UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD - HOBBS 08/14/2020 RECEIVED

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

5. Lease Serial No.	
NMLC0068387	

6. If Indian, Allotee or Tribe Name

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work:	NTER r			BELL LAKE / NMN	
	le Zone	Multiple Zone		8. Lease Name and Sell LAKE UNIT [3	
2. Name of Operator KAISER FRANCIS OIL COMPANY [12361]				9. API Well No. 30	0-025-47562
	o. Phone No 918) 491-0	o. (include area code 000	2)	10. Field and Pool, o	or Exploratory [98259 FCAMP, SOUTHWEST
4. Location of Well (Report location clearly and in accordance with At surface NWSE / 2082 FSL / 2206 FEL / LAT 32.33212 At proposed prod. zone NWNE / 330 FNL / 2110 FEL / LAT	94 / LONG	G -103.5246455	243486	11. Sec., T. R. M. or SEC 1/T23S/R33E	Blk. and Survey or Area /NMP
14. Distance in miles and direction from nearest town or post office ³ 20 miles	k			12. County or Parish LEA	13. State
location to nearest 558 feet	6. No of act	res in lease	17. Spacin 480.0	ng Unit dedicated to the	nis well
to nearest well, drilling, completed,	9. Proposed 0472 feet /	Depth ' 18360 feet		BIA Bond No. in file	
	2. Approxir 1/01/2020	mate date work will s	start*	23. Estimated durati 40 days	on
	24. Attacl	nments			
The following, completed in accordance with the requirements of Or (as applicable)	nshore Oil a	and Gas Order No. 1	, and the H	Iydraulic Fracturing ru	ule per 43 CFR 3162.3-3
Well plat certified by a registered surveyor. A Drilling Plan.		Item 20 above).	Î	s unless covered by an	n existing bond on file (see
3. A Surface Use Plan (if the location is on National Forest System I SUPO must be filed with the appropriate Forest Service Office).	Lands, the	5. Operator certific6. Such other site sp BLM.		mation and/or plans as	may be requested by the
25. Signature (Electronic Submission)		<i>(Printed/Typed)</i> MI DAVIS / Ph: (9	18) 491-0	000	Date 10/08/2019
Title Regulatory Analyst					
Approved by (Signature) (Electronic Submission)	I	<i>(Printed/Typed)</i> ₋ayton / Ph: (575) :	234-5959		Date 08/11/2020
Title Assistant Field Manager Lands & Minerals	Office Carlsb	ad Field Office			
Application approval does not warrant or certify that the applicant he	olds legal o	r equitable title to th	ose rights	in the subject lease wh	hich would entitle the

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 08/14/2020

applicant to conduct operations thereon. Conditions of approval, if any, are attached.

SL





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: NWSE / 2082 FSL / 2206 FEL / TWSP: 23S / RANGE: 33E / SECTION: 1 / LAT: 32.3321294 / LONG: -103.5246455 (TVD: 0 feet, MD: 0 feet)

PPP: SWSE / 0 FSL / 2120 FEL / TWSP: 22S / RANGE: 33E / SECTION: 36 / LAT: 32.3408911 / LONG: -103.5243819 (TVD: 10472 feet, MD: 13400 feet)

PPP: SWNE / 2600 FNL / 2130 FEL / TWSP: 23S / RANGE: 33E / SECTION: 1 / LAT: 32.3337702 / LONG: -103.5243992 (TVD: 10472 feet, MD: 10809 feet)

PPP: SWNE / 2640 FNL / 2130 FEL / TWSP: 23S / RANGE: 33E / SECTION: 1 / LAT: 32.33378 / LONG: -103.524345 (TVD: 10470 feet, MD: 10769 feet)

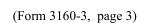
BHL: NWNE / 330 FNL / 2110 FEL / TWSP: 22S / RANGE: 33E / SECTION: 36 / LAT: 32.3545228 / LONG: -103.5243486 (TVD: 10472 feet, MD: 18360 feet)

BLM Point of Contact

Name: Deborah Ham

Title: Legal Landlaw Examiner

Phone: (575) 234-5965 Email: dham@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.



(Form 3160-3, page 4)



Operator Certification Data Report 08/12/2020

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Signed on: 09/25/2019

Title: Regulatory Analyst

Street Address: 106 W. Riverside Drive

City: Carlsbad State: NM Zip: 88220

Phone: (575)308-3765

Email address: nmogrservices@gmail.com

Field Representative

Email address: erich@kfoc.net

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone: (018)//01-//330		



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

Application Data Report

APD ID: 10400048014 **Submission Date:** 10/08/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 221H

Well Type: OIL WELL Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400048014 Tie to previous NOS? N Submission Date: 10/08/2019

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.

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: 221H Well API Number:

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

SOUTHWEST

Zip: 74121

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

Page 1 of 3

Well Name: BELL LAKE UNIT NORTH Well Number: 221H

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: Number: 3

Well Class: HORIZONTAL

NORTH BELL LAKE UNIT

Number of Legs: 1

Well Work Type: Drill
Well Type: OIL WELL
Describe Well Type:

Well sub-Type: EXPLORATORY (WILDCAT)

Describe sub-type:

Distance to town: 20 Miles Distance to nearest well: 30 FT Distance to lease line: 558 FT

Reservoir well spacing assigned acres Measurement: 480 Acres

Well plat: BLUN 221H C102 20190925150326.pdf

Pay.gov_20191008083827.pdf

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

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 Vertical Datum: NAVD88

Survey number: 5766A 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	208 2	FSL	220 6	FEL	23S	33E	1	Aliquot NWSE	32.33212 94	- 103.5246 455	LEA	NEW MEXI CO	114-11	F		352 9	0	0	N
KOP Leg #1	208 2	FSL	220 6	FEL	23S	33E	1	Aliquot NWSE	32.33212 94	- 103.5246 455	LEA		NEW MEXI CO	F	NMLC0 066438	- 597 1	950 0	950 0	N

Well Name: BELL LAKE UNIT NORTH Well Number: 221H

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	264 0	FNL	213 0	FEL	23S	33E	1	Aliquot SWNE	32.33378	103.5244	LEA	NEW MEXI	MEXI	F	NMLC0 068387	- 694	107 69	104 70	Υ
#1-1 PPP	000	- \	040		000	005	4	Alignet	00 00077	5		CO	CO	_	NIN 41 00		400	404	
Leg #1-2	260 0	FNL	213 0	FEL	23S	33E	1	Aliquot SWNE	32.33377 02	103.5243 992	LEA	MEXI CO	—	F	068387	- 694 3	108 09	104 72	Υ
PPP Leg #1-3	0	FSL	212 0	FEL	22S	33E	36	Aliquot SWSE	32.34089 11	- 103.5243 819	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	- 694 3	134 00	104 72	Υ
EXIT Leg #1	330	FNL	211 0	FEL	22S	33E	36	Aliquot NWNE	32.35452 28	- 103.5243 486	LEA	NEW MEXI CO		S	STATE	- 694 3	183 60	104 72	Y
BHL Leg #1	330	FNL	211 0	FEL	22S	33E	36	Aliquot NWNE	32.35452 28	- 103.5243 486	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	- 694 3	183 60	104 72	Y



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

1 message

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

Tue, Oct 8, 2019 at 8:36 AM



An official email of the United States government



Your payment has been submitted to Pay.gov and the details are below. If you have any questions regarding this payment, please contact BLM OC CBS Customer Service at (303) 236-6795 or BLM_OC_CBS_Customer_Service@blm.gov.

Application Name: BLM Oil and Gas Online Payment

Pay.gov Tracking ID: 26KNI8P5 Agency Tracking ID: 75857871525

Transaction Type: Sale

Transaction Date: 10/08/2019 10:36:41 AM EDT

Account Holder Name: George B Kaiser

Transaction Amount: \$10,230.00

Card Type: Visa

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

Company: Kaiser-Francis Oil Company

APD IDs: 10400048014

Lease Numbers: NMLC0068387

Well Numbers: 221H

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

08/12/2020

APD ID: 10400048014

Well Type: OIL WELL

Submission Date: 10/08/2019

Highlighted data reflects the most recent changes

Operator Name: KAISER FRANCIS OIL COMPANY

Well Number: 221H

Show Final Text

Well Name: BELL LAKE UNIT NORTH

Well Work Type: Drill

Section 1 - Geologic Formations

Formation			True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
546848		3529	0	0	OTHER : Surface	NONE	N
546849	RUSTLER	2307	1222	1222	SANDSTONE	NONE	N
546850	SALADO	2057	1472	1472	SALT	NONE	N
546851	TOP SALT	1732	1797	1797	SALT	NONE	N
546852	BASE OF SALT	-1218	4747	4747	SALT	NONE	N
546853	LAMAR	-1493	5022	5022	SANDSTONE	NATURAL GAS, OIL	N
546854	BELL CANYON	-1793	5322	5322	SANDSTONE	NATURAL GAS, OIL	N
546855	CHERRY CANYON	-3043	6572	6572	SANDSTONE	NATURAL GAS, OIL	N
546856	BRUSHY CANYON	-4693	8222	8222	SANDSTONE	NATURAL GAS, OIL	N
546857	BONE SPRING	-4918	8447	8447	LIMESTONE	NATURAL GAS, OIL	N
546858	AVALON SAND	-5273	8802	8802	SANDSTONE	NATURAL GAS, OIL	N
546859	BONE SPRING 1ST	-6218	9747	9747	SANDSTONE	NATURAL GAS, OIL	N
546866	BONE SPRING 2ND	-6743	10272	10272	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Well Name: BELL LAKE UNIT NORTH Well Number: 221H

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 221H Choke Manifold 20190926071405.pdf

BOP Diagram Attachment:

BLUN_221H_BOP_20200205101006.pdf

Cactus_Flex_Hose_16C_Certification_20200205101008.pdf

BLUN 221H Wellhead 20200205101144.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	1272	0	1272	3529	2257	1272	J-55	54.5	BUTT	1.9	4.6	DRY	13.1	DRY	12.3
2		12.2 5	9.625	NEW	API	N	0	5072	0	5072		-1543	5072	HCP -110	40	LT&C	1.8	3.4	DRY	6.2	DRY	6.2
	PRODUCTI ON	8.75	5.5	NEW	API	N	0	18360	0	10472		-6943	18360	P- 110		OTHER - GB CD Butt	2.3	2.6	DRY	3.2	DRY	3.1

Casing Attachments

Well Name: BELL LAKE UNIT NORTH Well Number: 221H

Casing <i>i</i>	Attachments	
Casi	ing ID: 1	String Type: SURFACE
Insp	ection Document:	
Spec	c Document:	
Таре	ered String Spec:	
Casi		ptions and Worksheet(s):
	BLUN_221H_Casi	ing_Assumptions_20190926072115.pdf
Casi	ing ID: 2	String Type: INTERMEDIATE
Insp	ection Document:	
Spe	c Document:	
Таре	ered String Spec:	
Casi	ing Design Assum _l	ptions and Worksheet(s):
	BLUN_221H_Casi	ing_Assumptions_20190926071659.pdf
Casi	ing ID: 3	String Type: PRODUCTION
Insp	ection Document:	
Spec	c Document:	
Таре	ered String Spec:	
Casi	ing Design Assum _l	ptions and Worksheet(s):

Section 4 - Cement

 $BLUN_221H_Casing_Assumptions_20190926071939.pdf$

 ${\sf GBCD_5.5} in_Connection_Spec_Sheet_20190926071942.pdf$

Well Name: BELL LAKE UNIT NORTH Well Number: 221H

String Type	Lead/Tail	Stage Tool Depth	Тор МD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1272	730	1.74	13.5	1275	75	HALCEM	4% Bentonite
SURFACE	Tail		0	1272	300	1.3	14.8	400	75	HalCem	0.125 #/sk Poly Flake
INTERMEDIATE	Lead		0	5072	1069	2.08	12.5	2223	75	Econocem	3#/sk KolSeal
INTERMEDIATE	Tail		0	5072	411	1.33	14.8	547	75	Halcem	none
PRODUCTION	Lead		4000	1836 0	425	3.48	10.5	1482	10	NeoCem	2#/sk Kol Seal
PRODUCTION	Tail		4000	1836 0	2046	1.22	14.5	2502	10	Versacem	None

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
5072	1047 2	OIL-BASED MUD	8.7	8.9							
1272	5072	OIL-BASED MUD	8.7	8.9							
0	1272	OTHER : Fresh Water	8.4	9							

Well Name: BELL LAKE UNIT NORTH Well Number: 221H

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: 4846 Anticipated Surface Pressure: 2542

Anticipated Bottom Hole Temperature(F): 165

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

H2S_Contingency_Plan_NM_BLUN_20190926073105.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

BLUN_221H___Directional_Plan_20190926073137.pdf

Other proposed operations facets description:

Gas Capture Plan attached

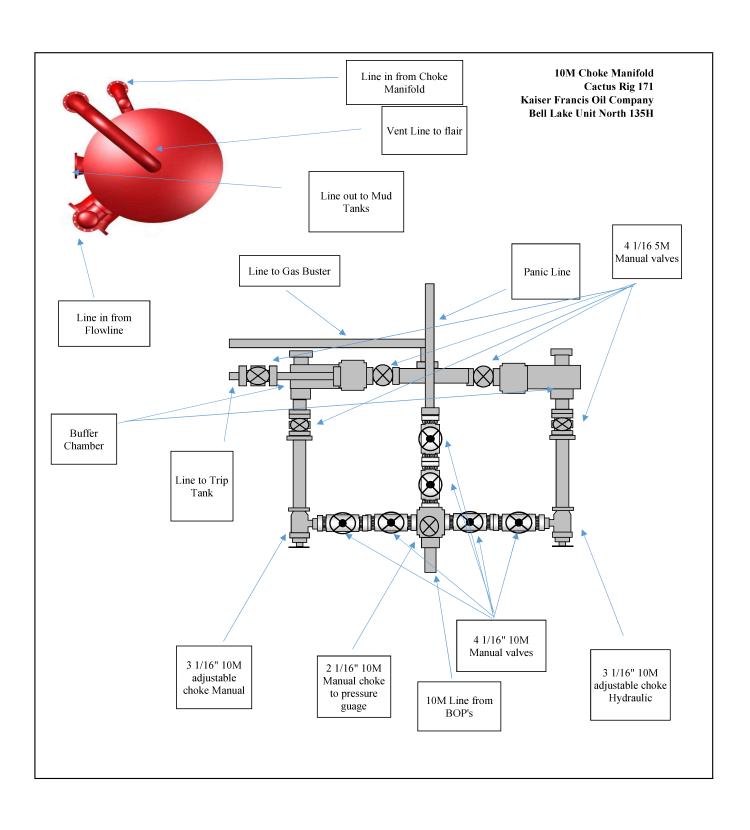
Other proposed operations facets attachment:

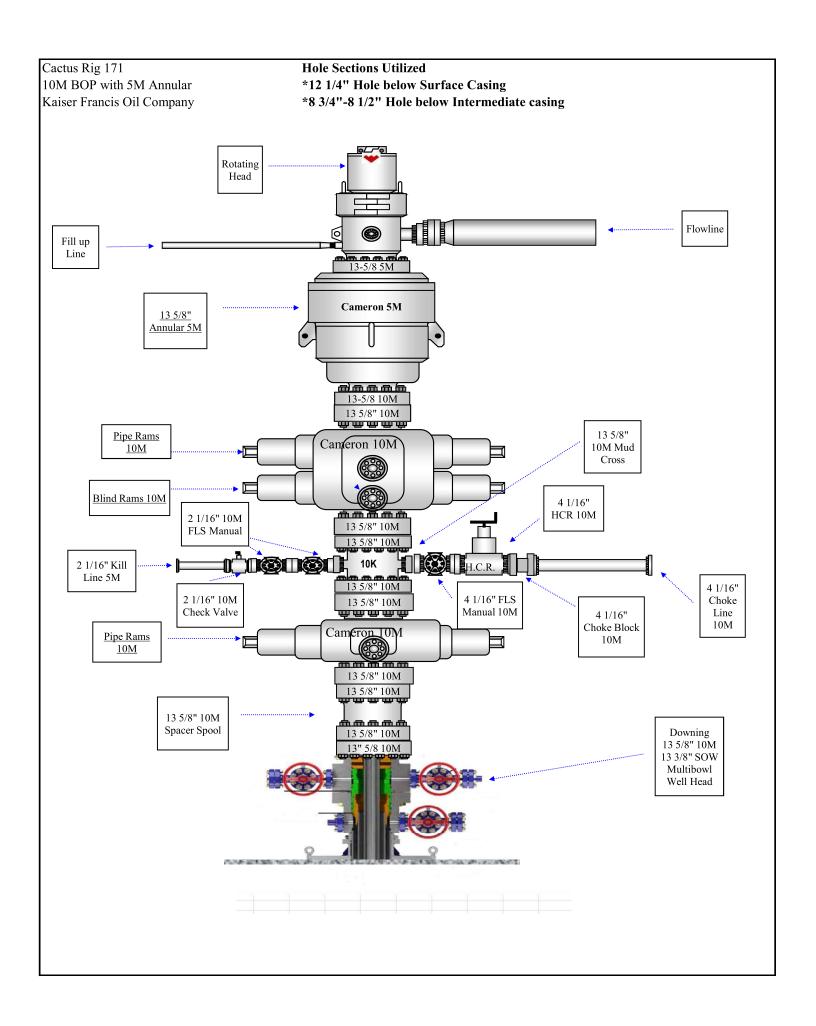
BLUN 221H GCP 20190926073150.pdf

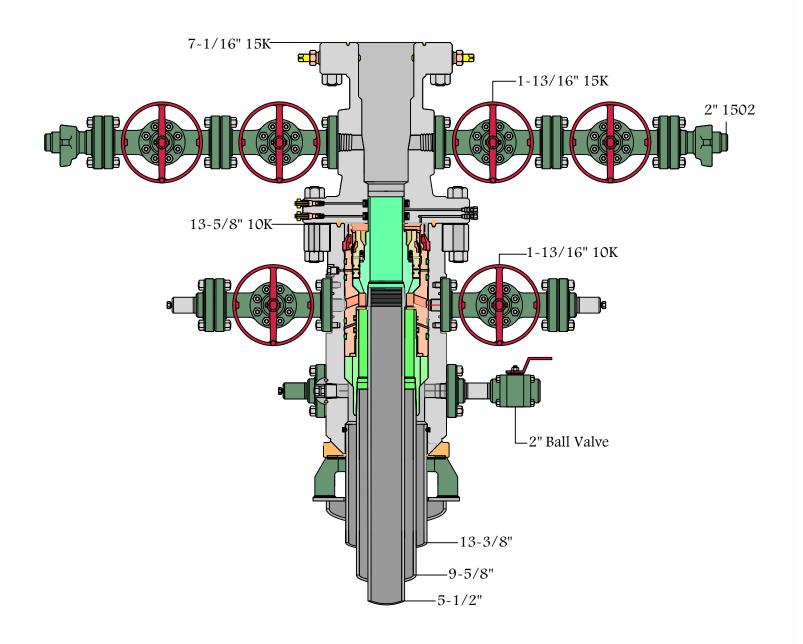
Other Variance attachment:

BLUN_221H_Wellhead_20200205101553.pdf

 $Cactus_Flex_Hose_16C_Certification_20200205101556.pdf$







RKI

BLUN 221H

Casing Assumptions

Interval Conductor	Length		Weight (#/ft)	Grade	Thread	Condition New	Hole Size	TVD (ft)	Mud Type	Mud Weight Hole Control	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)	Joint Tensile Safety Factor (Min 1.8)
Surface	1272'	13-3/8"	54.5	J-55	BTC	New	17-1/2"	1272	FW	8.4 - 9.0	32 - 34	NC	9	595	1130	2730	853000	909000	1.9	4.6	12.3	13.1
Intermediate	5072'	9-5/8"	40	HCP-110	LTC	New	12-1/4"	5072	OBM	8.7 - 8.9	28	NC	8.9	2347	4230	7900	1260000	1266000	1.8	3.4	6.2	6.2
Production	18360'	5-1/2"	20	P110	GBCD	New	8-3/4"	10472	OBM	8.7 - 8.9	28 - 29	NC	8.9	4846	11100	12640	641000	667000	2.3	2.6	3.1	3.2

BLUN 221H

Casing Assumptions

Interval Conductor	Length		Weight (#/ft)	Grade	Thread	Condition New	Hole Size	TVD (ft)	Mud Type	Mud Weight Hole Control	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)	Joint Tensile Safety Factor (Min 1.8)
Surface	1272'	13-3/8"	54.5	J-55	BTC	New	17-1/2"	1272	FW	8.4 - 9.0	32 - 34	NC	9	595	1130	2730	853000	909000	1.9	4.6	12.3	13.1
Intermediate	5072'	9-5/8"	40	HCP-110	LTC	New	12-1/4"	5072	OBM	8.7 - 8.9	28	NC	8.9	2347	4230	7900	1260000	1266000	1.8	3.4	6.2	6.2
Production	18360'	5-1/2"	20	P110	GBCD	New	8-3/4"	10472	OBM	8.7 - 8.9	28 - 29	NC	8.9	4846	11100	12640	641000	667000	2.3	2.6	3.1	3.2

Worksheet for determining GB Connection Running Torque at the beginning of a Casing Run

Ignore joints that are assembled with threadlock compounds. See "Addendum Procedure for GB Connections Assembled with Threadlocking Compounds" available at www.gbtubulars.com.

Pertinent Excerpt from GB Running Procedure

- 5. Stab the pin carefully into the coupling of the joint hanging in the rotary table. A stabbing guide is recommended to protect the pin nose and leading thread from physical damage that may contribute to thread galling. Make up each connection until shoulder engagement plus delta torque ≥ 10% of the shoulder torque without exceeding the Maximum Makeup Torque. Record the shoulder torque observed for the first 10 joints (excluding threadlocked accessory joints). The Running Torque is (a) the Minimum Makeup Torque shown on the GB Connection Performance Property Sheets or (b) the Maximum Shoulder Torque recorded from the first 10 makeups + 10%, whichever is higher (rounded to the next highest 500 ft.-lbs.) When making up the initial joints for establishing the Running Torque carefully watch the torque gauge for the shoulder torque and try to manually shut down the tongs before reaching Maximum Makeup Torque shown on the GB Connection Performance Property Sheets. Alternately, the dump valve should be set to the Maximum Makeup Torque during this initial process.
- 6. After the first 10 makeups (more if necessary due to conditions at the time of the run), use the "Running Torque" established in Step 5 for the remainder of the string. A dump valve is strongly recommended to stop makeup once the established Running Torque is achieved.

Casing Data	Comment
OD (in)	See GB Connection Data Sheet
Weight (ppf)	See GB Connection Data Sheet
Grade	See GB Connection Data Sheet
Min MU Torque (ft-lbs)	See GB Connection Data Sheet
Max MU Torque (ft-lbs)	(2 X Min MU Tq)
Max Operating Torque (ft-lbs)	The Maximum Operating Torque is NOT the Maximum Makeup Torque and is NOT a sustainable rotating torque. Operating at the Maximum Operating Torque for any length of time will likely damage the connection.

Notes	Joint No.	Shoulder Torque (ft-lbs)	Final Torque (ft-lbs)	Triangle Stamp Position Sketch (△)
Required	1			
Required	2			
Required	3			
Required	4			
Required	5			
Required	6			
Required	7			
Required	8			
Required	9			
Required	10			
Optional	11			
Optional	12			
Optional	13			
Optional	14			
Optional	15			
Max. Shoulder T	orque			
A Max. Shoulde	er Torque + 10%			
B Min. Makeup (from GB Cor	Torque nn. Data Sheet)			
Running Torqu	ue (ft-lbs)		A or B, whichev	ver is greater.

Optional joints should be added if there is wide variability in shoulder torques recorded during the initial 10 joints. Judgement should be used to determine if more than 10 joints are needed for the purpose of establishing the Running Torque and, if so, how many more should be added.

Wide variations in Shoulder Torque during the first ten (10) joints suggest other issues requiring attention such as poor alignment, improper amount and distribution of thread compound, etc. Refer to 2nd paragraph of GB Running Procedure for possible contributing factors to aid troubleshooting.

GB Tubulars

950 Threadneedle, Suite 130 Houston TX 77079 Toll Free: 1-888-245-3848 Main: 713-465-3585 Fax: 713-984-1529 For Techincal Information, contact:

Gene Mannella

genem@gbtubulars.com

Qing Lu

gingl@gbtubulars.com



BLUN 221H

Casing Assumptions

Interval Conductor	Length		Weight (#/ft)	Grade	Thread	Condition New	Hole Size	TVD (ft)	Mud Type	Mud Weight Hole Control	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)	Joint Tensile Safety Factor (Min 1.8)
Surface	1272'	13-3/8"	54.5	J-55	BTC	New	17-1/2"	1272	FW	8.4 - 9.0	32 - 34	NC	9	595	1130	2730	853000	909000	1.9	4.6	12.3	13.1
Intermediate	5072'	9-5/8"	40	HCP-110	LTC	New	12-1/4"	5072	OBM	8.7 - 8.9	28	NC	8.9	2347	4230	7900	1260000	1266000	1.8	3.4	6.2	6.2
Production	18360'	5-1/2"	20	P110	GBCD	New	8-3/4"	10472	OBM	8.7 - 8.9	28 - 29	NC	8.9	4846	11100	12640	641000	667000	2.3	2.6	3.1	3.2

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

Bell Lake Unit North SECTION 1 -T23S-R33E SECTION 6 -T23S-R34E SECTION 5 -T23S-R34E

LEA COUNTY, NM

This well/facility is not expected to have H_2S , but due to the sensitive location, the following is submitted as requested.

TABLE OF CONTENTS

Emergency Response Activation and General Responsibilities	3
Individual Responsibilities During An H₂S Release	4
Procedure For Igniting An Uncontrollable Condition	5
Emergency Phone Numbers	6
Protection Of The General Public/Roe	7
Characteristics Of H ₂ S And SO ₂	8
Training	8
Public Relations	8
Maps	

EMERGENCY RESPONSE ACTIVATION AND GENERAL RESPONSIBILITIES

Activation of the Emergency Action Plan

In the event of any emergency situation, all personnel on location should first ensure that the following items are initiated. After that, they should refer to the appropriate Specific Emergency Guidance sections below for further responsibilities:

- 1. Notify the senior ranking contract representative on site.
- 2. Notify Kaiser-Francis representative in charge.
- 3. Notify civil authorities if the Kaiser-Francis Representative cannot be contacted and the situation dictates.
- 4. Perform rescue and first aid as required (without jeopardizing additional personnel).

General Responsibilities

In the event of an H₂S emergency, the following plan will be initiated.

- 1) All personnel will immediately evacuate to an up-wind and if possible up-hill "safe area".
- 2) If for any reason a person must enter the hazardous area, they must wear a SCBA (Self contained breathing apparatus).
- 3) Always use the "buddy system".
- 4) Isolate the well/problem if possible.
- 5) Account for all personnel
- 6) Display the proper colors, warning all unsuspecting personnel of the danger at hand
- 7) Contact the Company personnel as soon as possible if not at the location. (use the enclosed call list as instructed)

At this point the company representative will evaluate the situation and coordinate the necessary duties to bring the situation under control, and if necessary, the notification of emergency response agencies and residents.

INDIVIDUAL RESPONSIBILITIES DURING AN H2S RELEASE

The following procedures and responsibilities will be implemented on activation of the H₂S siren and lights.

All Personnel:

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.
- Notify Contract management and Kaiser-Francis Representative.
- 5. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.

Two People Responsible for Shut-in and Rescue:

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

All Other Personnel:

1. Isolate the area and prevent entry by other persons into the 100 ppm ROE.

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

Kaiser-Francis Oil Company Representative:

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

PROCEDURE FOR IGNITING AN UNCONTROLLABLE CONDITION:

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

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

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

INSTRUCTIONS FOR IGNITION:

- 1) Two people are required. They must be equipped with positive pressure; self contained breathing apparatus and a "D"-ring style, full body, OSHA approved safety harness. Non-flammable rope will be attached.
- 2) One of the people will be a qualified safety person who will test the atmosphere for H₂S, Oxygen, & LFL. The other person will be the company supervisor; he is responsible for igniting the well.
- 3) Ignite up-wind from a distance no closer than necessary. Make sure that where you ignite from has the maximum escape avenue available. A 25mm flare gun shall be used, with a +/-500' range to ignite the gas.
- 4) Prior to ignition, make a final check for combustible gases.
- 5) Following ignition, continue with the emergency actions & procedures as before.

CONTACTING AUTHORITIES

Kaiser-Francis personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. This response plan must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER).

EMERGENCY CALL LIST: (Start and continue until ONE of these people have been reached)

Kaiser-Francis Oil Co.	<u>OFFCE</u> 918/494-0000	<u>MOBILE</u>
Bill Wilkinson	580/668-2335	580/221-4637
David Zerger	918/491-4350	918/557-6708
Charles Lock	918/491-4337	918/671-6510
Stuart Blake	918/491-4347	918/510-4126
Robert Sanford	918/491-4201	918/770-2682
Eric Hansen	918/491-4339	918/527-5260

EMERGENCY RESPONSE NUMBERS: Lea County, New Mexico

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

PROTECTION OF THE GENERAL PUBLIC/ROE:

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

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

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

Calculation for the 100 ppm ROE:

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

(H2S concentrations in decimal form)

10,000 ppm +=1.+ 1,000 ppm +=.1+

100 ppm += 01+

10 ppm += .001+

Calculation for the 500 ppm ROE:

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

EXAMPLE: If a well/facility has been determined to have 150 ppm H₂S in the gas mixture and the well/facility is producing at a gas rate of 200 MCFPD then:

ROE for 100 PPM X=[(1.589)(.0150)(200)] (0.6258)

X=2.65'

ROE for 500 PPM X=[(.4546)(.0150)(200)] (0.6258)

X=1.2'

(These calculations will be forwarded to the appropriate District NMOCD office when applicable.)

PUBLIC EVACUATION PLAN:

(When the supervisor has determined that the General Public will be involved, the following plan will be implemented)

- 1) Notification of the emergency response agencies of the hazardous condition and Implement evacuation procedures.
- 2) A trained person in H₂S safety, shall monitor with detection equipment the H₂S Concentration, wind and area of exposure (ROE). This person will determine the outer perimeter of the hazardous area. The extent of the evacuation area will be determined from the data being collected. Monitoring shall continue until the situation has been resolved. (All monitoring equipment will be UL approved, for use in class I groups A,B,C & D, Division I, hazardous locations. All monitors will have a minimum capability of measuring H₂S, oxygen, and flammable values.)
- 3) Law enforcement shall be notified to set up necessary barriers and maintain such for the duration of the situation as well as aid in the evacuation procedure.
- 4) The company supervising personnel shall stay in communication with all agencies through out the duration of the situation and inform such agencies when the situation has been contained and the effected area(s) is safe to enter.

CHARACTERISTICS OF H2S AND SO2

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

TRAINING:

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

PUBLIC RELATIONS

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

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

All contract and Kaiser-Francis employees are instructed **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

Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H

Plan: 190413 Bell Lake Unit North 221H

Morcor Standard Plan

13 April, 2019



Site

Morcor Engineering

Morcor Standard Plan

Company: Kaiser Francis

Bell Lake Unit North 221H Project: Site: Bell Lake Unit North 221H Well: Bell Lake Unit North 221H

Wellbore: Bell Lake Unit North 221H 190413 Bell Lake Unit North 221H Design:

Project Bell Lake Unit North 221H

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

New Mexico Eastern Zone

Bell Lake Unit North 221H

Site Position: Position Uncertainty: 1.0 usft Northing: Easting: Slot Radius: 485,503.56 usft 791,116.80 usft 17-1/2 "

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference:

North Reference:

System Datum:

MD Reference:

Database:

Latitude: Longitude: Grid Convergence:

32° 19' 55.666 N 103° 31' 28.724 W 0.43 °

Well Bell Lake Unit North 221H

0.0 usft 485,503.56 usft **Well Position** +N/-S Northing: 791,116.80 usft 0.0 usft +E/-W Easting: Position Uncertainty

1.0 usft Wellhead Elevation: Latitude: Longitude:

Ground Level:

Well Bell Lake Unit North 221H

EDM 5000.1 Single User Db

Minimum Curvature

Mean Sea Level

WELL @ 3550.7usft (Original Well Elev)

WELL @ 3550.7usft (Original Well Elev)

32° 19' 55.666 N 103° 31' 28.724 W 3,528.7 usft

Wellbore Bell Lake Unit North 221H Field Strength Model Name Declination Magnetics Sample Date Dip Angle (°) (nT) IGRF2010 4/13/2019 6.60 60.09 47,902

Design	190413 Bell Lake Unit North 221H			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	0.21

Survey Tool Program	Date	4/13/2019		
From	То			
(usft)	(usft)	Survey (Wellbore)	Tool Name	Description
0.0	18,359.4	1 190413 Bell Lake Unit North 221H (Bell La	MWD	MWD - Standard

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H Design: 190413 Bell Lake Unit North 221H Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Database:

Well Bell Lake Unit North 221H

WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

Minimum Curvature EDM 5000.1 Single User Db

Design.	100410 Bell Lake Of					EBW 0000.1 Giligio 0001 BB				
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	0.0	-3,550.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
50	0.0	0.00	50.0	-3,500.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
100	0.0	0.00	100.0	-3,450.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
120	0.0	0.00	120.0	-3,430.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
20" Cond	luctor									
150	0.0	0.00	150.0	-3,400.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
200	0.0	0.00	200.0	-3,350.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
250	0.0	0.00	250.0	-3,300.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
300	0.0	0.00	300.0	-3,250.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
350	0.0	0.00	350.0	-3,200.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
400	0.0	0.00	400.0	-3,150.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
450	0.0	0.00	450.0	-3,100.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
500	0.0	0.00	500.0	-3,050.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
550	0.0	0.00	550.0	-3,000.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
600	0.0	0.00	600.0	-2,950.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
650	0.0	0.00	650.0	-2,900.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
700	0.0	0.00	700.0	-2,850.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
750	0.0	0.00	750.0	-2,800.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
800	0.0	0.00	800.0	-2,750.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
850	0.0	0.00	850.0	-2,700.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
900	0.0	0.00	900.0	-2,650.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
950	0.0	0.00	950.0	-2,600.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
1,000	0.0	0.00	1,000.0	-2,550.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
1,050	0.0	0.00	1,050.0	-2,500.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
1,100	0.0	0.00	1,100.0	-2,450.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
1,150	0.0	0.00	1,150.0	-2,400.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00
1,200	0.0	0.00	1,200.0	-2,350.7	0.0	0.0	791,116.80	485,503.56	0.00	0.00

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Survey Calculation Method:

Well Bell Lake Unit North 221H WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

Minimum Curvature

ign:	190413 Be	ell Lake Unit N	lorth 221H				Database:		EDM 5000.1 Single	e User Db	
ned Survey											
MD (usft)		nc (°)	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	0.00	1,222.0	-2,328.7	0.0	0.0	791,116.80	485,503.56	0.00	0.
Rustler											
1,250	.0	0.00	0.00	1,250.0	-2,300.7	0.0	0.0	791,116.80	485,503.56	0.00	0
1,272	.0	0.00	0.00	1,272.0	-2,278.7	0.0	0.0	791,116.80	485,503.56	0.00	0
	ırface Casir										
1,300	.0	0.00	0.00	1,300.0	-2,250.7	0.0	0.0	791,116.80	485,503.56	0.00	0
1,350	.0	0.00	0.00	1,350.0	-2,200.7	0.0	0.0	791,116.80	485,503.56	0.00	0
1,400	.0	0.00	0.00	1,400.0	-2,150.7	0.0	0.0	791,116.80	485,503.56	0.00	(
1,450	.0	0.00	0.00	1,450.0	-2,100.7	0.0	0.0	791,116.80	485,503.56	0.00	(
1,472	.0	0.00	0.00	1,472.0	-2,078.7	0.0	0.0	791,116.80	485,503.56	0.00	(
Salado											
1,500	.0	0.00	0.00	1,500.0	-2,050.7	0.0	0.0	791,116.80	485,503.56	0.00	(
1,550	.0	0.00	0.00	1,550.0	-2,000.7	0.0	0.0	791,116.80	485,503.56	0.00	(
1,600	.0	0.00	0.00	1,600.0	-1,950.7	0.0	0.0	791,116.80	485,503.56	0.00	(
1,650	.0	0.00	0.00	1,650.0	-1,900.7	0.0	0.0	791,116.80	485,503.56	0.00	(
1,700	.0	0.00	0.00	1,700.0	-1,850.7	0.0	0.0	791,116.80	485,503.56	0.00	
1,750	.0	0.00	0.00	1,750.0	-1,800.7	0.0	0.0	791,116.80	485,503.56	0.00	
1,797	.0	0.00	0.00	1,797.0	-1,753.7	0.0	0.0	791,116.80	485,503.56	0.00	
Top of Sa	lt										
1,800	.0	0.00	0.00	1,800.0	-1,750.7	0.0	0.0	791,116.80	485,503.56	0.00	
1,850	.0	0.00	0.00	1,850.0	-1,700.7	0.0	0.0	791,116.80	485,503.56	0.00	
1,900	.0	0.00	0.00	1,900.0	-1,650.7	0.0	0.0	791,116.80	485,503.56	0.00	(
1,950	.0	0.00	0.00	1,950.0	-1,600.7	0.0	0.0	791,116.80	485,503.56	0.00	
2,000	.0	0.00	0.00	2,000.0	-1,550.7	0.0	0.0	791,116.80	485,503.56	0.00	
2,050	.0	0.00	0.00	2,050.0	-1,500.7	0.0	0.0	791,116.80	485,503.56	0.00	
2,100	.0	0.00	0.00	2,100.0	-1,450.7	0.0	0.0	791,116.80	485,503.56	0.00	
2,150	.0	0.00	0.00	2,150.0	-1,400.7	0.0	0.0	791,116.80	485,503.56	0.00	
2,200	.0	0.00	0.00	2,200.0	-1,350.7	0.0	0.0	791,116.80	485,503.56	0.00	

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Bell Lake Unit North 221H 190413 Bell Lake Unit North 221H Wellbore:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Survey Calculation Method:

Well Bell Lake Unit North 221H WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

Minimum Curvature EDM 5000.1 Single User Db

ign: 1	190413 Bell Lake Unit North 221H					Database:		EDM 5000.1 Single User Db		
ned 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	0.00	2,250.0	-1,300.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,300.0	0.00	0.00	2,300.0	-1,250.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,350.0	0.00	0.00	2,350.0	-1,200.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,400.0	0.00	0.00	2,400.0	-1,150.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,450.0	0.00	0.00	2,450.0	-1,100.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,500.0	0.00	0.00	2,500.0	-1,050.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,550.0	0.00	0.00	2,550.0	-1,000.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,600.0	0.00	0.00	2,600.0	-950.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,650.0	0.00	0.00	2,650.0	-900.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,700.0	0.00	0.00	2,700.0	-850.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,750.0	0.00	0.00	2,750.0	-800.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,800.0	0.00	0.00	2,800.0	-750.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,850.0	0.00	0.00	2,850.0	-700.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,900.0	0.00	0.00	2,900.0	-650.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
2,950.0	0.00	0.00	2,950.0	-600.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
3,000.0	0.00	0.00	3,000.0	-550.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
3,050.0	0.00	0.00	3,050.0	-500.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
3,100.0	0.00	0.00	3,100.0	-450.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
3,150.0	0.00	0.00	3,150.0	-400.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
3,200.0	0.00	0.00	3,200.0	-350.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
3,250.0	0.00	0.00	3,250.0	-300.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
3,300.0	0.00	0.00	3,300.0	-250.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
3,350.0	0.00	0.00	3,350.0	-200.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
3,400.0	0.00	0.00	3,400.0	-150.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
3,450.0	0.00	0.00	3,450.0	-100.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
3,500.0	0.00	0.00	3,500.0	-50.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0
3,550.0	0.00	0.00	3,550.0	-0.7	0.0	0.0	791,116.80	485,503.56	0.00	0.0

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H 190413 Bell Lake Unit North 221H Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Survey Calculation Method: Well Bell Lake Unit North 221H

WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

Minimum Curvature
EDM 5000.1 Single User Db

gn: 1904	+13 Bell Lake Unit	. 110101 22 11 1				Database:			EDM 5000.1 Single Oser Db		
ned 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	0.00	3,600.0	49.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0	
3,650.0	0.00	0.00	3,650.0	99.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0	
3,700.0	0.00	0.00	3,700.0	149.3	0.0	0.0	791,116.80	485,503.56	0.00	0.	
3,750.0	0.00	0.00	3,750.0	199.3	0.0	0.0	791,116.80	485,503.56	0.00	0.	
3,800.0	0.00	0.00	3,800.0	249.3	0.0	0.0	791,116.80	485,503.56	0.00	0.	
3,850.0	0.00	0.00	3,850.0	299.3	0.0	0.0	791,116.80	485,503.56	0.00	0.	
3,900.0	0.00	0.00	3,900.0	349.3	0.0	0.0	791,116.80	485,503.56	0.00	0.	
3,950.0	0.00	0.00	3,950.0	399.3	0.0	0.0	791,116.80	485,503.56	0.00	0.	
4,000.0	0.00	0.00	4,000.0	449.3	0.0	0.0	791,116.80	485,503.56	0.00	0	
4,050.0	0.00	0.00	4,050.0	499.3	0.0	0.0	791,116.80	485,503.56	0.00	0	
4,100.0	0.00	0.00	4,100.0	549.3	0.0	0.0	791,116.80	485,503.56	0.00	C	
4,150.0	0.00	0.00	4,150.0	599.3	0.0	0.0	791,116.80	485,503.56	0.00	0	
4,200.0	0.00	0.00	4,200.0	649.3	0.0	0.0	791,116.80	485,503.56	0.00	0	
4,250.0	0.00	0.00	4,250.0	699.3	0.0	0.0	791,116.80	485,503.56	0.00	0	
4,300.0	0.00	0.00	4,300.0	749.3	0.0	0.0	791,116.80	485,503.56	0.00	0	
4,350.0	0.00	0.00	4,350.0	799.3	0.0	0.0	791,116.80	485,503.56	0.00	0	
4,400.0	0.00	0.00	4,400.0	849.3	0.0	0.0	791,116.80	485,503.56	0.00	C	
4,450.0	0.00	0.00	4,450.0	899.3	0.0	0.0	791,116.80	485,503.56	0.00	C	
4,500.0	0.00	0.00	4,500.0	949.3	0.0	0.0	791,116.80	485,503.56	0.00	C	
4,550.0	0.00	0.00	4,550.0	999.3	0.0	0.0	791,116.80	485,503.56	0.00	0	
4,600.0	0.00	0.00	4,600.0	1,049.3	0.0	0.0	791,116.80	485,503.56	0.00	C	
4,650.0	0.00	0.00	4,650.0	1,099.3	0.0	0.0	791,116.80	485,503.56	0.00	0	
4,700.0	0.00	0.00	4,700.0	1,149.3	0.0	0.0	791,116.80	485,503.56	0.00	(
4,747.0	0.00	0.00	4,747.0	1,196.3	0.0	0.0	791,116.80	485,503.56	0.00	C	
Base of Salt											
4,750.0	0.00		4,750.0	1,199.3	0.0	0.0	791,116.80	485,503.56	0.00	C	
4,800.0	0.00	0.00	4,800.0	1,249.3	0.0	0.0	791,116.80	485,503.56	0.00	0	

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Survey Calculation Method:

Well Bell Lake Unit North 221H WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

Minimum Curvature

sign:	190413 Bell Lake Uni	t North 221H				Database:		EDM 5000.1 Single User Db		
nned Survey										
MD (usft)	Inc (°)	Azi (azimuth) TV		TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
4,850.0	0.00	0.00	4,850.0	1,299.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
4,900.0	0.00	0.00	4,900.0	1,349.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
4,950.0	0.00	0.00	4,950.0	1,399.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,000.0	0.00	0.00	5,000.0	1,449.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,022.0	0.00	0.00	5,022.0	1,471.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
Lamar										
5,050.0	0.00	0.00	5,050.0	1,499.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,072.0	0.00	0.00	5,072.0	1,521.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
9 5/8" Inter	mediate Casing									
5,100.0	0.00	0.00	5,100.0	1,549.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,150.0	0.00	0.00	5,150.0	1,599.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,200.0	0.00	0.00	5,200.0	1,649.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,250.0	0.00	0.00	5,250.0	1,699.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,300.0	0.00	0.00	5,300.0	1,749.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,322.0	0.00	0.00	5,322.0	1,771.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
Bell Canyo	n									
5,350.0	0.00	0.00	5,350.0	1,799.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,400.0	0.00	0.00	5,400.0	1,849.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,450.0	0.00	0.00	5,450.0	1,899.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,500.0	0.00	0.00	5,500.0	1,949.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,550.0	0.00	0.00	5,550.0	1,999.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,600.0	0.00	0.00	5,600.0	2,049.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,650.0	0.00	0.00	5,650.0	2,099.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,700.0	0.00	0.00	5,700.0	2,149.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,750.0	0.00	0.00	5,750.0	2,199.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,800.0	0.00	0.00	5,800.0	2,249.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
5,850.0	0.00	0.00	5,850.0	2,299.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H Design: 190413 Bell Lake Unit North 221H Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Survey Calculation Method:

Well Bell Lake Unit North 221H WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

	113 Bell Lake Unit					Database:	non metrioa:	EDM 5000.1 Single		
nned Survey										
MD (usft)	Inc (°)	Azi (azimuth) TV		TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
5,900.0	0.00	0.00	5,900.0	2,349.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
5,950.0	0.00	0.00	5,950.0	2,399.3	0.0	0.0	791,116.80	485,503.56	0.00	0
6,000.0	0.00	0.00	6,000.0	2,449.3	0.0	0.0	791,116.80	485,503.56	0.00	C
6,050.0	0.00	0.00	6,050.0	2,499.3	0.0	0.0	791,116.80	485,503.56	0.00	C
6,100.0	0.00	0.00	6,100.0	2,549.3	0.0	0.0	791,116.80	485,503.56	0.00	C
6,150.0	0.00	0.00	6,150.0	2,599.3	0.0	0.0	791,116.80	485,503.56	0.00	(
6,200.0	0.00	0.00	6,200.0	2,649.3	0.0	0.0	791,116.80	485,503.56	0.00	(
6,250.0	0.00	0.00	6,250.0	2,699.3	0.0	0.0	791,116.80	485,503.56	0.00	
6,300.0	0.00	0.00	6,300.0	2,749.3	0.0	0.0	791,116.80	485,503.56	0.00	
6,350.0	0.00	0.00	6,350.0	2,799.3	0.0	0.0	791,116.80	485,503.56	0.00	
6,400.0	0.00	0.00	6,400.0	2,849.3	0.0	0.0	791,116.80	485,503.56	0.00	
6,450.0	0.00	0.00	6,450.0	2,899.3	0.0	0.0	791,116.80	485,503.56	0.00	
6,500.0	0.00	0.00	6,500.0	2,949.3	0.0	0.0	791,116.80	485,503.56	0.00	
6,550.0	0.00	0.00	6,550.0	2,999.3	0.0	0.0	791,116.80	485,503.56	0.00	
6,572.0	0.00	0.00	6,572.0	3,021.3	0.0	0.0	791,116.80	485,503.56	0.00	
Cherry Canyon		0.00	0.000.0	2.040.2	0.0	0.0	704 440 00	405 500 50	0.00	
6,600.0	0.00	0.00	6,600.0	3,049.3	0.0	0.0	791,116.80	485,503.56		
6,650.0 6,700.0	0.00	0.00	6,650.0	3,099.3 3,149.3	0.0	0.0	791,116.80	485,503.56	0.00	
6,700.0	0.00	0.00	6,700.0	3,149.3	0.0	0.0	791,116.80	485,503.56	0.00	
6,750.0	0.00	0.00	6,750.0	3,199.3	0.0	0.0	791,116.80	485,503.56	0.00	
6,800.0	0.00	0.00	6,800.0	3,249.3	0.0	0.0	791,116.80	485,503.56	0.00	
6,850.0	0.00	0.00	6,850.0	3,299.3	0.0	0.0	791,116.80	485,503.56	0.00	
6,900.0	0.00	0.00	6,900.0	3,349.3	0.0	0.0	791,116.80	485,503.56	0.00	
6,950.0	0.00	0.00	6,950.0	3,399.3	0.0	0.0	791,116.80	485,503.56	0.00	
7,000.0	0.00	0.00	7,000.0	3,449.3	0.0	0.0	791,116.80	485,503.56	0.00	
7,050.0	0.00	0.00	7,050.0	3,499.3	0.0	0.0	791,116.80	485,503.56	0.00	
7,100.0	0.00	0.00	7,100.0	3,549.3	0.0	0.0	791,116.80	485,503.56	0.00	

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H 190413 Bell Lake Unit North 221H Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Survey Calculation Method:

Well Bell Lake Unit North 221H WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

ign: 19041	3 Bell Lake Unit	NOTHI 22 III				Database:		EDM 5000.1 Single	e Oser Db	
ned 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)
7,150.0	0.00	0.00	7,150.0	3,599.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
7,200.0	0.00	0.00	7,200.0	3,649.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
7,250.0	0.00	0.00	7,250.0	3,699.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
7,300.0	0.00	0.00	7,300.0	3,749.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
7,350.0	0.00	0.00	7,350.0	3,799.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
7,400.0	0.00	0.00	7,400.0	3,849.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
7,450.0	0.00	0.00	7,450.0	3,899.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
7,500.0	0.00	0.00	7,500.0	3,949.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
7,550.0	0.00	0.00	7,550.0	3,999.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
7,600.0	0.00	0.00	7,600.0	4,049.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
7,650.0	0.00	0.00	7,650.0	4,099.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
7,700.0	0.00	0.00	7,700.0	4,149.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
7,750.0	0.00	0.00	7,750.0	4,199.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
7,800.0	0.00	0.00	7,800.0	4,249.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
7,850.0	0.00	0.00	7,850.0	4,299.3	0.0	0.0	791,116.80	485,503.56	0.00	0
7,900.0	0.00	0.00	7,900.0	4,349.3	0.0	0.0	791,116.80	485,503.56	0.00	0
7,950.0	0.00	0.00	7,950.0	4,399.3	0.0	0.0	791,116.80	485,503.56	0.00	0
8,000.0	0.00	0.00	8,000.0	4,449.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
8,050.0	0.00	0.00	8,050.0	4,499.3	0.0	0.0	791,116.80	485,503.56	0.00	0
8,100.0	0.00	0.00	8,100.0	4,549.3	0.0	0.0	791,116.80	485,503.56	0.00	0
8,150.0	0.00	0.00	8,150.0	4,599.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
8,200.0	0.00	0.00	8,200.0	4,649.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
8,222.0	0.00	0.00	8,222.0	4,671.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
Brushy Canyon	0.00	0.00	0.050.0	4.000.0	0.0	0.0	704 440 00	405 500 50	0.00	_
8,250.0	0.00		8,250.0	4,699.3	0.0	0.0	791,116.80	485,503.56	0.00	0
8,300.0	0.00	0.00	8,300.0	4,749.3	0.0	0.0	791,116.80	485,503.56	0.00	0
8,350.0	0.00	0.00	8,350.0	4,799.3	0.0	0.0	791,116.80	485,503.56	0.00	0.

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H 190413 Bell Lake Unit North 221H Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Survey Calculation Method:

Well Bell Lake Unit North 221H WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

n: 1904	13 Bell Lake Unit	NOTHIZZIII				Database:		EDIVI 5000.1 SINGR	e Oser Db	
ed 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)
8,400.0	0.00	0.00	8,400.0	4,849.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
8,447.0	0.00	0.00	8,447.0	4,896.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
Bone Spring										
8,450.0	0.00	0.00	8,450.0	4,899.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
8,500.0	0.00	0.00	8,500.0	4,949.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
8,550.0	0.00	0.00	8,550.0	4,999.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
8,600.0	0.00	0.00	8,600.0	5,049.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
8,650.0	0.00	0.00	8,650.0	5,099.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
8,700.0	0.00	0.00	8,700.0	5,149.3	0.0	0.0	791,116.80	485,503.56	0.00	0.
8,750.0	0.00	0.00	8,750.0	5,199.3	0.0	0.0	791,116.80	485,503.56	0.00	0
8,800.0	0.00	0.00	8,800.0	5,249.3	0.0	0.0	791,116.80	485,503.56	0.00	0
8,802.0	0.00	0.00	8,802.0	5,251.3	0.0	0.0	791,116.80	485,503.56	0.00	0
Avalon										
8,850.0	0.00	0.00	8,850.0	5,299.3	0.0	0.0	791,116.80	485,503.56	0.00	0
8,900.0	0.00	0.00	8,900.0	5,349.3	0.0	0.0	791,116.80	485,503.56	0.00	0
8,950.0	0.00	0.00	8,950.0	5,399.3	0.0	0.0	791,116.80	485,503.56	0.00	0
9,000.0	0.00	0.00	9,000.0	5,449.3	0.0	0.0	791,116.80	485,503.56	0.00	0
9,050.0	0.00	0.00	9,050.0	5,499.3	0.0	0.0	791,116.80	485,503.56	0.00	0
9,100.0	0.00	0.00	9,100.0	5,549.3	0.0	0.0	791,116.80	485,503.56	0.00	C
9,150.0	0.00	0.00	9,150.0	5,599.3	0.0	0.0	791,116.80	485,503.56	0.00	0
9,200.0	0.00	0.00	9,200.0	5,649.3	0.0	0.0	791,116.80	485,503.56	0.00	0
9,250.0	0.00	0.00	9,250.0	5,699.3	0.0	0.0	791,116.80	485,503.56	0.00	C
9,300.0	0.00	0.00	9,300.0	5,749.3	0.0	0.0	791,116.80	485,503.56	0.00	0
9,350.0	0.00	0.00	9,350.0	5,799.3	0.0	0.0	791,116.80	485,503.56	0.00	0
9,400.0	0.00	0.00	9,400.0	5,849.3	0.0	0.0	791,116.80	485,503.56	0.00	C
9,450.0	0.00	0.00	9,450.0	5,899.3	0.0	0.0	791,116.80	485,503.56	0.00	0

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H Design: 190413 Bell Lake Unit North 221H Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Database:

Well Bell Lake Unit North 221H

WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

nned 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)
9,500.0	0.00	0.00	9,500.0	5,949.3	0.0	0.0	791,116.80	485,503.56	0.00	0.0
Start Build 3.00)									
9,550.0	1.50	58.80	9,550.0	5,999.3	0.3	0.6	791,117.36	485,503.90	0.34	3.00
9,600.0	3.00	58.80	9,600.0	6,049.3	1.4	2.2	791,119.03	485,504.92	1.36	3.0
9,650.0	4.50	58.80	9,649.8	6,099.1	3.0	5.0	791,121.83	485,506.61	3.07	3.0
9,700.0	6.00	58.80	9,699.6	6,148.9	5.4	8.9	791,125.74	485,508.98	5.45	3.0
Start 240.0 hold	d at 9700.0 MD									
9,747.6	6.00	58.80	9,747.0	6,196.3	8.0	13.2	791,130.00	485,511.56	8.05	0.0
1st Bone Sprin										
9,750.0	6.00	58.80	9,749.4	6,198.7	8.1	13.4	791,130.21	485,511.69	8.18	0.0
9,800.0	6.00	58.80	9,799.1	6,248.4	10.8	17.9	791,134.69	485,514.40	10.90	0.0
9,850.0	6.00	58.80	9,848.8	6,298.1	13.5	22.4	791,139.16	485,517.11	13.62	0.0
9,900.0	6.00	58.80	9,898.5	6,347.8	16.2	26.8	791,143.63	485,519.81	16.35	0.0
9,933.0	6.00	58.80	9,931.4	6,380.7	18.0	29.8	791,146.58	485,521.60	18.15	0.0
9,940.0	6.38	53.36	9,938.3	6,387.6	18.5	30.4	791,147.20	485,522.02	18.57	10.0
Start DLS 10.15	TFO -59.91									
9,950.0	7.01	46.69	9,948.2	6,397.5	19.2	31.3	791,148.09	485,522.77	19.32	10.0
10,000.0	11.02	26.99	9,997.6	6,446.9	25.6	35.7	791,152.48	485,529.13	25.69	10.0
10,050.0	15.60	18.19	10,046.3	6,495.6	36.2	40.0	791,156.76	485,539.78	36.36	10.0
10,100.0	20.38	13.38	10,093.8	6,543.1	51.1	44.1	791,160.87	485,554.65	51.25	10.0
10,150.0	25.24	10.34	10,139.9	6,589.2	70.1	48.0	791,164.80	485,573.62	70.23	10.0
10,200.0	30.15	8.24	10,184.2	6,633.5	93.0	51.7	791,168.52	485,596.55	93.18	10.0
10,250.0	35.08	6.68	10,226.3	6,675.6	119.7	55.2	791,171.99	485,623.27	119.90	10.0
10,300.0	40.03	5.46	10,265.9	6,715.2	150.0	58.4	791,175.19	485,653.56	150.21	10.0
10,308.0	40.82	5.28	10,272.0	6,721.3	155.2	58.9	791,175.68	485,658.74	155.39	10.0
First PP - 2nd F	Sone Spring Sand									
10,350.0	44.98	4.46	10,302.7	6,752.0	183.6	61.3	791,178.10	485,687.21	183.87	10.0
10,400.0	49.95	3.63	10,336.5	6,785.8	220.4	63.9	791,180.69	485,723.95	220.62	10.0
. 5,400.0	+0.00	0.00	. 5,000.0	3,700.0	220.4	00.0	, 100.00	.55,720.00	220.02	

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H Local Co-ordinate Reference:

TVD Reference: North Reference: Survey Calculation Method:

Well Bell Lake Unit North 221H WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

Minimum Curvature

gn: 190	0413 Bell Lake Unit	North 221H				Database:		EDM 5000.1 Single	e User Db	
ned 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)
10,450.0	54.91	2.91	10,367.0	6,816.3	259.9	66.1	791,182.94	485,763.50	260.18	10.0
10,500.0	59.89	2.28	10,393.9	6,843.2	302.0	68.0	791,184.84	485,805.57	302.25	10.0
10,550.0	64.86	1.70	10,417.1	6,866.4	346.3	69.6	791,186.37	485,849.83	346.51	10.0
10,600.0	69.84	1.17	10,436.4	6,885.7	392.4	70.7	791,187.52	485,895.94	392.63	10.0
10,650.0	74.82	0.67	10,451.5	6,900.8	440.0	71.5	791,188.28	485,943.56	440.26	10.0
10,700.0	79.80	0.20	10,462.5	6,911.8	488.8	71.9	791,188.65	485,992.32	489.02	10.0
10,706.7	80.46	0.14	10,463.7	6,913.0	495.4	71.9	791,188.67	485,998.92	495.62	10.0
Start DLS 8.67										
10,738.7	83.65	359.84	10,468.1	6,917.4	527.1	71.9	791,188.66	486,030.64	527.34	10.
10,750.0	84.67	359.82	10,469.2	6,918.5	538.3	71.8	791,188.63	486,041.85	538.55	8.
10,800.0	89.16	359.71	10,471.9	6,921.2	588.2	71.6	791,188.42	486,091.77	588.46	8.
10,809.3	90.00	359.69	10,472.0	6,921.3	597.5	71.6	791,188.37	486,101.08	597.77	8.
10,811.9	90.00	359.69	10,472.0	6,921.3	600.1	71.6	791,188.36	486,103.67	600.36	0.
	TFO -90.00 - First									
10,850.0	90.00	359.69	10,472.0	6,921.3	638.2	71.4	791,188.15	486,141.77	638.46	0.
10,900.0	90.00	359.69	10,472.0	6,921.3	688.2	71.1	791,187.87	486,191.77	688.46	0.
10,950.0	90.00	359.69	10,472.0	6,921.3	738.2	70.8	791,187.60	486,241.76	738.45	0.
11,000.0	90.00	359.69	10,472.0	6,921.3	788.2	70.5	791,187.32	486,291.76	788.45	0.
11,050.0	90.00	359.69	10,472.0	6,921.3	838.2	70.3	791,187.05	486,341.76	838.45	0.
11,100.0	90.00	359.69	10,472.0	6,921.3	888.2	70.0	791,186.78	486,391.76	888.45	0.
11,150.0	90.00	359.69	10,472.0	6,921.3	938.2	69.7	791,186.50	486,441.76	938.45	0.
11,200.0	90.00	359.69	10,472.0	6,921.3	988.2	69.4	791,186.23	486,491.76	988.44	0.
11,250.0	90.00	359.69	10,472.0	6,921.3	1,038.2	69.2	791,185.95	486,541.76	1,038.44	0.
11,300.0	90.00	359.69	10,472.0	6,921.3	1,088.2	68.9	791,185.68	486,591.76	1,088.44	0.
11,350.0	90.00	359.69	10,472.0	6,921.3	1,138.2	68.6	791,185.40	486,641.76	1,138.44	0.
11,400.0	90.00	359.69	10,472.0	6,921.3	1,188.2	68.3	791,185.13	486,691.76	1,188.44	0.
11,450.0	90.00	359.69	10,472.0	6,921.3	1,238.2	68.1	791,184.85	486,741.76	1,238.43	0.0

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H Design: 190413 Bell Lake Unit North 221H Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Survey Calculation Method:

Well Bell Lake Unit North 221H WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

	190413 Bell Lake Unit					Database:	ion Metrioa:	EDM 5000.1 Single		
Planned Survey										
MD (usft)	Inc (°)	Azi (azimuth) TV		TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
11,500.0	90.00	359.69	10,472.0	6,921.3	1,288.2	67.8	791,184.58	486,791.76	1,288.43	0.0
11,550.0	90.00	359.69	10,472.0	6,921.3	1,338.2	67.5	791,184.30	486,841.76	1,338.43	0.0
11,600.0	90.00	359.69	10,472.0	6,921.3	1,388.2	67.2	791,184.03	486,891.75	1,388.43	0.0
11,650.0	90.00	359.69	10,472.0	6,921.3	1,438.2	67.0	791,183.75	486,941.75	1,438.43	0.0
11,700.0	90.00	359.69	10,472.0	6,921.3	1,488.2	66.7	791,183.48	486,991.75	1,488.42	0.0
11,750.0	90.00	359.69	10,472.0	6,921.3	1,538.2	66.4	791,183.20	487,041.75	1,538.42	0.0
11,800.0	90.00	359.69	10,472.0	6,921.3	1,588.2	66.1	791,182.93	487,091.75	1,588.42	0.0
11,850.0	90.00	359.68	10,472.0	6,921.3	1,638.2	65.9	791,182.65	487,141.75	1,638.42	0.0
11,900.0	90.00	359.68	10,472.0	6,921.3	1,688.2	65.6	791,182.38	487,191.75	1,688.41	0.0
11,950.0	90.00	359.68	10,472.0	6,921.3	1,738.2	65.3	791,182.11	487,241.75	1,738.41	0.0
12,000.0	90.00	359.68	10,472.0	6,921.3	1,788.2	65.0	791,181.83	487,291.75	1,788.41	0.0
12,050.0	90.00	359.68	10,472.0	6,921.3	1,838.2	64.8	791,181.55	487,341.75	1,838.41	0.0
12,100.0	90.00	359.68	10,472.0	6,921.3	1,888.2	64.5	791,181.28	487,391.75	1,888.41	0.0
12,150.0	90.00	359.68	10,472.0	6,921.3	1,938.2	64.2	791,181.00	487,441.75	1,938.40	0.0
12,200.0	90.00	359.68	10,472.0	6,921.3	1,988.2	63.9	791,180.73	487,491.75	1,988.40	0.
12,250.0	90.00	359.68	10,472.0	6,921.3	2,038.2	63.7	791,180.45	487,541.75	2,038.40	0.0
12,300.0	90.00	359.68	10,472.0	6,921.3	2,088.2	63.4	791,180.18	487,591.74	2,088.40	0.0
12,350.0	90.00	359.68	10,472.0	6,921.3	2,138.2	63.1	791,179.90	487,641.74	2,138.40	0.0
12,400.0	90.00	359.68	10,472.0	6,921.3	2,188.2	62.8	791,179.63	487,691.74	2,188.39	0.0
12,450.0	90.00	359.68	10,472.0	6,921.3	2,238.2	62.6	791,179.35	487,741.74	2,238.39	0.
12,500.0	90.00	359.68	10,472.0	6,921.3	2,288.2	62.3	791,179.08	487,791.74	2,288.39	0.
12,550.0	90.00	359.68	10,472.0	6,921.3	2,338.2	62.0	791,178.80	487,841.74	2,338.39	0.
12,600.0	90.00	359.68	10,472.0	6,921.3	2,388.2	61.7	791,178.53	487,891.74	2,388.39	0.
12,650.0	90.00	359.68	10,472.0	6,921.3	2,438.2	61.5	791,178.25	487,941.74	2,438.38	0.
12,700.0	90.00	359.68	10,472.0	6,921.3	2,488.2	61.2	791,177.98	487,991.74	2,488.38	0.
12,750.0	90.00	359.68	10,472.0	6,921.3	2,538.2	60.9	791,177.70	488,041.74	2,538.38	0.0
12,800.0	90.00	359.68	10,472.0	6,921.3	2,588.2	60.6	791,177.43	488,091.74	2,588.38	0.0

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H Design: 190413 Bell Lake Unit North 221H Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Survey Calculation Method:

Database:

Well Bell Lake Unit North 221H WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

_										
ned 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)
12,850.0	90.00	359.68	10,472.0	6,921.3	2,638.2	60.4	791,177.15	488,141.74	2,638.37	0.
12,900.0	90.00	359.68	10,472.0	6,921.3	2,688.2	60.1	791,176.87	488,191.74	2,688.37	0
12,950.0	90.00	359.68	10,472.0	6,921.3	2,738.2	59.8	791,176.60	488,241.73	2,738.37	0
13,000.0	90.00	359.68	10,472.0	6,921.3	2,788.2	59.5	791,176.32	488,291.73	2,788.37	0
13,050.0	90.00	359.68	10,472.0	6,921.3	2,838.2	59.3	791,176.05	488,341.73	2,838.37	C
13,100.0	90.00	359.68	10,472.0	6,921.3	2,888.2	59.0	791,175.77	488,391.73	2,888.36	0
13,150.0	90.00	359.68	10,472.0	6,921.3	2,938.2	58.7	791,175.50	488,441.73	2,938.36	C
13,200.0	90.00	359.68	10,472.0	6,921.3	2,988.2	58.4	791,175.22	488,491.73	2,988.36	(
13,250.0	90.00	359.68	10,472.0	6,921.3	3,038.2	58.1	791,174.94	488,541.73	3,038.36	(
13,300.0	90.00	359.68	10,472.0	6,921.3	3,088.2	57.9	791,174.67	488,591.73	3,088.36	C
13,350.0	90.00	359.68	10,472.0	6,921.3	3,138.2	57.6	791,174.39	488,641.73	3,138.35	(
13,400.0	90.00	359.68	10,472.0	6,921.3	3,188.2	57.3	791,174.12	488,691.73	3,188.35	(
13,450.0	90.00	359.68	10,472.0	6,921.3	3,238.2	57.0	791,173.84	488,741.73	3,238.35	(
13,500.0	90.00	359.68	10,472.0	6,921.3	3,288.2	56.8	791,173.56	488,791.73	3,288.35	(
13,550.0	90.00	359.68	10,472.0	6,921.3	3,338.2	56.5	791,173.29	488,841.73	3,338.35	(
13,600.0	90.00	359.68	10,472.0	6,921.3	3,388.2	56.2	791,173.01	488,891.72	3,388.34	(
13,650.0	90.00	359.68	10,472.0	6,921.3	3,438.2	55.9	791,172.74	488,941.72	3,438.34	(
13,700.0	90.00	359.68	10,472.0	6,921.3	3,488.2	55.7	791,172.46	488,991.72	3,488.34	(
13,750.0	90.00	359.68	10,472.0	6,921.3	3,538.2	55.4	791,172.18	489,041.72	3,538.34	(
13,800.0	90.00	359.68	10,472.0	6,921.3	3,588.2	55.1	791,171.91	489,091.72	3,588.33	(
13,850.0	90.00	359.68	10,472.0	6,921.3	3,638.2	54.8	791,171.63	489,141.72	3,638.33	(
13,900.0	90.00	359.68	10,472.0	6,921.3	3,688.2	54.6	791,171.36	489,191.72	3,688.33	(
13,950.0	90.00	359.68	10,472.0	6,921.3	3,738.2	54.3	791,171.08	489,241.72	3,738.33	(
14,000.0	90.00	359.68	10,472.0	6,921.3	3,788.2	54.0	791,170.80	489,291.72	3,788.33	(
14,050.0	90.00	359.68	10,472.0	6,921.3	3,838.2	53.7	791,170.53	489,341.72	3,838.32	(
14,100.0	90.00	359.68	10,472.0	6,921.3	3,888.2	53.5	791,170.25	489,391.72	3,888.32	(
14,150.0	90.00	359.68	10,472.0	6,921.3	3,938.2	53.2	791,169.97	489,441.72	3,938.32	(

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H Design: 190413 Bell Lake Unit North 221H Local Co-ordinate Reference:

TVD Reference:

North Reference: Survey Calculation Method: Database:

Well Bell Lake Unit North 221H

WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

jn: 190	413 Dell Lake Utill	NOITH 22 III				Database:		EDIVI 3000.1 Sirigit	e Oser Db	
ned 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)
14,200.0	90.00	359.68	10,472.0	6,921.3	3,988.2	52.9	791,169.70	489,491.72	3,988.32	0.
14,250.0	90.00	359.68	10,472.0	6,921.3	4,038.2	52.6	791,169.42	489,541.71	4,038.32	0.
14,300.0	90.00	359.68	10,472.0	6,921.3	4,088.1	52.3	791,169.14	489,591.71	4,088.31	0
14,350.0	90.00	359.68	10,472.0	6,921.3	4,138.1	52.1	791,168.87	489,641.71	4,138.31	0
14,400.0	90.00	359.68	10,472.0	6,921.3	4,188.1	51.8	791,168.59	489,691.71	4,188.31	0
14,450.0	90.00	359.68	10,472.0	6,921.3	4,238.1	51.5	791,168.31	489,741.71	4,238.31	0
14,500.0	90.00	359.68	10,472.0	6,921.3	4,288.1	51.2	791,168.04	489,791.71	4,288.31	0
14,550.0	90.00	359.68	10,472.0	6,921.3	4,338.1	51.0	791,167.76	489,841.71	4,338.30	0
14,600.0	90.00	359.68	10,472.0	6,921.3	4,388.1	50.7	791,167.48	489,891.71	4,388.30	0
14,650.0	90.00	359.68	10,472.0	6,921.3	4,438.1	50.4	791,167.21	489,941.71	4,438.30	0
14,700.0	90.00	359.68	10,472.0	6,921.3	4,488.1	50.1	791,166.93	489,991.71	4,488.30	0
14,750.0	90.00	359.68	10,472.0	6,921.3	4,538.1	49.9	791,166.65	490,041.71	4,538.29	0
14,800.0	90.00	359.68	10,472.0	6,921.3	4,588.1	49.6	791,166.38	490,091.71	4,588.29	0
14,850.0	90.00	359.68	10,472.0	6,921.3	4,638.1	49.3	791,166.10	490,141.71	4,638.29	0
14,900.0	90.00	359.68	10,472.0	6,921.3	4,688.1	49.0	791,165.82	490,191.70	4,688.29	0
14,950.0	90.00	359.68	10,472.0	6,921.3	4,738.1	48.8	791,165.55	490,241.70	4,738.29	C
15,000.0	90.00	359.68	10,472.0	6,921.3	4,788.1	48.5	791,165.27	490,291.70	4,788.28	C
15,050.0	90.00	359.68	10,472.0	6,921.3	4,838.1	48.2	791,164.99	490,341.70	4,838.28	C
15,100.0	90.00	359.68	10,472.0	6,921.3	4,888.1	47.9	791,164.71	490,391.70	4,888.28	C
15,150.0	90.00	359.68	10,472.0	6,921.3	4,938.1	47.6	791,164.44	490,441.70	4,938.28	0
15,200.0	90.00	359.68	10,472.0	6,921.3	4,988.1	47.4	791,164.16	490,491.70	4,988.28	C
15,250.0	90.00	359.68	10,472.0	6,921.3	5,038.1	47.1	791,163.88	490,541.70	5,038.27	C
15,300.0	90.00	359.68	10,472.0	6,921.3	5,088.1	46.8	791,163.61	490,591.70	5,088.27	C
15,350.0	90.00	359.68	10,472.0	6,921.3	5,138.1	46.5	791,163.33	490,641.70	5,138.27	0
15,400.0	90.00	359.68	10,472.0	6,921.3	5,188.1	46.3	791,163.05	490,691.70	5,188.27	0
15,450.0	90.00	359.68	10,472.0	6,921.3	5,238.1	46.0	791,162.77	490,741.70	5,238.27	0
15,500.0	90.00	359.68	10,472.0	6,921.3	5,288.1	45.7	791,162.50	490,791.70	5,288.26	0

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H Design: 190413 Bell Lake Unit North 221H

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:

Well Bell Lake Unit North 221H

WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev)

	90413 Bell Lake Unit					Database:	ion Method:	EDM 5000.1 Single		
lanned Survey										
MD (usft)	Inc (°)	Azi (azimuth) TV		TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
15,550.0		359.68	10,472.0	6,921.3	5,338.1	45.4	791,162.22	490,841.69	5,338.26	0.0
15,600.0	90.00	359.68	10,472.0	6,921.3	5,388.1	45.1	791,161.94	490,891.69	5,388.26	0.0
15,650.0	90.00	359.68	10,472.0	6,921.3	5,438.1	44.9	791,161.66	490,941.69	5,438.26	0.0
15,700.0	90.00	359.68	10,472.0	6,921.3	5,488.1	44.6	791,161.39	490,991.69	5,488.25	0.0
15,750.0	90.00	359.68	10,472.0	6,921.3	5,538.1	44.3	791,161.11	491,041.69	5,538.25	0.0
15,800.0	90.00	359.68	10,472.0	6,921.3	5,588.1	44.0	791,160.83	491,091.69	5,588.25	0.0
15,850.0	90.00	359.68	10,472.0	6,921.3	5,638.1	43.8	791,160.55	491,141.69	5,638.25	0.0
15,900.0	90.00	359.68	10,472.0	6,921.3	5,688.1	43.5	791,160.28	491,191.69	5,688.25	0.0
15,950.0	90.00	359.68	10,472.0	6,921.3	5,738.1	43.2	791,160.00	491,241.69	5,738.24	0.0
16,000.0	90.00	359.68	10,472.0	6,921.3	5,788.1	42.9	791,159.72	491,291.69	5,788.24	0.
16,050.0	90.00	359.68	10,472.0	6,921.3	5,838.1	42.6	791,159.44	491,341.69	5,838.24	0.
16,100.0	90.00	359.68	10,472.0	6,921.3	5,888.1	42.4	791,159.17	491,391.69	5,888.24	0.
16,150.0	90.00	359.68	10,472.0	6,921.3	5,938.1	42.1	791,158.89	491,441.69	5,938.24	0.
16,200.0	90.00	359.68	10,472.0	6,921.3	5,988.1	41.8	791,158.61	491,491.68	5,988.23	0.
16,250.0	90.00	359.68	10,472.0	6,921.3	6,038.1	41.5	791,158.33	491,541.68	6,038.23	0.
16,300.0	90.00	359.68	10,472.0	6,921.3	6,088.1	41.3	791,158.05	491,591.68	6,088.23	0.
16,350.0	90.00	359.68	10,472.0	6,921.3	6,138.1	41.0	791,157.78	491,641.68	6,138.23	0.
16,400.0	90.00	359.68	10,472.0	6,921.3	6,188.1	40.7	791,157.50	491,691.68	6,188.22	0.
16,450.0	90.00	359.68	10,472.0	6,921.3	6,238.1	40.4	791,157.22	491,741.68	6,238.22	0.
16,500.0	90.00	359.68	10,472.0	6,921.3	6,288.1	40.1	791,156.94	491,791.68	6,288.22	0.
16,550.0	90.00	359.68	10,472.0	6,921.3	6,338.1	39.9	791,156.67	491,841.68	6,338.22	0.
16,600.0	90.00	359.68	10,472.0	6,921.3	6,388.1	39.6	791,156.39	491,891.68	6,388.22	0.
16,650.0	90.00	359.68	10,472.0	6,921.3	6,438.1	39.3	791,156.11	491,941.68	6,438.21	0.
16,700.0	90.00	359.68	10,472.0	6,921.3	6,488.1	39.0	791,155.83	491,991.68	6,488.21	0.
16,750.0	90.00	359.68	10,472.0	6,921.3	6,538.1	38.8	791,155.55	492,041.68	6,538.21	0
16,800.0	90.00	359.68	10,472.0	6,921.3	6,588.1	38.5	791,155.27	492,091.68	6,588.21	0.
16,850.0	90.00	359.68	10,472.0	6,921.3	6,638.1	38.2	791,155.00	492,141.67	6,638.21	0

Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Wellbore: Bell Lake Unit North 221H Design: 190413 Bell Lake Unit North 221H Local Co-ordinate Reference:

Database:

TVD Reference:

WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev) North Reference: Survey Calculation Method:

Minimum Curvature EDM 5000.1 Single User Db

Well Bell Lake Unit North 221H

nned 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)
16,900.0	90.00	359.68	10,472.0	6,921.3	6,688.1	37.9	791,154.72	492,191.67	6,688.20	0.00
16,950.0	90.00	359.68	10,472.0	6,921.3	6,738.1	37.6	791,154.44	492,241.67	6,738.20	0.00
17,000.0	90.00	359.68	10,472.0	6,921.3	6,788.1	37.4	791,154.16	492,291.67	6,788.20	0.00
17,050.0	90.00	359.68	10,472.0	6,921.3	6,838.1	37.1	791,153.88	492,341.67	6,838.20	0.00
17,100.0	90.00	359.68	10,472.0	6,921.3	6,888.1	36.8	791,153.60	492,391.67	6,888.20	0.00
17,150.0	90.00	359.68	10,472.0	6,921.3	6,938.1	36.5	791,153.33	492,441.67	6,938.19	0.00
17,200.0	90.00	359.68	10,472.0	6,921.3	6,988.1	36.3	791,153.05	492,491.67	6,988.19	0.00
17,250.0	90.00	359.68	10,472.0	6,921.3	7,038.1	36.0	791,152.77	492,541.67	7,038.19	0.00
17,300.0	90.00	359.68	10,472.0	6,921.3	7,088.1	35.7	791,152.49	492,591.67	7,088.19	0.00
17,350.0	90.00	359.68	10,472.0	6,921.3	7,138.1	35.4	791,152.21	492,641.67	7,138.18	0.00
17,400.0	90.00	359.68	10,472.0	6,921.3	7,188.1	35.1	791,151.93	492,691.67	7,188.18	0.00
17,450.0	90.00	359.68	10,472.0	6,921.3	7,238.1	34.9	791,151.65	492,741.67	7,238.18	0.00
17,500.0	90.00	359.68	10,472.0	6,921.3	7,288.1	34.6	791,151.38	492,791.66	7,288.18	0.00
17,550.0	90.00	359.68	10,472.0	6,921.3	7,338.1	34.3	791,151.10	492,841.66	7,338.18	0.00
17,600.0	90.00	359.68	10,472.0	6,921.3	7,388.1	34.0	791,150.82	492,891.66	7,388.17	0.00
17,650.0	90.00	359.68	10,472.0	6,921.3	7,438.1	33.7	791,150.54	492,941.66	7,438.17	0.00
17,700.0	90.00	359.68	10,472.0	6,921.3	7,488.1	33.5	791,150.26	492,991.66	7,488.17	0.00
17,750.0	90.00	359.68	10,472.0	6,921.3	7,538.1	33.2	791,149.98	493,041.66	7,538.17	0.00
17,800.0	90.00	359.68	10,472.0	6,921.3	7,588.1	32.9	791,149.70	493,091.66	7,588.17	0.00
17,850.0	90.00	359.68	10,472.0	6,921.3	7,638.1	32.6	791,149.42	493,141.66	7,638.16	0.00
17,900.0	90.00	359.68	10,472.0	6,921.3	7,688.1	32.4	791,149.15	493,191.66	7,688.16	0.00
17,950.0	90.00	359.68	10,472.0	6,921.3	7,738.1	32.1	791,148.87	493,241.66	7,738.16	0.00
18,000.0	90.00	359.68	10,472.0	6,921.3	7,788.1	31.8	791,148.59	493,291.66	7,788.16	0.00
18,050.0	90.00	359.68	10,472.0	6,921.3	7,838.1	31.5	791,148.31	493,341.66	7,838.15	0.00
18,100.0	90.00	359.68	10,472.0	6,921.3	7,888.1	31.2	791,148.03	493,391.66	7,888.15	0.00
18,150.0	90.00	359.68	10,472.0	6,921.3	7,938.1	31.0	791,147.75	493,441.65	7,938.15	0.00
18,200.0	90.00	359.68	10,472.0	6,921.3	7,988.1	30.7	791,147.47	493,491.65	7,988.15	0.00



Morcor Standard Plan

Company: Project: Site: Kaiser Francis Bell Lake Unit North 221H Bell Lake Unit North 221H Well: Bell Lake Unit North 221H Wellbore: Bell Lake Unit North 221H Design:

190413 Bell Lake Unit North 221H

90.00

359.68

10,472.0

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

29.8

WELL @ 3550.7usft (Original Well Elev)
WELL @ 3550.7usft (Original Well Elev) Grid Minimum Curvature EDM 5000.1 Single User Db Survey Calculation Method:

791,146.58

Well Bell Lake Unit North 221H

493,651.65

8,148.14

0.00

Database:

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)
18,250.0	90.00	359.68	10,472.0	6,921.3	8,038.1	30.4	791,147.19	493,541.65	8,038.15	0.00
18,300.0	90.00	359.68	10,472.0	6,921.3	8,088.1	30.1	791,146.91	493,591.65	8,088.14	0.00
18,350.0	90.00	359.68	10,472.0	6,921.3	8,138.1	29.8	791,146.63	493,641.65	8,138.14	0.00

8,148.1

6,921.3

5 1/2" Production Casing

18,360.0

Casing Points					
	Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
	18,360.0	10,472.0	5 1/2" Production Casing	5-1/2	8-3/4
	1,272.0	1,272.0	13 3/8" Surface Casing	13-3/8	17-1/2
	5,072.0	5,072.0	9 5/8" Intermediate Casing	9-5/8	12-1/4
	120.0	120.0	20" Conductor	20	26



Morcor Standard Plan

Company: Kaiser Francis
Project: Bell Lake Unit North 221H
Site: Bell Lake Unit North 221H
Well: Bell Lake Unit North 221H
Wellbore: Bell Lake Unit North 221H
Design: 190413 Bell Lake Unit North 221H

Local Co-ordinate Reference: W
TVD Reference: W
MD Reference: W
North Reference: G
Survey Calculation Method: M
Database: El

Well Bell Lake Unit North 221H WELL @ 3550.7usft (Original Well Elev) WELL @ 3550.7usft (Original Well Elev)

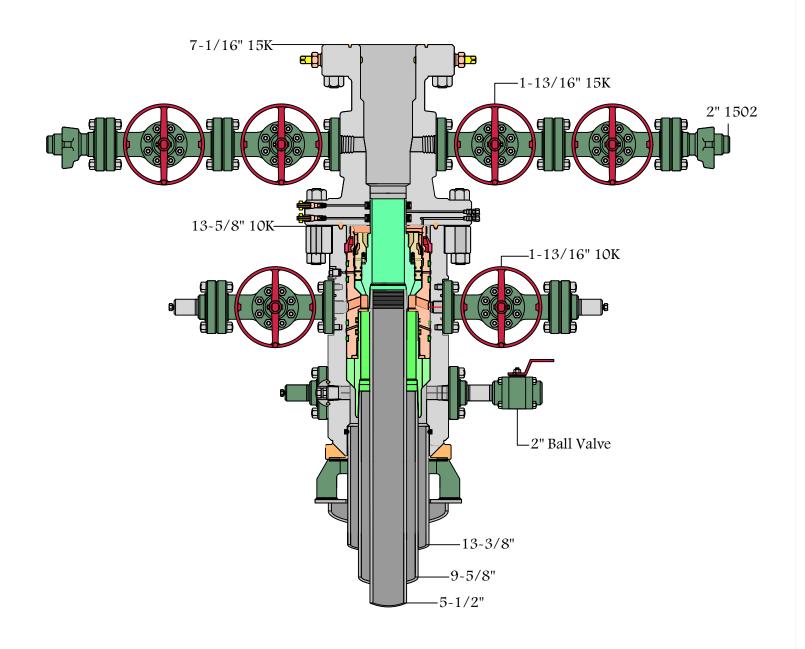
Minimum Curvature
EDM 5000.1 Single User Db

Formations Dip Direction Measured Vertical Depth (usft) Depth Dip (usft) Lithology (°) Name 5,022.0 5,022.0 Lamar 0.00 8,447.0 8,447.0 Bone Spring 0.00 1,222.0 1,222.0 Rustler 0.00 6,572.0 Cherry Canyon 6,572.0 0.00 1,797.0 1,797.0 Top of Salt 0.00 4,747.0 4,747.0 Base of Salt 0.00 8,222.0 8,222.0 Brushy Canyon 0.00 10,308.0 10,272.0 2nd Bone Spring Sand 0.00 9,747.6 9,747.0 1st Bone Spring Sand 0.00 1,472.0 1,472.0 Salado 0.00 8,802.0 8,802.0 Avalon 0.00 5,322.0 Bell Canyon 5,322.0 0.00

Plan Annotations				
Measured	Vertical Local Coordinates		dinates	
Depth	Depth	+N/-S	+E/-W	
(usft)	(usft)	(usft)	(usft)	Comment
9,500.0	9,500.0	0.0	0.0	Start Build 3.00
9,700.0	9,699.6	5.4	8.9	Start 240.0 hold at 9700.0 MD
9,940.0	9,938.3	18.5	30.4	Start DLS 10.15 TFO -59.91
10,308.0	10,272.0	155.2	58.9	First PP
10,706.7	10,463.7	495.4	71.9	Start DLS 8.67 TFO -2.39
10,811.9	10,472.0	600.1	71.6	Start DLS 0.00 TFO -90.00 - First Take Point
18,362.6				TD at 18362.6 - Last Take Point

Checked By:	Approved By:	Date:
Checked By.	Арргоved By.	Date:





RKI



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

Vice President of Global Industry Services

Dema Opflueign

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.



PWD Data Report
08/12/2020

APD ID: 10400048014 **Submission Date**: 10/08/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH

Well Number: 221H

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 221H

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD disturbance (acres): PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 221H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: Injection well name:

Assigned injection well API number? Injection well API number:

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 221H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:



BUREAU OF LAND MANAGEMENT

Bond Info Data Report

08/12/2020

APD ID: 10400048014

Submission Date: 10/08/2019

Highlighted data reflects the most recent changes

•

Operator Name: KAISER FRANCIS OIL COMPANY

Well Number: 221H

Show Final Text

Well Type: OIL WELL

Well Name: BELL LAKE UNIT NORTH

Well Work Type: Drill

Bond Information

Federal/Indian APD: FED

BLM Bond number: WYB000055

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

District 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

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

1 API Number

District IV

State of New Mexico

Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

1220 South St. Francis Dr. Santa Fe, NM 87505

Pool Code

Revised August 1, 2011 Submit one copy to appropriate OCD - HOBBS District Office 08|14|2020

AMENDED REPORT

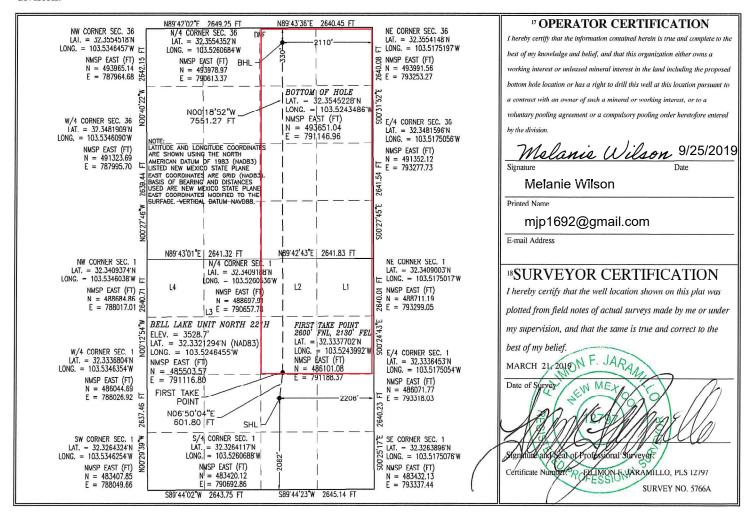
Form C-102

RECEIVED WELL LOCATION AND ACREAGE DEDICATION PLAT

Ar i Number				root Code	-	rooi Name					
30-0	562		98259		Ojo Chiso;Bone Spring, Southwest				est est		
⁴ Property Code ⁵ Prop					⁵ Property	operty Name				⁶ Well Number	
31670)7	BELL LAKE UNIT NORTH 221H						221H			
OGRID :	No.	⁸ Operator Name ⁹ Elevation					⁹ Elevation				
12361	L	KAISER-FRANCIS OIL CO.					3528.7				
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		2082	SOUTH	2206	EA	ST	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 36 22 S 33 E 330 **NORTH** 2110 **EAST** LEA 12 Dedicated Acres 13 Joint or Infill 5 Order No. 14 Consolidation Code 479.95 R-14527A

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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

Date: 01/26/2018

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

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



GAS CAPTURE PLAN

Bute. 01/20/2010	
⊠ 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	30-025-	1-23S-33E		2000	0	
Bell Lake Unit North 222H	47562	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 <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's</u> belief the system can take this gas upon completion of the well(s).

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

Alternatives to Reduce Flaring

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

- Power Generation On lease
 - 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