048.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,650.0	0.00	58.60	5,650.0	2,098.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,700.0	0.00	58.60	5,700.0	2,148.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,750.0	0.00	58.60	5,750.0	2,198.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,800.0	0.00	58.60	5,800.0	2,248.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,850.0	0.00	58.60	5,850.0	2,298.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,900.0	0.00	58.60	5,900.0	2,348.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
5,950.0	0.00	58.60	5,950.0	2,398.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
Project:	Bell Lake Unit North 421H	**TVD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
6,000.0	0.00	58.60	6,000.0	2,448.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,050.0	0.00	58.60	6,050.0	2,498.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,100.0	0.00	58.60	6,100.0	2,548.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,150.0	0.00	58.60	6,150.0	2,598.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,200.0	0.00	58.60	6,200.0	2,648.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,250.0	0.00	58.60	6,250.0	2,698.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,300.0	0.00	58.60	6,300.0	2,748.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,350.0	0.00	58.60	6,350.0	2,798.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,400.0	0.00	58.60	6,400.0	2,848.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,450.0	0.00	58.60	6,450.0	2,898.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,500.0	0.00	58.60	6,500.0	2,948.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,550.0	0.00	58.60	6,550.0	2,998.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,572.0	0.00	58.60	6,572.0	3,020.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
Cherry Canyon										
6,600.0	0.00	58.60	6,600.0	3,048.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,650.0	0.00	58.60	6,650.0	3,098.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,700.0	0.00	58.60	6,700.0	3,148.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,750.0	0.00	58.60	6,750.0	3,198.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,800.0	0.00	58.60	6,800.0	3,248.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,850.0	0.00	58.60	6,850.0	3,298.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,900.0	0.00	58.60	6,900.0	3,348.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
6,950.0	0.00	58.60	6,950.0	3,398.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,000.0	0.00	58.60	7,000.0	3,448.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,050.0	0.00	58.60	7,050.0	3,498.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,100.0	0.00	58.60	7,100.0	3,548.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,150.0	0.00	58.60	7,150.0	3,598.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,200.0	0.00	58.60	7,200.0	3,648.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
Project:	Bell Lake Unit North 421H	**TVD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
7,250.0	0.00	58.60	7,250.0	3,698.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,300.0	0.00	58.60	7,300.0	3,748.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,350.0	0.00	58.60	7,350.0	3,798.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,400.0	0.00	58.60	7,400.0	3,848.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,450.0	0.00	58.60	7,450.0	3,898.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,500.0	0.00	58.60	7,500.0	3,948.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,550.0	0.00	58.60	7,550.0	3,998.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,600.0	0.00	58.60	7,600.0	4,048.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,650.0	0.00	58.60	7,650.0	4,098.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,700.0	0.00	58.60	7,700.0	4,148.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,750.0	0.00	58.60	7,750.0	4,198.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,800.0	0.00	58.60	7,800.0	4,248.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,850.0	0.00	58.60	7,850.0	4,298.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,900.0	0.00	58.60	7,900.0	4,348.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
7,950.0	0.00	58.60	7,950.0	4,398.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,000.0	0.00	58.60	8,000.0	4,448.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,050.0	0.00	58.60	8,050.0	4,498.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,100.0	0.00	58.60	8,100.0	4,548.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,150.0	0.00	58.60	8,150.0	4,598.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,200.0	0.00	58.60	8,200.0	4,648.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,222.0	0.00	58.60	8,222.0	4,670.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
Brushy Canyon										
8,250.0	0.00	58.60	8,250.0	4,698.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,300.0	0.00	58.60	8,300.0	4,748.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,350.0	0.00	58.60	8,350.0	4,798.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,400.0	0.00	58.60	8,400.0	4,848.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
Project:	Bell Lake Unit North 421H	**TVD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
8,447.0	0.00	58.60	8,447.0	4,895.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
Bone Spring										
8,450.0	0.00	58.60	8,450.0	4,898.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,500.0	0.00	58.60	8,500.0	4,948.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,550.0	0.00	58.60	8,550.0	4,998.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,600.0	0.00	58.60	8,600.0	5,048.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,650.0	0.00	58.60	8,650.0	5,098.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,700.0	0.00	58.60	8,700.0	5,148.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,750.0	0.00	58.60	8,750.0	5,198.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,800.0	0.00	58.60	8,800.0	5,248.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,802.0	0.00	58.60	8,802.0	5,250.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
Avalon										
8,850.0	0.00	58.60	8,850.0	5,298.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,900.0	0.00	58.60	8,900.0	5,348.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
8,950.0	0.00	58.60	8,950.0	5,398.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,000.0	0.00	58.60	9,000.0	5,448.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,050.0	0.00	58.60	9,050.0	5,498.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,100.0	0.00	58.60	9,100.0	5,548.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,150.0	0.00	58.60	9,150.0	5,598.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,200.0	0.00	58.60	9,200.0	5,648.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,250.0	0.00	58.60	9,250.0	5,698.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,300.0	0.00	58.60	9,300.0	5,748.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,350.0	0.00	58.60	9,350.0	5,798.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,400.0	0.00	58.60	9,400.0	5,848.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,450.0	0.00	58.60	9,450.0	5,898.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,500.0	0.00	58.60	9,500.0	5,948.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,550.0	0.00	58.60	9,550.0	5,998.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
Project:	Bell Lake Unit North 421H	**TVD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
9,600.0	0.00	58.60	9,600.0	6,048.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,650.0	0.00	58.60	9,650.0	6,098.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,700.0	0.00	58.60	9,700.0	6,148.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,747.0	0.00	58.60	9,747.0	6,195.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
1st Bone Spring Sand										
9,750.0	0.00	58.60	9,750.0	6,198.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,800.0	0.00	58.60	9,800.0	6,248.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,850.0	0.00	58.60	9,850.0	6,298.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,900.0	0.00	58.60	9,900.0	6,348.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
9,950.0	0.00	58.60	9,950.0	6,398.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,000.0	0.00	58.60	10,000.0	6,448.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,050.0	0.00	58.60	10,050.0	6,498.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,100.0	0.00	58.60	10,100.0	6,548.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,150.0	0.00	58.60	10,150.0	6,598.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,200.0	0.00	58.60	10,200.0	6,648.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,250.0	0.00	58.60	10,250.0	6,698.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,272.0	0.00	58.60	10,272.0	6,720.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
2nd Bone Spring Sand										
10,300.0	0.00	58.60	10,300.0	6,748.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,350.0	0.00	58.60	10,350.0	6,798.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,400.0	0.00	58.60	10,400.0	6,848.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,450.0	0.00	58.60	10,450.0	6,898.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,500.0	0.00	58.60	10,500.0	6,948.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,550.0	0.00	58.60	10,550.0	6,998.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,600.0	0.00	58.60	10,600.0	7,048.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,650.0	0.00	58.60	10,650.0	7,098.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,700.0	0.00	58.60	10,700.0	7,148.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
Project:	Bell Lake Unit North 421H	**TVD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
10,750.0	0.00	58.60	10,750.0	7,198.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,772.0	0.00	58.60	10,772.0	7,220.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
3rd Bone Spring Lime										
10,800.0	0.00	58.60	10,800.0	7,248.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,850.0	0.00	58.60	10,850.0	7,298.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,900.0	0.00	58.60	10,900.0	7,348.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
10,950.0	0.00	58.60	10,950.0	7,398.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
11,000.0	0.00	58.60	11,000.0	7,448.4	0.0	0.0	791,117.68	485,383.57	0.00	0.00
Start Build 3.00 - 7 5/8" Intermediate Casing										
11,050.0	1.50	58.60	11,050.0	7,498.4	0.3	0.6	791,118.24	485,383.91	0.34	3.00
11,100.0	3.00	58.60	11,100.0	7,548.4	1.4	2.2	791,119.91	485,384.93	1.37	3.00
11,150.0	4.50	58.60	11,149.8	7,598.2	3.1	5.0	791,122.71	485,386.64	3.09	3.00
11,200.0	6.00	58.60	11,199.6	7,648.0	5.5	8.9	791,126.61	485,389.02	5.48	3.00
Start 80.0 hold at 11200.0 MD										
11,250.0	6.00	58.60	11,249.4	7,697.8	8.2	13.4	791,131.07	485,391.74	8.22	0.00
11,280.0	6.00	58.60	11,279.2	7,727.6	9.8	16.1	791,133.75	485,393.38	9.87	0.00
Start DLS 10.00 TFO -58.13										
11,300.0	7.26	45.03	11,299.1	7,747.5	11.2	17.9	791,135.53	485,394.82	11.31	10.00
11,303.0	7.47	43.43	11,302.0	7,750.4	11.5	18.1	791,135.80	485,395.09	11.58	10.00
3rd Bone Spring Sand										
11,350.0	11.37	26.93	11,348.4	7,796.8	17.9	22.3	791,140.00	485,401.44	17.95	10.00
11,400.0	15.99	18.74	11,397.0	7,845.4	28.8	26.8	791,144.45	485,412.37	28.89	10.00
11,450.0	20.78	14.20	11,444.4	7,892.8	43.9	31.2	791,148.84	485,427.50	44.04	10.00
11,500.0	25.65	11.31	11,490.4	7,938.8	63.1	35.5	791,153.14	485,446.72	63.28	10.00
11,550.0	30.56	9.30	11,534.4	7,982.8	86.3	39.6	791,157.32	485,469.89	86.46	10.00
11,600.0	35.49	7.79	11,576.4	8,024.8	113.3	43.7	791,161.34	485,496.83	113.42	10.00
11,650.0	40.44	6.62	11,615.8	8,064.2	143.8	47.5	791,165.18	485,527.34	143.94	10.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
Project:	Bell Lake Unit North 421H	**TVD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
11,658.3	41.26	6.45	11,622.0	8,070.4	149.1	48.1	791,165.80	485,532.70	149.31	10.00
First PP - Wolfcamp										
11,700.0	45.40	5.66	11,652.4	8,100.8	177.6	51.1	791,168.81	485,561.19	177.80	10.00
11,750.0	50.36	4.85	11,685.9	8,134.3	214.5	54.5	791,172.19	485,598.11	214.73	10.00
11,800.0	55.33	4.15	11,716.1	8,164.5	254.3	57.6	791,175.31	485,637.82	254.46	10.00
11,850.0	60.30	3.53	11,742.7	8,191.1	296.5	60.5	791,178.14	485,680.03	296.67	10.00
11,900.0	65.28	2.97	11,765.6	8,214.0	340.8	63.0	791,180.65	485,724.41	341.06	10.00
11,950.0	70.25	2.45	11,784.5	8,232.9	387.1	65.2	791,182.83	485,770.63	387.29	10.00
12,000.0	75.23	1.96	11,799.3	8,247.7	434.8	67.0	791,184.67	485,818.32	434.99	10.00
12,050.0	80.21	1.50	11,809.9	8,258.3	483.6	68.5	791,186.14	485,867.14	483.81	10.00
12,100.0	85.19	1.05	11,816.3	8,264.7	533.1	69.6	791,187.24	485,916.71	533.38	10.00
12,117.2	86.90	0.89	11,817.5	8,265.9	550.3	69.8	791,187.53	485,933.87	550.54	9.98
Start DLS 1.99 TFO -21.27										
12,150.0	87.51	0.66	11,819.1	8,267.5	583.1	70.3	791,187.97	485,966.62	583.30	1.99
12,200.0	88.43	0.29	11,820.8	8,269.2	633.0	70.7	791,188.38	486,016.59	633.27	1.99
12,250.0	89.36	359.93	11,821.8	8,270.2	683.0	70.8	791,188.48	486,066.58	683.26	1.99
12,284.5	90.00	359.69	11,822.0	8,270.4	717.5	70.7	791,188.37	486,101.08	717.76	1.99
Start DLS 0.00 TFO 90.00 - First Take Point										
12,300.0	90.00	359.69	11,822.0	8,270.4	733.0	70.6	791,188.28	486,116.58	733.26	0.00
12,350.0	90.00	359.69	11,822.0	8,270.4	783.0	70.3	791,188.01	486,166.58	783.25	0.00
12,400.0	90.00	359.69	11,822.0	8,270.4	833.0	70.1	791,187.74	486,216.58	833.25	0.00
12,450.0	90.00	359.69	11,822.0	8,270.4	883.0	69.8	791,187.46	486,266.58	883.25	0.00
12,500.0	90.00	359.69	11,822.0	8,270.4	933.0	69.5	791,187.19	486,316.57	933.25	0.00
12,550.0	90.00	359.69	11,822.0	8,270.4	983.0	69.2	791,186.91	486,366.57	983.25	0.00
12,600.0	90.00	359.69	11,822.0	8,270.4	1,033.0	69.0	791,186.64	486,416.57	1,033.24	0.00
12,650.0	90.00	359.69	11,822.0	8,270.4	1,083.0	68.7	791,186.37	486,466.57	1,083.24	0.00
12,700.0	90.00	359.69	11,822.0	8,270.4	1,133.0	68.4	791,186.09	486,516.57	1,133.24	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
Project:	Bell Lake Unit North 421H	**TVD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
12,750.0	90.00	359.69	11,822.0	8,270.4	1,183.0	68.1	791,185.82	486,566.57	1,183.24	0.00
12,800.0	90.00	359.69	11,822.0	8,270.4	1,233.0	67.9	791,185.54	486,616.57	1,233.24	0.00
12,850.0	90.00	359.69	11,822.0	8,270.4	1,283.0	67.6	791,185.27	486,666.57	1,283.23	0.00
12,900.0	90.00	359.69	11,822.0	8,270.4	1,333.0	67.3	791,185.00	486,716.57	1,333.23	0.00
12,950.0	90.00	359.69	11,822.0	8,270.4	1,383.0	67.0	791,184.72	486,766.57	1,383.23	0.00
13,000.0	90.00	359.69	11,822.0	8,270.4	1,433.0	66.8	791,184.45	486,816.57	1,433.23	0.00
13,050.0	90.00	359.69	11,822.0	8,270.4	1,483.0	66.5	791,184.17	486,866.57	1,483.22	0.00
13,100.0	90.00	359.69	11,822.0	8,270.4	1,533.0	66.2	791,183.90	486,916.57	1,533.22	0.00
13,150.0	90.00	359.69	11,822.0	8,270.4	1,583.0	65.9	791,183.63	486,966.57	1,583.22	0.00
13,200.0	90.00	359.69	11,822.0	8,270.4	1,633.0	65.7	791,183.35	487,016.56	1,633.22	0.00
13,250.0	90.00	359.69	11,822.0	8,270.4	1,683.0	65.4	791,183.08	487,066.56	1,683.22	0.00
13,300.0	90.00	359.69	11,822.0	8,270.4	1,733.0	65.1	791,182.81	487,116.56	1,733.21	0.00
13,350.0	90.00	359.69	11,822.0	8,270.4	1,783.0	64.9	791,182.53	487,166.56	1,783.21	0.00
13,400.0	90.00	359.69	11,822.0	8,270.4	1,833.0	64.6	791,182.26	487,216.56	1,833.21	0.00
13,450.0	90.00	359.69	11,822.0	8,270.4	1,883.0	64.3	791,181.98	487,266.56	1,883.21	0.00
13,500.0	90.00	359.69	11,822.0	8,270.4	1,933.0	64.0	791,181.71	487,316.56	1,933.21	0.00
13,550.0	90.00	359.69	11,822.0	8,270.4	1,983.0	63.8	791,181.44	487,366.56	1,983.20	0.00
13,600.0	90.00	359.69	11,822.0	8,270.4	2,033.0	63.5	791,181.16	487,416.56	2,033.20	0.00
13,650.0	90.00	359.69	11,822.0	8,270.4	2,083.0	63.2	791,180.89	487,466.56	2,083.20	0.00
13,700.0	90.00	359.69	11,822.0	8,270.4	2,133.0	62.9	791,180.62	487,516.56	2,133.20	0.00
13,750.0	90.00	359.69	11,822.0	8,270.4	2,183.0	62.7	791,180.34	487,566.56	2,183.20	0.00
13,800.0	90.00	359.69	11,822.0	8,270.4	2,233.0	62.4	791,180.07	487,616.56	2,233.19	0.00
13,850.0	90.00	359.69	11,822.0	8,270.4	2,283.0	62.1	791,179.80	487,666.55	2,283.19	0.00
13,900.0	90.00	359.69	11,822.0	8,270.4	2,333.0	61.8	791,179.52	487,716.55	2,333.19	0.00
13,950.0	90.00	359.69	11,822.0	8,270.4	2,383.0	61.6	791,179.25	487,766.55	2,383.19	0.00
14,000.0	90.00	359.69	11,822.0	8,270.4	2,433.0	61.3	791,178.98	487,816.55	2,433.19	0.00
14,050.0	90.00	359.69	11,822.0	8,270.4	2,483.0	61.0	791,178.70	487,866.55	2,483.18	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
Project:	Bell Lake Unit North 421H	**TVD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
14,100.0	90.00	359.69	11,822.0	8,270.4	2,533.0	60.7	791,178.43	487,916.55	2,533.18	0.00
14,150.0	90.00	359.69	11,822.0	8,270.4	2,583.0	60.5	791,178.16	487,966.55	2,583.18	0.00
14,200.0	90.00	359.69	11,822.0	8,270.4	2,633.0	60.2	791,177.88	488,016.55	2,633.18	0.00
14,250.0	90.00	359.69	11,822.0	8,270.4	2,683.0	59.9	791,177.61	488,066.55	2,683.18	0.00
14,300.0	90.00	359.69	11,822.0	8,270.4	2,733.0	59.7	791,177.34	488,116.55	2,733.17	0.00
14,350.0	90.00	359.69	11,822.0	8,270.4	2,783.0	59.4	791,177.06	488,166.55	2,783.17	0.00
14,400.0	90.00	359.69	11,822.0	8,270.4	2,833.0	59.1	791,176.79	488,216.55	2,833.17	0.00
14,450.0	90.00	359.69	11,822.0	8,270.4	2,883.0	58.8	791,176.52	488,266.55	2,883.17	0.00
14,500.0	90.00	359.69	11,822.0	8,270.4	2,933.0	58.6	791,176.24	488,316.55	2,933.17	0.00
14,550.0	90.00	359.69	11,822.0	8,270.4	2,983.0	58.3	791,175.97	488,366.54	2,983.16	0.00
14,600.0	90.00	359.69	11,822.0	8,270.4	3,033.0	58.0	791,175.70	488,416.54	3,033.16	0.00
14,650.0	90.00	359.69	11,822.0	8,270.4	3,083.0	57.7	791,175.42	488,466.54	3,083.16	0.00
14,700.0	90.00	359.69	11,822.0	8,270.4	3,133.0	57.5	791,175.15	488,516.54	3,133.16	0.00
14,750.0	90.00	359.69	11,822.0	8,270.4	3,183.0	57.2	791,174.88	488,566.54	3,183.16	0.00
14,800.0	90.00	359.69	11,822.0	8,270.4	3,233.0	56.9	791,174.60	488,616.54	3,233.15	0.00
14,850.0	90.00	359.69	11,822.0	8,270.4	3,283.0	56.7	791,174.33	488,666.54	3,283.15	0.00
14,900.0	90.00	359.69	11,822.0	8,270.4	3,333.0	56.4	791,174.06	488,716.54	3,333.15	0.00
14,950.0	90.00	359.69	11,822.0	8,270.4	3,383.0	56.1	791,173.79	488,766.54	3,383.15	0.00
15,000.0	90.00	359.69	11,822.0	8,270.4	3,433.0	55.8	791,173.51	488,816.54	3,433.15	0.00
15,050.0	90.00	359.69	11,822.0	8,270.4	3,483.0	55.6	791,173.24	488,866.54	3,483.14	0.00
15,100.0	90.00	359.69	11,822.0	8,270.4	3,533.0	55.3	791,172.97	488,916.54	3,533.14	0.00
15,150.0	90.00	359.69	11,822.0	8,270.4	3,583.0	55.0	791,172.69	488,966.54	3,583.14	0.00
15,200.0	90.00	359.69	11,822.0	8,270.4	3,633.0	54.7	791,172.42	489,016.53	3,633.14	0.00
15,250.0	90.00	359.69	11,822.0	8,270.4	3,683.0	54.5	791,172.15	489,066.53	3,683.14	0.00
15,300.0	90.00	359.69	11,822.0	8,270.4	3,733.0	54.2	791,171.88	489,116.53	3,733.13	0.00
15,350.0	90.00	359.69	11,822.0	8,270.4	3,783.0	53.9	791,171.60	489,166.53	3,783.13	0.00
15,400.0	90.00	359.69	11,822.0	8,270.4	3,833.0	53.7	791,171.33	489,216.53	3,833.13	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
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Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
15,450.0	90.00	359.69	11,822.0	8,270.4	3,883.0	53.4	791,171.06	489,266.53	3,883.13	0.00
15,500.0	90.00	359.69	11,822.0	8,270.4	3,933.0	53.1	791,170.78	489,316.53	3,933.12	0.00
15,550.0	90.00	359.69	11,822.0	8,270.4	3,983.0	52.8	791,170.51	489,366.53	3,983.12	0.00
15,600.0	90.00	359.69	11,822.0	8,270.4	4,033.0	52.6	791,170.24	489,416.53	4,033.12	0.00
15,650.0	90.00	359.69	11,822.0	8,270.4	4,083.0	52.3	791,169.97	489,466.53	4,083.12	0.00
15,700.0	90.00	359.69	11,822.0	8,270.4	4,133.0	52.0	791,169.69	489,516.53	4,133.12	0.00
15,750.0	90.00	359.69	11,822.0	8,270.4	4,183.0	51.7	791,169.42	489,566.53	4,183.11	0.00
15,800.0	90.00	359.69	11,822.0	8,270.4	4,233.0	51.5	791,169.15	489,616.53	4,233.11	0.00
15,850.0	90.00	359.69	11,822.0	8,270.4	4,283.0	51.2	791,168.88	489,666.52	4,283.11	0.00
15,900.0	90.00	359.69	11,822.0	8,270.4	4,333.0	50.9	791,168.60	489,716.52	4,333.11	0.00
15,950.0	90.00	359.69	11,822.0	8,270.4	4,383.0	50.7	791,168.33	489,766.52	4,383.11	0.00
16,000.0	90.00	359.69	11,822.0	8,270.4	4,433.0	50.4	791,168.06	489,816.52	4,433.10	0.00
16,050.0	90.00	359.69	11,822.0	8,270.4	4,483.0	50.1	791,167.79	489,866.52	4,483.10	0.00
16,100.0	90.00	359.69	11,822.0	8,270.4	4,533.0	49.8	791,167.51	489,916.52	4,533.10	0.00
16,150.0	90.00	359.69	11,822.0	8,270.4	4,583.0	49.6	791,167.24	489,966.52	4,583.10	0.00
16,200.0	90.00	359.69	11,822.0	8,270.4	4,632.9	49.3	791,166.97	490,016.52	4,633.10	0.00
16,250.0	90.00	359.69	11,822.0	8,270.4	4,682.9	49.0	791,166.70	490,066.52	4,683.09	0.00
16,300.0	90.00	359.69	11,822.0	8,270.4	4,732.9	48.7	791,166.43	490,116.52	4,733.09	0.00
16,350.0	90.00	359.69	11,822.0	8,270.4	4,782.9	48.5	791,166.15	490,166.52	4,783.09	0.00
16,400.0	90.00	359.69	11,822.0	8,270.4	4,832.9	48.2	791,165.88	490,216.52	4,833.09	0.00
16,450.0	90.00	359.69	11,822.0	8,270.4	4,882.9	47.9	791,165.61	490,266.52	4,883.09	0.00
16,500.0	90.00	359.69	11,822.0	8,270.4	4,932.9	47.7	791,165.34	490,316.52	4,933.08	0.00
16,550.0	90.00	359.69	11,822.0	8,270.4	4,982.9	47.4	791,165.06	490,366.51	4,983.08	0.00
16,600.0	90.00	359.69	11,822.0	8,270.4	5,032.9	47.1	791,164.79	490,416.51	5,033.08	0.00
16,650.0	90.00	359.69	11,822.0	8,270.4	5,082.9	46.8	791,164.52	490,466.51	5,083.08	0.00
16,700.0	90.00	359.69	11,822.0	8,270.4	5,132.9	46.6	791,164.25	490,516.51	5,133.08	0.00
16,750.0	90.00	359.69	11,822.0	8,270.4	5,182.9	46.3	791,163.98	490,566.51	5,183.07	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
Project:	Bell Lake Unit North 421H	**TVD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
16,800.0	90.00	359.69	11,822.0	8,270.4	5,232.9	46.0	791,163.70	490,616.51	5,233.07	0.00
16,850.0	90.00	359.69	11,822.0	8,270.4	5,282.9	45.8	791,163.43	490,666.51	5,283.07	0.00
16,900.0	90.00	359.69	11,822.0	8,270.4	5,332.9	45.5	791,163.16	490,716.51	5,333.07	0.00
16,950.0	90.00	359.69	11,822.0	8,270.4	5,382.9	45.2	791,162.89	490,766.51	5,383.07	0.00
17,000.0	90.00	359.69	11,822.0	8,270.4	5,432.9	44.9	791,162.62	490,816.51	5,433.06	0.00
17,050.0	90.00	359.69	11,822.0	8,270.4	5,482.9	44.7	791,162.34	490,866.51	5,483.06	0.00
17,100.0	90.00	359.69	11,822.0	8,270.4	5,532.9	44.4	791,162.07	490,916.51	5,533.06	0.00
17,150.0	90.00	359.69	11,822.0	8,270.4	5,582.9	44.1	791,161.80	490,966.51	5,583.06	0.00
17,200.0	90.00	359.69	11,822.0	8,270.4	5,632.9	43.8	791,161.53	491,016.50	5,633.06	0.00
17,250.0	90.00	359.69	11,822.0	8,270.4	5,682.9	43.6	791,161.26	491,066.50	5,683.05	0.00
17,300.0	90.00	359.69	11,822.0	8,270.4	5,732.9	43.3	791,160.99	491,116.50	5,733.05	0.00
17,350.0	90.00	359.69	11,822.0	8,270.4	5,782.9	43.0	791,160.71	491,166.50	5,783.05	0.00
17,400.0	90.00	359.69	11,822.0	8,270.4	5,832.9	42.8	791,160.44	491,216.50	5,833.05	0.00
17,450.0	90.00	359.69	11,822.0	8,270.4	5,882.9	42.5	791,160.17	491,266.50	5,883.05	0.00
17,500.0	90.00	359.69	11,822.0	8,270.4	5,932.9	42.2	791,159.90	491,316.50	5,933.04	0.00
17,550.0	90.00	359.69	11,822.0	8,270.4	5,982.9	41.9	791,159.63	491,366.50	5,983.04	0.00
17,600.0	90.00	359.69	11,822.0	8,270.4	6,032.9	41.7	791,159.35	491,416.50	6,033.04	0.00
17,650.0	90.00	359.69	11,822.0	8,270.4	6,082.9	41.4	791,159.08	491,466.50	6,083.04	0.00
17,700.0	90.00	359.69	11,822.0	8,270.4	6,132.9	41.1	791,158.81	491,516.50	6,133.04	0.00
17,750.0	90.00	359.69	11,822.0	8,270.4	6,182.9	40.9	791,158.54	491,566.50	6,183.03	0.00
17,800.0	90.00	359.69	11,822.0	8,270.4	6,232.9	40.6	791,158.27	491,616.50	6,233.03	0.00
17,850.0	90.00	359.69	11,822.0	8,270.4	6,282.9	40.3	791,158.00	491,666.50	6,283.03	0.00
17,900.0	90.00	359.69	11,822.0	8,270.4	6,332.9	40.0	791,157.73	491,716.49	6,333.03	0.00
17,950.0	90.00	359.69	11,822.0	8,270.4	6,382.9	39.8	791,157.45	491,766.49	6,383.03	0.00
18,000.0	90.00	359.69	11,822.0	8,270.4	6,432.9	39.5	791,157.18	491,816.49	6,433.02	0.00
18,050.0	90.00	359.69	11,822.0	8,270.4	6,482.9	39.2	791,156.91	491,866.49	6,483.02	0.00
18,100.0	90.00	359.69	11,822.0	8,270.4	6,532.9	39.0	791,156.64	491,916.49	6,533.02	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
Project:	Bell Lake Unit North 421H	**TVD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
18,150.0	90.00	359.69	11,822.0	8,270.4	6,582.9	38.7	791,156.37	491,966.49	6,583.02	0.00
18,200.0	90.00	359.69	11,822.0	8,270.4	6,632.9	38.4	791,156.10	492,016.49	6,633.02	0.00
18,250.0	90.00	359.69	11,822.0	8,270.4	6,682.9	38.1	791,155.83	492,066.49	6,683.01	0.00
18,300.0	90.00	359.69	11,822.0	8,270.4	6,732.9	37.9	791,155.55	492,116.49	6,733.01	0.00
18,350.0	90.00	359.69	11,822.0	8,270.4	6,782.9	37.6	791,155.28	492,166.49	6,783.01	0.00
18,400.0	90.00	359.69	11,822.0	8,270.4	6,832.9	37.3	791,155.01	492,216.49	6,833.01	0.00
18,450.0	90.00	359.69	11,822.0	8,270.4	6,882.9	37.1	791,154.74	492,266.49	6,883.01	0.00
18,500.0	90.00	359.69	11,822.0	8,270.4	6,932.9	36.8	791,154.47	492,316.49	6,933.00	0.00
18,550.0	90.00	359.69	11,822.0	8,270.4	6,982.9	36.5	791,154.20	492,366.49	6,983.00	0.00
18,600.0	90.00	359.69	11,822.0	8,270.4	7,032.9	36.2	791,153.93	492,416.48	7,033.00	0.00
18,650.0	90.00	359.69	11,822.0	8,270.4	7,082.9	36.0	791,153.66	492,466.48	7,083.00	0.00
18,700.0	90.00	359.69	11,822.0	8,270.4	7,132.9	35.7	791,153.39	492,516.48	7,132.99	0.00
18,750.0	90.00	359.69	11,822.0	8,270.4	7,182.9	35.4	791,153.11	492,566.48	7,182.99	0.00
18,800.0	90.00	359.69	11,822.0	8,270.4	7,232.9	35.2	791,152.84	492,616.48	7,232.99	0.00
18,850.0	90.00	359.69	11,822.0	8,270.4	7,282.9	34.9	791,152.57	492,666.48	7,282.99	0.00
18,900.0	90.00	359.69	11,822.0	8,270.4	7,332.9	34.6	791,152.30	492,716.48	7,332.99	0.00
18,950.0	90.00	359.69	11,822.0	8,270.4	7,382.9	34.4	791,152.03	492,766.48	7,382.98	0.00
19,000.0	90.00	359.69	11,822.0	8,270.4	7,432.9	34.1	791,151.76	492,816.48	7,432.98	0.00
19,050.0	90.00	359.69	11,822.0	8,270.4	7,482.9	33.8	791,151.49	492,866.48	7,482.98	0.00
19,100.0	90.00	359.69	11,822.0	8,270.4	7,532.9	33.5	791,151.22	492,916.48	7,532.98	0.00
19,150.0	90.00	359.69	11,822.0	8,270.4	7,582.9	33.3	791,150.95	492,966.48	7,582.98	0.00
19,200.0	90.00	359.69	11,822.0	8,270.4	7,632.9	33.0	791,150.68	493,016.48	7,632.97	0.00
19,250.0	90.00	359.69	11,822.0	8,270.4	7,682.9	32.7	791,150.40	493,066.47	7,682.97	0.00
19,300.0	90.00	359.69	11,822.0	8,270.4	7,732.9	32.5	791,150.13	493,116.47	7,732.97	0.00
19,350.0	90.00	359.69	11,822.0	8,270.4	7,782.9	32.2	791,149.86	493,166.47	7,782.97	0.00
19,400.0	90.00	359.69	11,822.0	8,270.4	7,832.9	31.9	791,149.59	493,216.47	7,832.97	0.00
19,450.0	90.00	359.69	11,822.0	8,270.4	7,882.9	31.6	791,149.32	493,266.47	7,882.96	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
Project:	Bell Lake Unit North 421H	**TVD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
19,500.0	90.00	359.69	11,822.0	8,270.4	7,932.9	31.4	791,149.05	493,316.47	7,932.96	0.00
19,550.0	90.00	359.69	11,822.0	8,270.4	7,982.9	31.1	791,148.78	493,366.47	7,982.96	0.00
19,600.0	90.00	359.69	11,822.0	8,270.4	8,032.9	30.8	791,148.51	493,416.47	8,032.96	0.00
19,650.0	90.00	359.69	11,822.0	8,270.4	8,082.9	30.6	791,148.24	493,466.47	8,082.96	0.00
19,700.0	90.00	359.69	11,822.0	8,270.4	8,132.9	30.3	791,147.97	493,516.47	8,132.95	0.00
19,750.0	90.00	359.69	11,822.0	8,270.4	8,182.9	30.0	791,147.70	493,566.47	8,182.95	0.00
19,800.0	90.00	359.69	11,822.0	8,270.4	8,232.9	29.7	791,147.43	493,616.47	8,232.95	0.00
19,834.6	90.00	359.69	11,822.0	8,270.4	8,267.5	29.6	791,147.24	493,651.07	8,267.55	0.00
TD at 19834.8 - Last Take Point - 5 1/2" Production Casing										

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,272.0	1,272.0	10 3/4" Surface Casing	10-3/4	12-1/4
11,000.0	11,000.0	7 5/8" Intermediate Casing	7-5/8	9-7/8
19,834.6	11,822.0	5 1/2" Production Casing	5-1/2	6-3/4
120.0	120.0	20" Conductor	20	26

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 421H
Project:	Bell Lake Unit North 421H	**TVD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Site:	Bell Lake Unit North 421H	**MD Reference:**	WELL @ 3551.6usft (Original Well Elev)
Well:	Bell Lake Unit North 421H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 421H	**Survey Calculation Method:**	Minimum Curvature
Design:	Bell Lake Unit North 421H	**Database:**	EDM 5000.1 Single User Db

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
10,272.0	10,272.0	2nd Bone Spring Sand		0.00	
11,303.0	11,302.0	3rd Bone Spring Sand		0.00	
4,747.0	4,747.0	Base of Salt		0.00	
1,472.0	1,472.0	Salado		0.00	
10,772.0	10,772.0	3rd Bone Spring Lime		0.00	
5,022.0	5,022.0	Lamar		0.00	
5,322.0	5,322.0	Bell Canyon		0.00	
1,222.0	1,222.0	Rustler		0.00	
8,222.0	8,222.0	Brushy Canyon		0.00	
9,747.0	9,747.0	1st Bone Spring Sand		0.00	
8,802.0	8,802.0	Avalon		0.00	
6,572.0	6,572.0	Cherry Canyon		0.00	
1,797.0	1,797.0	Top of Salt		0.00	
11,658.3	11,622.0	Wolfcamp		0.00	
8,447.0	8,447.0	Bone Spring		0.00	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
11,000.0	11,000.0	0.0	0.0	Start Build 3.00
11,200.0	11,199.6	5.5	8.9	Start 80.0 hold at 11200.0 MD
11,280.0	11,279.2	9.8	16.1	Start DLS 10.00 TFO -58.13
11,658.3	11,622.0	149.1	48.1	First PP
12,117.2	11,817.5	550.3	69.8	Start DLS 1.99 TFO -21.27
12,284.5	11,822.0	717.5	70.7	Start DLS 0.00 TFO 90.00 - First Take Point
19,834.6	11,822.0	8,267.5	29.6	TD at 19834.8 - Last Take Point

Checked By: _____ Approved By: _____ Date: _____

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Submit Original
to Appropriate
District Office

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 (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Bell Lake Unit North 221H		1-23S-33E		2000	0	
Bell Lake Unit North 222H		1-23S-33E		2000	0	
Bell Lake Unit North 321H		1-23S-33E		2000	0	
Bell Lake Unit North 322H		1-23S-33E		2000	0	
Bell Lake Unit North 421H		1-23S-33E		2000	0	
Bell Lake Unit North 422H		1-23S-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 Targa and will be connected to Targa low/high pressure gathering system located in _Lea_ County, New Mexico. It will require _11,000' of pipeline to connect the facility to low/high pressure gathering system. Kaiser-Francis Oil Company provides (periodically) to Targa a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Kaiser-Francis Oil Company and Targa have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Targa Processing Plant located in Sec._36_, Twn.__19S_, Rng._36E, __Lea__ 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 Targa system at that time. Based on current information, it is Kaiser-Francis Oil Company's belief the system can take this gas upon completion of the well(s).

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

Alternatives to Reduce Flaring

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

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

QMS REGISTERED

Certificate of Registration

APIQR® REGISTRATION NUMBER

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 (APIQR®) and found it to be in conformance with the following standard:

ISO 9001:2015

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

Design and Manufacture of Oilfield, Marine and Other Industrial 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**

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.**

QUALITY REGISTRAR

2018-152 | 02.19
Digital

energy API

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

Vice President of Global Industry Services

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

Certificate of Authority to use the Official API Monogram

License Number: 16C-0383 **ORIGINAL**

The American Petroleum Institute hereby grants to

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

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and **API-16C** and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: **16C-0383**

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

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

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: APRIL 21, 2019
Expiration Date: APRIL 21, 2022

To verify the authenticity of this license, go to www.api.org/compositelist.

Vice President of Global Industry Services

American Petroleum Institute

AMERICAN PETROLEUM INSTITUTE CORPORATE SEAL INCORPORATED 1919

2018-151 | Digital

copper state rubber
CSR
Specialties Company

14141 S. Wayside Drive
Houston, Texas 77048

Phone 713-644-1491
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www.copperstaterubber.com
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October 7, 2019

Cactus Drilling LTR Fastener
11722 W. Hwy 80 E.
Odessa, TX 79765

Subject: Date: October 7, 2019
Specialties Company File No.: CSR-32367 / SPECO-83336

Equipment: Inspect, Borescope, and Recertify Customer's Choke & Kill Hose, API 16C Monogrammed, Fire Resistant, 10,000 PSI MAWP x 15,000 PSI Test, Complete With 4-1/16" 10,000 PSI API Flanged Ends (Swivel x Fixed).
1EA: 3" ID X 35 Ft. (S/N-33974A)

CERTIFICATE OF COMPLIANCE

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

I. COMPLETE HOSE ASSEMBLY
- A. API Certificate of Accreditation for Spec: Q1 (Quality Programs) and Spec.: 16C
  1. Copper State Rubber, Inc. Certificate No.: 16C-0383
- B. **CSR** Specification No.: 090-1915C-48

II. PHYSICAL/CHEMICAL PROPERTIES OF METAL COMPONENTS
- A. **API** Spec. 6A, latest edition
- B. **API** Spec. 16A, latest edition
- C. **NACE** Standard MR0175, latest edition

Sincerely,

Wyatt D. Love,
Technical Department

Visual Inspection / Hydrostatic Test Report

Manufacturer	Copper State Rubber Inc.
Hose Type	Rotary Hose Re-Test
Pressure Rating	10,000 PSI MAWP X 15,000 PSI T/P
Spec Number	090-1915C - 48

Serial Number	33974A
Size ID	3"
Length	35'
Date	October 3, 2019
Shop Order Number	32367

Connections Description: 4 1/16" 10,000 PSI API SWIVEL FLANGE
4 1/16" 10,000 PSI API FIXED FLANGE

Traceability of Terminating Connectors

	Insert	Male	Nut	Female	Flanges	Hubs	Other
Connector 1	14B2				V4760		81401-1
Connector 2	14C1				V5468		H1264

Comments

Calibrated Devices

Pressure Recorder	CAL242	Calibration Date	8/8/2019

*This report signifies that the product has been visually inspected for defects in the interior tube, recess, gasket, cover and branding and all have been found to be conforming.

Comments Hose recess was repaired and then tested to factory test pressure as new.

Hydrostatic Testing Requirements

15 Min @ 15,000 psi (-0/+500 psi)

Length after test

35' OAL

Witness By: _____
Kyle Winters, Supervisor

Final OK: _____
Robert Snider, Quality Manager

Borescope / Visual Inspection

Manufacturer	**Copper State Rubber Inc.**
Hose Type	**Vibrator / Rotary Hose**
Pressure Rating	**10,000 PSI MAWP X 15,000 PSI T/P**
Spec Number	**090-1915C - 48**

Serial Number	33974A
Size ID	3"
Length	35'
Date	October 3, 2019

	Remarks
Gasket Faces	Pass
Recesses	Pass
Hose Bore	Pass
Bubbles or Bulges	None Noted
Visual Inspection	Pass

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

Witness By: _____

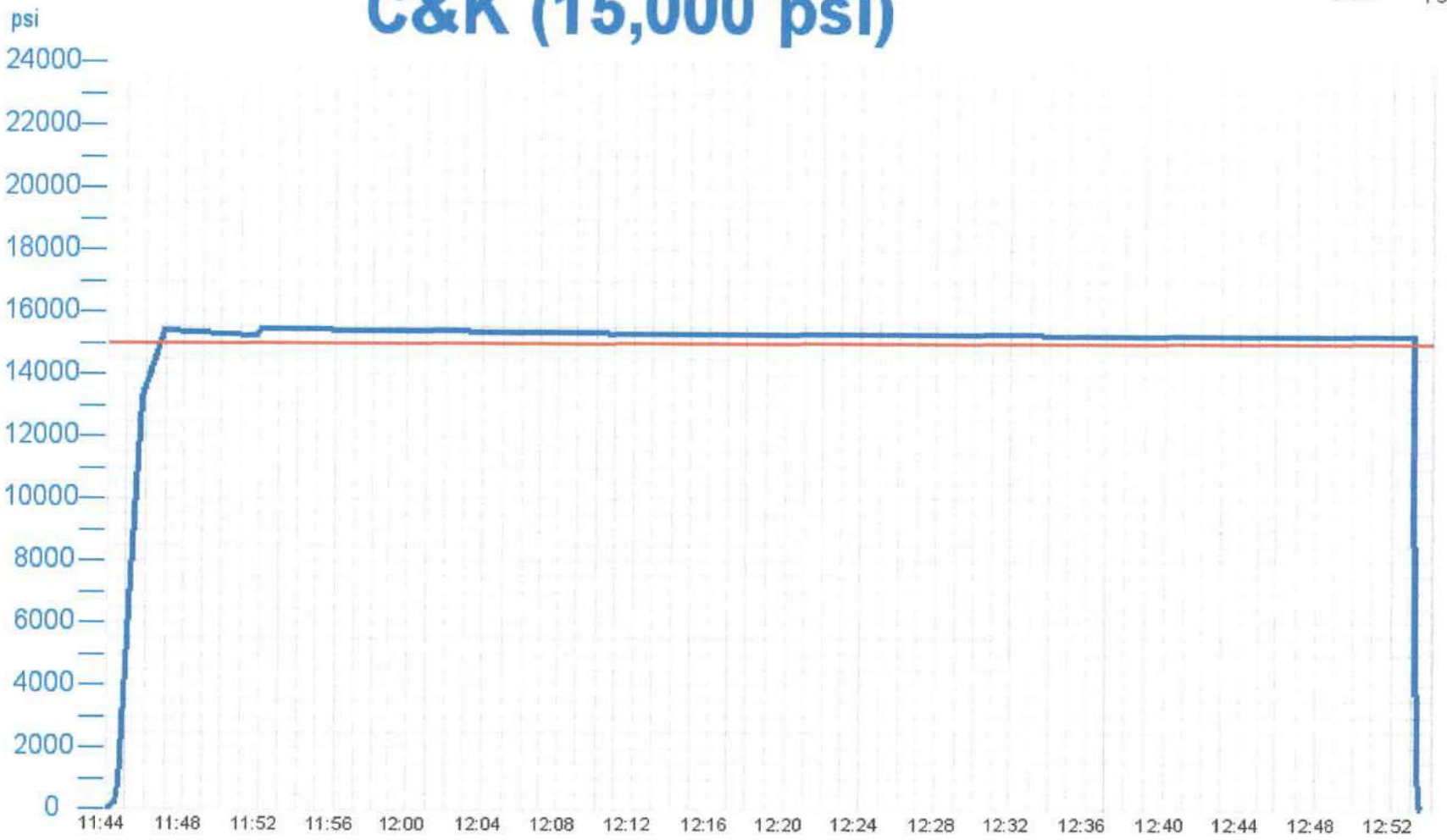
Robert Snider, Quality Manager

C&K (15,000 psi)

Date 10/03/19

Working Pressure	
10000	psi
Test Pressure	
15000	psi
Final Pressure	
15229	psi

Pressure Recorder ID
CAL242
Calibration Date
08/08/19



Serial	Work Order	Hose I.D.	Length	End Fitting A	End Fitting B
33974A	32367	3"	35 ft 0.00 in	4-1/16" 10,000# API SWIVEL FLANG	4-1/16" 10,000# API FLANGE

Operator	Reviewer	3rd Party Witness
Ruben Martinez	Kyle Winters	Robert Snyder II

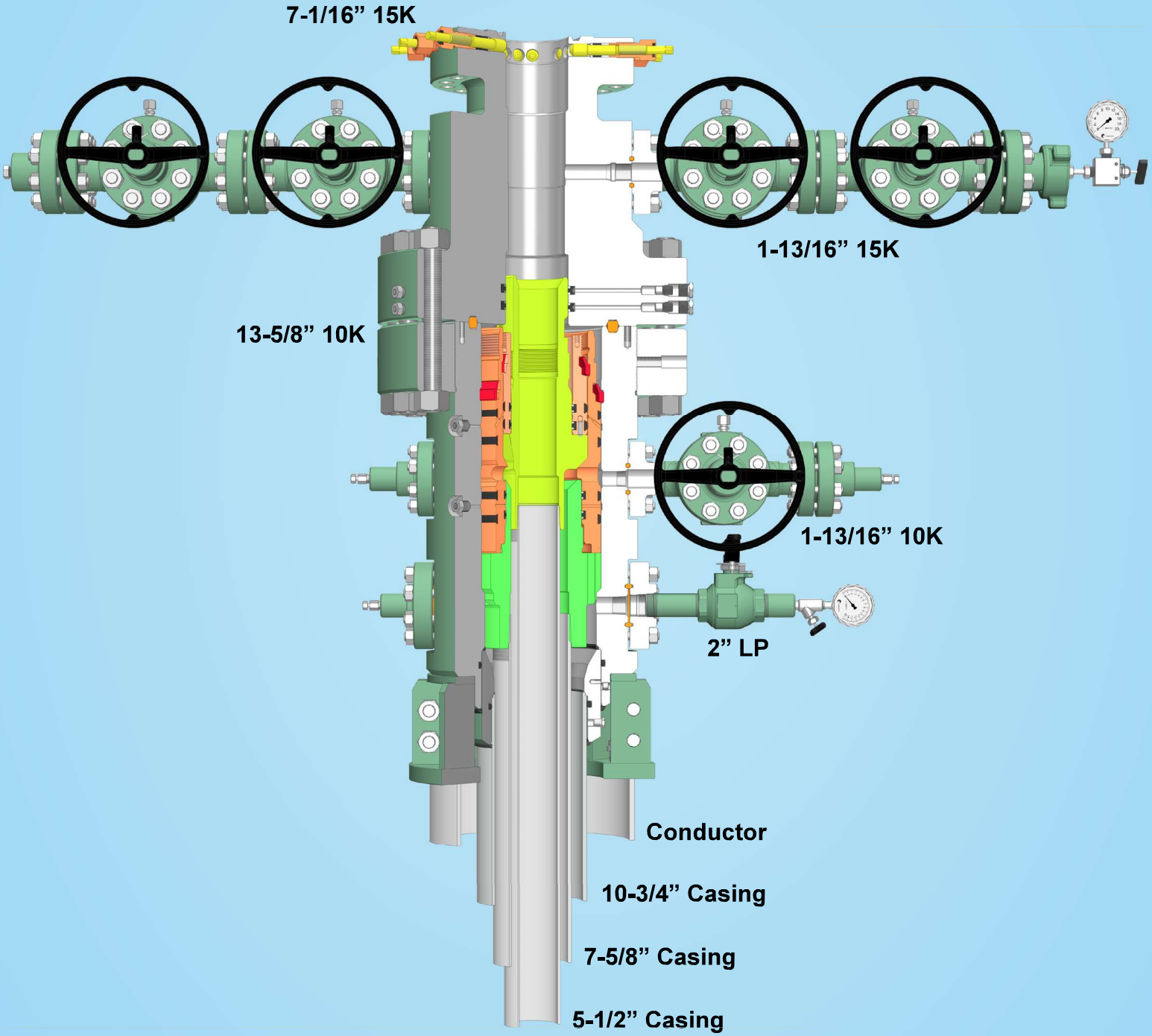
Signature/Date

Signature/Date

Signature/Date

CAMERON
A Schlumberger Company

13-5/8” 10K MN-DS Wellhead



Kaiser-Francis Oil Company

1678248

NOTE: All dimensions on this drawing are estimated measurements and should be evaluated by engineering.