Form 3160-3
(June 2015)

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

HOBBS OCD
SEP 05 2018
RECEIVED

Carlsbad Field Office
OCD Hobbs

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. NMLC0063993
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other	6. If Indian, Allotee or Tribe Name
1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone	7. If Unit or CA Agreement, Name and No.
	8. Lease Name and Well No. BELL LAKE UNIT SOUTH 201H (316706)
2. Name of Operator KAISER FRANCIS OIL COMPANY (12361)	9. API Well No. 30-025-45178
3a. Address 6733 S. Yale Ave. Tulsa OK 74121	3b. Phone No. *(include area code)* (918)491-0000
	10. Field and Pool, or Exploratory ~~ANTELOPE RIDGE WEST / BONE SPRI~~ BELL LAKE (98264) SOUTH
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface SWNW / 2100 FNL / 295 FWL / LAT 32.248089 / LONG -103.533657 At proposed prod. zone SWSW / 330 FSL / 350 FWL / LAT 32.225759 / LONG -103.533474	11. Sec., T. R. M. or Blk. and Survey or Area SEC 1 / T24S / R33E / NMP
14. Distance in miles and direction from nearest town or post office*	12. County or Parish / 13. State

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 295 feet	16. No of acres in lease 160	17. Spacing Unit dedicated to this well 240
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 3007 feet	19. Proposed Depth 10635 feet / 18463 feet	20. BLM/BIA Bond No. in file FED: WYB000055
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3633 feet	22. Approximate date work will start* 10/15/2017	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 (Electronic Submission)	Name *(Printed/Typed)* Melanie Wilson / Ph: (575)914-1461	Date 09/15/2017
Title Regulatory Analyst		
Approved by *(Signature)* (Electronic Submission)	Name *(Printed/Typed)* Cody Layton / Ph: (575)234-5959	Date 08/23/2018
Title Assistant Field Manager Lands & Minerals	Office CARLSBAD	

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 09/05/18

APPROVED WITH CONDITIONS

Approval Date: 08/23/2018

09/07/18

(Continued on page 2)

*(Instructions on page 2)

Double Sided

MIN F
SURF S

SS

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160
PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.
ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.
EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Continued on page 3)

Additional Operator Remarks

Location of Well

1. SHL: SWNW / 2100 FNL / 295 FWL / TWSP: 24S / RANGE: 33E / SECTION: 1 / LAT: 32.248089 / LONG: -103.533657 (TVD: 0 feet, MD: 0 feet)
   PPP: NWSW / 2640 FSL / 350 FWL / TWSP: 24S / RANGE: 33E / SECTION: 12 / LAT: 32.2321277 / LONG: -103.533607 (TVD: 10635 feet, MD: 16140 feet)
   PPP: NWNW / 0 FNL / 350 FWL / TWSP: 24S / RANGE: 33E / SECTION: 12 / LAT: 32.239384 / LONG: -103.533544 (TVD: 10635 feet, MD: 13500 feet)
   PPP: NWSW / 2552 FSL / 350 FWL / TWSP: 24S / RANGE: 33E / SECTION: 1 / LAT: 32.246368 / LONG: -103.533483 (TVD: 10635 feet, MD: 10965 feet)
   BHL: SWSW / 330 FSL / 350 FWL / TWSP: 24S / RANGE: 33E / SECTION: 12 / LAT: 32.225759 / LONG: -103.533474 (TVD: 10635 feet, MD: 18463 feet)

BLM Point of Contact

Name: Sipra Dahal
Title: Legal Instruments Examiner
Phone: 5752345983
Email: sdahal@blm.gov

Review and Appeal Rights

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

AFMSS

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

Operator Certification Data Report

08/27/2018

Operator Certification

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

NAME: Melanie Wilson **Signed on:** 09/15/2017

Title: Regulatory Analyst

Street Address: 106 W. Riverside Drive

City: Calsbad **State:** NM **Zip:** 88220

Phone: (575)914-1461

Email address: mjp1692@gmail.com

Field Representative

Representative Name: Robert Sanford

Street Address: 6733 S Yale Ave

City: Tulsa **State:** OK **Zip:** 74136

Phone: (918)770-2682

Email address: roberts@kfoc.net

AFMSS

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

Application Data Report

08/27/2018

APD ID: 10400021966 **Submission Date:** 09/15/2017

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 201H

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

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400021966 **Tie to previous NOS?** 10400013193 **Submission Date:** 09/15/2017

BLM Office: CARLSBAD **User:** Melanie Wilson **Title:** Regulatory Analyst

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

Lease number: NMLC0063993 **Lease Acres:** 160

Surface access agreement in place? **Allotted?** **Reservation:**

Agreement in place? NO **Federal or Indian agreement:**

Agreement number:

Agreement name:

Keep application confidential? YES

Permitting Agent? NO **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 **Mater Development Plan name:**

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

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

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 201H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** ANTELOPE RIDGE **Pool Name:** BONE SPRING WEST

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 SOUTH **Well Number:** 201H

Describe other minerals:

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** NO **New surface disturbance?**

Type of Well Pad: MULTIPLE WELL **Multiple Well Pad Name:** SOUTH BELL LAKE UNIT **Number:** 0

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: 25 Miles **Distance to nearest well:** 3007 FT **Distance to lease line:** 295 FT

Reservoir well spacing assigned acres Measurement: 240 Acres

Well plat: Bell_Lake_Unit_South_201H_C102_20170913061557.pdf

Well work start Date: 10/15/2017 **Duration:** 40 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number:

	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
SHL Leg #1	2100	FNL	295	FWL	24S	33E	1	Aliquot SWNW	32.248089	-103.533657	LEA	NEW MEXICO	NEW MEXICO	S	STATE	3633	0	0
KOP Leg #1	2100	FNL	295	FWL	24S	33E	1	Aliquot SWNW	32.248089	-103.533657	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-4914	8547	8547
PPP Leg #1	2552	FSL	350	FWL	24S	33E	1	Aliquot NWSW	32.246368	-103.533483	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-7002	10965	10635

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 201H

	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
PPP Leg #1	0	FNL	350	FWL	24S	33E	12	Aliquot NWNW	32.239384	-103.533544	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0063993	-7002	13500	10635
PPP Leg #1	2640	FSL	350	FWL	24S	33E	12	Aliquot NWSW	32.232127	-103.533607	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0063798	-7002	16140	10635
EXIT Leg #1	330	FSL	350	FWL	24S	33E	12	Aliquot SWSW	32.225759	-103.533474	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0063798	-7002	18463	10635
BHL Leg #1	330	FSL	350	FWL	24S	33E	12	Aliquot SWSW	32.225759	-103.533474	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0063798	-7002	18463	10635

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 201H

Pressure Rating (PSI): 10M **Rating Depth:** 18000

Equipment: Annular. The BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.

Requesting Variance? YES

Variance request: Flex Hose Variance

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all of the components installed will be functional and tested.

Choke Diagram Attachment:

Bell_Lake_Unit_South_201H_Chk_Man_Rev1_20180805183337.pdf

BOP Diagram Attachment:

Bell_Lake_Unit_South_201H_FLEX_HOSE_DATA_20180206165912.pdf

Bell_Lake_Unit_South_201H_BOP_Rev1_20180805183347.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	1350	0	1350			1350	J-55	54.5	STC	1.8	4.3	DRY	7	DRY	11.6
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	5200	0	5200			5200	HCP-110	40	LTC	1.5	2.9	DRY	6.1	DRY	6.1
3	PRODUCTION	8.75	5.5	NEW	API	N	0	18463	0	18463			18463	P-110	20	BUTT	2.3	2.6	DRY	2.6	DRY	3

Casing Attachments

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 201H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Bell_Lake_Unit_South_201H_Casing_Assumptions_20170914133913.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Bell_Lake_Unit_South_201H_Casing_Assumptions_20170914133931.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Bell_Lake_Unit_South_201H_Casing_Assumptions_20170914133946.pdf

Section 4 - Cement

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 201H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1350	780	1.73	12.8	1414.42	100	SLB Lead	30% Extender
SURFACE	Tail		0	1350	272	1.66	13.6	451.45	100	SLB Tail	2% Extender
INTERMEDIATE	Lead		0	5200	1000	2.02	12.6	2020	50	SLB Lead	30% Extender
INTERMEDIATE	Tail		0	5200	246	1.29	14.2	317.34	50	SLB Tail	44% Extender
PRODUCTION	Lead		4700	18463	595	2.81	11	1665.5	25	NeoCem	-
PRODUCTION	Tail		4700	18463	1670	1.47	13.2	2440.36	15	NeoCem	0.6% HR-601

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
5200	18462	OTHER : Cut Brine	8.7	8.9							
1350	5200	OTHER : Brine	10	10.2							
0	1350	OTHER : Fresh Water	8.4	9							

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 201H

Section 6 - Test, Logging, Coring

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

None planned

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

GR,MUDLOG

Coring operation description for the well:

None planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4922 **Anticipated Surface Pressure:** 2582.3

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:

Bell_Lake_Unit_South_201H_H2S_Plan_20170913100105.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Bell_Lake_Unit_South_201H_Directional_Plan_20170913100205.pdf

Other proposed operations facets description:

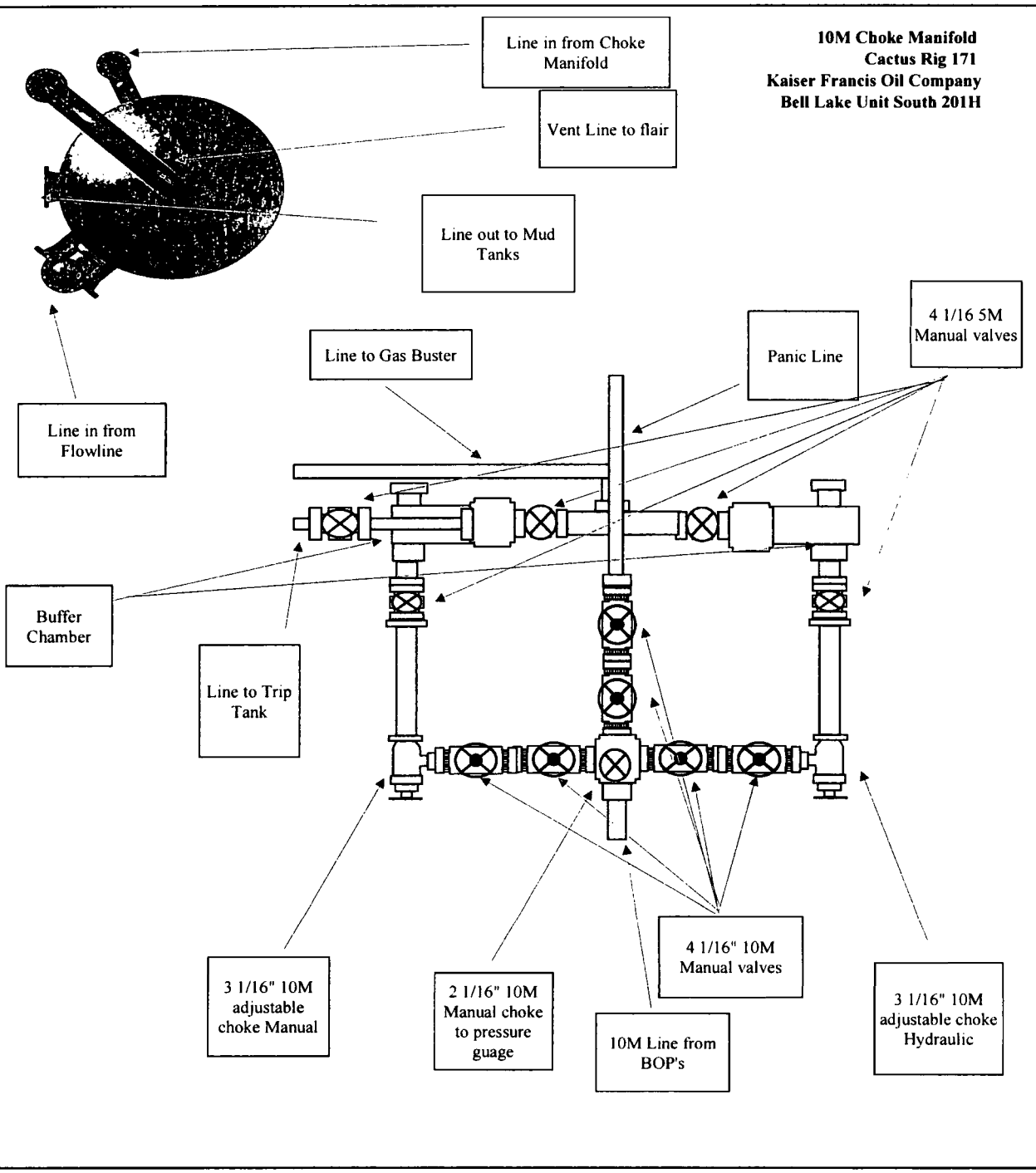
Gas Capture Plan attached

Other proposed operations facets attachment:

Bell_Lake_Unit_South_201H_Gas_Capture_Plan_20180206165945.pdf

Other Variance attachment:

10M Choke Manifold
Cactus Rig 171
Kaiser Francis Oil Company
Bell Lake Unit South 201H



GATES E & S NORTH AMERICA, INC.
7603 Prairie Oak Dr.
Houston, TX 77086

PHONE: 281-602-4119
FAX:
EMAIL: Troy.Schmidt@gat
WEB: www.gates.com

10K ASSEMBLY PRESSURE TEST CERTIFICATE

Customer :	A-7 AUSTIN INC DBA AUSTIN HOSE	Test Date:	10/3/2017
Customer Ref. :	4086301	Hose Serial No.:	H-100317-2
Invoice No. :	508588	Created By:	Irene Pizana

Product Description:	10K3.035.0CM4.1/16FLGE/E

End Fitting 1 :	4 -1/16 10K FLANGE - FIXED	End Fitting 2 :	4 -1/16 10K FLANGE - FLOATING
Gates Part No. :	68603010-9710398	Assembly Code :	L39789092117H-100317-2
Working Pressure :	10,000 PSI	Test Pressure :	15,000 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has successfully passed all pressure testing requirements set forth in Section 9.7.7 and Table 10 of API 7K, Sixth Edition (December 2015).

Quality:	QUALITY	Produciton:	PRODUCTION
Date :	10/3/2017	Date :	10/3/2017
Signature :		Signature :	

Form PTC - 01 Rev.0 2

POWERING PROGRESS™

Gates E&S North America, Inc.
7603 Prairie Oak Dr.
Houston, TX. 77086
PHONE :
FAX:
Troy.Schmidt@gates.com

CERTIFICATE OF CONFORMANCE

This is to verify that all Parts and/or Materials included in this shipment have been manufactured and/or processed in Conformance with applicable drawings and specifications, and that Records of Required Tests are on file and subject to examination. The following items were assembled at **Gates E & S, North America Inc.**, facilities in Houston, TX, USA. This hose assembly was designed and manufactured to meet requirements of API Spec 7K.

CUSTOMER: A-7 AUSTIN INC DBA AUSTIN HOSE
CUSTOMERS P.O.#: 4086301
PART DESCRIPTION: 10K3.035.0CM4.1/16FLGE/E
SALES ORDER #: 508588
QUANTITY: 1
SERIAL #: H-100317-2

SIGNATURE: _____

TITLE: QUALITY ASSURANCE

DATE: 10/3/2017

JOB REPORT

COMPANY DETAILS

Company: Austin
Contact:
Phone:

Email: Irene.pizana@gates.com

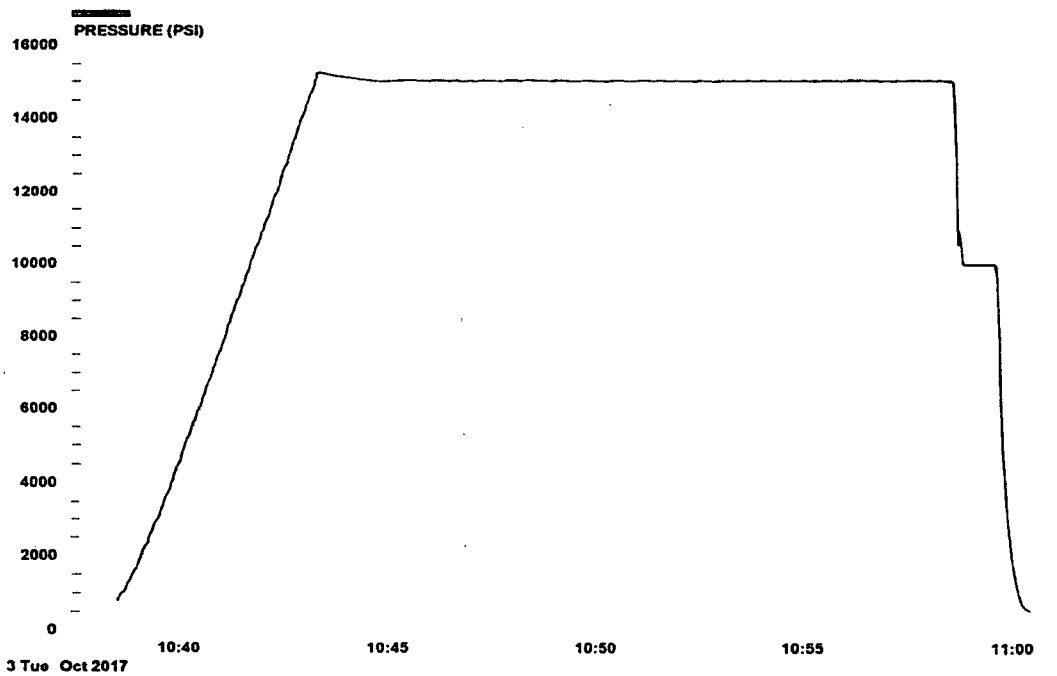
JOB DETAILS

DATE October 03, 2017
START TIME 10:38:29
END TIME 11:00:25
Gates Rep: Chris Olivo
Recommendation: H-100317-2
Working Pressure: 10000
Ext Inspection: Pass
Fitting Inspection: Pass
Test pressure: 15000
Serial No: H-100317-2

Length: 35'
Inner Diameter: 3.0"
Pressure Test: Pass
Internal Inspection: N/A
Fitting Type: 10K Flange ExE

GATES ENGINEERING & SERVICES NA
QA/QC
OCT 03 2017
APPROVED

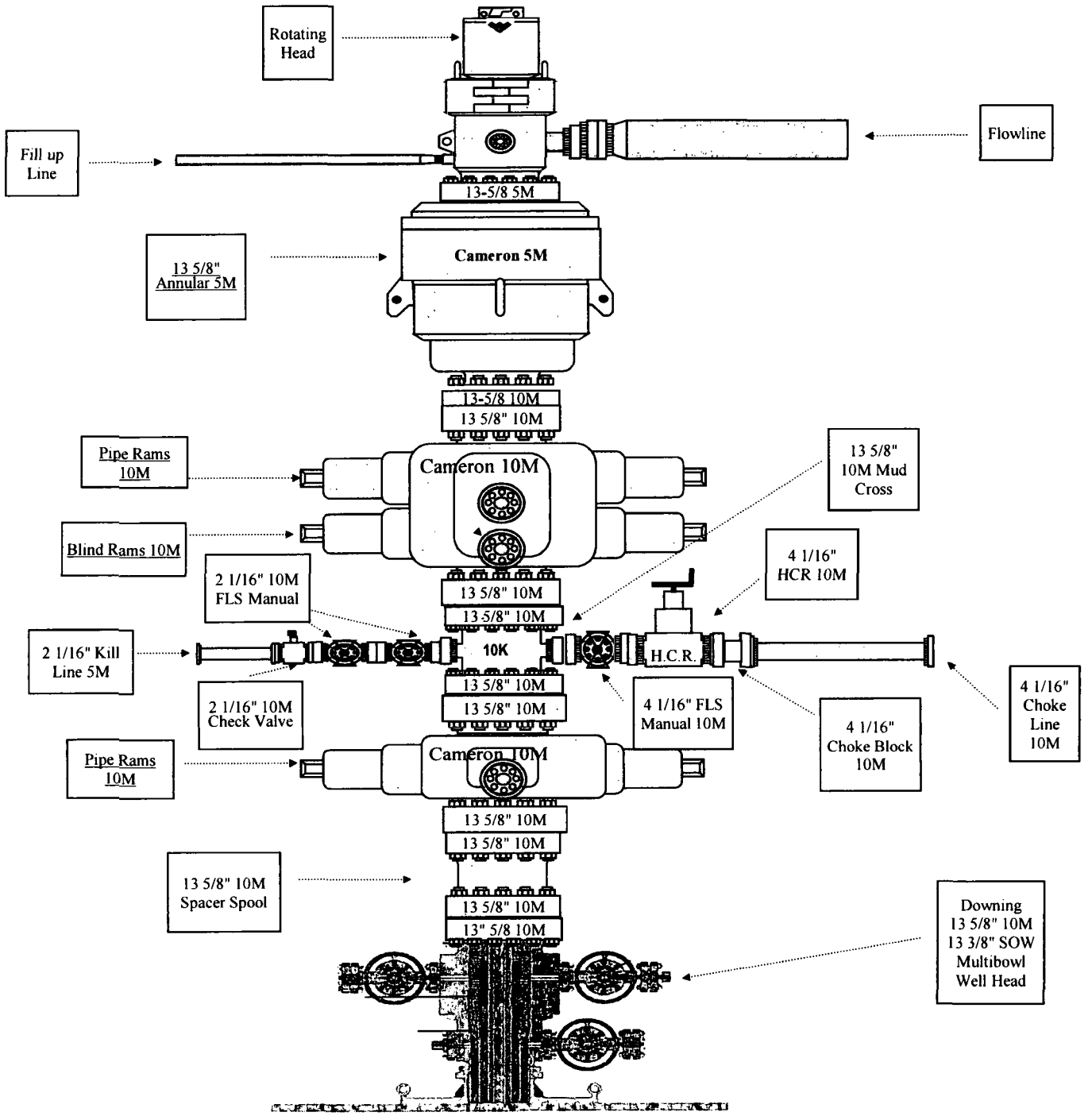
SUMMARY GRAPH



Report Created: 3-Oct-17

10M BOP with 5M Annular
Kaiser Francis Oil Company
Bell Lake Unit South 201H

Hole Sections Utilized
***12 1/4" Hole below Surface Casing**
***8 3/4"-8 1/2" Hole below Intermediate casing**



Kaiser-Francis Oil Company

Bell Lake Unit South 201H

Casing Assumptions Worksheet

Formation Name	Formation Top TVD
Rustler	1400
Salado	1825
Top of Salt	2000
Base of Salt	5000
Lamar	5200
Bell Canyon	5400
Cherry Canyon	6250
Brushy Canyon	7725
Bone Spring	8865
Avalon	9057
1 BSS	10100
2 BSS	10635
3 BSL	11150
3 BSS	11630
Wolfcamp	11935

Interval	Length	Casing Size	Weight (lb/ft)	Grade	Thread	Condition	Hole Size	TVD (ft)
Conductor	120'	20"				New		120
Surface	1350'	13-5/8"	54.5	J-55	STC	New	17-1/2"	1350
Intermediate	5200'	9-5/8"	40	HCP-110	LTC	New	12-1/4"	5200
Production	18463'	5-1/2"	20	P110	BTC	New	8-3/4"	10635

Mud Type	Mud Weight Hole Control	Viscosity	Fluid Loss
FW	8.4 - 9.0	32 - 34	NC
Brine	10 - 10 2	28	NC
Cut Brine	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	632	1130	2730	853000	514000
10.2	2758	4230	7900	1260000	1266000
8.9	4922	11100	12640	641000	548000

Collapse Safety Factor (Min 1.1)	Burst Safety Factor (Min 1.0)	Body Tensile Safety Factor	Joint Tensile Safety Factor
1.8	4.3	11.6	7.0
1.5	2.9	6.1	6.1
2.3	2.6	3.0	2.6

Kaiser-Francis Oil Company

Bell Lake Unit South 201H

Casing Assumptions Worksheet

Formation Name	Formation Top TVD
Rustler	1400
Salado	1825
Top of Salt	2000
Base of Salt	5000
Lamar	5200
Bell Canyon	5400
Cherry Canyon	6250
Brushy Canyon	7725
Bone Spring	8865
Avalon	9057
1 BSS	10100
2 BSS	10635
3 BSL	11150
3 BSS	11630
Wolfcamp	11935

Interval	Length	Casing Size	Weight (#/ft)	Grade	Thread	Condition	Hole Size	TVD (ft)
Conductor	120'	20"				New		120
Surface	1350'	13-5/8"	54.5	J-55	STC	New	17-1/2"	1350
Intermediate	5200'	9-5/8"	40	HCP-110	LTC	New	12-1/4"	5200
Production	18463'	5-1/2"	20	P110	BTC	New	8-3/4"	10635

Mud Type	Mud Weight Hole Control	Viscosity	Fluid Loss
FW	8.4 - 9.0	32 - 34	NC
Brine	10 - 10.2	28	NC
Cut Brine	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	632	3130	2730	853000	514000
10.2	2758	4230	7900	1260000	1266000
8.9	4922	11100	12640	641000	548000

Collapse Safety Factor (Min 1.1)	Burst Safety Factor (Min 1.0)	Body Tensile Safety Factor	Joint Tensile Safety Factor
1.8	4.3	11.6	7.0
1.5	2.9	6.1	6.1
2.3	2.6	3.0	2.6

Kaiser-Francis Oil Company

Bell Lake Unit South 201H

Casing Assumptions Worksheet

Formation Name	Formation Top TVD
Rustler	1400
Salado	1825
Top of Salt	2000
Base of Salt	5000
Lamar	5200
Bell Canyon	5400
Cherry Canyon	6250
Brushy Canyon	7725
Bone Spring	8865
Avalon	9057
1 BSS	10100
2 BSS	10635
3 BSL	11150
3 BSS	11630
Wolfcamp	11935

Interval	Length	Casing Size	Weight (#/ft)	Grade	Thread	Condition	Hole Size	TVD (ft)
Conductor	120'	20"				New		120
Surface	1350'	13-5/8"	54.5	J-55	STC	New	17-1/2"	1350
Intermediate	5200'	9-5/8"	40	HCP-110	LTC	New	12-1/4"	5200
Production	18463'	5-1/2"	20	P110	BTC	New	8-3/4"	10635

Mud Type	Mud Weight Hole Control	Viscosity	Fluid Loss
FW	8.4 - 9.0	32 - 34	NC
Brine	10 - 10.2	28	NC
Cut Brine	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	632	1130	2730	853000	514000
10.2	2758	4230	7900	1260000	1266000
8.9	4922	11100	12640	641000	548000

Collapse Safety Factor (Min 1.1)	Burst Safety Factor (Min 1.0)	Body Tensile Safety Factor	Joint Tensile Safety Factor
1.8	4.3	11.6	7.0
1.5	2.9	6.1	6.1
2.3	2.6	3.0	2.6

KAISER-FRANCIS OIL COMPANY
HYDROGEN SULFIDE (H_2S) CONTINGENCY PLAN
FOR DRILLING/COMPLETION WORKOVER/FACILITY

BELL LAKE UNIT SOUTH #201H
SECTION 1 -T24S-R33E
LEA COUNTY, NM

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

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
Matt Warner	918/491-4379	720/556-2313

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.

APD ID: 10400021966 **Submission Date:** 09/15/2017

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 201H

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:

Bell_Lake_Unit_South_201H_Road_Map_20170913100552.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:

0296_Bell_Lake_Unit_South__201H_Access_Road_20170913110700.pdf

New road type: RESOURCE

Length: 1138.6 Feet **Width (ft.):** 25

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

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 15

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

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: OTHER

Access topsoil source: BOTH

Access surfacing type description: Native caliche

Access onsite topsoil source depth: 6

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

Access miscellaneous information:

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

Drainage Control

New road drainage crossing: OTHER

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

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Bell_Lake_Unit_South_201H_1_Mile_Radius_20170913111152.pdf

Existing Wells description:

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 south side of pad. Plan for initial wells: 2-1000 bbl water tanks and 5-1000 bbl oil tanks, a temporary 6X20 horizontal 3-phase sep, a 48" X 10' 3-phase sep, a 8 X 20' heater treater and a 48"X 10' 2-phase sep

Section 5 - Location and Types of Water Supply

Water Source Table

Water source use type: INTERMEDIATE/PRODUCTION CASING **Water source type:** OTHER

Describe type: BRINE WATER

Source latitude: **Source longitude:**

Source datum:

Water source permit type: PRIVATE CONTRACT

Source land ownership: PRIVATE

Water source transport method: TRUCKING

Source transportation land ownership: OTHER **Describe transportation land ownership:**

Water source volume (barrels): 20000 **Source volume (acre-feet):** 2.577862

Source volume (gal): 840000

Water source use type: OTHER, STIMULATION, SURFACE CASING **Water source type:** OTHER

Describe type: FRESH WATER

Source latitude: **Source longitude:**

Source datum:

Water source permit type: PRIVATE CONTRACT

Source land ownership: PRIVATE

Water source transport method: TRUCKING

Source transportation land ownership: OTHER **Describe transportation land ownership:**

Water source volume (barrels): 250000 **Source volume (acre-feet):** 32.223274

Source volume (gal): 10500000

Water source and transportation map:

Bell_Lake_Unit_South_201H_Water_Source_Map_20170914140431.pdf

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

New water well? NO

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

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: 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 on US 62/180 at Halfway, NM

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

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

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

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? YES

Description of cuttings location Cuttings will be stored in roll off bins and hauled to R360 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?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Bell_Lake_Unit_South_201H_Wellsite_Layout_20170913112331.pdf
Bell_Lake_Unit_South_201H_Drilling_Site_Layout_20170915060113.pdf
Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: SOUTH BELL LAKE UNIT

Multiple Well Pad Number: 0

Recontouring attachment:

Drainage/Erosion control construction: During construction proper erosion control methods will be used to control erosion, runoff and siltation of the surrounding area. As per request of rancher, a berm will be constructed along the east side of well pad.

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

Wellpad long term disturbance (acres): 3.44

Wellpad short term disturbance (acres): 5.97

Access road long term disturbance (acres): 0.39

Access road short term disturbance (acres): 0.65

Pipeline long term disturbance (acres): 0

Pipeline short term disturbance (acres): 0

Other long term disturbance (acres): 0

Other short term disturbance (acres): 0

Total long term disturbance: 3.83

Total short term disturbance: 6.62

Disturbance Comments: Plan to reclaim 150' on the north side and 100' on the west side of well pad.

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:

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances:

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 201H

Seed Summary	
Seed Type	**Pounds/Acre**

Total 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? NO

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

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:

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 201H

State Local Office: COMMISSIONER OF PUBLIC LANDS, PO BOX 1148, SANTA FE, NM 87504

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Fee Owner: Mark T. McCloy & Annette E McCloy **Fee Owner Address:** PO Box 795 Tatum, NM 88267

Phone: (432)940-4459 **Email:**

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: Surface Use and Compensation Agreement dated October 4, 2016 between Mark T McCloy and Annette E McCloy Revocable Living Trust and Kaiser-Francis Oil Company

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Disturbance type: NEW ACCESS ROAD

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: COMMISSIONER OF PUBLIC LANDS, PO BOX 1148, SANTA FE, NM 87504-1148

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 201H

USFS Forest/Grassland: **USFS Ranger District:**

Section 12 - Other Information

Right of Way needed? NO **Use APD as ROW?**

ROW Type(s):

ROW Applications

SUPO Additional Information: SUP Attached

Use a previously conducted onsite? YES

Previous Onsite information: Onsite held 7/20/17 with Fernando Banos (BLM), Matt Warner & Melanie Wilson (Kaiser-Francis), Jimmy Harrison (John West Surveying) and Jeff (APAC Archaeology)

Other SUPO Attachment

Bell_Lake_Unit_South_201H_SUP_20170915090256.pdf

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

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?

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? NO

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? NO

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? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD discharge volume (bbl/day):

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

08/27/2018

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:

APD ID: 10400021966 **Submission Date:** 09/15/2017

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 201H

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

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	---	3633	0	0		NONE	No
2	RUSTLER	2233	1400	1400		NONE	No
3	SALADO	1808	1825	1825		NONE	No
4	TOP SALT	1633	2000	2000		NONE	No
5	BASE OF SALT	-1367	5000	5000		NONE	No
6	LAMAR	-1567	5200	5200		NATURAL GAS,OIL	No
7	BELL CANYON	-1767	5400	5400		NATURAL GAS,OIL	No
8	CHERRY CANYON	-2617	6250	6250		NATURAL GAS,OIL	No
9	BRUSHY CANYON	-4092	7725	7725		NATURAL GAS,OIL	No
10	BONE SPRING	-5232	8865	8865		NATURAL GAS,OIL	No
11	AVALON SAND	-5424	9057	9057		NATURAL GAS,OIL	No
12	BONE SPRING 1ST	-6467	10100	10100		NATURAL GAS,OIL	No
13	BONE SPRING 2ND	-7002	10635	10635		NATURAL GAS,OIL	Yes
14	BONE SPRING LIME	-7517	11150	11150		NATURAL GAS,OIL	No
15	BONE SPRING 3RD	-7997	11630	11630		NATURAL GAS,OIL	No
16	WOLFCAMP	-8302	11935	11935		NATURAL GAS,OIL	No

Section 2 - Blowout Prevention