Form 3160-3
(June 2015)

OCD – HOBBS
09/23/2020
RECEIVED

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM0001244A

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

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

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

8. Lease Name and Well No.
BELL LAKE UNIT NORTH [316707]
227H

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

9. API Well No.
30-025-47771

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

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

10. Field and Pool, or Exploratory [98259]
OJO CHISO/WOLFCAMP, SOUTHWEST

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface NWSE / 2130 FSL / 2425 FEL / LAT 32.3322407 / LONG -103.5085611
At proposed prod. zone NENW / 330 FNL / 2110 FWL / LAT 32.3545103 / LONG -103.5106856

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 6/T23S/R34E/NMP

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

12. County or Parish
LEA

13. State
NM

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

16. No of acres in lease
634.35

17. Spacing Unit dedicated to this well
480.0

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

19. Proposed Depth
10277 feet / 18356 feet

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3475 feet

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

23. Estimated duration
40 days

24. Attachments

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

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

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	STORMI DAVIS / Ph: (918) 491-0000	10/30/2019

Title: Regulatory Analyst

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575) 234-5959	09/21/2020

Title	Office
Assistant Field Manager Lands & Minerals	Carlsbad Field Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

GCP Rec 09/23/2020

SL

APPROVED WITH CONDITIONS

KZ
10/07/2020

Approval Date: 09/21/2020

(Continued on page 2)

*(Instructions on page 2)

APD ID: 10400050021 Submission Date: 10/30/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

Well Type: OIL WELL Well Work Type: Drill

Highlighted data reflects the most recent changes

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Section 1 - General

APD ID: 10400050021 Tie to previous NOS? N Submission Date: 10/30/2019

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: NMNM0001244A Lease Acres: 634.35

Surface access agreement in place? Allotted? Reservation:

Agreement in place? YES Federal or Indian agreement: FEDERAL

Agreement number: NMNM068292X

Agreement name: BELL LAKE

Keep application confidential? Y

Permitting Agent? YES APD Operator: KAISER FRANCIS OIL COMPANY

Operator letter of designation:

Operator Info

Operator Organization Name: KAISER FRANCIS OIL COMPANY

Operator Address: 6733 S. Yale Ave.

Zip: 74121

Operator PO Box: PO Box 21468

Operator City: Tulsa State: OK

Operator Phone: (918)491-0000

Operator Internet Address:

Section 2 - Well Information

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

Well in Master SUPO? NO Master SUPO name:

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

Well Name: BELL LAKE UNIT NORTH Well Number: 227H Well API Number:

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

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

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

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

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

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name: NORTH BELL LAKE UNIT Number: 9

Well Class: HORIZONTAL

Number of Legs: 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: EXPLORATORY (WILDCAT)

Describe sub-type:

Distance to town: 20 Miles Distance to nearest well: 30 FT Distance to lease line: 215 FT

Reservoir well spacing assigned acres Measurement: 480 Acres

Well plat: BLUN_227H_C102_20191024100455.pdf

BLUN_227H_Pymt_20191025110841.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: 6997 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	2130	FSL	2425	FEL	23S	34E	6	Aliquot NWSE	32.3322407	-103.5085611	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 0001244A	3475	0	0	N
KOP Leg #1	2130	FSL	2425	FEL	23S	34E	6	Aliquot NWSE	32.3322407	-103.5085611	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 0001244A	-5975	9450	9450	N

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
PPP Leg #1-1	2116	FSL	2640	FWL	23S	34E	6	Aliquot NESW	32.3322069	-103.5092134	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 0000587	-6417	9950	9892	N
PPP Leg #1-2	2640	FNL	2190	FWL	23S	34E	6	Aliquot SENW	32.33371	-103.51045	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 0001244A	-6800	10765	10275	Y
PPP Leg #1-3	2600	FNL	2190	FWL	23S	34E	6	Aliquot SENW	32.3337564	-103.5104157	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 0001244A	-6802	10805	10277	Y
PPP Leg #1-4	0	FSL	2160	FWL	22S	34E	31	Aliquot SESW	32.3408868	-103.5105083	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0 070544B	-6802	13405	10277	Y
PPP Leg #1-5	2640	FNL	2160	FWL	22S	34E	31	Aliquot SENW	32.34832	-103.51038	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0 070544A	-6802	16045	10277	Y
EXIT Leg #1	330	FNL	2110	FWL	22S	34E	31	Aliquot NENW	32.3545103	-103.5106856	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0 070544A	-6802	18356	10277	Y
BHL Leg #1	330	FNL	2110	FWL	22S	34E	31	Aliquot NENW	32.3545103	-103.5106856	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0 070544A	-6802	18356	10277	Y

Melanie Wilson

From: notification@pay.gov
Sent: Thursday, October 24, 2019 5:29 PM
To: mjp1692@gmail.com
Subject: Pay.gov Payment Confirmation: BLM Oil and Gas Online Payment


An official email of the United States government

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

Application Name: BLM Oil and Gas Online Payment
Pay.gov Tracking ID: 26L2PHMN
Agency Tracking ID: 75869720477
Transaction Type: Sale
Transaction Date: 10/24/2019 07:29:19 PM EDT
Account Holder Name: GEORGE B KAISER
Transaction Amount: $10,230.00
Card Type: Visa
Card Number: **********0061

Company: Kaiser-Francis Oil Company
APD IDs: 10400050021
Lease Numbers: NMNM0001244A
Well Numbers: 227H
Note: You will need your Pay.gov Tracking ID to complete your APD transaction in AFMSS II. Please ensure you write this number down upon completion of payment.

THIS IS AN AUTOMATED MESSAGE. PLEASE DO NOT REPLY.


Pay.gov is a program of the U.S. Department of the Treasury, Bureau of the Fiscal Service

APD ID: 10400050021 Submission Date: 10/30/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

Well Type: OIL WELL Well Work Type: Drill

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Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
570904	---	3475	0	0	OTHER : Surface	NONE	N
570905	RUSTLER	2303	1172	1172	SANDSTONE	NONE	N
570906	SALADO	2003	1472	1472	SALT	NONE	N
570907	TOP SALT	1703	1772	1772	SALT	NONE	N
570908	BASE OF SALT	-1087	4562	4562	SALT	NONE	N
570909	LAMAR	-1372	4847	4847	SANDSTONE	NATURAL GAS, OIL	N
570910	BELL CANYON	-1697	5172	5172	SANDSTONE	NATURAL GAS, OIL	N
570911	CHERRY CANYON	-2647	6122	6122	SANDSTONE	NATURAL GAS, OIL	N
570912	BRUSHY CANYON	-4047	7522	7522	SANDSTONE	NATURAL GAS, OIL	N
570913	BONE SPRING	-5097	8572	8572	LIMESTONE	NATURAL GAS, OIL	N
570914	AVALON SAND	-5264	8739	8739	SANDSTONE	NATURAL GAS, OIL	N
570915	BONE SPRING 1ST	-6097	9572	9572	SANDSTONE	NATURAL GAS, OIL	N
570922	BONE SPRING 2ND	-6602	10077	10077	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

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 Multi Bowl Wellhead

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_227H_Choke_Manifold_20191024113007.pdf

BOP Diagram Attachment:

Cactus_Flex_Hose_16C_Certification_20191024113027.pdf

BLUN_227H_BOP2_20200826143953.pdf

BLUN_227H_MultiBowl_Wellhead_2_20200826143953.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	1197	0	1197	3475	2278	1197	J-55	54.5	BUTT	2	4.9	DRY	13.9	DRY	13.1
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	4897	0	4897		-1422	4897	HCP-110	40	LT&C	1.9	3.5	DRY	6.5	DRY	6.4
3	PRODUCTION	8.75	5.5	NEW	API	N	0	18356	0	10277		-6802	18356	P-110	20	OTHER - GB CD Butt	2.3	2.7	DRY	3.2	DRY	3.1

Casing Attachments

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BLUN_227H_Casing_Assumptions_20191024113453.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BLUN_227H_Casing_Assumptions_20191024113256.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BLUN_227H_Casing_Assumptions_20191024113332.pdf

GBCD_5.5in_Connection_Spec_Sheet_20191024113601.pdf

Section 4 - Cement

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1197	647	1.7	13.5	1131	75	HALCEM	4% Bentonite
SURFACE	Tail		0	1197	300	1.3	14.8	400	75	HalCem	0.125 #/sk Poly Flake
INTERMEDIATE	Lead		0	4897	1101	2.09	12.5	2300	75	Econocem	3#/sk KolSeal
INTERMEDIATE	Tail		0	4897	411	1.33	14.8	54	75	Halcem	none
PRODUCTION	Lead		4000	18356	425	3.4	10.5	1482	10	NeoCem	2#/sk Kol Seal
PRODUCTION	Tail		4000	18356	2420	1.22	14.5	2960	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)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
4897	10277	OIL-BASED MUD	8.7	8.9							
1197	4897	OIL-BASED MUD	8.7	8.9							
0	1197	OTHER : Fresh Water	8.4	9							

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

Section 6 - Test, Logging, Coring

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

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

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

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

Coring operation description for the well:

None planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5045 Anticipated Surface Pressure: 2784

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_20191024114059.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

BLUN_227H___Directional_Plan_20191024114117.pdf

Other proposed operations facets description:

Gas Capture Plan attached

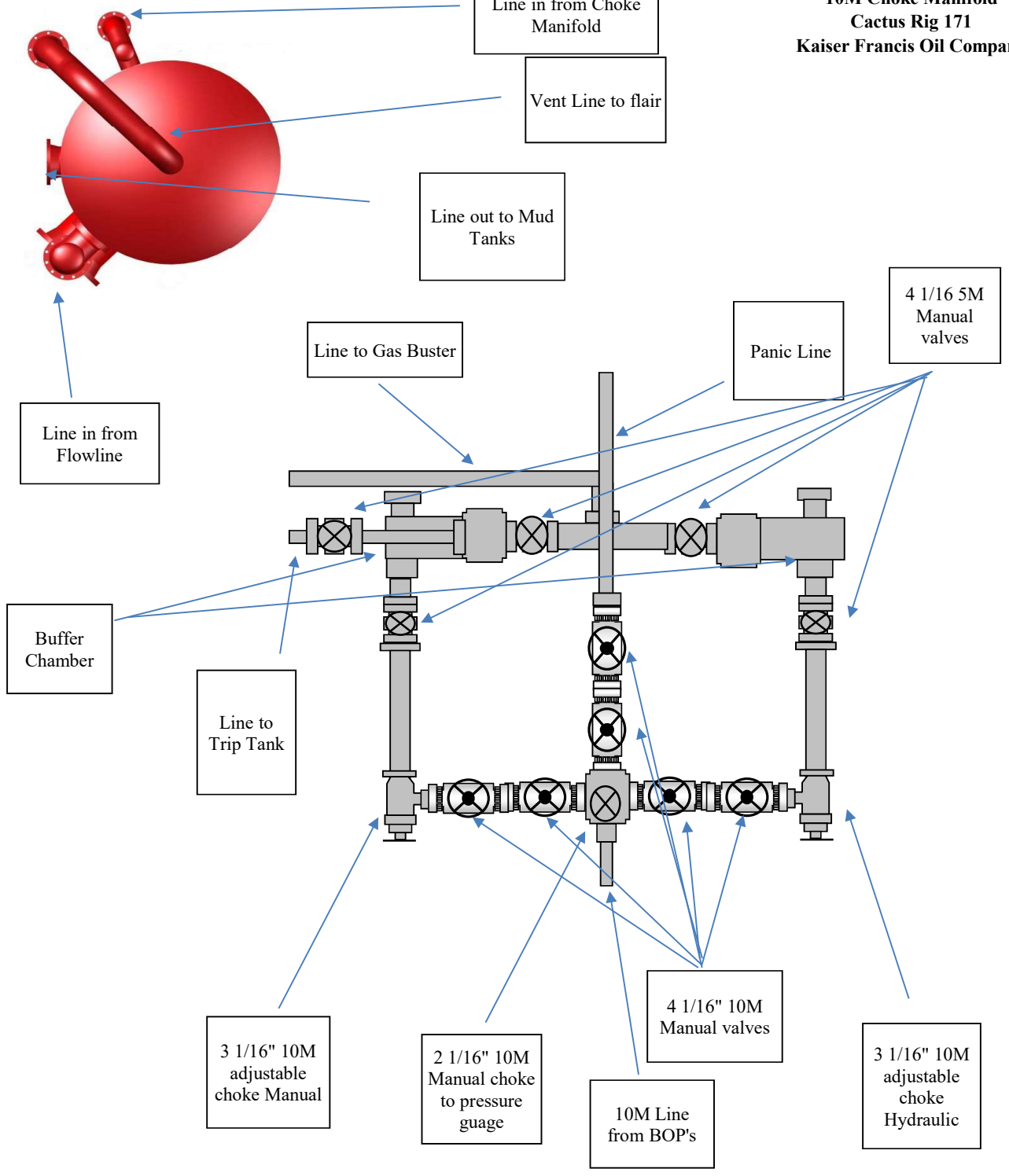
Other proposed operations facets attachment:

Gas_Capture_Plan_BLUN_Pad_9_20191024114127.pdf

Other Variance attachment:

Cactus_Flex_Hose_16C_Certification_20191024114144.pdf

10M Choke Manifold
Cactus Rig 171
Kaiser Francis Oil Company



BLUN 227H

Casing Assumptions

Interval	Length	Casing Size	Weight (#/ft)	Grade	Thread	Condition	Hole Size	TVD (ft)
Conductor	120	20"				New		120
Surface	1197	13-3/8"	54.5	J-55	BTC	New	17-1/2"	1197
Intermediate	4897	9-5/8"	40	HCP-110	LTC	New	12-1/4"	4897
Production	18356	5-1/2"	20	P110	GBCD	New	8-3/4"	10277

Mud Type	Mud Weight Hole Control	Viscosity	Fluid Loss
FW	8.4 - 9.0	32 - 34	NC
OBM	8.7 - 8.9	28	NC
OBM	8.7 - 8.9	28-29	NC

Anticipated Mud Weight (ppg)	Max Pore Pressure (psi)	Collapse (psi)	Burst (psi)	Body Tensile Strength	Joint Tensile Strength
9	560	1130	2730	853000	909000
8.9	2266	4230	7900	1260000	1266000
8.9	4756	11100	12640	641000	667000

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)
2.0	4.9	13.1	13.9
1.9	3.5	6.4	6.5
2.3	2.7	3.1	3.2

KAISER-FRANCIS OIL COMPANY
HYDROGEN SULFIDE (H_2S) 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

Activation of the Emergency Action Plan

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

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

General Responsibilities

In the event of an H_2S 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 H_2S RELEASE

The following procedures and responsibilities will be implemented on activation of the H_2S siren and lights.

All Personnel:

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

Rig Manager/Tool Pusher:

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

Two People Responsible for Shut-in and Rescue:

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

All Other Personnel:

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

Kaiser-Francis Oil Company Representative:

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

PROCEDURE FOR IGNITING AN UNCONTROLLABLE CONDITION:
Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police shall be the Incident Command of any major release.

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

1) Human life and/or property are in danger.

2) There is no hope of bringing the situation under control with the prevailing conditions at the site.

INSTRUCTIONS FOR IGNITION:

1) Two people are required. They must be equipped with positive pressure; self contained breathing apparatus and a "D"-ring style, full body, OSHA approved safety harness. Non-flammable rope will be attached.

2) One of the people will be a qualified safety person who will test the atmosphere for H_2S, 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)

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

EMERGENCY RESPONSE NUMBERS: Lea County, New Mexico

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

PROTECTION OF THE GENERAL PUBLIC/ROE:

In the event of a release with a concentration greater than 100 ppm H_2S, 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)

Calculation for the 500 ppm ROE:

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

(H2S concentrations in decimal form)
10,000 ppm +=1.+
1,000 ppm +=.1+
100 ppm +=.01+
10 ppm +=.001+

EXAMPLE: If a well/facility has been determined to have 150 ppm H_2S 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 H_2S safety, shall monitor with detection equipment the H_2S Concentration, wind and area of exposure (ROE). This person will determine the outer perimeter of the hazardous area. The extent of the evacuation area will be determined from the data being collected. Monitoring shall continue until the situation has been resolved. **(All monitoring equipment will be UL approved, for use in class I groups A,B,C & D, Division I, hazardous locations. All monitors will have a minimum capability of measuring H_2S, 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 H_2S AND SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = 1	10 ppm	100 ppm	600 ppm
Sulfur Dioxide	SO_2	2.21 Air = 1	2 ppm	N/A	1000 ppm

TRAINING:

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

PUBLIC RELATIONS

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

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

All contract and Kaiser-Francis employees are instructed **NOT** to make any statement to the media concerning the emergency incident. If a media representative contacts any employee, they should refer them to the designated Emergency Command Center where they should contact the Incident Commander or his designated relief for any information concerning the incident.

KAISER-FRANCIS OIL COMPANY

Kaiser Francis

Bell Lake Unit North 227H
Bell Lake Unit North 227H
Bell Lake Unit North 227H
Bell Lake Unit North 227H

Plan: 190913 Bell Lake Unit North 227H

Morcor Standard Plan

13 September, 2019

Morcor Engineering

Morcor Standard Plan

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 227H
Project:	Bell Lake Unit North 227H	**TVD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Site:	Bell Lake Unit North 227H	**MD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Well:	Bell Lake Unit North 227H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 227H	**Survey Calculation Method:**	Minimum Curvature
Design:	190913 Bell Lake Unit North 227H	**Database:**	EDM 5000.1 Single User Db

Project Bell Lake Unit North 227H

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

Site Bell Lake Unit North 227H

Site Position:		**Northing:**	485,581.95 usft	**Latitude:**	32° 19' 56.067 N
From:	Map	**Easting:**	796,084.63 usft	**Longitude:**	103° 30' 30.820 W
Position Uncertainty:	1.0 usft	**Slot Radius:**	17-1/2 "	**Grid Convergence:**	0.44 °

Well Bell Lake Unit North 227H

Well Position	**+N/-S**	0.0 usft	**Northing:**	485,581.95 usft	**Latitude:**	32° 19' 56.067 N
	+E/-W	0.0 usft	**Easting:**	796,084.63 usft	**Longitude:**	103° 30' 30.820 W
Position Uncertainty		1.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,475.3 usft

Wellbore Bell Lake Unit North 227H

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/13/2019	6.54	60.08	47,862

Design 190913 Bell Lake Unit North 227H

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

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	354.93

Survey Tool Program **Date** 9/13/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	18,356.7	190913 Bell Lake Unit North 227H (Bell La	MWD	MWD - Standard

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Wellbore:	Bell Lake Unit North 227H	**Survey Calculation Method:**	Minimum Curvature
Design:	190913 Bell Lake Unit North 227H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
0.0	0.00	0.00	0.0	-3,497.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
100.0	0.00	0.00	100.0	-3,397.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
120.0	0.00	0.00	120.0	-3,377.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
20" Conductor										
200.0	0.00	0.00	200.0	-3,297.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
300.0	0.00	0.00	300.0	-3,197.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
400.0	0.00	0.00	400.0	-3,097.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
500.0	0.00	0.00	500.0	-2,997.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
600.0	0.00	0.00	600.0	-2,897.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
700.0	0.00	0.00	700.0	-2,797.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
800.0	0.00	0.00	800.0	-2,697.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
900.0	0.00	0.00	900.0	-2,597.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
1,000.0	0.00	0.00	1,000.0	-2,497.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
1,100.0	0.00	0.00	1,100.0	-2,397.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
1,172.0	0.00	0.00	1,172.0	-2,325.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
Rustler										
1,197.0	0.00	0.00	1,197.0	-2,300.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
13 3/8" Surface Casing										
1,200.0	0.00	0.00	1,200.0	-2,297.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
1,300.0	0.00	0.00	1,300.0	-2,197.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
1,400.0	0.00	0.00	1,400.0	-2,097.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
1,472.0	0.00	0.00	1,472.0	-2,025.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
Salado										
1,500.0	0.00	0.00	1,500.0	-1,997.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
1,600.0	0.00	0.00	1,600.0	-1,897.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
1,700.0	0.00	0.00	1,700.0	-1,797.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
1,772.0	0.00	0.00	1,772.0	-1,725.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
Top of Salt										

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Design:	190913 Bell Lake Unit North 227H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
1,800.0	0.00	0.00	1,800.0	-1,697.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
1,900.0	0.00	0.00	1,900.0	-1,597.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
2,000.0	0.00	0.00	2,000.0	-1,497.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
2,100.0	0.00	0.00	2,100.0	-1,397.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
2,200.0	0.00	0.00	2,200.0	-1,297.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
2,300.0	0.00	0.00	2,300.0	-1,197.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
2,400.0	0.00	0.00	2,400.0	-1,097.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
2,500.0	0.00	0.00	2,500.0	-997.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
2,600.0	0.00	0.00	2,600.0	-897.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
2,700.0	0.00	0.00	2,700.0	-797.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
2,800.0	0.00	0.00	2,800.0	-697.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
2,900.0	0.00	0.00	2,900.0	-597.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
3,000.0	0.00	0.00	3,000.0	-497.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
3,100.0	0.00	0.00	3,100.0	-397.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
3,200.0	0.00	0.00	3,200.0	-297.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
3,300.0	0.00	0.00	3,300.0	-197.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
3,400.0	0.00	0.00	3,400.0	-97.3	0.0	0.0	796,084.63	485,581.95	0.00	0.00
3,500.0	0.00	0.00	3,500.0	2.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
3,600.0	0.00	0.00	3,600.0	102.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
3,700.0	0.00	0.00	3,700.0	202.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
3,800.0	0.00	0.00	3,800.0	302.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
3,900.0	0.00	0.00	3,900.0	402.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
4,000.0	0.00	0.00	4,000.0	502.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
4,100.0	0.00	0.00	4,100.0	602.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
4,200.0	0.00	0.00	4,200.0	702.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
4,300.0	0.00	0.00	4,300.0	802.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
4,400.0	0.00	0.00	4,400.0	902.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00

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Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
4,500.0	0.00	0.00	4,500.0	1,002.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
4,562.0	0.00	0.00	4,562.0	1,064.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
Base of Salt										
4,600.0	0.00	0.00	4,600.0	1,102.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
4,700.0	0.00	0.00	4,700.0	1,202.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
4,800.0	0.00	0.00	4,800.0	1,302.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
4,847.0	0.00	0.00	4,847.0	1,349.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
Lamar										
4,897.0	0.00	0.00	4,897.0	1,399.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
9 5/8" Intermediate Casing										
4,900.0	0.00	0.00	4,900.0	1,402.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
5,000.0	0.00	0.00	5,000.0	1,502.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
5,100.0	0.00	0.00	5,100.0	1,602.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
5,172.0	0.00	0.00	5,172.0	1,674.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
Bell Canyon										
5,200.0	0.00	0.00	5,200.0	1,702.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
5,300.0	0.00	0.00	5,300.0	1,802.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
5,400.0	0.00	0.00	5,400.0	1,902.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
5,500.0	0.00	0.00	5,500.0	2,002.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
5,600.0	0.00	0.00	5,600.0	2,102.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
5,700.0	0.00	0.00	5,700.0	2,202.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
5,800.0	0.00	0.00	5,800.0	2,302.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
5,900.0	0.00	0.00	5,900.0	2,402.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
6,000.0	0.00	0.00	6,000.0	2,502.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
6,100.0	0.00	0.00	6,100.0	2,602.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
6,122.0	0.00	0.00	6,122.0	2,624.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
Cherry Canyon										
6,200.0	0.00	0.00	6,200.0	2,702.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00

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Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
6,300.0	0.00	0.00	6,300.0	2,802.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
6,400.0	0.00	0.00	6,400.0	2,902.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
6,500.0	0.00	0.00	6,500.0	3,002.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
6,600.0	0.00	0.00	6,600.0	3,102.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
6,700.0	0.00	0.00	6,700.0	3,202.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
6,800.0	0.00	0.00	6,800.0	3,302.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
6,900.0	0.00	0.00	6,900.0	3,402.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
7,000.0	0.00	0.00	7,000.0	3,502.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
7,100.0	0.00	0.00	7,100.0	3,602.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
7,200.0	0.00	0.00	7,200.0	3,702.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
7,300.0	0.00	0.00	7,300.0	3,802.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
7,400.0	0.00	0.00	7,400.0	3,902.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
7,500.0	0.00	0.00	7,500.0	4,002.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
7,522.0	0.00	0.00	7,522.0	4,024.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
Brushy Canyon										
7,600.0	0.00	0.00	7,600.0	4,102.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
7,700.0	0.00	0.00	7,700.0	4,202.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
7,800.0	0.00	0.00	7,800.0	4,302.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
7,900.0	0.00	0.00	7,900.0	4,402.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
8,000.0	0.00	0.00	8,000.0	4,502.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
8,100.0	0.00	0.00	8,100.0	4,602.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
8,200.0	0.00	0.00	8,200.0	4,702.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
8,300.0	0.00	0.00	8,300.0	4,802.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
8,400.0	0.00	0.00	8,400.0	4,902.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
8,500.0	0.00	0.00	8,500.0	5,002.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
8,572.0	0.00	0.00	8,572.0	5,074.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
Bone Spring										

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 227H
Project:	Bell Lake Unit North 227H	**TVD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Site:	Bell Lake Unit North 227H	**MD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Well:	Bell Lake Unit North 227H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 227H	**Survey Calculation Method:**	Minimum Curvature
Design:	190913 Bell Lake Unit North 227H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
8,600.0	0.00	0.00	8,600.0	5,102.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
8,700.0	0.00	0.00	8,700.0	5,202.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
8,739.0	0.00	0.00	8,739.0	5,241.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
Avalon										
8,800.0	0.00	0.00	8,800.0	5,302.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
8,900.0	0.00	0.00	8,900.0	5,402.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
9,000.0	0.00	0.00	9,000.0	5,502.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
9,100.0	0.00	0.00	9,100.0	5,602.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
9,200.0	0.00	0.00	9,200.0	5,702.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
9,300.0	0.00	0.00	9,300.0	5,802.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
9,400.0	0.00	0.00	9,400.0	5,902.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
9,450.0	0.00	0.00	9,450.0	5,952.7	0.0	0.0	796,084.63	485,581.95	0.00	0.00
Start Build 10.00										
9,500.0	5.00	265.03	9,499.9	6,002.6	-0.2	-2.2	796,082.46	485,581.76	0.00	10.00
9,572.9	12.29	265.03	9,572.0	6,074.7	-1.1	-13.1	796,071.54	485,580.81	0.02	10.00
1st Bone Spring Sand										
9,600.0	15.00	265.03	9,598.3	6,101.0	-1.7	-19.4	796,065.18	485,580.26	0.03	10.00
9,700.0	25.00	265.03	9,692.1	6,194.8	-4.7	-53.5	796,031.16	485,577.30	0.09	10.00
9,800.0	35.00	265.03	9,778.6	6,281.3	-9.0	-103.2	795,981.41	485,572.97	0.18	10.00
9,885.2	43.52	265.03	9,844.5	6,347.2	-13.6	-156.9	795,927.75	485,568.30	0.27	10.00
Start DLS 10.07 TFO 92.83										
9,900.0	43.46	267.19	9,855.3	6,358.0	-14.3	-167.0	795,917.59	485,567.61	0.48	10.07
10,000.0	44.17	281.72	9,927.6	6,430.3	-8.9	-235.7	795,848.95	485,573.02	11.94	10.07
10,100.0	46.63	295.45	9,998.0	6,500.7	13.8	-302.8	795,781.84	485,595.78	40.54	10.07
10,200.0	50.59	307.81	10,064.3	6,567.0	53.2	-366.3	795,718.34	485,635.18	85.40	10.07
10,220.3	51.54	310.13	10,077.0	6,579.7	63.2	-378.5	795,706.08	485,645.10	96.37	10.07
2nd Bone Spring Sand										
10,300.0	55.70	318.67	10,124.3	6,627.0	108.1	-424.2	795,660.39	485,690.03	145.15	10.07

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 227H
Project:	Bell Lake Unit North 227H	**TVD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Site:	Bell Lake Unit North 227H	**MD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Well:	Bell Lake Unit North 227H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 227H	**Survey Calculation Method:**	Minimum Curvature
Design:	190913 Bell Lake Unit North 227H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
10,400.0	61.65	328.19	10,176.4	6,679.1	176.7	-474.8	795,609.79	485,758.62	217.95	10.07
10,500.0	68.19	336.65	10,218.8	6,721.5	256.9	-516.5	795,568.10	485,838.84	301.54	10.07
10,600.0	75.12	344.35	10,250.3	6,753.0	346.3	-548.0	795,536.58	485,928.22	393.36	10.07
10,700.0	82.30	351.56	10,269.9	6,772.6	442.1	-568.4	795,516.23	486,024.01	490.57	10.07
10,800.0	89.58	358.53	10,277.0	6,779.7	541.3	-577.0	795,507.66	486,123.26	590.19	10.07
10,805.7	90.00	358.93	10,277.0	6,779.7	547.0	-577.1	795,507.53	486,128.95	595.86	10.07
Start 7551.0 hold at 10805.7 MD										
10,900.0	90.00	358.93	10,277.0	6,779.7	641.3	-578.9	795,505.77	486,223.25	689.95	0.00
11,000.0	90.00	358.93	10,277.0	6,779.7	741.3	-580.7	795,503.90	486,323.23	789.71	0.00
11,100.0	90.00	358.93	10,277.0	6,779.7	841.3	-582.6	795,502.02	486,423.21	889.47	0.00
11,200.0	90.00	358.93	10,277.0	6,779.7	941.2	-584.5	795,500.15	486,523.19	989.22	0.00
11,300.0	90.00	358.93	10,277.0	6,779.7	1,041.2	-586.4	795,498.28	486,623.18	1,088.98	0.00
11,400.0	90.00	358.93	10,277.0	6,779.7	1,141.2	-588.2	795,496.41	486,723.16	1,188.74	0.00
11,500.0	90.00	358.93	10,277.0	6,779.7	1,241.2	-590.1	795,494.53	486,823.14	1,288.49	0.00
11,600.0	90.00	358.93	10,277.0	6,779.7	1,341.2	-592.0	795,492.66	486,923.12	1,388.25	0.00
11,700.0	90.00	358.93	10,277.0	6,779.7	1,441.2	-593.8	795,490.79	487,023.11	1,488.01	0.00
11,800.0	90.00	358.93	10,277.0	6,779.7	1,541.1	-595.7	795,488.92	487,123.09	1,587.76	0.00
11,900.0	90.00	358.93	10,277.0	6,779.7	1,641.1	-597.6	795,487.04	487,223.07	1,687.52	0.00
12,000.0	90.00	358.93	10,277.0	6,779.7	1,741.1	-599.5	795,485.17	487,323.05	1,787.28	0.00
12,100.0	90.00	358.93	10,277.0	6,779.7	1,841.1	-601.3	795,483.30	487,423.04	1,887.03	0.00
12,200.0	90.00	358.93	10,277.0	6,779.7	1,941.1	-603.2	795,481.43	487,523.02	1,986.79	0.00
12,300.0	90.00	358.93	10,277.0	6,779.7	2,041.1	-605.1	795,479.55	487,623.00	2,086.55	0.00
12,400.0	90.00	358.93	10,277.0	6,779.7	2,141.0	-606.9	795,477.68	487,722.98	2,186.30	0.00
12,500.0	90.00	358.93	10,277.0	6,779.7	2,241.0	-608.8	795,475.81	487,822.97	2,286.06	0.00
12,600.0	90.00	358.93	10,277.0	6,779.7	2,341.0	-610.7	795,473.94	487,922.95	2,385.82	0.00
12,700.0	90.00	358.93	10,277.0	6,779.7	2,441.0	-612.6	795,472.06	488,022.93	2,485.57	0.00
12,800.0	90.00	358.93	10,277.0	6,779.7	2,541.0	-614.4	795,470.19	488,122.91	2,585.33	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 227H
Project:	Bell Lake Unit North 227H	**TVD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Site:	Bell Lake Unit North 227H	**MD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Well:	Bell Lake Unit North 227H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 227H	**Survey Calculation Method:**	Minimum Curvature
Design:	190913 Bell Lake Unit North 227H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
12,900.0	90.00	358.93	10,277.0	6,779.7	2,640.9	-616.3	795,468.32	488,222.90	2,685.08	0.00
13,000.0	90.00	358.93	10,277.0	6,779.7	2,740.9	-618.2	795,466.45	488,322.88	2,784.84	0.00
13,100.0	90.00	358.93	10,277.0	6,779.7	2,840.9	-620.1	795,464.58	488,422.86	2,884.60	0.00
13,200.0	90.00	358.93	10,277.0	6,779.7	2,940.9	-621.9	795,462.70	488,522.84	2,984.35	0.00
13,300.0	90.00	358.93	10,277.0	6,779.7	3,040.9	-623.8	795,460.83	488,622.83	3,084.11	0.00
13,400.0	90.00	358.93	10,277.0	6,779.7	3,140.9	-625.7	795,458.96	488,722.81	3,183.87	0.00
13,500.0	90.00	358.93	10,277.0	6,779.7	3,240.8	-627.5	795,457.09	488,822.79	3,283.62	0.00
13,600.0	90.00	358.93	10,277.0	6,779.7	3,340.8	-629.4	795,455.21	488,922.77	3,383.38	0.00
13,700.0	90.00	358.93	10,277.0	6,779.7	3,440.8	-631.3	795,453.34	489,022.76	3,483.14	0.00
13,800.0	90.00	358.93	10,277.0	6,779.7	3,540.8	-633.2	795,451.47	489,122.74	3,582.89	0.00
13,900.0	90.00	358.93	10,277.0	6,779.7	3,640.8	-635.0	795,449.60	489,222.72	3,682.65	0.00
14,000.0	90.00	358.93	10,277.0	6,779.7	3,740.8	-636.9	795,447.72	489,322.70	3,782.41	0.00
14,100.0	90.00	358.93	10,277.0	6,779.7	3,840.7	-638.8	795,445.85	489,422.69	3,882.16	0.00
14,200.0	90.00	358.93	10,277.0	6,779.7	3,940.7	-640.7	795,443.98	489,522.67	3,981.92	0.00
14,300.0	90.00	358.93	10,277.0	6,779.7	4,040.7	-642.5	795,442.11	489,622.65	4,081.68	0.00
14,400.0	90.00	358.93	10,277.0	6,779.7	4,140.7	-644.4	795,440.23	489,722.63	4,181.43	0.00
14,500.0	90.00	358.93	10,277.0	6,779.7	4,240.7	-646.3	795,438.36	489,822.62	4,281.19	0.00
14,600.0	90.00	358.93	10,277.0	6,779.7	4,340.6	-648.1	795,436.49	489,922.60	4,380.95	0.00
14,700.0	90.00	358.93	10,277.0	6,779.7	4,440.6	-650.0	795,434.62	490,022.58	4,480.70	0.00
14,800.0	90.00	358.93	10,277.0	6,779.7	4,540.6	-651.9	795,432.75	490,122.56	4,580.46	0.00
14,900.0	90.00	358.93	10,277.0	6,779.7	4,640.6	-653.8	795,430.87	490,222.55	4,680.22	0.00
15,000.0	90.00	358.93	10,277.0	6,779.7	4,740.6	-655.6	795,429.00	490,322.53	4,779.97	0.00
15,100.0	90.00	358.93	10,277.0	6,779.7	4,840.6	-657.5	795,427.13	490,422.51	4,879.73	0.00
15,200.0	90.00	358.93	10,277.0	6,779.7	4,940.5	-659.4	795,425.26	490,522.49	4,979.49	0.00
15,300.0	90.00	358.93	10,277.0	6,779.7	5,040.5	-661.2	795,423.38	490,622.48	5,079.24	0.00
15,400.0	90.00	358.93	10,277.0	6,779.7	5,140.5	-663.1	795,421.51	490,722.46	5,179.00	0.00
15,500.0	90.00	358.93	10,277.0	6,779.7	5,240.5	-665.0	795,419.64	490,822.44	5,278.76	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 227H
Project:	Bell Lake Unit North 227H	**TVD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Site:	Bell Lake Unit North 227H	**MD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Well:	Bell Lake Unit North 227H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 227H	**Survey Calculation Method:**	Minimum Curvature
Design:	190913 Bell Lake Unit North 227H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
15,600.0	90.00	358.93	10,277.0	6,779.7	5,340.5	-666.9	795,417.77	490,922.42	5,378.51	0.00
15,700.0	90.00	358.93	10,277.0	6,779.7	5,440.5	-668.7	795,415.89	491,022.41	5,478.27	0.00
15,800.0	90.00	358.93	10,277.0	6,779.7	5,540.4	-670.6	795,414.02	491,122.39	5,578.03	0.00
15,900.0	90.00	358.93	10,277.0	6,779.7	5,640.4	-672.5	795,412.15	491,222.37	5,677.78	0.00
16,000.0	90.00	358.93	10,277.0	6,779.7	5,740.4	-674.4	795,410.28	491,322.35	5,777.54	0.00
16,100.0	90.00	358.93	10,277.0	6,779.7	5,840.4	-676.2	795,408.40	491,422.34	5,877.30	0.00
16,200.0	90.00	358.93	10,277.0	6,779.7	5,940.4	-678.1	795,406.53	491,522.32	5,977.05	0.00
16,300.0	90.00	358.93	10,277.0	6,779.7	6,040.4	-680.0	795,404.66	491,622.30	6,076.81	0.00
16,400.0	90.00	358.93	10,277.0	6,779.7	6,140.3	-681.8	795,402.79	491,722.28	6,176.57	0.00
16,500.0	90.00	358.93	10,277.0	6,779.7	6,240.3	-683.7	795,400.91	491,822.27	6,276.32	0.00
16,600.0	90.00	358.93	10,277.0	6,779.7	6,340.3	-685.6	795,399.04	491,922.25	6,376.08	0.00
16,700.0	90.00	358.93	10,277.0	6,779.7	6,440.3	-687.5	795,397.17	492,022.23	6,475.84	0.00
16,800.0	90.00	358.93	10,277.0	6,779.7	6,540.3	-689.3	795,395.30	492,122.21	6,575.59	0.00
16,900.0	90.00	358.93	10,277.0	6,779.7	6,640.2	-691.2	795,393.43	492,222.19	6,675.35	0.00
17,000.0	90.00	358.93	10,277.0	6,779.7	6,740.2	-693.1	795,391.55	492,322.18	6,775.11	0.00
17,100.0	90.00	358.93	10,277.0	6,779.7	6,840.2	-694.9	795,389.68	492,422.16	6,874.86	0.00
17,200.0	90.00	358.93	10,277.0	6,779.7	6,940.2	-696.8	795,387.81	492,522.14	6,974.62	0.00
17,300.0	90.00	358.93	10,277.0	6,779.7	7,040.2	-698.7	795,385.94	492,622.12	7,074.38	0.00
17,400.0	90.00	358.93	10,277.0	6,779.7	7,140.2	-700.6	795,384.06	492,722.11	7,174.13	0.00
17,500.0	90.00	358.93	10,277.0	6,779.7	7,240.1	-702.4	795,382.19	492,822.09	7,273.89	0.00
17,600.0	90.00	358.93	10,277.0	6,779.7	7,340.1	-704.3	795,380.32	492,922.07	7,373.65	0.00
17,700.0	90.00	358.93	10,277.0	6,779.7	7,440.1	-706.2	795,378.45	493,022.05	7,473.40	0.00
17,800.0	90.00	358.93	10,277.0	6,779.7	7,540.1	-708.1	795,376.57	493,122.04	7,573.16	0.00
17,900.0	90.00	358.93	10,277.0	6,779.7	7,640.1	-709.9	795,374.70	493,222.02	7,672.92	0.00
18,000.0	90.00	358.93	10,277.0	6,779.7	7,740.1	-711.8	795,372.83	493,322.00	7,772.67	0.00
18,100.0	90.00	358.93	10,277.0	6,779.7	7,840.0	-713.7	795,370.96	493,421.98	7,872.43	0.00
18,200.0	90.00	358.93	10,277.0	6,779.7	7,940.0	-715.5	795,369.08	493,521.97	7,972.19	0.00

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 227H
Project:	Bell Lake Unit North 227H	**TVD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Site:	Bell Lake Unit North 227H	**MD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Well:	Bell Lake Unit North 227H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 227H	**Survey Calculation Method:**	Minimum Curvature
Design:	190913 Bell Lake Unit North 227H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
18,300.0	90.00	358.93	10,277.0	6,779.7	8,040.0	-717.4	795,367.21	493,621.95	8,071.94	0.00
18,356.7	90.00	358.93	10,277.0	6,779.7	8,096.7	-718.5	795,366.15	493,678.64	8,128.51	0.00
TD at 18356.7 - 5 1/2" Production Casing										

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
120.0	120.0	20" Conductor	20	26
1,197.0	1,197.0	13 3/8" Surface Casing	13-3/8	17-1/2
4,897.0	4,897.0	9 5/8" Intermediate Casing	9-5/8	12-1/4
18,356.7	10,277.0	5 1/2" Production Casing	5-1/2	8-3/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,472.0	1,472.0	Salado		0.00	
8,572.0	8,572.0	Bone Spring		0.00	
4,847.0	4,847.0	Lamar		0.00	
1,772.0	1,772.0	Top of Salt		0.00	
10,220.3	10,077.0	2nd Bone Spring Sand		0.00	
9,572.9	9,572.0	1st Bone Spring Sand		0.00	
6,122.0	6,122.0	Cherry Canyon		0.00	
4,562.0	4,562.0	Base of Salt		0.00	
5,172.0	5,172.0	Bell Canyon		0.00	
8,739.0	8,739.0	Avalon		0.00	
7,522.0	7,522.0	Brushy Canyon		0.00	
1,172.0	1,172.0	Rustler		0.00	

Company:	Kaiser Francis	**Local Co-ordinate Reference:**	Well Bell Lake Unit North 227H
Project:	Bell Lake Unit North 227H	**TVD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Site:	Bell Lake Unit North 227H	**MD Reference:**	WELL @ 3497.3usft (Original Well Elev)
Well:	Bell Lake Unit North 227H	**North Reference:**	Grid
Wellbore:	Bell Lake Unit North 227H	**Survey Calculation Method:**	Minimum Curvature
Design:	190913 Bell Lake Unit North 227H	**Database:**	EDM 5000.1 Single User Db

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
9,450.0	9,450.0	0.0	0.0	Start Build 10.00
9,885.2	9,844.5	-13.6	-156.9	Start DLS 10.07 TFO 92.83
10,805.7	10,277.0	547.0	-577.1	Start 7551.0 hold at 10805.7 MD
18,356.7	10,277.0	8,096.7	-718.5	TD at 18356.7

Checked By: _____ Approved By: _____ Date: _____

APD ID: 10400050021 Submission Date: 10/30/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

Well Type: OIL WELL Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

BLUN_227H_Existing_Roads_20191024114216.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

BLUN_227H_Access_Road_20191024114258.pdf

New road type: RESOURCE

Length: 53 Feet Width (ft.): 30

Max slope (%): 2 Max grade (%): 2

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 20

New road access erosion control: Road construction requirements and regular maintenance would alleviate potential impacts to the access road from water erosion damage.
New road access plan or profile prepared? N

New road access plan attachment:

Access road engineering design? N

Access road engineering design attachment:

Turnout? N

Access surfacing type: OTHER

Access topsoil source: BOTH

Access surfacing type description: Native caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description: Material will be obtained from BLM caliche pit in SWSW Section 22-T24S-R34E or NENE Section 20-T23S-R33E
Onsite topsoil removal process: The top 6 inches of topsoil is pushed off and stockpiled along the side of the location. An approximate 160' X 160' area is used within the proposed well site to remove caliche. Subsoil is removed and stockpiled within the pad site to build the location and road. Then subsoil is pushed back in the hole and caliche is spread accordingly across proposed access road.
Access other construction information:

Access miscellaneous information:

Number of access turnouts: **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: Proposed access road will be crowned and ditched and constructed of 6 inch rolled and compacted caliche. Water will be diverted where necessary to avoid ponding, maintain good drainage, and to be consistent with local drainage patterns.
Road Drainage Control Structures (DCS) description: The ditches will be 3' wide with 3:1 slopes

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

BLUN_227H_1_MILE_WELLS_20191024114424.pdf
BLUN_227H_1_Mile_Wells_Map_20191024114426.pdf

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? DEFER

Estimated Production Facilities description: Production facilities are planned for the north side of pad. Plan for initial wells: 2-1000 bbl water tanks and 5 -1000 bbl oil tanks, a temporary 6X20 horizontal 3-phase sep, a 48 X 10 3-phase sep, a 8 X 20 heater treater and a 48X 10 2-phase sep

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: OTHER

Describe type: BRINE WATER

Water source use type: INTERMEDIATE/PRODUCTION CASING

Source latitude: Source longitude:

Source datum:

Water source permit type: PRIVATE CONTRACT

Water source transport method: TRUCKING

Source land ownership: PRIVATE

Source transportation land ownership: OTHER

Describe transportation land ownership: Source transpo mixture of Federal, State and County.

Water source volume (barrels): 20000

Source volume (acre-feet): 2.577862

Source volume (gal): 840000

Water source type: OTHER

Describe type: FRESH WATER

Water source use type: STIMULATION

OTHER

Describe use type: ROAD/PAD CONSTRUCTION AND

SURFACE CASING

Source latitude: Source longitude:

Source datum:

Water source permit type: PRIVATE CONTRACT

Water source transport method: TRUCKING

Source land ownership: PRIVATE

Source transportation land ownership: OTHER

Describe transportation land ownership: Source transpo mixture of Federal, State and County.

Water source volume (barrels): 250000

Source volume (acre-feet): 32.223274

Source volume (gal): 10500000

Water source and transportation map:

BLUN_227H_Water_Source_Map_20191024121151.pdf

Water source comments: Source transportation land ownership is a mixture of Federal, State and County.

New water well? N

New Water Well Info

Well latitude: Well Longitude: Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft): Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft): Well casing type:

Well casing outside diameter (in.): Well casing inside diameter (in.):

New water well casing? Used casing source:

Drilling method: Drill material:

Grout material: Grout depth:

Casing length (ft.): Casing top depth (ft.):

Well Production type: Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: On site caliche will be used for construction if sufficient. In the event insufficient quantities of caliche are available onsite, caliche will be trucked in from BLM's caliche pit in SWSW Section 22-T24-R34E or NENE Section 20-T23S-R33E.

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: GARBAGE

Waste content description: Miscellaneous trash

Amount of waste: 500 pounds

Waste disposal frequency : One Time Only

Safe containment description: Trash produced during drilling and completion operations will be collected in a trash container and disposed of properly

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY Disposal location ownership: COMMERCIAL
Disposal type description:

Disposal location description: Trucked to an approved disposal facility (Sandpoint Landfill (solid materials dump) NW/4 Section 11-T21S-R28E)

Waste type: SEWAGE

Waste content description: Human waste and grey water

Amount of waste: 1000 gallons

Waste disposal frequency : One Time Only

Safe containment description: Waste material will be stored safely and disposed of properly

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY Disposal location ownership: COMMERCIAL
Disposal type description:

Disposal location description: Trucked to an approved disposal facility (Carlsbad sewer plant SENW Section 10-T22S-R27E)

Waste type: DRILLING

Waste content description: Drilling fluids and cuttings

Amount of waste: 3900 barrels

Waste disposal frequency : One Time Only

Safe containment description: All drilling fluids will be stored safely and disposed of properly

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY Disposal location ownership: COMMERCIAL
Disposal type description:

Disposal location description: Cuttings will be hauled to R360's facility located in Section 27-T20S-R32E on US 62/180 at Halfway, NM

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.) Reserve pit width (ft.)

Reserve pit depth (ft.) Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? Y

Description of cuttings location Cuttings will be stored in roll off bins and hauled to R360 located in Section 27-T20S-R32E on US 62/180 near Halfway.

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

BLUN_DRILLING_LAYOUT_20191024114728.pdf
BLUN_227H_Wellsite_layout_2_20200910084646.pdf
Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: NORTH BELL LAKE UNIT

Multiple Well Pad Number: 9

Recontouring attachment:

Pad_9_IR_2_20200910084715.pdf

Drainage/Erosion control construction: During construction proper erosion control methods will be used to control erosion, runoff and siltation of the surrounding area.
Drainage/Erosion control reclamation: Proper erosion control methods will be used on the area to control erosion, runoff and siltation of the surrounding area.

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

Well pad proposed disturbance (acres): 5.843
Road proposed disturbance (acres): 0.0365
Powerline proposed disturbance (acres): 0
Pipeline proposed disturbance (acres): 0
Other proposed disturbance (acres): 0
Total proposed disturbance: 5.8795

Well pad interim reclamation (acres): 0.730028
Road interim reclamation (acres): 0
Powerline interim reclamation (acres): 0
Pipeline interim reclamation (acres): 0
Other interim reclamation (acres): 0
Total interim reclamation: 0.730028

Well pad long term disturbance (acres): 5.113
Road long term disturbance (acres): 0.0365
Powerline long term disturbance (acres): 0
Pipeline long term disturbance (acres): 0
Other long term disturbance (acres): 0
Total long term disturbance: 5.149500000000001

Disturbance Comments:

Reconstruction method: The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.
Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations
Soil treatment: To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.
Existing Vegetation at the well pad: The historic climax plant community is a grassland dominated by black grama, dropseeds, and blue stems with sand sage and shinnery oak distributed evenly throughout. Current landscape displays mesquite, shinnery oak, yucca, desert sage, fourwing saltbush, snakeweed, and bunch grasses
Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Refer to "Existing Vegetation at the well pad'

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline: Refer to "Existing Vegetation at the well pad'

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: None

Existing Vegetation Community at other disturbances attachment:

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Last Name:

Phone: Email:

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? N

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: No invasive species present. Standard regular maintenance to maintain a clear location and road.

Weed treatment plan attachment:

Monitoring plan description: Identify areas supporting weeds prior to construction; prevent the introduction and spread of weeds from construction equipment during construction; and contain weed seeds and propagules by preventing segregated topsoil from being spread to adjacent areas. No invasive species present. Standard regular maintenance to maintain a clear location and road.

Monitoring plan attachment:

Success standards: To maintain all disturbed areas as per Gold Book standards

Pit closure description: N/A

Pit closure attachment:

Section 11 - Surface Ownership

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

Disturbance type: WELL PAD

Describe:

Surface Owner: STATE GOVERNMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office: NM SLO, CARLSBAD, NM

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: USFS Ranger District:

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: PRIVATE OWNERSHIP,STATE GOVERNMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office: NM SLO, CARLSBAD NM

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: USFS Ranger District:

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

Section 12 - Other Information

Right of Way needed? N Use APD as ROW?

ROW Type(s):

ROW Applications

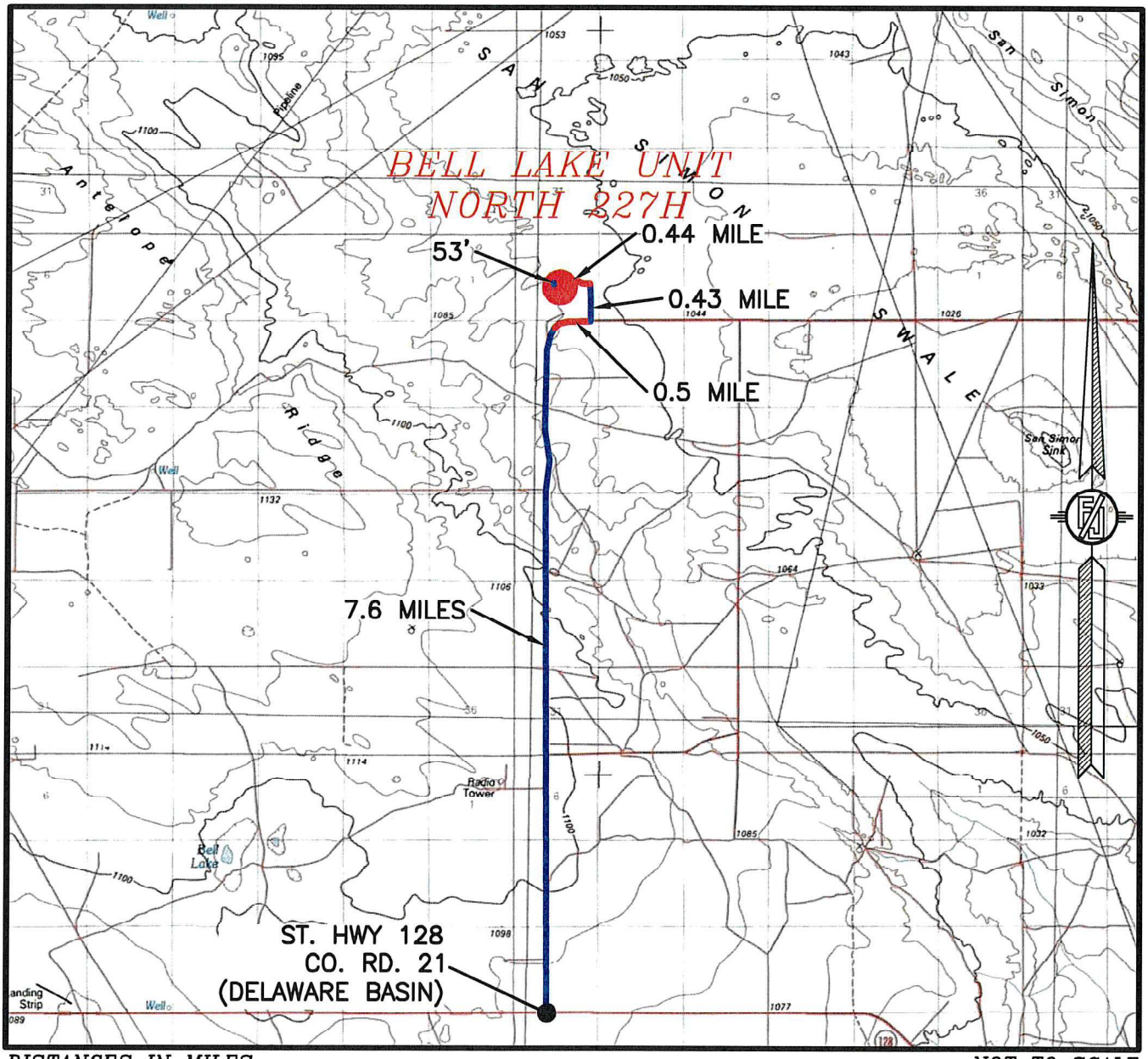
SUPO Additional Information:

Use a previously conducted onsite? Y

Previous Onsite information: Onsite held March 14, 2019 with BLM rep, William Degrush and Kaiser-Francis rep, Eric Hansen.

Other SUPO Attachment

SECTION 6, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES *NOT TO SCALE*

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CO. RD. 21 (DELAWARE BASIN RD.) AND ST. HWY. 128, GO NORTH ON DELAWARE BASIN RD. FOR APPROX. 7.6 MILES, FOLLOW CURVE AND GO EAST APPROX. 0.5 MILE, TURN LEFT AND GO NORTH APPROX. 0.43 MILE, TURN LEFT AND GO WEST APPROX. 0.44 MILE TO A ROAD SURVEY, FOLLOW ROAD SURVEY SOUTH 53' TO THE NORTHWEST PAD CORNER FOR THIS LOCATION.

KAISER-FRANCIS OIL COMPANY
BELL LAKE UNIT NORTH 227H
LOCATED 2130 FT. FROM THE SOUTH LINE AND 2425 FT. FROM THE EAST LINE OF SECTION 6, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO

MARCH 22, 2019

SURVEY NO. 6997

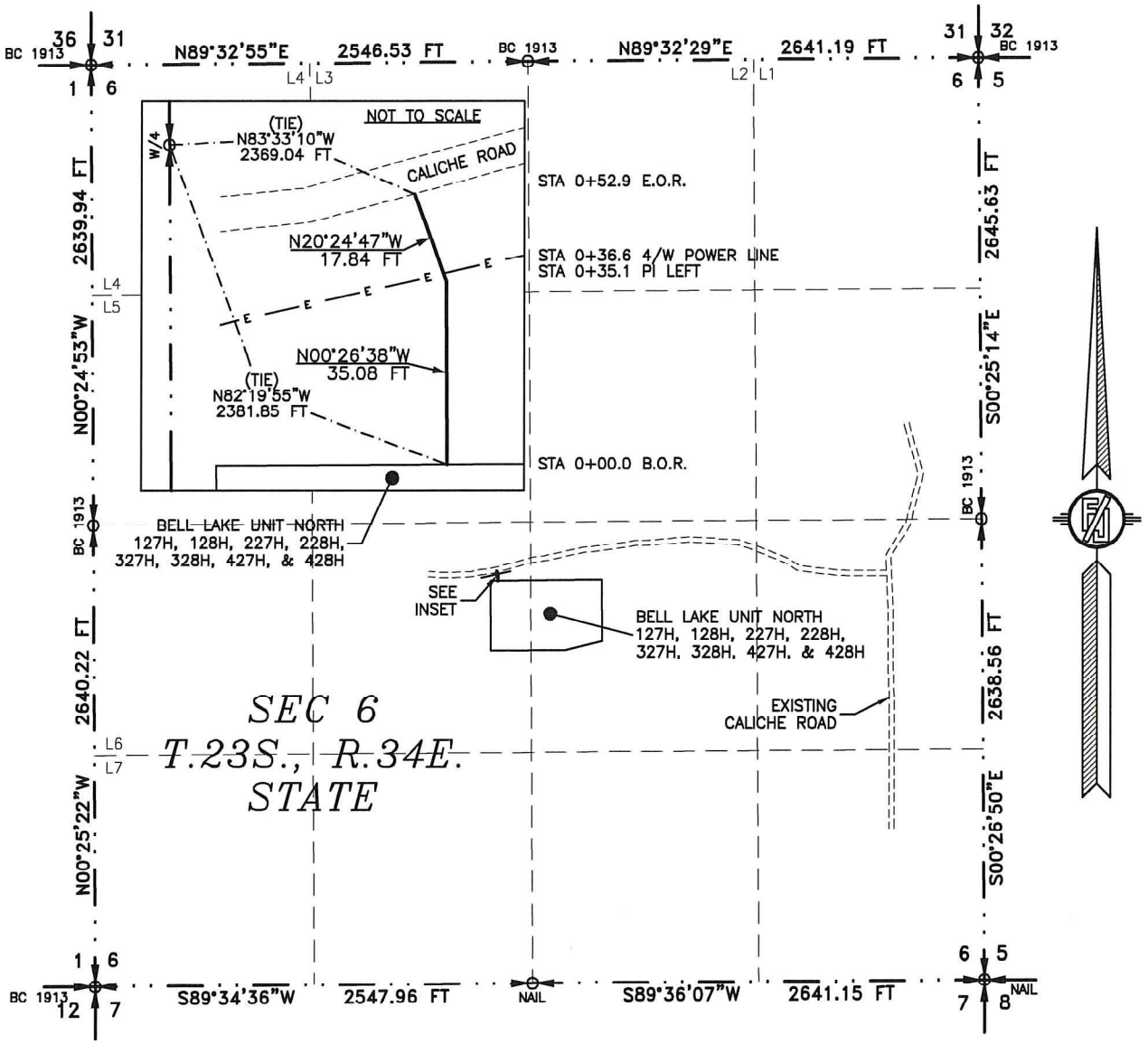
MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

ACCESS ROAD PLAT

ACCESS ROAD FOR BELL LAKE UNIT NORTH 127H, 128H, 227H, 228H, 327H, 328H, 427H, & 428H

KAISER-FRANCIS OIL COMPANY

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 6, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
MARCH 22, 2019



SEE NEXT SHEET (2-2) FOR DESCRIPTION

1000 0 1000
Scale: 1" = 1000'

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 24 DAY OF APRIL 2019

FILIMON F. JARAMILLO, PLS 12797
301 SOUTH CANAL
(575) 234-3341

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SHEET: 1-2

SURVEY NO. 6997

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ACCESS ROAD FOR BELL LAKE UNIT NORTH 127H, 128H, 227H, 228H, 327H, 328H, 427H, & 428H

KAISER–FRANCIS OIL COMPANY

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 6, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
MARCH 22, 2019

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 6, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M., LEA COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE NE/4 SW/4 OF SAID SECTION 6, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M., WHENCE THE WEST QUARTER CORNER OF SAID SECTION 6, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M. BEARS N82°19'55"W, A DISTANCE OF 2381.85 FEET;
THENCE N00°26'38"W A DISTANCE OF 35.08 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N20°24'47"W A DISTANCE OF 17.84 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE WEST QUARTER CORNER OF SAID SECTION 6, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M. BEARS N83°33'10"W, A DISTANCE OF 2369.04 FEET;

SAID STRIP OF LAND BEING 52.92 FEET OR 3.21 RODS IN LENGTH, CONTAINING 0.036 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NE/4 SW/4	52.92 L.F.	3.21 RODS	0.036 ACRES

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 24 DAY OF APRIL 2019.

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234–3341

FILIMON F. JARAMILLO, PLS. 12797
301 SOUTH CANAL
(575) 234–3341

SHEET: 2–2

SURVEY NO. 6997

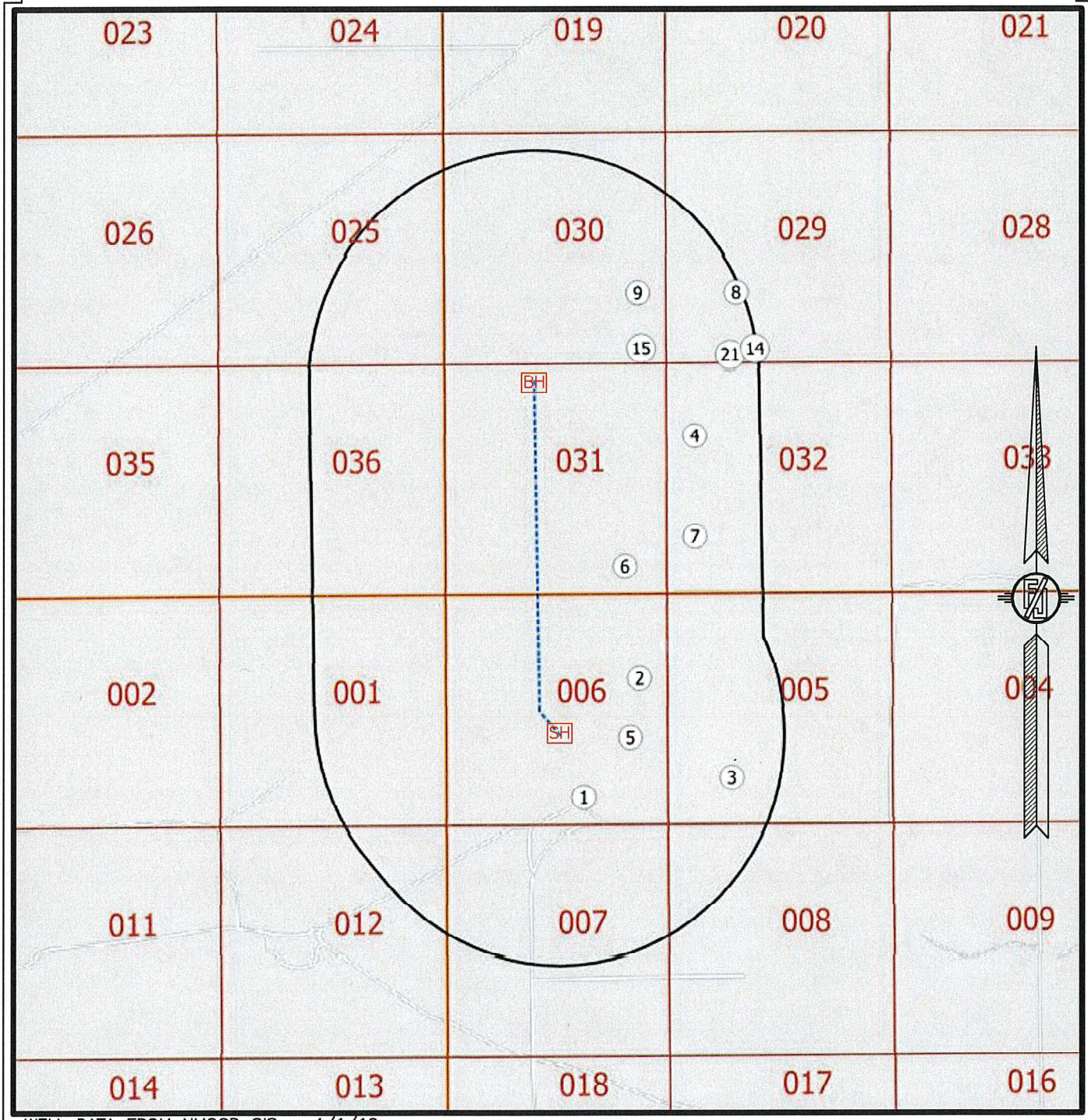
MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

BLUN 227H

1-Mile Wells

ID	API	wellname	well type	ulstr	ogrid_name	status	dir status	elev	meas depth	tot depth	spud_date	plug_date	eff_date	latitude	longitude	pool_id_li
1	30-025-08483	BELL LAKE UNIT #006	G	O-06-23S-34E	KAISER-FRANCIS OIL CO	P	V	3485	16506	16506	10/25/1959	8/31/2012	5/1/2005	32.3282585	-103.507103	[71840] BELL LAKE, DEVONIAN, NORTH (GAS)
2	30-025-33077	NORTH BELL LAKE FEDERAL #003	G	H-06-23S-34E	KAISER-FRANCIS OIL CO	A	V	3456	17540	17540	9/5/1995	12/31/9999	7/27/2009	32.3356552	-103.5028305	[71840] BELL LAKE, DEVONIAN, NORTH (GAS); [96385] BELL LAKE, ELLENBURGER, NORTH (GAS)
3	30-025-32672	NORTH BELL LAKE FEDERAL #002	O	N-05-23S-34E	KAISER-FRANCIS OIL CO	A	V	3443	17710	17710	9/29/1994	12/31/9999	7/27/2009	32.3294563	-103.4958344	[77680] GRAMA RIDGE, MRW (GAS); [96385] BELL LAKE, ELLENBURGER, N(GAS); [97630] BELL LAKE, DELW, NE
4	30-025-34629	BELL LAKE UNIT #020	G	E-32-22S-34E	KAISER-FRANCIS OIL CO	E	V	3424	13370	13370	9/15/1999	12/31/9999	7/27/2009	32.3509254	-103.4985275	[96665] OJO CHISO, MORROW, WEST (GAS); [97630] BELL LAKE, DELAWARE, NORTHEAST
5	30-025-43033	BELL LAKE UNIT NORTH #230H	O	I-06-23S-34E	KAISER-FRANCIS OIL CO	A	H	3456	18370	10226	11/20/2017	12/31/9999	8/3/2016	32.332037	-103.503544	[5150] BELL LAKE, BONE SPRING, NORTH
6	30-025-35592	BELL LAKE UNIT #022	G	P-31-22S-34E	KAISER-FRANCIS OIL CO	A	V	341	13430	13430	7/28/2001	12/31/9999	7/27/2009	32.3427773	-103.503891	[96665] OJO CHISO, MORROW, WEST (GAS)
7	30-025-35118	BELL LAKE UNIT #021	G	L-32-22S-34E	KAISER-FRANCIS OIL CO	A	V	3431	13407	13407	8/28/2000	12/31/9999	7/27/2009	32.3446426	-103.4985428	[96665]OJO CHISO, MRW,W(GAS); [97630]BELL LAKE, DELW, NE; [97724]WC-025 G-08 S223432L, WLF
8	30-025-33682	GAUCHO UNIT #002	G	K-29-22S-34E	DEVON SFS OPERATING INC	P	V	3426	3783	3783	3/4/1997	3/31/1997	3/31/1997	32.359993	-103.4953003	
8	30-025-34026	GAUCHO UNIT #002Y	G	K-29-22S-34E	DEVON ENERGY PROD CO, LP	A	V	3426	13340	13340	4/4/1997	12/31/9999	11/1/2002	32.359993	-103.4950562	[96665] OJO CHISO, MORROW, WEST (GAS)
9	30-025-34149	GAUCHO UNIT #005	G	I-30-22S-34E	DEVON ENERGY PROD CO, LP	P	V	3438	13450	13450	9/9/1998	8/29/2007	11/1/2002	32.3600006	-103.5027847	[96665] OJO CHISO, MORROW, WEST (GAS)
14	30-025-45152	GAUCHO UNIT #037H	O	N-29-22S-34E	DEVON ENERGY PROD CO, LP	N	H	3431	0	0	10/29/2018	12/31/9999	8/29/2018	32.3563859	-103.4942923	[97922] WC-025 G-06 S223421L, BONE SPRING
14	30-025-45157	GAUCHO UNIT #153H	O	N-29-22S-34E	DEVON ENERGY PROD CO, LP	N	H	3431	0	0	10/7/2018	12/31/9999	9/6/2018	32.3563852	-103.4941952	[97922] WC-025 G-06 S223421L, BONE SPRING
14	30-025-45165	GAUCHO UNIT #024H	O	N-29-22S-34E	DEVON ENERGY PROD CO, LP	N	H	3430	0	0	12/31/9999	12/31/9999	9/7/2018	32.3563832	-103.4939038	[97922] WC-025 G-06 S223421L, BONE SPRING
14	30-025-45158	GAUCHO UNIT #152H	O	N-29-22S-34E	DEVON ENERGY PROD CO, LP	N	H	3431	0	0	9/7/2018	12/31/9999	9/6/2018	32.3563845	-103.494098	[97922] WC-025 G-06 S223421L, BONE SPRING
14	30-025-45172	GAUCHO UNIT #089H	O	N-29-22S-34E	DEVON ENERGY PROD CO, LP	N	H	3430	0	0	12/31/9999	12/31/9999	9/7/2018	32.3563839	-103.4940009	[97922] WC-025 G-06 S223421L, BONE SPRING
15	30-025-45168	GAUCHO UNIT #031H	O	P-30-22S-34E	DEVON ENERGY PROD CO, LP	N	H	3434	0	0	12/31/9999	12/31/9999	9/7/2018	32.3564505	-103.5025591	[97922] WC-025 G-06 S223421L, BONE SPRING
15	30-025-45167	GAUCHO UNIT #028H	O	P-30-22S-34E	DEVON ENERGY PROD CO, LP	N	H	3434	0	0	12/31/9999	12/31/9999	9/7/2018	32.3564504	-103.5027534	[97922] WC-025 G-06 S223421L, BONE SPRING
15	30-025-45166	GAUCHO UNIT #026H	O	P-30-22S-34E	DEVON ENERGY PROD CO, LP	N	H	3434	0	0	12/31/9999	12/31/9999	9/7/2018	32.3564505	-103.5026562	[97922] WC-025 G-06 S223421L, BONE SPRING
15	30-025-45169	GAUCHO UNIT #033H	O	P-30-22S-34E	DEVON ENERGY PROD CO, LP	N	H	3434	0	0	12/31/9999	12/31/9999	9/7/2018	32.3564504	-103.5024619	[97922] WC-025 G-06 S223421L, BONE SPRING
21	30-025-42778	GAUCHO UNIT #020Y	O	N-29-22S-34E	DEVON ENERGY PROD CO, LP	P	V	3430	3798	3798	9/9/2015	10/2/2015	9/9/2015	32.3559701	-103.4959063	[97922] WC-025 G-06 S223421L, BONE SPRING
21	30-025-41978	GAUCHO UNIT #020	O	N-29-22S-34E	DEVON ENERGY PROD CO, LP	P	V	3428	1688	1688	9/4/2015	9/8/2015	7/24/2014	32.3560066	-103.4957962	[97922] WC-025 G-06 S223421L, BONE SPRING

1-MILE WELLS



WELL DATA FROM NMOCD GIS – 4/1/19

SH SURFACE LOCATION

BH BOTTOM OF HOLE

XX WELLS WITHIN 1 MILE

WELL PATH

1-MILE BOUNDARY

KAISER-FRANCIS OIL COMPANY

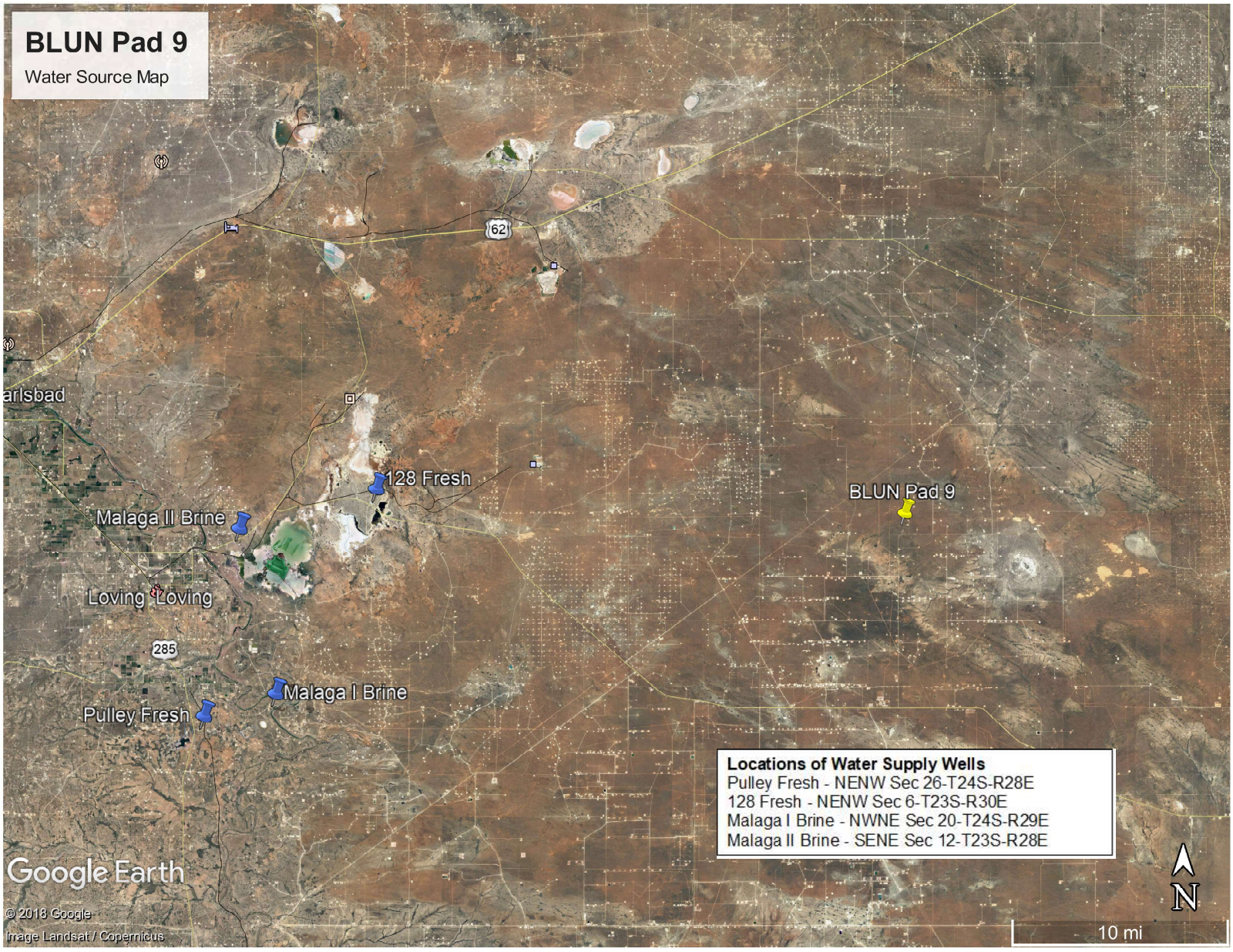
BELL LAKE UNIT NORTH 227H

LOCATED 2130 FT. FROM THE SOUTH LINE AND 2425 FT. FROM THE EAST LINE OF SECTION 6, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO

MARCH 22, 2019

SURVEY NO. 6997

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

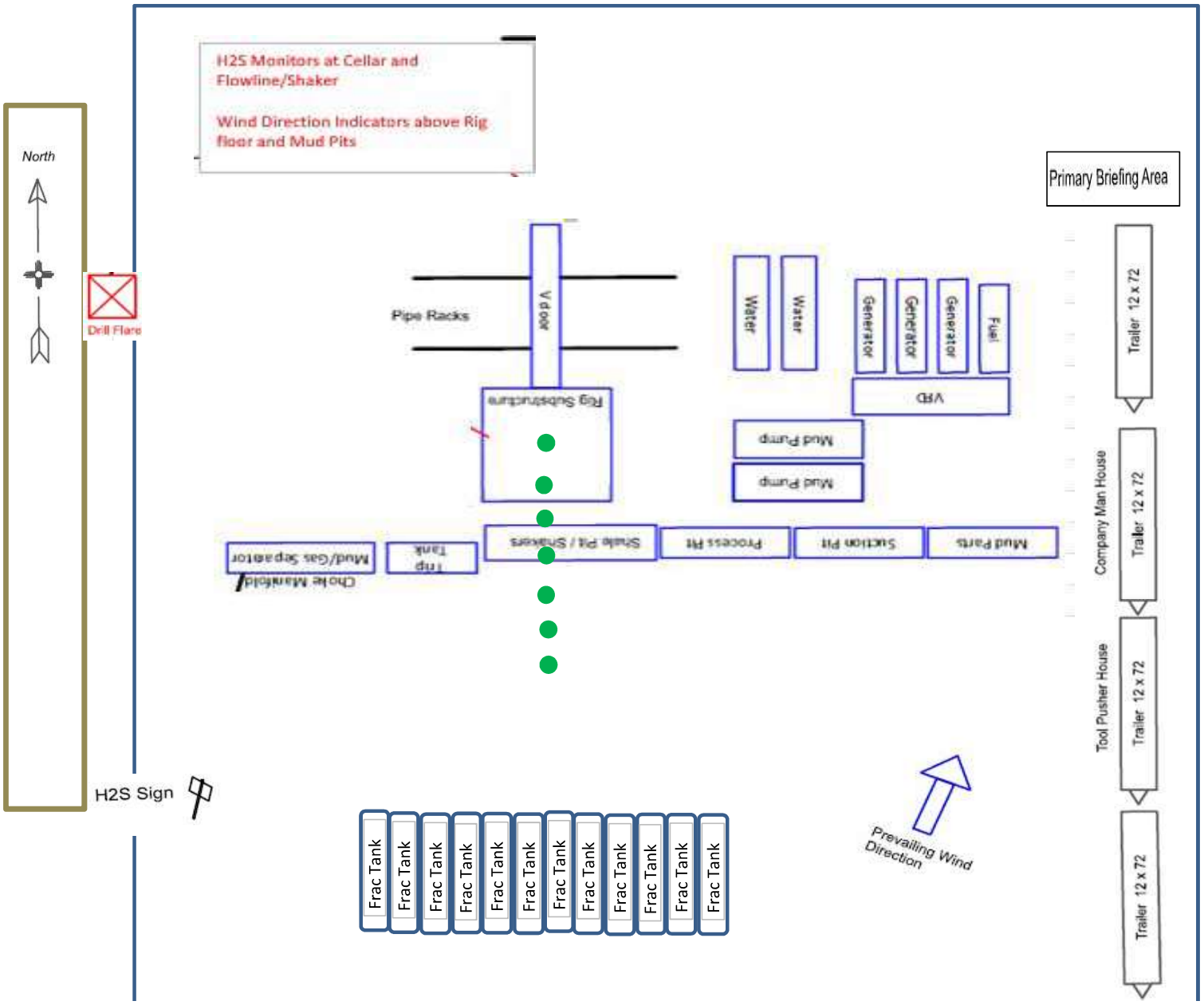

BLUN Pad 9
Water Source Map
62
arlsbad
128 Fresh
BLUN Pad 9
Malaga II Brine
Loving
Loving
285
Malaga I Brine
Pulley Fresh
Locations of Water Supply Wells
Pulley Fresh - NENW Sec 26-T24S-R28E
128 Fresh - NENW Sec 6-T23S-R30E
Malaga I Brine - NWNE Sec 20-T24S-R29E
Malaga II Brine - SENE Sec 12-T23S-R28E
Google Earth
© 2018 Google
Image Landsat / Copernicus
N
10 mi

General Drill Site Layout

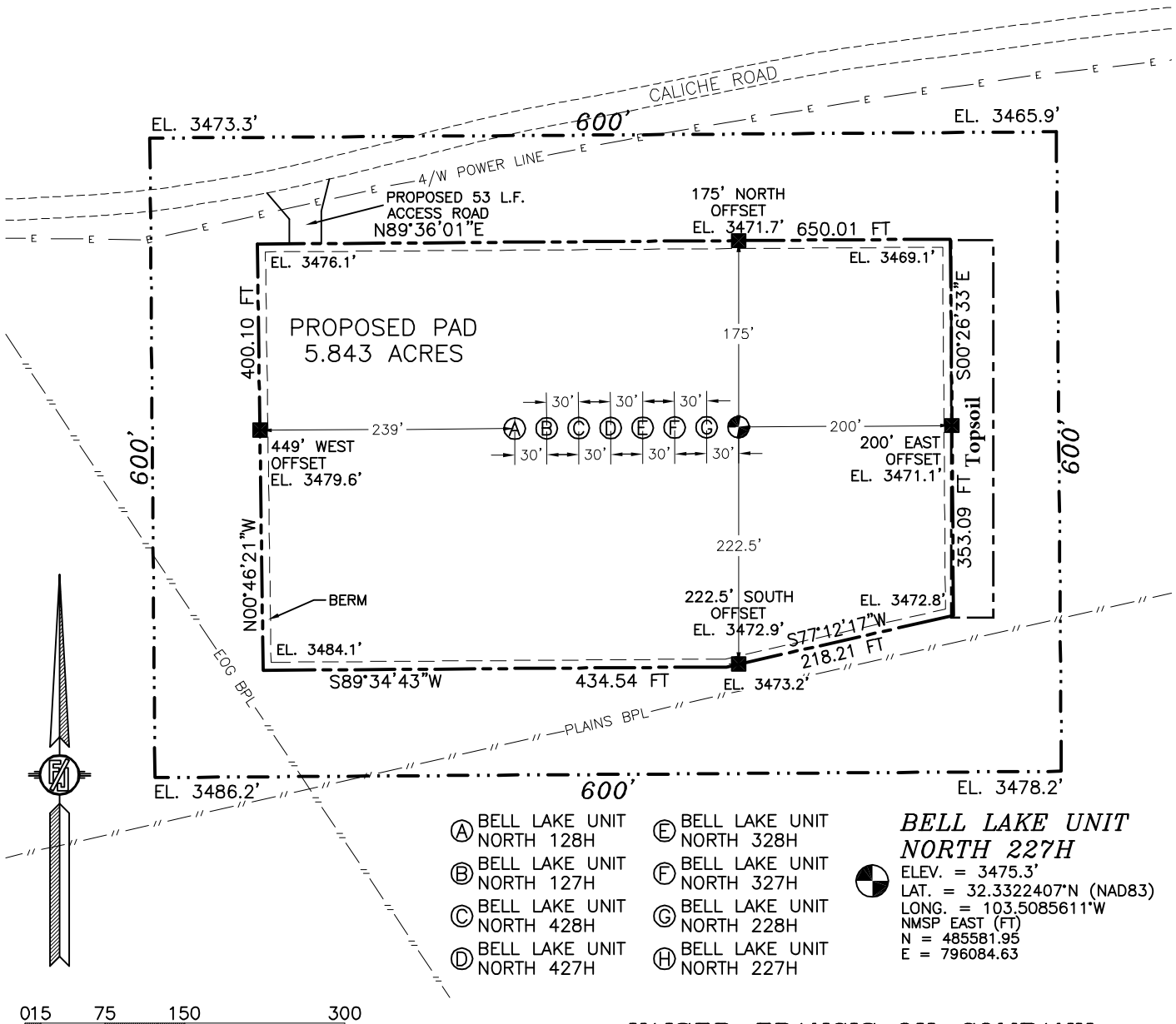
Pad Name: Bell Lake Unit North

Pad Dimensions: 400' X 650'

● Well head



SECTION 6, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
SITE MAP



Ⓐ BELL LAKE UNIT NORTH 128H
Ⓑ BELL LAKE UNIT NORTH 127H
Ⓒ BELL LAKE UNIT NORTH 428H
Ⓓ BELL LAKE UNIT NORTH 427H
Ⓔ BELL LAKE UNIT NORTH 328H
Ⓕ BELL LAKE UNIT NORTH 327H
Ⓖ BELL LAKE UNIT NORTH 228H
Ⓗ BELL LAKE UNIT NORTH 227H

BELL LAKE UNIT NORTH 227H
ELEV. = 3475.3'
LAT. = 32.3322407°N (NAD83)
LONG. = 103.5085611°W
NMSP EAST (FT)
N = 485581.95
E = 796084.63

015 75 150 300
SCALE 1" = 150'

DIRECTIONS TO LOCATION
FROM THE INTERSECTION OF CO. RD. 21 (DELAWARE BASIN RD.) AND ST. HWY. 128, GO NORTH ON DELAWARE BASIN RD. FOR APPROX. 7.6 MILES, FOLLOW CURVE AND GO EAST APPROX. 0.5 MILE, TURN LEFT AND GO NORTH APPROX. 0.43 MILE, TURN LEFT AND GO WEST APPROX. 0.44 MILE TO A ROAD SURVEY, FOLLOW ROAD SURVEY SOUTH 53' TO THE NORTHWEST PAD CORNER FOR THIS LOCATION.

I, FILIMON F. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED, AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

FILIMON F. JARAMILLO NO. 12797

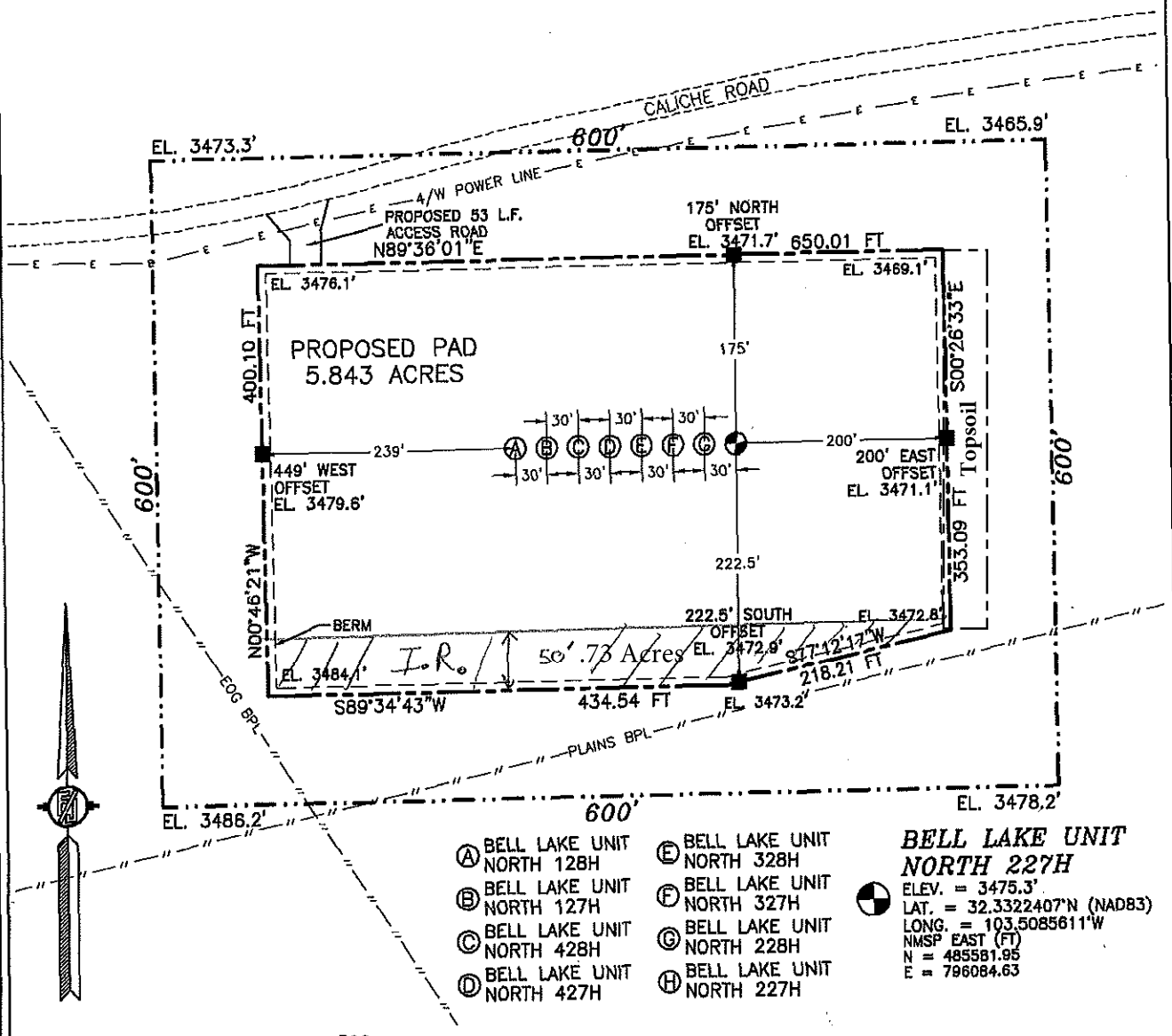
KAISER-FRANCIS OIL COMPANY
BELL LAKE UNIT NORTH 227H
LOCATED 2130 FT. FROM THE SOUTH LINE AND 2425 FT. FROM THE EAST LINE OF SECTION 6, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO

MARCH 22, 2019

SURVEY NO. 6997

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 6, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
SITE MAP



015 75 150 300

SCALE 1" = 150'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CO. RD. 21 (DELAWARE BASIN RD.) AND ST. HWY. 128, GO NORTH ON DELAWARE BASIN RD. FOR APPROX. 7.8 MILES, FOLLOW CURVE AND GO EAST APPROX. 0.5 MILE, TURN LEFT AND GO NORTH APPROX. 0.43 MILE, TURN LEFT AND GO WEST APPROX. 0.44 MILE TO A ROAD SURVEY, FOLLOW ROAD SURVEY SOUTH 53' TO THE NORTHWEST PAD CORNER FOR THIS LOCATION.

KAISER-FRANCIS OIL COMPANY

BELL LAKE UNIT NORTH 227H

LOCATED 2130 FT. FROM THE SOUTH LINE AND 2425 FT. FROM THE EAST LINE OF SECTION 6, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO

MARCH 22, 2019

SURVEY NO. 6997

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

APD ID: 10400050021 Submission Date: 10/30/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 227H

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: 227H

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: 227H

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: 227H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

AFMSS

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

Bond Info Data Report

09/21/2020

APD ID: 10400050021

Submission Date: 10/30/2019

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH

Well Number: 227H

Well Type: OIL WELL

Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

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

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

OCD – HOBBS
09/23/2020
RECEIVED

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-~~30-025-47771~~	98259	Ojo Chiso; Bone Spring, Southwest

[4] Property Code	[5] Property Name	[6] Well Number
316707	BELL LAKE UNIT NORTH	227H

[7] OGRID No.	[8] Operator Name	[9] Elevation
12361	KAISER-FRANCIS OIL CO.	3475.3

[10] Surface Location

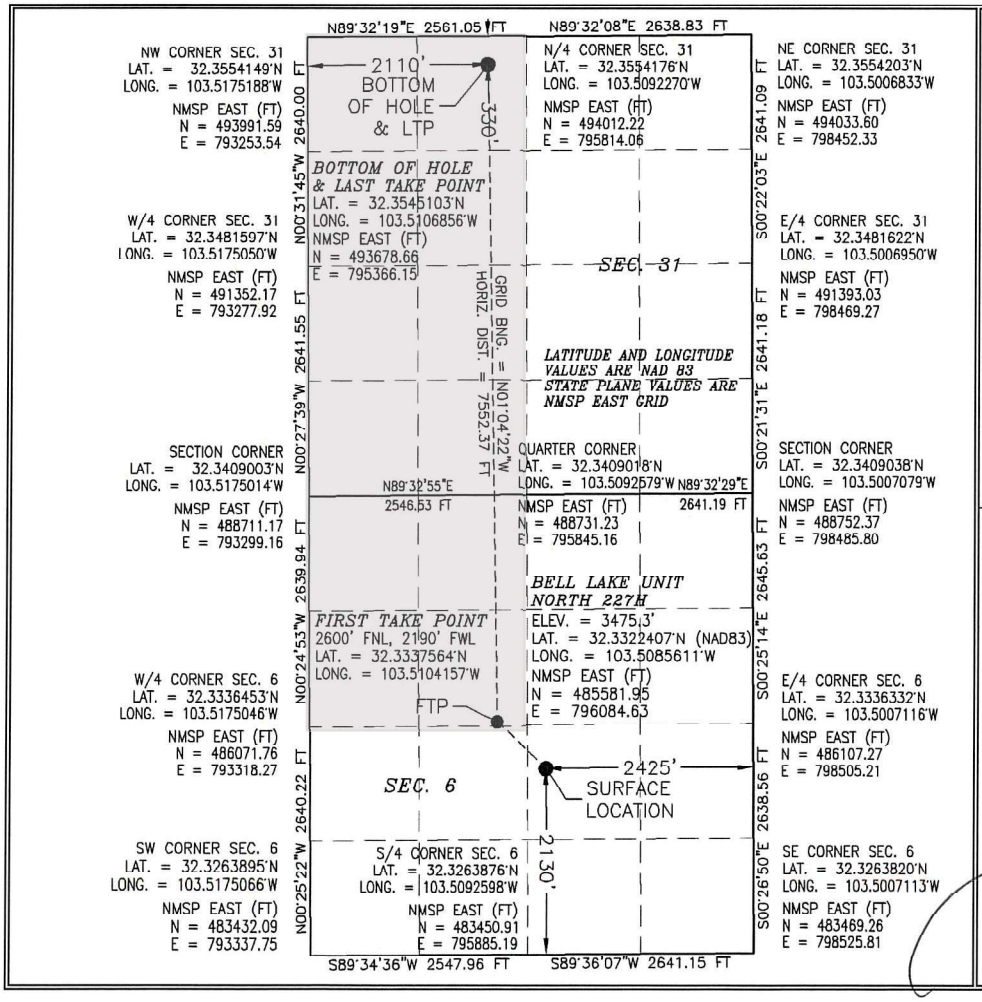
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	6	23 S	34 E		2130	SOUTH	2425	EAST	LEA

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	31	22 S	34 E		330	NORTH	2110	WEST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
~~480~~ 463.58			R-14527-A

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



[17] OPERATOR CERTIFICATION

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

Stormi Davis 10/24/19
Signature Date

Stormi Davis
Printed Name

ssdavis104@gmail.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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

MARCH 22, 2019
Date of Survey

FILIMON F. JARAMILLO
NEW MEXICO
12797
REGISTERED PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor:

Certificate Number: FILIMON F. JARAMILLO, PLS 12797
SURVEY NO. 6997

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Submit Original
to Appropriate
District Office

OCD – HOBBS
09/23/2020
RECEIVED

GAS CAPTURE PLAN

Date: **01/26/2018**

☒ Original

Operator & OGRID No.: Kaiser-Francis Oil Company, 12361

☐ Amended - Reason for Amendment:_____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Bell Lake Unit North 227H	30-025-47771	6-23S-34E		2000	0	
Bell Lake Unit North 228H		6-23S-34E		2000	0	
Bell Lake Unit North 327H		6-23S-34E		2000	0	
Bell Lake Unit North 328H		6-23S-34E		2000	0	
Bell Lake Unit North 427H		6-23S-34E		2000	0	
Bell Lake Unit North 428H		6-23S-34E		2000	0	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Targa and will be connected to Targa low/high pressure gathering system located in _Lea_ County, New Mexico. It will require _11,000' of pipeline to connect the facility to low/high pressure gathering system. Kaiser-Francis Oil Company provides (periodically) to Targa a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Kaiser-Francis Oil Company and Targa have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Targa Processing Plant located in Sec._36_, Twn.__19S_, Rng._36E, __Lea__ County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on Targa system at that time. Based on current information, it is Kaiser-Francis Oil Company's belief the system can take this gas upon completion of the well(s).

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

Alternatives to Reduce Flaring

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

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