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Form 3160-3 (March 2012) FORM APPROVED OMB No. 1004-0137 Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR

is:

JAN **16** 2019

5. Lease Serial No.

NMLC0066438 BUREAU OF LAND MANAGEMENT 6. If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR RELEASE 7 If Unit or CA Agreement, Name and No. **V** DRILL REENTER la. Type of work: BELL LAKE / NMNM068292X (8. Lease Name and Well No. ✓ Oil Well Gas Well Other ✓ Single Zone BÈLL LAKE UNIT NORTH 119 lb. Type of Well: Multiple Zone APÌ Well-No. Name of Operator KAISER FRANCIS OIL COMPANY /2361 30-1725-4-4 3b. Phone No. (include area code) 3a. Address 10. Field and Pool, or Exploratory 6733 S. Yale Ave. Tulsa OK 74121 (918)491-0000 ANTELOPE RIDGE WEST / BONE SPI 11. Sec., T. R. M. or Blk. and Survey or Area Location of Well (Report location clearly and in accordance with any State requirements.*) At surface NWSW / 2458 FSL / 380 FWL / LAT 32.333185 / LONG -103.533385 SEC 1 / T23S / R33E / NMP At proposed prod. zone NWNW / 330 FNL / 350 FWL / LAT 32.354543 / LONG -103.533507 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* **LEA** NM 27 miles 17. Spacing Unit dedicated to this well Distance from proposed* 16. No. of acres in lease location to nearest 380 feet property or lease line, ft. (Also to nearest drig. unit line, if any) 479.85 Distance from proposed location* to nearest well, drilling, completed, 3307 feet applied for, on this lease, ft. 20. BLM/BIA Bond No. on file 19. Proposed Depth FED: WYB000055 9250 feet / 17145 feet Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 11/01/2017 3528 feet 40 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form: 1. Well plat certified by a registered surveyor. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2. A Drilling Plan. Operator certification 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). Such other site specific information and/or plans as may be required by the Name (Printed/Typed) 25. Signature Melanie Wilson / Ph: (575)914-1461 10/24/2017 (Electronic Submission) Title Regulatory Analyst Name (Printed/Typed) Approved by (Signature). Date 08/04/2018 Cody Layton / Ph: (575)234-5959 (Electronic Submission) Office Title **CARLSBAD** Assistant Field Manager Lands & Minerals 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. (Continued on page 2)

GCP Pec 1/16/19 (Instructions on page 2) 01/11/19

7m

proval Date: 08/04/2018

NATRUCTIONS

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 well, 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 directionally 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.

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 well 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 will 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 collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/of 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 Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Continued on page 3)

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Additional Operator Remarks

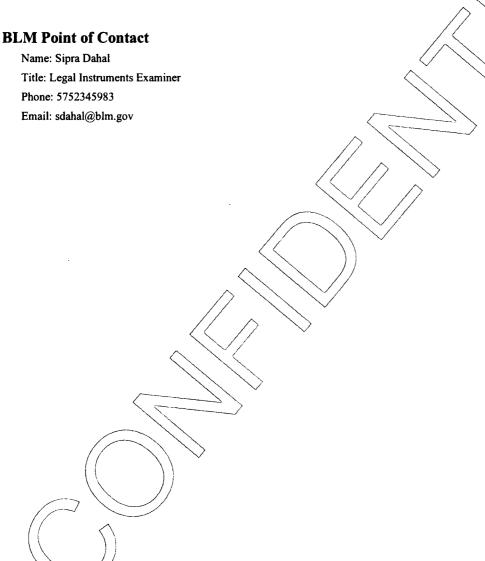
Location of Well

1. SHL: NWSW / 2458 FSL / 380 FWL / TWSP: 23S / RANGE: 33E / SECTION: 1 / LAT: 32.333185 / LONG: -103.533385 (TVD: 0 feet, MD: 0 feet)

PPP: SWSW / 0 FSL / 350 FWL / TWSP: 23S / RANGE: 33E / SECTION: 1 / LAT: 32.340929 / LONG: -103.533419 (TVD: 9250 feet, MD: 12200 feet)

PPP: SWNW / 2600 FNL / 350 FWL / TWSP: 23S / RANGE: 33E / SECTION: 1 / LAT: 32.33379 / LONG: -103.533482 (TVD: 9250 feet, MD: 9595 feet)

BHL: NWNW / 330 FNL / 350 FWL / TWSP: 22S / RANGE: 33E / SECTION: 36 / LAT: 32.354543 / LONG: -103.533507 (TVD: 9250 feet, MD: 17145 feet)



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.

PECOS DISTRICT DRILLING OPERATIONS CONDITIONS OF APPROVAL

OPERATOR'S NAME: | Kaiser Francis Oil Co

LEASE NO.: | LC066438

WELL NAME & NO.: 119H – Bell Lake Unit North

SURFACE HOLE FOOTAGE: | 2458'/S & 380'/W

BOTTOM HOLE FOOTAGE | 330'/N & 350'/W, sec. 36-T22S-R33E

LOCATION: | Sec. 1, T. 23 S, R. 33 E

COUNTY: Lea County

H2S	Yes	No	
Potash	None	Secretary	R-111-P
Cave/Karst Potential	Low	Medium	High
Variance	None	Flex Hose	Other
Wellhead	Conventional	Multibowl	Both
Other	4 String Area	Capitan Reef	WIPP

Commercial Well Determination

The proposed well is not within a participating area. A commercial well determination must be submitted to the BLM Carlsbad Office.

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

A. Hydrogen Sulfide

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The 13-3/8 inch surface casing shall be set at approximately 1350 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.

- a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least 500 feet into previous casing string. As proposed by operator. Operator shall provide method of verification.

Additional cement may be required – excess calculates to 18%.

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi. As proposed by operator

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

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- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
 - ☐ Lea County

 Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
 3933612
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement

- program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
- 5. The appropriate BLM office shall be notified a minimum of hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - a. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been

done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

- b. The tests shall be done by an independent service company utilizing a test plug. The results of the test shall be reported to the appropriate BLM office.
- c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- d. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes. This test shall be performed prior to the test at full stack pressure.
- f. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

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Approval Date: 08/04/2018

Waste Minimization Plan (WMP)

In the interest of resource development, submission of additional well gas capture development plan information is deferred but may be required by the BLM Authorized Officer at a later date.

EGF 022718

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PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

OPERATOR'S NAME:
LEASE NO.:
LEASE NO.:
WELL NAME & NO.:
SURFACE HOLE FOOTAGE:
BOTTOM HOLE FOOTAGE
LOCATION:
COUNTY:

Kaiser Francis Oil Co
LC066438

119H - Bell Lake Unit North
2458'/S & 380'/W
330'/N & 350'/W, sec. 36-T22S-R33E
LOCATION:
COUNTY:
Lea County, New Mexico

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Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

General Provisions
Permit Expiration
Archaeology, Paleontology, and Historical Sites
Noxious Weeds
Special Requirements
Lesser Prairie-Chicken Timing Stipulations
Ground-level Abandoned Well Marker
Watershed
Tank Battery
Surface Pipeline
Construction Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
☐ Road Section Diagram
Production (Post Drilling)
Well Structures & Facilities
Interview Dealermetics
Interim Reclamation
Final Abandonment & Reclamation

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

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V. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken:

Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

<u>Ground-level Abandoned Well Marker to avoid raptor perching</u>: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

Timing Limitation Exceptions:

The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

Watershed:

The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.

Tank Battery:

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems

will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

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Exclosure Fencing

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

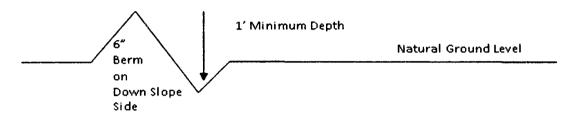
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope:
$$\frac{400'}{4\%}$$
 + 100' = 200' lead-off ditch interval

Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

- 1. Salvage topsoil
- 3. Redistribute topsoil4. Revegetate slopes
- 2. Construct road 4. R

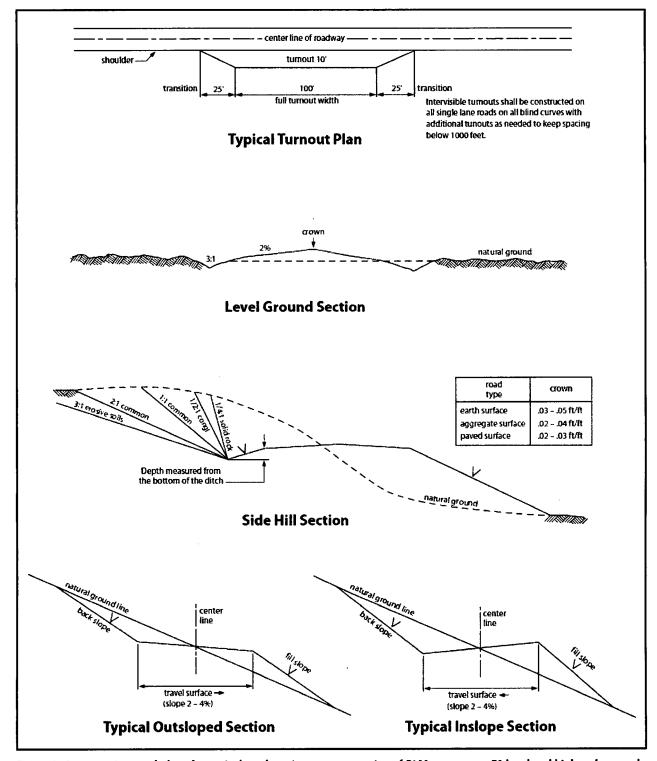


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory

Page 10 of 12

revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Exhibit A-1

Company: Kaiser Francis Lease #:NMNM068292X

Well name: Bell Lake Unit North 119H and 211H
December 1, 2014

Seed Mixture for LPC Sand/Shinnery Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

^{*}Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed



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



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: 10/24/2017

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: Curt Jones Street Address: 6733 S. Yale Ave.

City: Tulsa State: OK Zip: 74136

Phone: (918)720-2558

Email address: curtj@kfoc.net



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

Application Data Report

APD ID: 10400023390 Submission Date: 10/24/2017

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH

Well Number: 119H

Well Type: OIL WELL Well Work Type: Drill

Show Final Text

Section 1 - General

APD ID: 10400023390 Tie to previous NOS?

Submission Date: 10/24/2017

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: NMLC0066438

Lease Acres: 479.85

Surface access agreement in place?

Aliotted?

Reservation:

Agreement in place? YES

Federal or Indian agreement: FEDERAL

Agreement number: NMNM068292X

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.

Operator PO Box: PO Box 21468

Zip: 74121

Operator City: Tulsa

State: OK

Operator Phone: (918)491-0000

Operator Internet Address:

Section 2 - Well Information

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

Well in Master SUPO? NO Master SUPO name:

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

Well API Number: Well Number: 119H Well Name: BELL LAKE UNIT NORTH

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

WEST

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

Operator Name: KAISER FRANCIC JIL COMPANY

Well Name: BELL LAKE UNIT NORTH

Well Number: 119H

Describe other minerals:

Well Class: HORIZONTAL

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: BELL Number: 1

LAKE NORTH

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: 27 Miles Distance to near

Distance to nearest well: 3307 FT Distance to lease line: 380 FT

Reservoir well spacing assigned acres Measurement: 40 Acres

Well plat: Bell Lake Unit_North_119H_C102_20171022144611.pdf

Well work start Date: 11/01/2017

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	ΔΛΤ
SHL Leg #1	245 8	FSL	380	FWL	238	33E	1	Aliquot NWS W	32.33318 5	- 103.5333 85	LEA		NEW MEXI CO	F	NMLC0 066438	352 8	0	0
KOP Leg #1	245 8	FSL	380	FWL	238	33E	1	Aliquot NWS W	32.33209	-103.533	LEA	ľ	NEW MEXI CO	F	NMLC0 066438	- 514 9	869 5	867 7
PPP Leg #1	260 0	FNL	350	FWL	23S	33E	1	Aliquot SWN W	32.33379	- 103.5334 82	LEA		NEW MEXI CO	F	NMLC0 066438	- 572 2	959 5	925 0



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

Drilling Plan Data Report
08/09/2018

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 119H

Well Type: OIL WELL Well Work Type: Drill



Show Final Text

Section 1 - Geologic Formations

Formation			True Vertical	1			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
1		3528	0	0		NONE	No
2	RUSTLER	2302	1226	1226		NONE	No
3	SALADO	1905	1623	1623		NONE	No
4	TOP SALT	1578	1950	1950		NONE	No
5	BASE OF SALT	-1422	4950	4950		NONE	No
6	LAMAR	-1672	5200	5200		NONE	No
7	BELL CANYON	-1983	5500	5500		NATURAL GAS,OIL	No
8	CHERRY CANYON	-3172	6700	6700		NATURAL GAS,OIL	No
9	BRUSHY CANYON	-4873	8401	8401		NATURAL GAS,OIL	No
10	BONE SPRING	-5397	8925	8925		NATURAL GAS,OIL	No
11	AVALON SAND	-5460	8988	8988		NATURAL GAS,OIL	Yes
12	BONE SPRING 1ST	-6448	9976	9976		NATURAL GAS,OIL	No

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 11000

Equipment: A 5M system will be installed according to Onshore Order #2 consisting of an Annular Preventer, BOP with two rams and a blind ram. 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.

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 119H

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 5000 psi high. The System may be upgraded to a higher pressure but still tested to the working pressure stated. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. The Annular shall be functionally operated at least weekly. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

Choke Diagram Attachment:

Bell_Lake_Unit_North_119H_CHK_MANIFOLD_20171022153232.pdf

BOP Diagram Attachment:

Bell_Lake_Unit_North__119H_Flex_Hose_Data_20180206170949.pdf
Bell_Lake_Unit_North_119H_BOP_5m_annular_20180717154220.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		12.2 5	9.625	NEW	API	N	0	5200	0	5200			ı	HCP -110		LTC	1.5	2.9	DRY	6.1	DRY	6.1
	PRODUCTI ON	8.75	5.5	NEW	API	N	0	17145	0	17145			17145	P- 110	20	BUTT	2.6	3	DRY	3	DRY	3.5

Casing Attachments

Operator Name: KAISER FRANCIS OIL COMPANY Well Name: BELL LAKE UNIT NORTH Well Number: 119H **Casing Attachments** Casing ID: 1 String Type: SURFACE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Bell_Lake_Unit_North_119H_Csg_Assumptions_20171022154237.pdf Casing ID: 2 String Type: INTERMEDIATE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Bell_Lake_Unit_North_119H_Csg_Assumptions_20171022154246.pdf Casing ID: 3 String Type: PRODUCTION **Inspection Document: Spec Document:**

Tapered String Spec:

Bell_Lake_Unit_North_119H_Csg_Assumptions_20171022154254.pdf

Section 4 - Cement

Casing Design Assumptions and Worksheet(s):

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 119H

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	451.4 5	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	317.3 4	50	SLB Tail	44% Extender
PRODUCTION	Lead		4700	1714 5	590	2.81	11	1646	25	NeoCem	None
PRODUCTION	Tail		4700	1714 5	1420	1.47	13.2	2080. 5	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)	РН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1350	5200	OTHER : BRINE	10	10.2							·
5200	1714 5	OTHER : CUT BRINE	8.7	8.9							
0	1350	SPUD MUD	8.4	9							

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH

Well Number: 119H

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:

DS,GR,MUDLOG

Coring operation description for the well:

None planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4281

Anticipated Surface Pressure: 2246

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_North_119H_H2S_PLAN_20171022154847.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Bell_Lake_Unit_North_119H_Directional_Plan_20171022155045.pdf

Other proposed operations facets description:

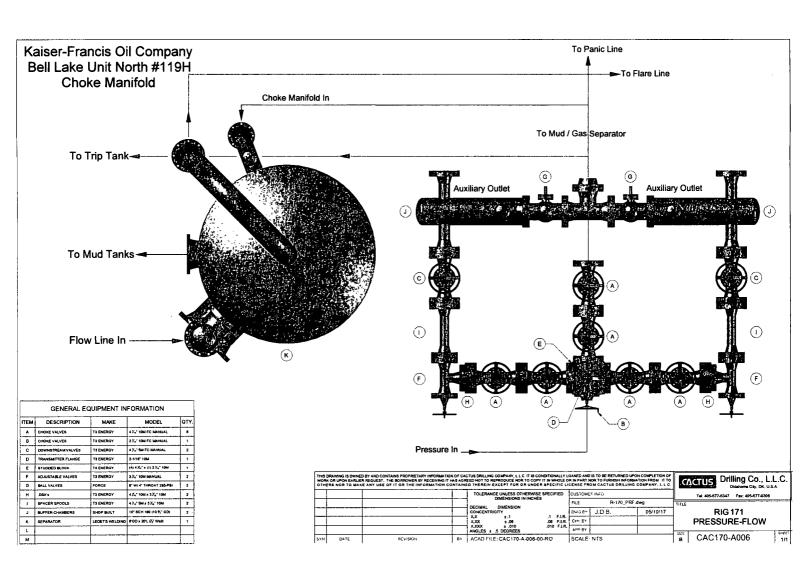
Gas Capture Plan attached

Other proposed operations facets attachment:

Bell_Lake_Unit_North_119H_Gas_Capture_Plan_20180206171107.pdf

Other Variance attachment:

Bell_Lake_Unit_North__119H_Flex_Hose_Data_20180206171022.pdf





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 4086301 Test Date:

10/3/2017

Customer Ref. : Invoice No. :

4086301 508588

Hose Serial No.:

H-100317-2

Created By:

Irene Pizana

Product Description:

10K3.035.0CM4.1/16FLGE/E

End Fitting 1:

4 -1/16 10K FLANGE - FIXED

QUALITY

10/3

End Fitting 2 :

4 -1/16 10K FLANGE - FLOATING

Gates Part No. : Working Pressure : 68603010-9710398 10,000 PSI

Assembly Code :

L39789092117H-100317-2

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:

Date:

Signature :

Produciton:

Date :

Signature :

PRODUCTION

10/3/2017

Form PTC - 01 Rev.0 2





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:	len The
TITLE:	QUALITY ASSURANCE
DATE:	10/3/2017



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

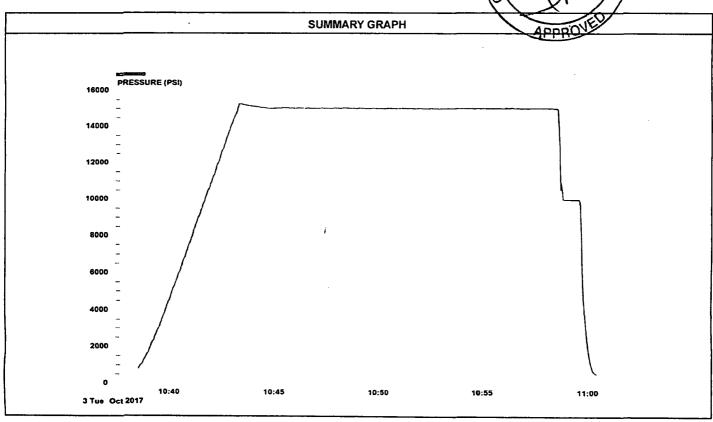
Serial No: H-100317-2

Length: 35'

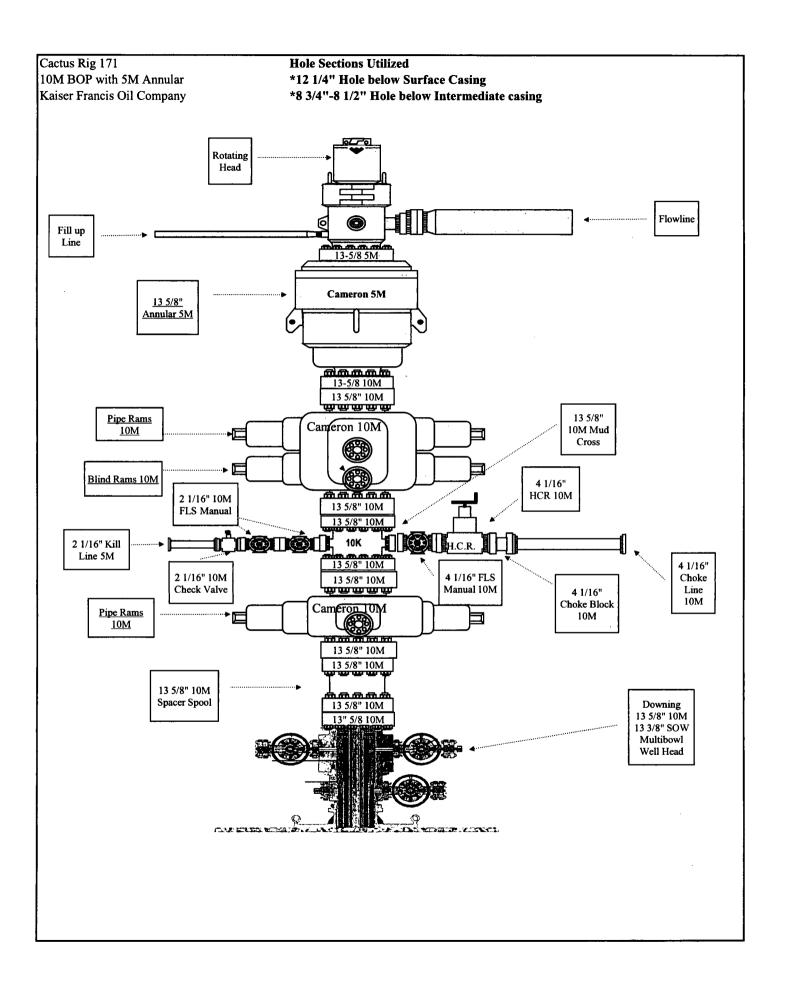
Inner Diameter: 3.0"
Pressure Test: Pass
Internal Inspection: N/A

Fitting Type: 10K Flange ExE





Report Created: 3-Oct-17



Kaiser-Francis Oil Company Bell Lake Unit North #119H Casing Assumptions Worksheet

Formation Name '	Formation Top TVD	Interval	Length	Casing Size	Weight (#/ft)	Grade	Thread	Condition	Hole Size	TVD (ft)	Mud Type	Mud Weight Hole Control	Viscosity	Fluid	Anticipated Mud Weight (ppg)	Max Pore Pressure (psi)	Collapse (psi)	Burst (psi)	Body Tensile Strength	Joint Tensile Strength	Factor	Suret Safety Factor	Body Tensile Safety Factor	Joint Tensile Safety Factor
Rustler	1226	Conductor	120'	20"				New		120		Contact	<u> </u>			(L	(Min 1.1)	1,010, 1.0,	(Min 1.8)	(Min 1.8)
Salado	1623	Surface	1350'	13-5/8"	54.5	J-55	STC	New	17-1/2"	1350	FW	8.4 - 9.0	32 - 34	NC	9	632	1130	2730	853000	514000	1.8	4.3	11.6	7.0
Top of Sait	1950	Intermediate	5200'	9-5/8*	40	HCP-110	LTC	New	12-1/4"	5200	Brine	10 - 10.2	28	NC	10.2	2758	4230	7900	1260000	1266000	1.5	2.9	6.1	6.1
Base of Salt	4950	Production	17145	5-1/2*	20	P110	втс	New	8-3/4"	9250	Cut Brine	8.7 - 8.9	28-29	NC	8.9	4281	11100	12640	641000	548000	2.6	3.0	3.5	3.0
Lamar	5200																							
Beli Canyon	5500																							
Cherry Canyon	6700																							
Brushy Canyon	8401																							
Bone Spring	8925																							
Avalon	8988																							

1 BSS

1 855 9976
2 855 10501
3 851 11026
3 855 11551
Wolfcamp 11851

9976

Kaiser-Francis Oil Company Bell Lake Unit North #119H Casing Assumptions Worksheet

							Ŀ			Ī	Γ	1		Ī	٠,	7,044		-	-		Collanse	- trung	Body	Joint
Formation	Formation Top TVD	interval	di di	Césing Size	Weight (8/ft)	Grade	Thread	Condition	Hole	2 €	Mud Type	Weight	Viscosity	Fluid	Anticipated Mud Weight (ppg)	a a	Collapse (psi)	(pad)	Body Tensile Strength	Joint Tensile Strength	Safety	Safety	Temsile Safety Factor	Terralle Safety Factor
Rustler	1226	Conductor	120,	20"				New		120		Control				(psd)					(Min 1.1)	(Min 1.0)	(Min 1.8)	(Min 1.8)
Salado	1623	Surface	1350	13-5/8"	54.5	1.55	STC	New	17-1/2"	1350	FW	8.4 - 9.0	32 - 34	NC	6	632	1130	2730	853000	514000	1.8	4.3	11.6	7.0
Top of Salt	1950	Intermediate	2300,	9-5/8"	40	HCP-110	LTC	New	12-1/4"	5200	Brine	10 - 10.2	28	NC	10.2	2758	4230	1900	1260000	1266000	1.5	2.9	6.1	6.1
Base of Salt	4950	Production	17145'	5-1/2"	20	P110	BTC	New	8-3/4"	9250	Cut Brine	8.7 - 8.9	28-29	NC	8.9	4281	11100	12640	641000	548000	2.6	3.0	3.5	3.0
Lamar	5200																							
Bell Canyon	5500																							
Cherry Canyon	6700																							
Brushy Canyon	8401																							
Bone Spring	8925																							
Avalon	8988																							
1 BSS	9256																							
2 855	10501																							
3 BSL	11026																							
3 855	11551																							

Kaiser-Francis Oil Company Bell Lake Unit North #119H Casing Assumptions Worksheet

Collepse Burst Tensile Tensile Safety	(Min 1.0) (Min 1.8)	1.8 4.3 11.6 7.0	1.5 2.9 6.1 6.1	2.6 3.0 3.5 3.0											
Joint Tensile Strength		514000	1266000	548000											
Body Tensile		853000	126000	641000											
(psd)	:	2730	96/	12640											
Collapse (pst)		1130	4230	11100											
Max Pore Pressure	(FSG)	632	2758	4281											
Anticipated Mud Weight (ope)	. ,	6	10.2	6.8											
Fhuid		NC	NC	NC											
Viscosity		32 - 34	28	62-82											
Mud Weight Hole	Control	8.4 - 9.0	10 - 10.2	8.7 - 8.9											
Mud Type		ΡW	Brine	Cut Brine 8.7 - 8.9											
2 € 0	120	1350	2200	9250											
Hole		17-1/2"	12-1/4"	8-3/4"											
Thread Condition	New	New	New	New											
Thread		STC	LTC	BTC											
Grade		7-55	HCP-110	0110											
Weight (#/ft)		54.5	40	20											
Casing	20"	13.5/8"	9-5/8"	5-1/2"											
Length	120	1350′	5200'	17145											
interval	Conductor	Surface	Intermediate	Production											
Formation Top TVD	1226	1623	1950	4950	5200	2500	6700	8401	8925	8988	9256	10501	11026	11551	
Formation	Rustler	Salado	Top of Salt	Base of Salt	Lamar	Bell Canyon	Cherry Canyon	Brushy Canyon	Bone Spring	Avaion	1 855	2 855	3 851	3 855	

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

BELL LAKE UNIT NORTH #119H SECTION 1 -T23S-R33E LEA COUNTY, NM

This well/facility is not expected to have H₂S, but due to the sensitive location, the following is submitted as requested.

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Emergency Response Activation and General Responsibilities	3
Individual Responsibilities During An H₂S Release	4
Procedure For Igniting An Uncontrollable Condition	5
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Characteristics Of H ₂ S And SO ₂	8
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EMERGENCY RESPONSE ACTIVATION AND GENERAL RESPONSIBILITIES

Activation of the Emergency Action Plan

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

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

General Responsibilities

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

- 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
- Contact the Company personnel as soon as possible if not at the location. (use the enclosed call list as instructed)

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

INDIVIDUAL RESPONSIBILITIES DURING AN H2S RELEASE

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

All Personnel:

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

Rig Manager/Tool Pusher:

- 1. Check that all personnel are accounted for and their condition.
- 2. Administer or arrange for first aid treatment, and/or call EMTs as needed.
- 3. Identify two people best suited to secure well and perform rescue, and instruct them to don SCBA.
- 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:

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

Kaiser-Francis Oil Company Representative:

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

PROCEDURE FOR IGNITING AN UNCONTROLLABLE CONDITION:

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

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

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

INSTRUCTIONS FOR IGNITION:

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

CONTACTING AUTHORITIES

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

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

Kaiser-Francis Oil Co.	<u>OFFCE</u> 918/494-0000	MOBILE
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
Talliparton	800/844-8451
	000/044-0401

PROTECTION OF THE GENERAL PUBLIC/ROE:

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

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

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

Calculation for the 100 ppm ROE:

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

(H2S concentrations in decimal form)

10,000 ppm +=1.+

1,000 ppm +=.1+

100 ppm +=.01+

10 ppm +=.001+

Calculation for the 500 ppm ROE:

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

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

ROE for 100 PPM

X=[(1.589)(.0150)(200)] (0.6258)

X=2.65'

ROE for 500 PPM

X=[(.4546)(.0150)(200)] (0.6258)

X=1.2'

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

PUBLIC EVACUATION PLAN:

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

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

CHARACTERISTICS OF H2S AND SO2

Common	Chemical	Specific	Threshold	Hazardous	Lethal
Name	Formula	Gravity	Limit	Limit	Concentration
Hydrogen		1.189			
Sulfide	H₂S	Air = 1	10 ppm	100 ppm	600 ppm
		2.21			
Sulfur Dioxide	SO ₂	Air = 1	2 ppm	N/A	1000 ppm

TRAINING:

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

PUBLIC RELATIONS

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

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

All contract and Kaiser-Francis employees are instructed <u>NOT</u> 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.

Kaisar Eranaia Oil Company	PBH, BLUN 1194(330 FML & 356 FWL 5
Kaiser Francis Oil Company	TO at 1745.1
Kaiser-Francis Oil Company Lea County, NM (NAD 27)	
Bell Lake Unit North 119H	
Dell Lake Ulif North (191	
Est KB=23'	
Design #1	
 	
· -	
DESIGN YARGET DÉTAILS	
Name TVD +N/-3 +E/-W Northing Easting Latitude Longitude	
KOP BLUN 119H 8877.0 -383.1 -28.5 458454.22 747204.68 32' 18' 58.28 N 103' 31' 58.796 W FTP BLUN 119H (2800' FNL & 380' FNL 39c 1) 9280.0 219.9 -31.4 486027.20 747199.80 32' 20' 1.180 N 103' 31' 58.201 W	
PBHL BLUN 119H(330' FHL & 380' FWL Sec 36) 9260.0 7769.7 45.6 433677.00 747136.70 32' 21' 16.910 N 103' 31' 68.891 W	
SECTION DETAILS	
MD Inc A2) TVD +N/-S +E/-W Dieg TFace VSect Annotation 0.0 0.00 0.00 0.0 0.0 0.0 0.0 0.0 0.0 0	
4810.2 6.00 184.30 4893.7 -15.7 -1.2 2.00 184.30 -15.7 Start 3084.8 hold at 4810.2 MD 7894.9 6.00 184.30 7877.3 -337.4 -26.4 0.00 0.00 -337.1 Start Drop 2.00	
8185.0 0.00 0.00 8177.0 -153.1 -28.5 0.00 180.00 -362.7 Start 809.0 hold at 8185.0 MD	
9595.0 90.00 359.51 9250.0 219.9 -31.4 10.00 359.51 220.2 Start 7559.1 hold at 9595.0 MD 17145.1 90.00 359.51 9250.0 7769.7 -46.5 0.00 0.00 7770.3 TD at 17145.1	
WELL DETAILS: Bell Lake Unit North 119H	
+N/-S +E/-W Northing Easting Latitude Longitude	
+N/-S +E/-W Northing Easting Latitude Longitude 0.0 0.0 485607.30 747231.20 32* 19* 59.020 N 103* 31* 58.455 W	
Start Butle 240	
Start SIMA hold at 4419.2 WO Constitution to Grid North]
Futures 24 KD a C1. Well & 2554 hunt (See KD122)	
+NU-S +ELW Northing Easting Luittude Longitude 0.0 0.0 485807.30 72731.20 32* 91* 58.020 N 103* 31* 68.455 W Geodetic Datum, NAD 1927 (ADDCON CONUS) Geodetic Ellipsoid: Clarks 1885 Geodetic Ellipsoid: Clarks 1885	
	1
Geodetic System: US State Palane 1927 (Exact solution)	
Long: 195-31 SAJAS W Northing: 48807.30 Esting: 747231.20 Magnetic Model: CRRF2015 Sample Date: 27-Sep-17 Mag Decimation: 6,91*]
Magnetic Model: IGRF2018 Sumple Date: 27-Sep-17 Magnetic Model: 44	
Mag Decimator: 8,83* Dip Angle: 60,17* Mag Filed Strength 4797.3348807nT To convert a Magnetic Direction to a Grid Direction, Add 8.49*	
To convert a Magnetic Direction to a True Direction, Add 6.91 East	Start 7550.9 hold at 9550.0 MD
To convert a True Direction to a Grid Direction, Subtract 0.43*	FTP BLUN 119H (2500 FHL & 350 FML Sec 1)
	Start DLS 10,00 TFO 333.51
DIRECTIONAL SERVICES, LLC.	Start Drop -2,00
	KDP BLUN 11994
Suin Criss - 2.00	
- Start 60(3) hold of 2193.3 MD	
RDP BLUN TEM	
T Stan (24 1900 1975)	
FT9 82.00 119H (2507 FML & 357 FML 5ac) 1) PRES. 82.00 119H (357 FML & 357 FML 5ac)	c36)
Sour 1550.1 hold at 9555.0 MD	
	j



Kaiser Francis Oil Company

Lea County, NM (NAD 27)
Bell Lake Unit Pad
Bell Lake Unit North 119H

Wellbore #1

Plan: Design #1

Standard Planning Report

27 September, 2017

Kaiser-Francis Oil Company



Database: Company: Project:

EDM 5000.14 Single User Db Kaiser Francis Oil Company Lea County, NM (NAD 27) Bell Lake Unit Pad

Well:

Site:

Bell Lake Unit North 119H

Wellbore: Design:

Wellbore #1 Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: **Survey Calculation Method:** Well Bell Lake Unit North 119H

Well @ 3551.0usft (Est KB=23') Well @ 3551.0usft (Est KB=23')

Grid

Minimum Curvature

Project

Lea County, NM (NAD 27)

Map System:

US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS)

Geo Datum:

Map Zone:

New Mexico East 3001

System Datum:

Mean Sea Level

Site

Bell Lake Unit Pad

Site Position: From:

Мар

Northing: Easting:

454,849.70 usft 747.377.60 usft

Latitude: Longitude: 32° 14' 52.674 N

Position Uncertainty:

Slot Radius: 0.0 usft

13-3/16 "

Grid Convergence:

103° 31' 59.440 W 0.43°

Well

Bell Lake Unit North 119H

Well Position +N/-S

+E/-W

30.957.6 usft -146.4 usft Northing: Easting:

485,807.30 usft 747.231.20 usft Latitude: Longitude: 32° 19' 59.020 N

Position Uncertainty

0.0 usft

Wellhead Elevation:

Ground Level:

103° 31' 58.455 W 3,528.0 usft

Wellbore

Wellbore #1

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle (°)

Field Strength (nT)

IGRF2015

2017/09/27

6.91

60.17

47,977,53368607

Design

Design #1

Version:

Audit Notes:

Phase:

PROTOTYPE

Tie On Depth:

0.0

Vertical Section:

Depth From (TVD) (usft) 0.0

+N/-S (usft) 0.0

+E/-W (usft) 0.0

Direction (°) 359.30

Plan Survey Tool Program

Depth From (usft)

Depth To (usft)

Survey (Wellbore)

Date 2017/09/27

Tool Name

Remarks

0.0

17,145.1 Design #1 (Wellbore #1)

OWSG MWD - Standard

Plan Sections

Platt Section	5									•
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	• •
4,510.0	0.00	0.00	4,510.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,810.2	6.00	184.30	4,809.7	-15.7	-1.2	2.00	2.00	0.00	184.30	
7,894.8	6.00	184.30	7,877.3	-337.4	-25.4	0.00	0.00	0.00	0.00	
8,195.0	0.00	0.00	8,177.0	-353.1	-26.5	2.00	-2.00	0.00	180.00	
8,695.0	0.00	0.00	8,677.0	-353.1	-26.5	0.00	0.00	0.00	0.00	KOP BLUN 119H
9,595.0	90.00	359.51	9,250.0	219.9	-31.4	10.00	10.00	-0.05	359.51	
17,145.1	90.00	359.51	9,250.0	7,769.7	-95.5	0.00	0.00	0.00	0.00	PBHL BLUN 119H(:



Database: Company: Project: Site: Well:

and the state of t EDM 5000.14 Single User Db Kaiser Francis Oil Company Lea County, NM (NAD 27) Bell Lake Unit Pad Bell Lake Unit North 119H

Wellbore: Design:

Wellbore #1 Design #1

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Local Co-ordinate Reference: Well Bell Lake Unit North 119H Well @ 3551.0usft (Est KB=23') Well @ 3551.0usft (Est KB=23')

Grid

Depth (usft)	Measured			Vertical			Vertical	Dogleg	Build	Turn
0.0 0.00 0.00 0.00 0.00 0.0 0.0 0.0 0.0				Depth			Section	Rate		
100.0										
200.0										
300.0 0.00 0.00 300.0 300.0 0.0 0.0 0.0					0.0					
400.0 0.00 0.00 400.0 0.0 0.0 0.0 0.00 0	200.0		0.00	200.0		0.0	0.0			0.00
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\$500.0 0.00 0.00 500.0 0.00 0.00 0.00 0.									0.00	0.00
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TODO										
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900.0 0.00 0.00 900.0 0.0 0.0 0.0 0.00 0										
1,000.0 0.00 0.00 1,000.0 0.0 0.0 0.0 0.0 0.0 0.00 0.0										
1,100.0 0.00 0.00 1,200.0 0.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00	900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0 0.00 0.00 1,200.0 0.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00	1 000 0	0.00	0.00	1 000 0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0 0.00 0.00 1,200.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00 0.0	1 100.0									
1,300.0 0.00 0.00 1,300.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00 0.										
1,400.0 0.00 0.00 1,400.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00 0.				•						
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1,600.0 0.00 0.00 1,500.0 0.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00	1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0 0.00 0.00 1,500.0 0.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00	1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0 0.00 0.00 1,700.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00 1,800.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00 1,900.0 0.00 0.00 0.00 0.00 0.00 0.00 0.0										
1,800.0 0.00 0.00 1,800.0 0.0 0.0 0.0 0.00										
1,900.0 0.00 0.00 1,900.0 0.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00										
2,000.0 0.00 0.00 2,000.0 0.0 0.0 0.0 0.0 0.0 0.00 0.0										
2,100.0										
2,200.0 0.00 0.00 2,200.0 0.0 0.0 0.0 0.0 0.00 0.0										
2,300.0 0.00 0.00 2,300.0 0.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00	2,100.0			2,100.0						0.00
2,400.0 0.00 0.00 2,400.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00 0.	2,200.0	. 0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0 0.00 0.00 2,400.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00 0.	2.300.0	0.00	0.00	2.300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0 0.00 0.00 2,500.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00 0.										
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2,800.0 0.00 0.00 2,800.0 0.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00										
2,900.0 0.00 0.00 2,900.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00 0.0										
3,000.0 0.00 0.00 3,000.0 0.0 0.0 0.0 0.0 0.00 0.0		0.00								
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3,900.0 0.00 0.00 3,900.0 0.0 0.0 0.0 0.00										
3,900.0 0.00 0.00 3,900.0 0.0 0.0 0.0 0.00	3,800.0	0.00	0.00	3,800.0		0.0	0.0	0.00	0.00	0.00
4,000.0 0.00 0.00 4,000.0 0.0 0.0 0.0 0.00										0.00
4,100.0 0.00 0.00 4,100.0 0.0 0.0 0.0 0.00	4 000 O	0.00	0.00	4 000 O	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0 0.00 0.00 4,200.0 0.0 0.0 0.0 0.00										
4,300.0 0.00 0.00 4,300.0 0.0 0.0 0.0 0.00										
4,400.0 0.00 0.00 4,400.0 0.0 0.0 0.0 0.00										
4,500.0 0.00 0.00 4,500.0 0.0 0.0 0.0 0.00										
4,510.0 0.00 0.00 4,510.0 0.0 0.0 0.0 0.00 0.00 0.00 Start Build 2.00 4,600.0 1.80 184.30 4,600.0 -1.4 -0.1 -1.4 2.00 2.00 0.00 4,700.0 3.80 184.30 4,699.9 -6.3 -0.5 -6.3 2.00 2.00 0.00	4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,510.0 0.00 0.00 4,510.0 0.0 0.0 0.0 0.00 0.00 0.00 Start Build 2.00 4,600.0 1.80 184.30 4,600.0 -1.4 -0.1 -1.4 2.00 2.00 0.00 4,700.0 3.80 184.30 4,699.9 -6.3 -0.5 -6.3 2.00 2.00 0.00	4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	ი იი
Start Build 2.00 4,600.0 1.80 184.30 4,600.0 -1.4 -0.1 -1.4 2.00 2.00 0.00 4,700.0 3.80 184.30 4,699.9 -6.3 -0.5 -6.3 2.00 2.00 0.00										
4,600.0 1.80 184.30 4,600.0 -1.4 -0.1 -1.4 2.00 2.00 0.00 4,700.0 3.80 184.30 4,699.9 -6.3 -0.5 -6.3 2.00 2.00 0.00			0.00	3,510.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0 3.80 184.30 4,699.9 -6.3 -0.5 -6.3 2.00 2.00 0.00			194 20	4 600 0	4 4	0.4	4.4	2.00	2.00	0.00
	4,000.0									
4,800.0 5.80 184.30 4,799.5 -14.6 -1.1 -14.6 2.00 2.00 0.00	4 700 0		3 8/1 (1)	A NUU U	-6.3	-0.5	-6.3	2.00	2.00	0.00



Database: Company: Project: Site:

Well:

EDM 5000.14 Single User Db Kaiser Francis Oil Company Lea County, NM (NAD 27)

Bell Lake Unit Pad Bell Lake Unit North 119H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Bell Lake Unit North 119H Well @ 3551.0usft (Est KB=23') Well @ 3551.0usft (Est KB=23')

Grid

nod 0							· · · · · · · · · · · · · · · · · · ·		
ned Survey		•							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.0	6.00	184.30	4,899.0	-25.0	-1.9	-25.0	0.00	0.00	0.00
5,000.0	6.00	184.30	4,998.4	-35.5	-2.7	-35.4	0.00	0.00	0.00
5,100.0	6.00	184.30	5,097.9	-45.9	-3.4	-45.9	0.00	0.00	0.00
5,200.0	6.00	184.30	5,197.3	-56.3	-4.2	-56.3	0.00	0.00	0.00
5,300.0	6.00	184.30	5,296.8	-66.8	-5.0	-66.7	0.00	0.00	0.00
5,400.0	6.00	184.30	5,396.2	-77.2	-5.8	-77.1	0.00	0.00	0.00
5,500.0	6.00	184.30	5,495.7	-87.6	-6.6	-87.5	0.00	0.00	0.00
5,600.0	6.00	184.30	5,595.1	-98.0	-7.4	-98.0	0.00	0.00	0.00
5,700.0	6.00	184.30	5,694.6	-108.5	-8.2	-108.4	0.00	0.00	0.00
5,800.0	6.00	184.30	5,794.0	-118.9	-8.9	-118.8	0.00	0.00	0.00
5,900.0	6.00	184.30	5,893.5	-129.3	-9.7	-129.2	0.00	0.00	0.00
6,000.0	6.00	184.30	5,992.9	-139.8	-10.5	-139.6	0.00	0.00	0.00
6,100.0	6.00	184.30	6,092.4	-150.2	-11.3	-150.1	0.00	0.00	0.00
6,200.0	6.00	184.30	6,191.8	-160.6	-12.1	-160.5	0.00	0.00	0.00
6,300.0	6.00	184.30	6,291,3	-171.1	-12.9	-170.9	0.00	0.00	0.00
6,400.0	6.00	184.30	6,390.7	-181.5	-13.6	-181.3	0.00	0.00	0.00
6,500.0	6.00	184.30	6,490,2	-191.9	-14.4	-191.7	0.00	0.00	0.00
6,600.0	6.00	184.30	6,589.6	-202.4	-15.2	-202.2	0.00	0.00	0.00
6,700.0	6.00	184.30	6,689.1	-212.8	-16.0	-212.6	0.00	0.00	0.00
6,800.0	6.00	184.30	6,788.5	-223.2	-16.8	-223,0	0.00	0.00	0.00
6,900.0	6.00	184.30	6,888.0	-233.6	-17.6	-233.4	0.00	0.00	0.00
7,000.0	6.00	184.30	6,987.4	-244.1	-18.3	-243.8	0.00	0.00	.0.00
7,100.0	6.00	184.30	7,086.9	-254.5	-19.1	-254.3	0.00	0.00	0.00
7,200.0	6.00	184.30	7,186.3	-264.9	-19.9	-264.7	0.00	0.00	0.00
7,300.0	6.00	184.30	7,285.8	-275.4	-20.7	-275.1	0.00	0.00	0.00
7,400.0	6.00	184.30	7,385.2	-285.8	-21.5	-285.5	0.00	0.00	0.00
7,500.0	6.00	184.30	7,484.7	-296.2	-22.3	-295.9	0.00	0.00	0.00
7,600.0	6.00	184.30	7,584.1	-306.7	-23.0	-306.4	0.00	0.00	0.00
7,700.0	6.00	184.30	7,683.6	-317.1	-23.8	-316.8	0.00	0.00	0.00
7,800.0	6.00	184.30	7,783.1	-327.5	-24.6	-327.2	0.00	0.00	0.00
7,894.8	6.00	184.30	7,877.3	-337.4	-25.4	-337.1	0.00	0.00	0.00
Start Drop			.,	••••		33,	0.00	5.55	3.33
7,900.0	5.90	184.30	7,882.5	-337.9	-25.4	-337.6	2.00	-2.00	0.00
8,000.0	3.90	184.30	7,982.1	-346.5	-26.0	-346.1	2.00	-2.00	0.00
8,100.0	1.90	184.30	8,082.0	-351.5	-26.4	-351.2	2.00	-2.00	0.00
8.195.0	0.00	0.00	8,177.0	-353.1	-26.5	-352.7	2.00	-2.00	0.00
-,	0 hold at 8195.		2, 1.1.3		20.0	302.1	2.00	2.00	0.00
8,200.0	0.00	0.00	8,182.0	-353.1	-26.5	-352.7	0.00	0.00	0.00
8,300.0	0.00	0.00	8,282.0	-353.1	-26.5	-352.7	0.00	0.00	0.00
8,400.0	0.00	0.00	8,382.0	-353.1	-26.5	-352.7	0.00	0.00	0.00
8,500.0	0.00	0.00	8,482.0	-353.1	-26.5	-352.7	0.00	0.00	0.00
8.600.0	0.00	0.00	8,582.0	-353.1	-26.5	-352,7	0.00	0.00	0.00
8,695.0	0.00	0.00	8,677.0	-353.1	-26.5	-352.7	0.00	0.00	0.00
•	10.00 TFO 359		-,				2.24		2.23
8,700.0	0.50	359.51	8,682.0	-353.1	-26.5	-352.7	10.00	10.00	0.00
8,800.0	10.50	359.51	8,781.4	-343.5	-26.6	-343.1	10.00	10.00	0.00
8,900.0	20.50	359.51	8,877.6	-316.8	-26.8	-316.4	10.00	10.00	0.00
9,000.0	30.50	359.51	8,967.8	-273.8	-27.2	-273.5	10.00	10.00	0.00
9,100.0 9,200.0	40.50 50.50	359.51 359.51	9,049.1	-215.8 -144.6	-27.7 -28.3	-215.5 -144.2	10.00	10.00	0.00 0.00
9,200.0	50.50 60.50	359.51 350.51	9,119.1	-144.6	-28.3 <i>-</i> 29.0	-144.2	10.00	10.00	0.00
9,300.0		359.51 359.51	9,175.7 9,217.1	-62.3	-29.0 -29.8	-61.9	10.00 10.00	10.00 10.00	0.00
	70.50			28.6		29.0			
9,500.0	80.50	359.51	9,242.1	125.3	-30.6	125.6	10.00	10.00	0.00



Database: Company: Project: Site: Well:

Control Section 2018 (Section 2018) And the Control Co EDM 5000.14 Single User Db Kaiser Francis Oil Company Lea County, NM (NAD 27) Bell Lake Unit Pad

Bell Lake Unit North 119H

Wellbore: Wellbore #1 Design #1 Design:

Local Co-ordinate Reference: Well Bell Lake Unit North 119H

TVD Reference: MD Reference:

North Reference: **Survey Calculation Method:** Well @ 3551.0usft (Est KB=23') Well @ 3551.0usft (Est KB=23')

Grid

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
9,595.0	90.00	359.51	9,250.0	219.9	-31.4	220.2	10.00	10.00	0.00
	.1 hold at 9595		9,230.0	219.5	-31.4	220.2	10.00	10.00	0.00
9.600.0	90.00	359.51	9,250.0	224.8	-31.4	225.2	0.00	0.00	0.00
9,700.0	90.00	359.51	9,250.0	224.6 324.8	-31.4	325.2	0.00	0.00	0.00
9,800.0	90.00	359.51	9,250.0	424.8	-33.1	425.2	0.00	0.00	0.00
9,900.0	90.00	359.51	9,250.0	524.8	-34.0	525.2	0.00	0.00	0.00
10,000.0	90.00	359.51	9,250.0	624.8	-34.8	625.2	0.00	0.00	0.00
10,100.0	90.00	359.51	9,250.0	724.8	-35.7	725.2	0.00	0.00	0.00
10,200.0	90.00	359.51	9,250.0	824.8	-36.5	825.2	0.00	0.00	0.00
10,300.0	90.00	359.51	9,250.0	924.8	-37.4	925.2	0.00	0.00	0.00
	90.00	359.51	9,250.0		-38.2		0.00	0.00	0.00
10,400.0				1,024.8		1,025.2			0.00
10,500.0	90.00	359.51	9,250.0	1,124.8	-39.1	1,125.2	0.00	0.00	0.00
10,600.0	90.00	359.51	9,250.0	1,224.8	-39.9	1,225.2	0.00	0.00	0.00
10,700.0	90.00	359.51	9,250.0	1,324.8	-40.8	1,325.2	0.00	0.00	0.00
10,800.0	90.00	359.51	9,250.0	1,424.8	-4 1.6	1,425.2	0.00	0.00	0.00
10,900.0	90.00	359.51	9,250.0	1,524.8	-42.5	1,525.2	0.00	0.00	0.00
11,000.0	90.00	359.51	9,250.0	1,624.8	-43.3	1,625.2	0.00	0.00	0.00
11,100.0	90.00	359.51	9,250.0	1,724.8	-44.2	1,725.2	0.00	0.00	0.00
11,200.0	90.00	359.51	9,250.0	1,824.8	-45.0	1,825.2	0.00	0.00	0.00
11,300.0	90.00	359.51	9,250.0	1,924.8	-45.9	1,925.2	0.00	0.00	0.00
11,400.0	90.00	359.51	9,250.0	2,024.8	-46.7	2,025.2	0.00	0.00	0.00
11,500.0	90.00	359.51	9,250.0	2,124.8	-47.6	2,125.2	0.00	0.00	0.00
11,600.0	90.00	359.51	9,250.0	2,224.8	-48.4	2,125.2	0.00	0.00	0.00
11,700.0	90.00	359.51	9,250.0	2,324.8	-49.3	2,325.2	0.00	0.00	0.00
11,800.0	90.00	359.51	9,250.0	2,424.8	-50.1	2,425.2	0.00	0.00	0.00
•			•						
11,900.0	90.00	359.51	9,250.0	2,524.8	-51.0	2,525.2	0.00	0.00	0.00
12,000.0	90.00	359.51	9,250.0	2,624.8	- 51.8	2,625.2	0.00	0.00	0.00
12,100.0	90.00	359.51	9,250.0	2,724.7	-52.7	2,725.2	0.00	0.00	0.00
12,200.0	90.00	359.51	9,250.0	2,824.7	-53.5	2,825.2	0.00	0.00	0.00
12,300.0	90.00	359.51	9,250.0	2,924.7	-54.4	2,925.2	0.00	0.00	0.00
12,400.0	90.00	359.51	9,250.0	3,024.7	-55.2	3.025.2	0.00	0.00	0.00
12,500.0	90.00	359.51	9,250.0	3,124.7	-56.1	3,125.2	0.00	0.00	0.00
12,600.0	90.00	359.51	9,250.0	3,224.7	-56.9	3,225.2	0.00	0.00	0.00
12,700.0	90.00	359.51	9,250.0	3,324.7	-57.8	3,325.2	0.00	0.00	0.00
12,800.0	90.00	359.51	9,250.0	3,424.7	-58.6	3,425.2	0.00	0.00	0.00
12,900.0	90.00	359.51	9,250.0	3,524.7	-59.5	3,525.2	0.00	0.00	0.00
13,000.0	90.00	359.51	9,250.0	3,524.7 3,624.7	-59.5 -60.3	3,525.2	0.00	0.00	0.00
13,100.0	90.00	359.51	9,250.0	3,024.7 3,724.7	-60.3 -61.2	3,625.2	0.00	0.00	0.00
13,100.0	90.00	359.51	9,250.0	3,72 4 .7 3,824.7	-61.2 -62.0	3,725.2	0.00	0.00	0.00
13,200.0	90.00	359.51	9,250.0	3,824.7 3,924.7	-62.0 -62.9	3,825.2	0.00	0.00	0.00
•			•	•					
13,400.0	90.00	359.51	9,250.0	4,024.7	-63.7	4,025.2	0.00	0.00	0.00
13,500.0	90.00	359.51	9,250.0	4,124.7	-64.6	4,125.2	0.00	0.00	0.00
13,600.0	90.00	359.51	9,250.0	4,224.7	-65.4	4,225.2	0.00	0.00	0.00
13,700.0	90.00	359.51	9,250.0	4,324.7	-66.3	4,325.2	0.00	0.00	0.00
13,800.0	90.00	359.51	9,250.0	4,424.7	-67.1	4,425.2	0.00	0.00	0.00
13,900.0	90.00	359.51	9,250.0	4,524.7	-67.9	4,525.2	0.00	0.00	0.00
14,000.0	90.00	359.51	9,250.0	4,624.7	-68.8	4,625.2	0.00	0.00	0.00
14,100.0	90.00	359.51	9,250.0	4,724.7	-69.6	4,725.2	0.00	0.00	0.00
14,100.0	90.00	359.51	9,250.0	4,724.7 4,824.7	-09.6 -70.5	4,725.2 4,825.2		0.00	0.00
14,200.0	90.00	359.51 359.51	9,250.0 9,250.0	4,824.7 4,924.7	-70.5 -71.3	4,825.2 4,925.2	0.00 0.00	0.00	0.00
14,400.0	90.00	359.51	9,250.0	5,024.7	-72.2	5,025.2	0.00	0.00	0.00
14,500.0	90.00	359.51	9,250.0	5,124.7	-73.0	5,125.2	0.00	0.00	0.00
14,600.0	90.00	359.51	9,250.0	5,224.7	-73.9	5,225.2	0.00	0.00	0.00
14,700.0	90.00	359.51	9,250.0	5,324.7	-74.7	5,325.2	0.00	0.00	0.00



Database: Company: EDM 5000.14 Single User Db Kaiser Francis Oil Company Lea County, NM (NAD 27)

Project: Bell Lake Unit Pad Site:

Well: Bell Lake Unit North 119H Wellbore: Wellbore #1

Design: Design #1

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Local Co-ordinate Reference: Well Bell Lake Unit North 119H

Well @ 3551.0usft (Est KB=23') Well @ 3551.0usft (Est KB=23')

Grid

Minimum Curvature

Measured			Vertical			Vertical	Donloss	Duild	T
	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,800.0	90.00	359.51	9,250.0	5,424.7	-75.6	5,425.2	0.00	0.00	0.00
14,900.0	90.00	359.51	9,250.0	5,524.6	-76.4	5,525.2	0.00	0.00	0.00
15,000.0	90.00	359.51	9,250.0	5,624.6	-77.3	5,625.2	0.00	0.00	0.00
15,100.0	90.00	359.51	9,250.0	5,724.6	-78.1	5,725.2	0.00	0.00	0.00
15,200.0	90.00	359.51	9,250.0	5,824.6	-79.0	5,825.2	0.00	0.00	0.00
15,300.0	90.00	359.51	9,250.0	5,924.6	-79.8	5,925.2	0.00	0.00	0.00
15,400.0	90.00	359.51	9,250.0	6,024.6	-80.7	6,025.2	0.00	0.00	0.00
15,500.0	90.00	359.51	9,250.0	6,124.6	-81.5	6,125.2	0.00	0.00	0.00
15,600.0	90.00	359.51	9,250.0	6,224.6	-82.4	6,225.2	0.00	0.00	0.00
15,700.0	90.00	359.51	9,250.0	6,324.6	-83.2	6,325.2	0.00	0.00	0.00
15,800.0	90.00	359.51	9,250.0	6,424.6	-84.1	6,425.2	0.00	0.00	0.00
15,900.0	90.00	359.51	9,250.0	6,524.6	-84.9	6,525.2	0.00	0.00	0.00
16,000.0	90.00	359.51	9,250.0	6,624.6	-85.8	6,625.2	0.00	0.00	0.00
16,100.0	90.00	359.51	9,250.0	6,724.6	-86.6	6,725.2	0.00	0.00	0.00
16,200.0	90.00	359.51	9,250.0	6,824.6	-87.5	6,825.2	0.00	0.00	0.00
16,300.0	90.00	359.51	9,250.0	6,924.6	-88.3	6,925.2	0.00	0.00	0.00
16,400.0	90.00	359.51	9,250.0	7,024.6	-89.2	7,025.2	0.00	0.00	0.00
16,500.0	90.00	359.51	9,250.0	7,124.6	-90.0	7,125.2	0.00	0.00	0.00
16,600.0	90.00	359.51	9,250.0	7,224.6	-90.9	7,225.2	0.00	0.00	0.00
16,700.0	90.00	359.51	9,250.0	7,324.6	-91.7	7,325.2	0.00	0.00	0.00
16,800.0	90.00	359.51	9,250.0	7,424.6	-92.6	7,425.2	0.00	0.00	0.00
16,900.0	90.00	359.51	9,250.0	7,524.6	-93.4	7,525.2	0.00	0.00	0.00
17,000.0	90.00	359.51	9,250.0	7,624.6	-94.3	7,625.2	0.00	0.00	0.00
17,100.0	90.00	359.51	9,250.0	7,724.6	-95.1	7,725.2	0.00	0.00	0.00
17,145.1	90.00	359.51	9,250.0	7,769.7	-95.5	7,770.3	0.00	0.00	0.00
TD at 17145	.1								

Design Targets

{	
Target	Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP BLUN 119H - plan hits target ce - Point	0.00 enter	0.00	8,677.0	-353.1	-26.5	485,454.22	747,204.66	32° 19' 55.528 N	103° 31' 58.795 W
FTP BLUN 119H (260 - plan hits target ce - Point	0.00 inter	0.00	9,250.0	219.9	-31.4	486,027.20	747,199.80	32° 20′ 1.198 N	103° 31' 58.801 W
PBHL BLUN 119H(33) - plan hits target ce - Point	0.00 Inter	0.01	9,250.0	7,769.7	-95.5	493,577.00	747,135.70	32° 21' 15.910 N	103° 31' 58.891 W



Database: Company: Project:

EDM 5000.14 Single User Db Kaiser Francis Oil Company Lea County, NM (NAD 27)

Site: Well: Bell Lake Unit Pad Bell Lake Unit North 119H

Wellbore: Design:

Wellbore #1 Design #1

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

The second secon Local Co-ordinate Reference: Well Bell Lake Unit North 119H

Well @ 3551.0usft (Est KB=23')

Well @ 3551.0usft (Est KB=23')

Grid

Plan An	notations					
	Measured	Vertical	Local Cool	rdinates		
	Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
	4,510.0	4.510.0	0.0	0.0	Start Build 2.00	
	4,810.2	4,809.7	-15.7	-1.2	Start 3084.6 hold at 4810.2 MD	
	7,894.8	7,877.3	-337.4	-25.4	Start Drop -2.00	
	8,195.0	8,177.0	-353.1	-26.5	Start 500.0 hold at 8195.0 MD	
	8,695.0	8,677.0	-353.1	-26.5	Start DLS 10.00 TFO 359.51	
	9,595.0	9,250.0	219.9	-31.4	Start 7550.1 hold at 9595.0 MD	
	17,145.1	9,250.0	7,769.7	-95.5	TD at 17145.1	



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

SIGNATUR <u>E:</u>	Alre Ho
TITLE:	QUALITY ASSURANCE
DATE:	10/3/2017



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

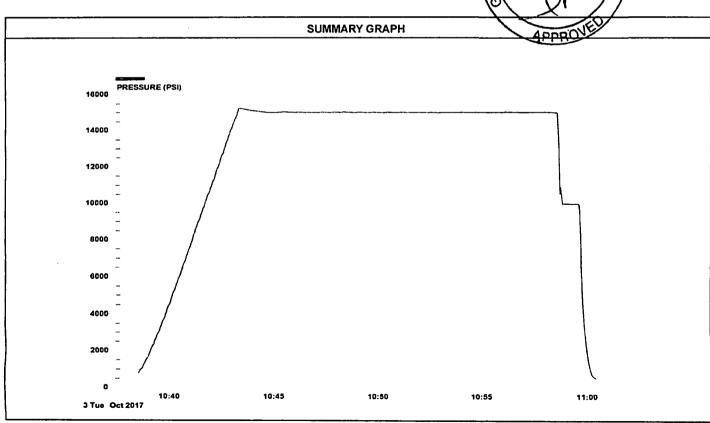
Length: 35'

Inner Diameter: 3.0"
Pressure Test: Pass

Internal Inspection: N/A

Fitting Type: 10K Flange ExE





Report Created: 3-Oct-17



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



APD ID: 10400023390

Submission Date: 10/24/2017

Operator Name: KAISER FRANCIS OIL COMPANY

Well Number: 119H

algunghtangana Sepanghtangana Bespinghtangana

Well Name: BELL LAKE UNIT NORTH

Well Halliber: 11511

Show Final Text

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Bell_Lake_Unit_North_119H_ROADS_20171022155823.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:

Bell_Lake_Unit_North_119H_ACCESS_ROAD_20171022160116.pdf

New road type: RESOURCE

Length: 16208

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:

Well Name: BELL LAKE UNIT NORTH Well Number: 119H

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

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Bell_Lake_Unit_North_119H_1_Mile_Map_20171022160441.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

Well Name: BELL LAKE UNIT NORTH Well Number: 119H

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_North_119H_Wtr_Source_Map_20171022160657.pdf

Water source comments: Water 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:

Well Name: BELL LAKE UNIT NORTH Well Number: 119H

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 containment attachment:

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

FACILITY

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 containment attachment:

Well Name: BELL LAKE UNIT NORTH

Weil Number: 119H

Waste disposal type: HAUL TO COMMERCIAL

Disposal location ownership: COMMERCIAL

FACILITY

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 containment attachment:

Waste disposal type: HAUL TO COMMERCIAL

Disposal location ownership: COMMERCIAL

FACILITY

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

Well Name: BELL LAKE UNIT NORTH Well Number: 119H

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 North 119H Rig Layout 20171022161914.pdf Bell_Lake_Unit_North_119H_Well_Site_Layout_20171022161927.pdf Comments:

Section 10 - Plans for Surface Reclamation

Multiple Well Pad Name: BELL LAKE NORTH Type of disturbance: New Surface Disturbance

Multiple Well Pad Number: 1

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.

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

Well pad proposed disturbance

(acres):

Road proposed disturbance (acres):

Powerline proposed disturbance

(acres):

Pipeline proposed disturbance

Total proposed disturbance:

(acres):

Other proposed disturbance (acres):

Well pad interim reclamation (acres):

Road interim reclamation (acres): 9.3

Powerline interim reclamation (acres):

Pipeline interim reclamation (acres): 0 (acres):

Other interim reclamation (acres): 0

Total interim reclamation: 15.27

Well pad long term disturbance

(acres): 3.44

Road long term disturbance (acres):

Powerline long term disturbance

Pipeline long term disturbance

(acres): 0

Other long term disturbance (acres): 0

Total long term disturbance: 9.02

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.

Well Name: BELL LAKE UNIT NORTH Well Number: 119H

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: N/A

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: N/A

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:

Well Name: BELL LAKE UNIT NORTH Well Number: 119H

PLS pounds per acre:

Proposed seeding season:

Seed Summary

Pounds/Acre

Total pounds/Acre:

Seed reclamation attachment:

Seed Type

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:

Well Name: BELL LAKE UNIT NORTH	Well Number: 119H
DOD Local Office:	
NPS Local Office:	
STANDARD FOR THE STANDARD LAND CONTROL	COMPOSTURIO PUBLICIANO CANTALIBADO
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: STATE GOVERNMENT	
Other surface owner description:	
BIA Local Office:	
BOR Local Office:	
COE Local Office:	
DOD Local Office:	
NPS Local Office:	
Military Local Office:	
USFWS Local Office:	
Other Local Office:	
USFS Region:	
USFS Forest/Grassland:	USFS Ranger District:
Section 12 - Other Information	

Use APD as ROW?

Operator Name: KAISER FRANCIS OIL COMPANY

Right of Way needed? NO

ROW Type(s):

Well Name: BELL LAKE UNIT NORTH Well Number: 119H

ROW Applications

SUPO Additional Information: SUPO will be attached with APD.

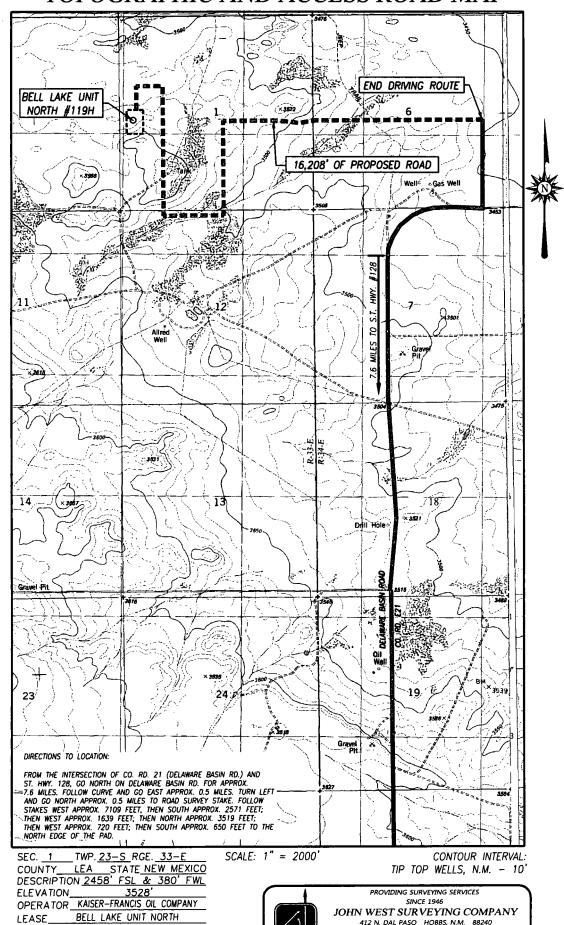
Use a previously conducted onsite? YES

Previous Onsite information: Onsite conducted 07/20/2017 by Fernando Banos (BLM), Matt Warner & Melanie Wilson (Kaiser-Francis), Jimmy Harrison (John West Surveying) and Jeff (APAC archaeologist).

Other SUPO Attachment

Bell_Lake_Unit_North_119H_SPCC_PLAN_20171022163108.pdf Bell_Lake_Unit_North_119H_SUP_20171022164643.pdf

TOPOGRAPHIC AND ACCESS RUAD MAP

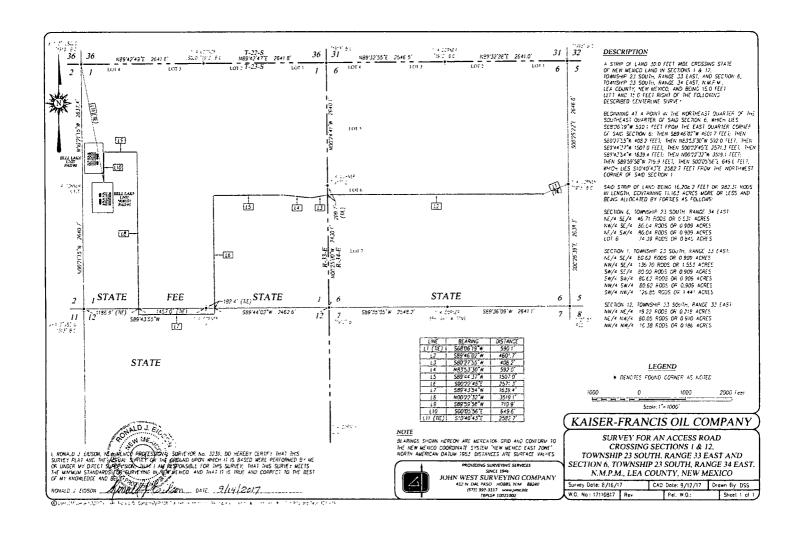


(575) 393-3117 www.jwsc.biz

TBPLS# 10021000

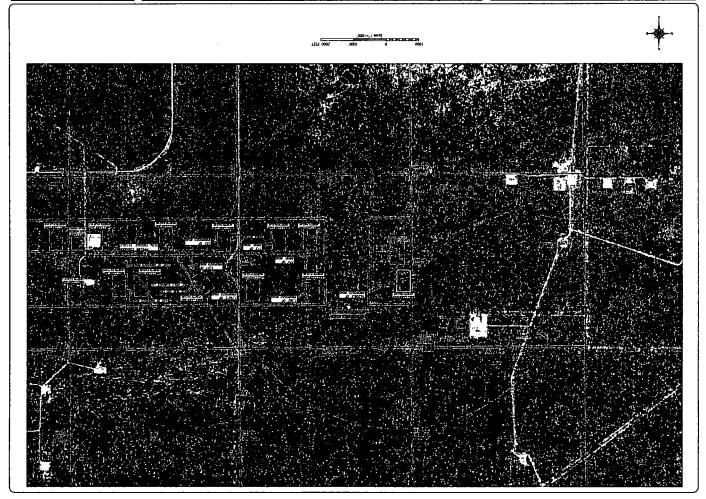
U.S.G.S. TOPOGRAPHIC MAP

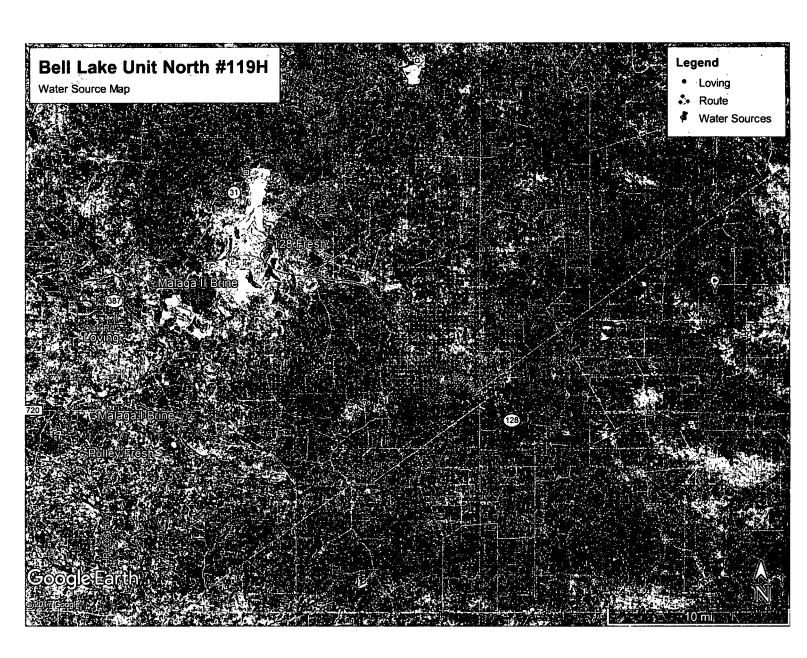
TIP TOP WELLS, N.M. SURVEY N.M.P.M.

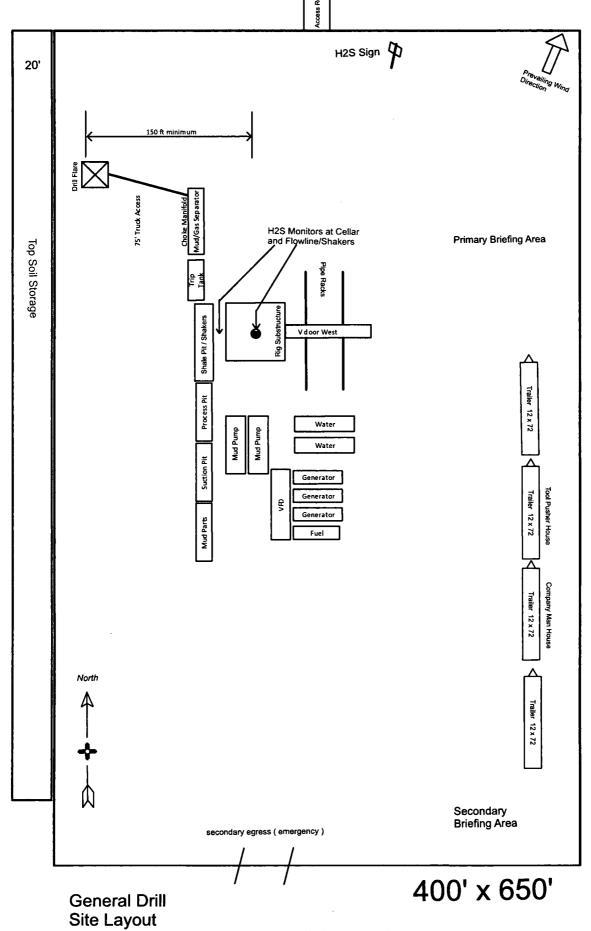


NWE WILL STATE ON THE BELL LAKE WASTON IN MIR WANGE 33 EAST, I MILE RADIUS MAP FOR THE BELL LAKE UNIT WORTH #119H

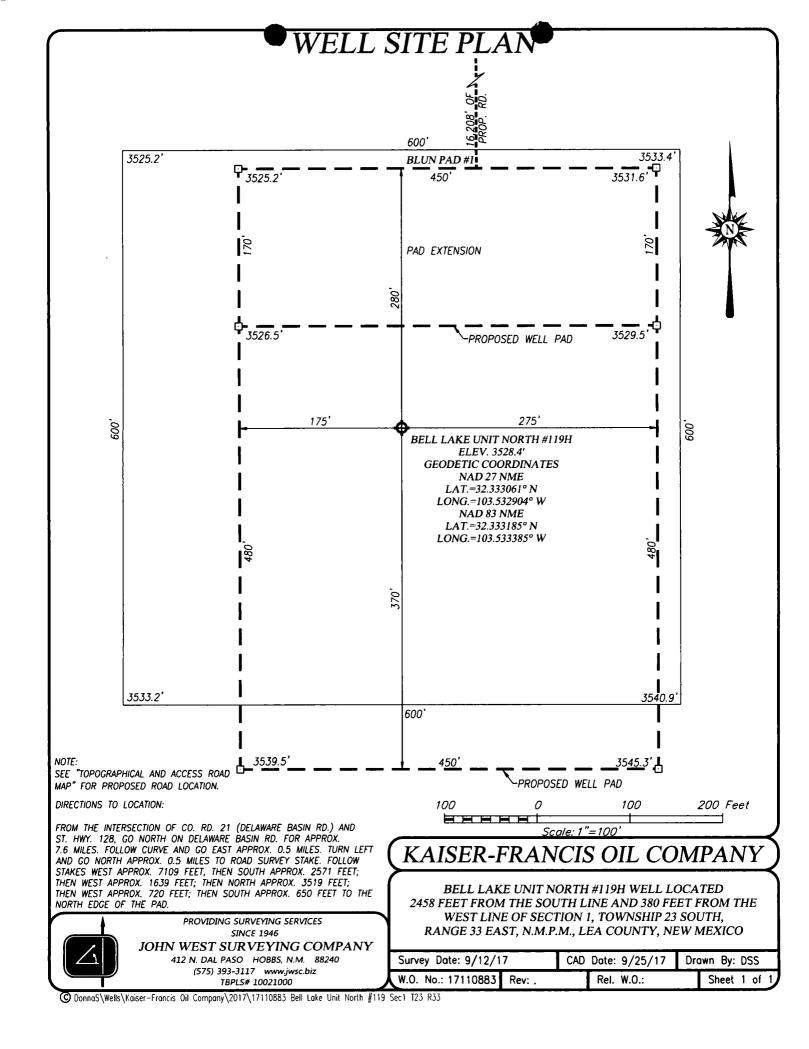
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Well: Bell Lake Unit North #119H



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN

Kaiser-Francis Oil Company P.O. Box 21468 Tulsa, Oklahoma 74121-1468

North Bell Lake Unit Pad #1 Production Facility

September 27, 2017

Facility: North Bell Lake Unit Pad #1

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Kaiser-Francis Oil Company
Spill Prevention, Control, and Countermeasure (SPCC) Plan

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Facility: North Bell Lake Unit Pad #1

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Cross-Reference with SPCC Rule

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^{*}Only relevant rule provisions are indicated. For a complete list of SPCC requirements, refer to the full text of 40 CFR part 112.

Facility: North Bell Lake Unit Pad #1

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Introduction

The purpose of this Spill Prevention Control and Countermeasure (SPCC) Plan is to describe measures implemented by Kaiser-Francis Oil Company "KFOC" to prevent oil discharges from occurring, and to prepare KFOC to respond in a safe, effective, and timely manner to mitigate the impacts of a discharge from the North Bell Lake Unit Pad #1 production facility. This SPCC Plan has been prepared and implemented in accordance with the SPCC requirements contained in 40 CFR part 112.

In addition to fulfilling requirements of 40 CFR 112, this SPCC Plan is used as a reference for oil storage information and testing records, as a tool to communicate practices on preventing and responding to discharges with KFOC employees and contractors, as a guide on facility inspections, and as a resource during emergency response.

Facility: North Bell Lake Unit Pad #1

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Management Approval

40 CFR 112.7

Kaiser-Francis Oil Company ("KFOC") is committed to maintaining the highest standards for preventing discharges of oil to navigable waters and the environment through the implementation of this SPCC Plan. This SPCC Plan has the full approval of KFOC management. KFOC's management has committed the necessary resources to implement the measures described in this Plan.

The Production Superintendent is the Designated Person Accountable for Oil Spill Prevention at this KFOC facility and has the authority to commit the necessary resources to implement the Plan as described.

Authorized Facility Representative:	David Zerger
Signature: Title:	Operations Engineer
Date:	
Professional Engineer Certifica 40 CFR 112.3(d)	ition
Part 112 of Title 40 of the Code of Fed visited and examined the facility, or ha appropriately qualified personnel. The u attests that this Spill Prevention, Control a in accordance with good engineering prindustry standards and the requirement required inspections have been establis facility. [112.3(d)]	Engineer is familiar with the requirements of eral Regulations (40 CFR part 112) and has as supervised examination of the facility by indersigned Registered Professional Engineer and Countermeasure Plan has been prepared ractice, including consideration of applicables of 40 CFR part 112; that procedures for hed; and that this Plan is adequate for the other or operator of the facility of his/her duty to lan in accordance with the requirements of 40 certains.
Signature	
Date	
Charles W. Lock Name of Professional Engineer	
Name of Professional Engineer	
16241 - OK	
Registration Number/Issuing State	

Facility: North Bell Lake Unit Pad #1

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Plan Review 40 CFR 112.5

In accordance with 40 CFR 112.5, Kaiser-Francis Oil Company periodically reviews and evaluates this SPCC Plan for any change in the facility design, construction, operation, or maintenance that materially affects the facility's potential for an oil discharge. KFOC reviews this SPCC Plan at least once every five years. Revisions to the Plan, if any are needed, are made within six months of this five-year review. KFOC will implement any amendment as soon as possible, but not later than six months following preparation of any amendment. A registered PE certifies any technical amendment to the Plan, as described above, in accordance with 40 CFR (112.3(3).

Table 0-1: Record of Plan Review and Changes

MANAGEMENT REVIEW

 Management will review this SPCC Plan at least each five (5) years and document the review on the form below.

Review/ Amend Date	Signature	Amend Plan (will/will not)	Description of Review Amendment	Affected Page(s)	P.E. Certification (Y/N)
	<u>-</u>				

Location of SPCC Plan 40 CFR 112.3(e)

In accordance with 40 CFR 112.3(e), and because the facility is normally unmanned, a complete copy of this SPCC Plan is maintained at the Corporate Office, which is located at 6733 S. Yale Avenue, Tulsa, OK.

Facility: North Bell Lake Unit Pad #1

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Certification of Substantial Harm Determination 40 CFR 112.20(e), 40 CFR 112.20(f)(1)

Facility Name:	Kaiser-Francis O	il Company, North Bell Lake Unit Pad #1
1. Does the facility transf total oil storage capacity (Yes□		or from vessels and does the facility have a lal to 42,000 gallons?
gallons and does the fa	cility lack seconda e largest abovegro	e capacity greater than or equal to 1 million ary containment that is sufficiently large to und oil tank plus sufficient freeboard to allow rage tank area?
gallons and is the facilit	y located at a dis	e capacity greater than or equal to 1 million stance (as calculated using the appropriate lity could cause injury to fish and wildlife and
gallons and is the facilit formula) such that a disc intake?	y located at a dis	e capacity greater than or equal to 1 million stance (as calculated using the appropriate ility would shut down a public drinking water
	y experienced a re	e capacity greater than or equal to 1 million portable oil spill in an amount greater than or rs?
information submitted in	n this document, for obtaining this	ersonally examined and am familiar with the and that based on my inquiry of those information, I believe that the submitted
Signature		EHS Manager Title
Charles W. Lock Name (type or print)		Date

Facility: North Bell Lake Unit Pad #1

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PART I – GENERAL FACILITY INFORMATION 40 CFR 112.7(a)(3)

1.1 Company Information

Name of Facility: Kaiser-Francis Oil Company
North Bell Lake Unit Pad #1

Type Onshore oil production facility

Location 1-23S-33E

Lea County, NM

Name and Address of Owner Kaiser-Francis Oil Company

Ardmore District Office Box 197 (Dillard Route) Wilson, OK 73643

Corporate Office 6733 S. Yale Avenue Tulsa. OK 74133

1.2 Contact Information

The designated person accountable for overall oil spill prevention and response at the facility, also referred to as the "Response Coordinator" (RC), is the Production Superintendent, Bill Wilkinson. 24 hour contact information is provided in Table 1-1.

The pumper/gauger provides operation support activities for KFOC, including performing informal daily examinations of the facility equipment, as described in Section 3.4 of this SPCC Plan. The pumper regularly visits the facility to record production levels and perform other maintenance/inspection activities as requested by the Kaiser-Francis Operations Engineer. Pumper phone numbers are included in Table 1-1.

Facility: North Bell Lake Unit Pad #1

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Table 1-1: Facility contact information

Name	Title	Telephone
Larry Motes	Pumper	432/238-6996 (cell)
Jeff Pevehouse	Pumper	575/361-2965 (cell)
Bill Wilkinson	Production Superintendent Kaiser-Francis Oil Company Ardmore District	580/668-2335 (office) 580/221-4637 (cell)
David Zerger	Operations Engineer Kaiser-Francis Oil Company Tulsa, OK	918/491-4350 (office)
Charles Lock	EHS Manager Kaiser-Francis Oil Company Tulsa, OK	918/491-4337 (office) 918/671-6510 (cell)

1.3 Facility Layout Diagram

Appendix A, at the end of this Plan, shows a general site plan for the facility. The site plan shows the site topography and the location of the facility relative to waterways, roads, and inhabited areas. Appendix A will also include a detailed facility diagram that shows the wells, tank battery, and transfer areas for the facility. The diagram will show the location, capacity, and contents of all oil storage containers greater than 55 gallons in capacity.

1.4 Facility Location and Operations

KFOC operates the North Bell Lake Unit Pad #1 production facility; directions to the lease are as follows:

From the intersection of County Road 21 (Delaware Basin Rd.) and State Hwy 128, go North on Delaware Basin Road for approx. 7.6 miles. Follow curve and go East approx. 0.5 miles. Turn left and go North approx. 0.5 miles to road survey stake. Follow stakes West approx. 7109 feet, then South approx. 2571 feet, then West approx. 1639 feet; then North approx. 3519 feet; then West approx. 720 feet; then South approx. 650 feet to the North edge of the pad.

The production facility is generally unmanned. Field operations personnel from KFOC, or pumpers acting as contractors to KFOC visit the facility daily to record production rates and ensure the proper functioning of wellhead equipment and pumpjacks, storage tanks, flowlines, and separation vessels. This includes performing equipment inspection and maintenance as needed.

The produced water tank may contain an oil/produced water mixture making it subject to 40 CFR part 112 and is covered by this SPCC Plan.

Facility: North Bell Lake Unit Pad #1

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1.5 Oil Storage and Handling

1.5.1 Production Equipment

All oil storage tanks are shop-built and meet the American Petroleum Institute (API) tank construction standard. Their design and construction are compatible with the oil they contain and the temperature and pressure conditions of storage.

Lubricating oil and other substances, such as solvents and chemicals for downhole treatment, are also sometimes stored at the facility, but in quantities below the 55-gallon threshold for SPCC applicability. Table 1-2 lists all oil containers present at the facility with capacity of 55 gallons or more.

Table 1-2: Characteristics of oil containers

ID	Construction	Primary Content	Capacity (barrels)	Capacity (gallons)
				* *
ļ				
ļ				
		TOTAL		

1.5.2 Transfer Activities

Wells produce crude oil, produced water (saltwater), and natural gas. Well liquids are then routed via steel flowlines to a separation vessel. Produced saltwater is routed from the separator to the saltwater storage tank. The crude oil is sent to the oil storage tanks.

Crude oil from the lease is purchased by a crude oil purchaser and transported from the facility by the purchaser's tanker truck. Tanker trucks come to the facility to transfer crude oil and produced water, but do not remain at the facility. Sorbent materials in conjunction with drip pans are used to contain spills. All transfer operations are attended by the trucker and meet the minimum requirements of the US Department of Transportation Hazardous Materials Regulations.

Facility: North Bell Lake Unit Pad #1

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1.6 Conformance w/Applicable State and Local Requirements [112.7(j)]

The SPCC regulation of 40 CFR part 112 is more stringent than requirements from the state for this type of facility. This SPCC Plan was written to conform to 40 CFR part 112 requirements. The facility thereby conforms to general requirements for oil pollution facilities in the state. All discharge notifications are made in compliance with local, state, and federal requirements.

Facility: North Bell Lake Unit Pad #1

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PART II. SPILL RESPONSE AND REPORTING 40 CFR 112.7

2.1 Discharge Discovery and Reporting [112.7(a)(3)]

Several individuals and organizations must be contacted in the event of an oil discharge. The Production Superintendent is responsible for ensuring that all required discharge notifications have been made. All discharges should be reported to the Production Superintendent. The summary table included in Appendix D to this SPCC Plan provides a list of agencies to be contacted under different circumstances. Discharges would typically be discovered during the inspections conducted at the facility in accordance with procedures set forth in Section 3.4.1 of this SPCC Plan, and on the checklist of Appendix B. The Form included in Appendix D of this Plan summarizes the information that must be provided when reporting a discharge, including contact lists and phone numbers.

2.1.1 Verbal Notification Requirements (Local, State, and Federal (40 CFR part 110))

For any discharge that reaches navigable waters, or threatens to reach navigable waters, *immediate* notification must be made to the National Response Center Hotline (800-424-8802) and to the Environmental Protection Agency.

In the event of a discharge that threatens to result in an emergency condition, facility field personnel must verbally notify the appropriate state agency immediately, and in no case later than within one (1) hour of the discovery of the discharge. An emergency condition is any condition that could reasonably be expected to endanger the health and safety of the public; cause significant adverse impact to the land, water, or air environment; or cause severe damage to property. This notification must be made regardless of the amount of the discharge.

In the event of a discharge that does not present an emergency situation, verbal notification must be made to the appropriate state agency within twenty-four hours of the discharge.

2.1.2 Written Notification Requirements (State and Federal (40 CFR part 112))

A written notification will be made to EPA for any single discharge of oil to a navigable water or adjoining shoreline waterway of more than 1,000 gallons, or for two discharges of 1 bbl (42 gallons) of oil to a waterway in any 12-month period. This written notification must be made within 60 days of the qualifying discharge, and a copy will be sent to the appropriate state agency in charge of oil production control activities. This reporting requirement is separate and in addition to reporting under 40 CFR part 110 discussed above.

Facility: North Bell Lake Unit Pad #1

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2.1.3 Submission of SPCC Information

Whenever the facility experiences a discharge into navigable waters of more than 1,000 gallons, or two discharges of 42 gallons or more within a 12-month period, KFOC will provide information in writing to the EPA Region office within 60 days of a qualifying discharge as described above. The required information is described in Appendix D of this SPCC Plan.

2.2 Spill Mitigation Procedures [112.7(a)(5)]

The following is a summary of actions that must be taken in the event of a discharge. It summarizes the distribution of responsibilities among individuals and describes procedures to follow in the event of a discharge.

In the event of a discharge, KFOC or contract field personnel and the Production Superintendent shall be responsible for the following:

2.2.1 Shut off Ignition Sources

Field personnel must shut off all ignition sources, including motors, electrical circuits, and open flames. See Appendix E for more information about shut-off procedures.

2.2.2 Stop Oil Flow

Field personnel should determine the source of the discharge, and if safe to do so, immediately shut off the source of the discharge. Shut in the well(s) if necessary.

2.2.3 Stop Spread of Oil and Call the Production Superintendent

If safe to do so, field personnel must use resources available at the facility to stop the spilled material from spreading. Measures that may be implemented, depending on the location and size of the discharge, include placing sorbent material or other barriers in the path of the discharge (e.g., sand bags), or constructing earthen berms or trenches.

In the event of a significant discharge, field personnel must immediately contact the Production Superintendent, who may obtain assistance from authorized company contractors and direct the response and cleanup activities. Should a discharge reach navigable waters, only physical response and countermeasures should be employed, such as the construction of underflow dams, installation of hard boom and sorbent boom, use of sorbent pads, and use of vacuum trucks to recover oil and oily water from the water. If water flow is low, construction of any underflow dam downstream and ahead of the spill flow may be advantageous. Sorbent material and/or boom should be placed immediately downstream of the dam to recover any sheen from the water. If water flow is normal, floating booms and sorbent boom will be deployed. Vacuum trucks will then be utilized to remove oil and oily water at dams and other access points. At no time shall any surfactants, dispersants, or other chemicals be used to remove oil when the spill is in water.

Facility: North Bell Lake Unit Pad #1

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2.2.4 Gather Spill Information

The Production Superintendent will ensure that the *Discharge Notification Form* is filled out and that notifications have been made to the appropriate authorities. The Production Superintendent may ask for assistance in gathering the spill information on the *Spill Report Form* (Appendix D) of this Plan.

2.2.5 Notify Agencies Verbally

Some notifications must be completed *immediately* upon discovering the discharge. It is important to immediately contact the Production Superintendent so that timely notifications can be made. If the Production Superintendent is not available, or the Production Superintendent requests it, field personnel must designate one person to begin notification. Section 2.1 of this Plan describes the required notifications to government agencies. The Notification List is included in Appendix D of this SPCC Plan. The Production Superintendent must also ensure that written notifications, if needed, are submitted to the appropriate agencies.

2.3 Disposal Plan

The cleanup contractor will handle the disposal of any recovered product, contaminated soil, contaminated materials and equipment, decontamination solutions, sorbents, and spent chemicals collected during a response to a discharge incident.

Facility: North Bell Lake Unit Pad #1

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PART III. SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PROVISIONS

40 CFR 112.7 and 112.9

- 3.1 Potential Discharge Volume and Direction of Flow [112.7(b)] and Containment [112.7(a)(3)(iii)]
- The potential spills sources at the Facility are summarized in the following table:

Container ID	Substance Stored (Oil)	Shell Capacity (Bbls)	Potential Failure	Rate of Flow (Bbls/hr)	Direction of Flow	Containment System(s)
Bulk Sto	rage Contai	ners	•			
Operatio	nal Equipme	ent				
			-			
Truck or	Rail Loadin	g/Unloadi	ng Rack			
Other Po	tential Spill	Sources				

- The material and construction of bulk storage containers are compatible with the material stored and conditions of storage such as pressure and temperature.
- All bulk storage container installations, if required, are constructed so that a means of secondary containment is provided for the entire capacity of the largest single container plus sufficient freeboard to contain precipitation.
- Diked areas are sufficiently impervious to contain discharged oil.

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3.2 Containment and Diversionary Structures [112.7(c)]

The facility is configured to minimize the likelihood of a discharge reaching navigable waters. The following measures are provided:

 Secondary containment for the oil storage tanks and saltwater tanks (which may have small amounts of oil), is provided by an earthen berm or metal containment ring, as described in Section 3.2.2 below. The earthen berm is constructed of native soils and then covered with gravel.

3.2.1 Oil Production Facility Drainage [112.9(b)]

Facility drainage areas in the production/separation area, but outside containment berms, are visually examined by facility personnel on a daily basis during routine facility rounds to detect any discoloration or staining that would indicate the presence of oil from small leaks within the facility. Any accumulation of oil is promptly removed and disposed off site.

3.2.2 Secondary Containment for Bulk Storage Containers [112.9(c)(2)]

In order to further minimize the potential for a discharge to navigable waters, bulk storage containers such as all tank battery, separation, and treating equipment are placed inside a berm (fire wall). It provides secondary containment sufficient for the size of the largest tank, plus enough freeboard to contain precipitation. Per example below: This secondary containment capacity is equivalent to approximately 775 percent of the capacity of the largest tank within the containment area and exceeds the 10 percent freeboard recommended by API for firewalls around production tanks (API-12R1). An example of the berm capacity calculations is provided in Table 3-2.

EXAMPLE Table 3-2: BERM CAPACITY CALCULATIONS

BERM CAPACITY	
Berm height	3 ft
Berm dimensions	140 ft x 50 ft = 7000 ft ²
Tank footprint	6 tanks @ 16 ft dia. each = $6 \times (\pi \ 16^2/4) = 1198.69 \ \text{ft}^2$
Net volume	$3 \text{ ft} \times (7000\text{-}1198.69) = 17403.93 \text{ ft}^3$
Ratio to largest tank	17403.93 /2245.84 = 774.94 %
CORRESPONDING AMOUNT OF FREEBOARD	
100% volume of largest tank	16800 gal = 2245.84 ft ³
Net area	7000 - 1198.69 = 5801.31 ft ²
Minimum berm height for 100% of tank volume	2245.84 / 5801.31 ft = 0.38 ft
Freeboard	3 - 0.38 = 2.62 ft

Facility personnel inspect the berm daily for the presence of oil. The sides of the earthen berms are capped with gravel to minimize erosion.

Facility: North Bell Lake Unit Pad #1

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3.2.3 Practicability of Secondary Containment [112.7(d)]

Flowlines adjacent to the production equipment and storage tanks are located within the berm, and therefore have secondary containment. Flowlines that go from the wells to the production equipment as well as the tank truck loading area are inspected daily by the pumper, as described in section 3.4 of this Plan. The installation of double-wall piping, berms, or other permanent structures (e.g., remote impoundment) around flowlines and tank truck loading area are impracticable at this facility due to the long distances involved and physical and road/fenceline right-of-way constraints. Sorbent materials in conjunction with drip pans provide adequate secondary containment for equipment and piping outside of the berm. Therefore, sorbent materials will be used when necessary.

3.3 Other Spill Prevention Measures

3.3.1 Bulk Storage Containers Overflow Prevention [112.9(c)(4)]

The tank battery is designed with a fail-safety system to prevent discharge, as follows:

- The capacity of the oil storage tanks is sufficient to ensure that oil storage is adequate in the event where facility personnel are unable to perform the daily visit to unload the tanks or the pumper is delayed in stopping production. The oil tanks are sized to provide sufficient storage for at least two days.
- Where applicable when multiple oil tanks are present the tanks are connected with overflow equalizing lines to ensure the full tank can overflow to an adjacent tank.

3.3.2 Transfer Operations and Saltwater Disposal System [112.9(d)]

All aboveground valves and piping associated with transfer operations are inspected daily by the pumper and/or truck driver, as described in Section 3.4 of this Plan. The inspection procedure includes observing flange joints, valve glands and bodies, drip pans, and pipe supports.

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3.4 Inspections, Tests, and Records [112.7(e)]

This Plan outlines procedures for inspecting the facility equipment in accordance with SPCC requirements. Records of inspections performed as described in this Plan and signed by the appropriate supervisor are maintained at the Tulsa Corporate Office for a minimum of three years. The reports include a description of the inspection procedure, date of inspection and the inspector's signature.

Each container is inspected monthly by field operation personnel as described in this Plan section and following the checklist provided in Appendix B of this SPCC Plan. The inspection is aimed at identifying signs of deterioration and maintenance needs.

The inspection program is comprised of informal daily examinations, monthly scheduled inspections, and periodic condition inspections. Additional inspections and/or examinations are performed whenever an operation alert, malfunction, shell or deck leak, or potential bottom leak is reported following a scheduled examination. Written examination/inspection procedures and monthly examination/inspection reports are signed by the field inspector and are maintained at the corporate office for a period of at least three years.

3.4.1 Daily Examinations

The facility is visited daily by field operations personnel. The daily visual examination consists of a walk through of the tank battery and around the well. Field operations personnel check the wells and production equipment for leaks and proper operation. They examine all aboveground valves, polished rod stuffing boxes, wellheads, fittings, gauges, and flowline piping at the wellhead. Personnel inspect pumps to verify proper function and check for damage and leakage. They look for accumulation of water within the tank battery berms. The storage tanks are gauged every day. A daily production report is maintained. All malfunctions, improper operation of equipment, evidence of leakage, stained or discolored soil, etc. are logged and communicated to the KFOC Production Superintendent.

3.4.2 Monthly Reports

Leases and equipment are inspected daily. Any problems with the lease or equipment are recorded on the Monthly Inspection Report (Appendix B) and submitted with the gauge report for each month.

3.4.3 Brittle Fracture Evaluation [112.7(i)]

At the present time, none of the bulk storage containers at this site are field-erected, and therefore no brittle fracture evaluation is required.

Facility: North Bell Lake Unit Pad #1

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3.4.4 Flowline Maintenance Program [112.9(d)(3)]

The facility is relying on sorbent materials to address discharges from flowlines. The flowline maintenance program is specifically implemented to maintain the integrity of the primary container (in this case piping) to minimize releases of oil from this part of the production facility. The facility's gathering lines and flowlines are inspected for leaks at connections and on each joint, corrosion (pitting, flaking), and maintained to minimize the potential for a discharge.

3.5 Personnel Training, and Discharge Prevention Procedures [112.7(f)]

The Production Superintendent has been designated as the point of contact for all oil discharge prevention and response at this facility.

All KFOC field personnel receive training on proper handling of oil products and procedures to respond to an oil discharge. The training ensures that all facility personnel understand the procedures described in the SPCC Plan and are informed of the requirements under applicable pollution control laws, rules and regulations. The training also covers risks associated with potential exposure to hydrogen sulfide (H2S) gas.

KFOC ensures that all contractor personnel are familiar with the facility operations, and spill prevention and control procedures described in this Plan.

KFOC management holds briefings with company field operations personnel at least once a year, as described below.

3.5.1 Spill Prevention Briefing

The Safety & Environmental Coordinator conducts Spill Prevention Briefings annually to ensure adequate understanding and effective implementation of this SPCC Plan. These briefings highlight and describe known events or failures, malfunctioning components, and recently developed precautionary measures. The briefings are conducted in conjunction with the company safety meetings. Sign-in sheets, which include the topics of discussion at each meeting, are maintained in the Safety Department at KFOC's Corporate Office. The scheduled annual briefing includes a review of KFOC policies and procedures for SPCC inspections and spill prevention procedures; spill reporting procedures; spill response; and recovery, disposal, and treatment of spilled material.

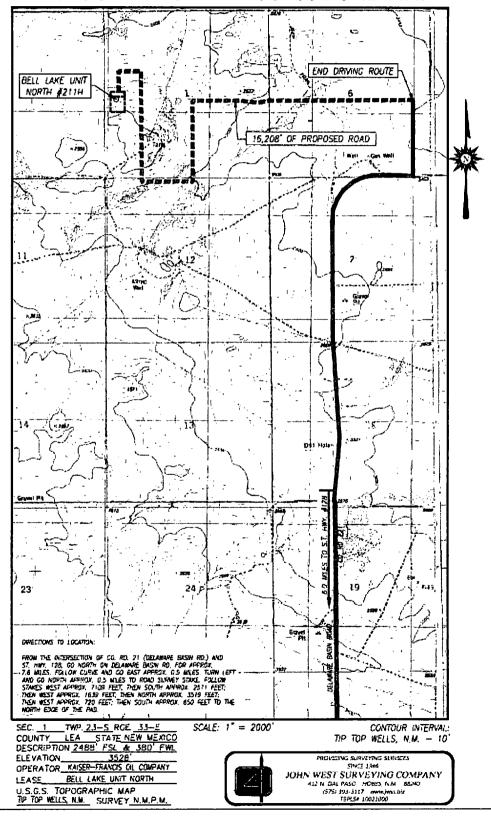
Personnel are instructed in applicable federal, state, and local pollution laws, rules, and regulations. Facility operators and other personnel have an opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations.

Facility: North Bell Lake Unit Pad #1

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APPENDIX A: Facility Diagrams/ Vicinity / Road

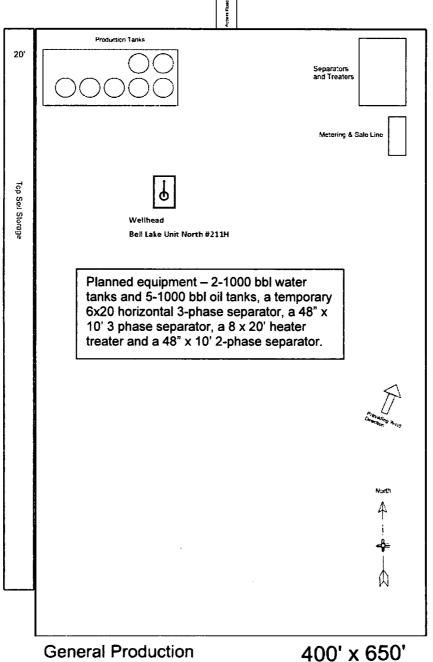
TOPOGRAPHIC AND ACCESS ROAD MAP



ser-Francis Oil Company	Spill Prevention, Control, and Countermeasure (SPCC) Plan

Facility: North Bell Lake Unit Pad #1 Page 22 of 33

PLANNED SITE DIAGRAM FOR COMPLETED TANK BATTERY



General Production Site Layout

Well: Befi Lake Unit North #211H

Facility: North Bell Lake Unit Pad #1

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APPENDIX B: Monthly Inspection Report

A record of the completed checklists, with signatures, is maintained at the Tulsa KFOC office. Inspections are conducted using the following checklist in accordance with section 3.4 of this SPCC plan.

SPCC Inspection Checklist				
Pumper:	Di	stric	ot:	
Facility ID:				
Storage Areas and Separation Equipment	Y	N	Description & Comments	
	<u> </u>	Ļ_	(Note tank/equipment ID)	
Tank surfaces showing signs of leakage	 	├		
Tanks showing signs of damage, rust or deterioration	<u> </u>	—		
Damaged bolts, rivets or seams	<u> </u>	<u> </u>		
Deteriorated or buckled aboveground tank supports		<u> </u>		
Eroded or settled Aboveground tank foundations	$ldsymbol{oxed}$	$ldsymbol{f eta}$		
Leaking gaskets				
Level gauges or alarms that are inoperative				
Obstructed vents				
Thief hatch and vent valve does not seal air tight				
Damaged or missing nets on open top vessels			,	
Containment berm showing discoloration or stains				
Berm that is breached or eroded or has vegetation				
Trash or vegetation inside of berm area				
Missing equipment guards, labels or signs				
Piping/Flowlines and Related Equipment				
Leaking valve seals or gaskets				
Damaged or deteriorated Pipelines or supports				
Buried pipelines that are exposed				
Visible line leaks				
Transfer Equipment				
Damaged or deteriorated loading/unloading lines			-	
Connections are not capped or blank-flanged				
Secondary Containment is damaged or stained				
Field drainage systems				
Accumulation of oil in drainage ditches or road ditches				
Accumulation of oil in oil traps, sumps, or skimmers				
If yes, you must promptly remove any accumulations of oil				
Response Kit Inventory:				
Discharge response material is missing or damaged or				
needs replaced				
Signature:	Da	ate:		

Facility: North Bell Lake Unit Pad #1

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Monthly Inspection Report

	A de	tailed de	scription	of what to i	nspect is	provided	on page one of the Checklist
	Distr	ict:	<u> </u>			Pumpe	er:
Facility ID	Problem with St tanks & Separa Equipm	orage tion			Problem Transfe Equipm		Description & Comments (Note tank/equipment ID)
	Υ	N	Y	N	Υ	N	
		-					
			-				
	furth spac this prepla	aged or one description of the d	riptions and bottom of any item are to may rest	ed. nd commer this page on swered "Yoult in nonco	nts, if need or on a s es" need mpliance	eded, sho eparate s s to be p with reg	erly netted and the net is not build be provided on the empty sheet of paper and attached to promptly reported, repaired, or building requirements. daily. Record any problems on ort.
Dat	e:					Signati	ure:

Facility: North Bell Lake Unit Pad #1

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APPENDIX C: Record of Dike Drainage

This record must be completed when rainwater from diked areas is drained into a storm drain or into an open watercourse, lake, or pond, and bypasses the water treatment system. The facility is not equipped with a manual valve of open-and-closed design. All water accumulated within the berm is closely inspected by field operations personnel (who are the persons providing "responsible supervision") to ensure that no free oil is present (i.e. there is no sheen or discoloration upon the surface, or a sludge or emulsion deposit beneath the surface of the water). Free oil is promptly removed and disposed of in accordance with waste regulations.

Date	Area	Presence of oil (y/n)	Time started	Time Finished	Signature
			1		

Facility: North Bell Lake Unit Pad #1

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APPENDIX D: Discharge Notification Procedures

 WHEN REPORTING A DISCHARGE PROVIDE THE FOLLOWING INFORMATION:

Exact location;
Material involved;
Quantity involved;
Topographical and environmental conditions;
Circumstances that may hinder response; and Injuries, if any.

- WARN PERSONNEL. All personnel on facility will be verbally warned of the oil spill. If an explosion or fire occurs, evacuate personnel from the area until the danger is over.
- REQUEST ADDITIONAL RESOURCES. If oil has reached water or could reach water, facility personnel will decide whether the available onsite containment materials are sufficient to contain the spill. If it is estimated that additional materials will be necessary, an Oil Spill Removal Organization will be contacted at this time. An estimate of the amount of oil released shall be relayed to the Oil Spill Removal Organization.
- CONTAIN THE SPILLED OIL. Facility personnel will attempt to prevent the spilled oil from spreading. Available containment material will be deployed.
- GATHER INFORMATION. Information on the spill will be collected and the "Spill Notification Form" will be completed.
- MAKE NOTIFICATIONS. Facility personnel will contact Company Management. Information on the spill along with actions taken will be relayed to Company Management and Company Management will make all necessary notifications. If Company Management is not available facility personnel will make the notifications.
- CLEAN UP THE SPILLED OIL. Once the spill is contained to the maximum extent possible, available supplies will be used to proceed with cleanup of the spill. An Oil Spill Removal Organization will be mobilized as required.
- SPILL RESPONSE. If immediate cleanup is not considered to be an appropriate remedial measure, the operator will notify the proper agency and give an alternative remedial plan and will promptly implement said plan upon approval.

Facility: North Bell Lake Unit Pad #1

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Spill Report Form

Description of Discharge		
Date/time	Release date: Release time: Duration:	Discovery date: Discovery time:
Reporting Individual	Name:	Tel. #:
Location of discharge (Quarter, Block, Section, Survey, etc.)	County: State:	Description:
Surface Owner	Description of area: □ Farming □ Grazing □ Urban	
Equipment Sources	□ Piping □ Flowline □ Well □ Stock, flare □ Unknown	Description: Equipment ID:
Product	□ Crude oil □ Saltwater □ Other*	*Description other:
Appearance and description of area	□ Sandy □ Sandy Loam □ Clay □ Rocky □ Wet □ Dry □ Snow	
Environmental conditions	Wind Direction: Wind Speed:	Rainfall: Current:
Site Drainage direction		
Distance to nearest navigable water		

Facility: North Bell Lake Unit Pad #1 Page 28 of 33

Kaiser-Francis Oil Company Spill Prevention, Control, and Countermeasure (SPCC) Plan

Impacts Quantity Released: Recovered: Receiving Medium □ Water** Release confined to company □ Land property. □ Other (describe): □ Release outside company property ** if water, indicate extent and body of water: Describe Circumstances of the Release Assessment of impacts and remedial actions Disposal method for recovered material Action taken to prevent incident from reoccurring Safety Issues □ Fire *Description of other: Explosion □ Injuries □ Fatalities □ Evacuation □ *Other **Notifications** Date/time reported & Comments Agency Name Company Spill Response Coordinator Charles W. Lock (918)491-4337 National Response Center 1-800-424-8802 OSRO/cleanup contractor

Facility: North Bell Lake Unit Pad #1

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Contact List and Phone Numbers

Contact information for reporting a discharge to the National Response Center and other federal, state, and local agencies, and to other affected parties, is provided below. Note that any discharge to water must be reported immediately to the National Response Center.

The following is a contact list and phone number reference for the Facility:

Contacts	Primary	Alternate
Designated Person Accountable For Oil Spill Prevention and/or Facility Response Coordinator		
Name/Title: Larry Motes/Pumper	432/238-6996	
Name/Title: Jeff Pevehouse/Pumper	575/361-2965	
Name/Title: Jeremy Parent/Prod. Foreman	580/504-2593	580/668-2334
Name/Title: Bill Wilkinson/Prod. Superintendent	580/221-4637	
Name/Title: David Zerger/Operations Engineer	918/491-4350	918/671-6510
Name/Title: Charles Lock/EHS Manager	918/491-4337	

Facility: North Bell Lake Unit Pad #1

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Contact List and Phone Numbers

The following is a contact list and phone number reference for the Facility:

Contacts	Primary	Alternate (Cell)
Cleanup Contractors (as necessary):		
Dozers – B&R Trucking – Carlsbad	575/236-6012	
Vacuum & Tank Trucks – Parker Energy – Eunice	575/394-0444	:
Misc. Trucks & Labor – J&A Oilfield Svcs.	575/208-9653	
Pump Trucks – Parker Energy – Eunice	575/394-0444	
Frac Tanks – EOS – Hobbs	575/397-0100	
Welder – Custom Welding – Hobbs	575/393-5904	
Federal, State and local agencies (as necessary)		
National Response Center	(800) 424-8802	(202) 267-2675
NMOCC - Hobbs	505/393-6161	
EPA Region 6	866/372-7745	
OSHA – Lubbock	806/472-7681	800/321-OSHA
Other contact references:		
Fire Fighting – Hobbs	575/397-9308	
Police – Hobbs	575/397-9265	
Ambulance – Hobbs	575/397-9308	
Sheriff – Hobbs	575/393-2515	
Highway Patrol – Hobbs	575/392-5588	

Facility: North Bell Lake Unit Pad #1

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APPENDIX E: Equipment Shut-off Procedures

Source	Action
Manifold, transfer pumps or hose failure	Shut in the well supplying oil to the tank battery if appropriate. Immediately close the header/manifold or appropriate valve(s). Shut off transfer pumps.
Tank overflow	Shut in the well supplying oil to the tank battery. Close header/manifold or appropriate valve(s).
Tank failure	Shut in the well supplying oil to the tank battery. Close inlet valve to the storage tanks.
Flowline rupture	Shut in the well supplying oil to the flowline. Immediately close the nearest valve to stop the flow of oil to the leaking section.
Flowline leak	Shut in the well supplying oil to the flowline. Immediately close the nearest valve to stop the flow of oil to the leaking section.
Explosion or fire	Immediately evacuate personnel from the area until the danger is over. Immediately shut in both wells if safe to do so. If possible, close all manifold valves. If the fire is small enough such that it is safe to do so, attempt to extinguish if extinguisher is available.
Equipment failure	Immediately close the nearest valve to stop the flow of oil into the leaking area.

Facility: North Bell Lake Unit Pad #1 Page 32 of 33

APPENDIX F: Written Commitment of Manpower, Equipment, and Materials

In addition to implementing the preventive measures described in this Plan, Kaiser-Francis Oil Company will also:

In the event of a discharge:

- Make available trained field personnel to perform response actions
- Obtain assistance from additional employees from its main operations contractor.
- Collaborate with local, state, and federal authorities on response and cleanup operations.

Maintain all on-site oil spill control equipment described in this Plan and in the attached Oil Spill Contingency Plan.

Maintain all communications equipment in operating condition at all times.

Ensure that staging areas are accessible by field vehicles.

Review the adequacy of on-site and third party response capacity with preestablished response/cleanup contractors.

Maintain formal agreements/contracts with response and cleanup contractors who will provide assistance in responding to an oil discharge and/or completing cleanup.

Facility: North Bell Lake Unit Pad #1

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Surface Use & Operating Plan

Bell Lake Unit North #119H

Surface Owner: State of New Mexico

Grazing Tenant: Mark T. McCloy & Annette E McCloy

• New Road: 16,208' of new road

• Facilities: Production facilities will be installed on well pad

• Well Site Information

V Door: East Topsoil: East

Interim Reclamation: Reclaim 150' on the south and 100' on the

east sides of location.

Notes

<u>Onsite</u>: On-site was done by Fernando Banos (BLM); Matt Warner and Melanie Wilson (Kaiser-Francis), Jimmy Harrison (John West Surveying) and Jeff (APAC Archaeology) on July 20, 2017.

SURFACE USE AND OPERATING PLAN

1. Existing & Proposed Access Roads

- A. The well site survey and elevation plat for the proposed well is attached with this application. It was staked by John West Surveying, Hobbs, NM.
- B. All roads to the location are shown on the Road Map attachment. The existing lease roads are illustrated in red and are adequate for travel during drilling and disposal operations. Upgrading existing roads prior to drilling the well will be done where necessary. Proposed new access road is shown in red dashes on the Road Map attachment and is shown in detail on the Access Road Map attachment.
- C. Directions to location: See Wellsite Layout attachment
- D. Based on current road maintenance performed on other roads serving existing wells, we anticipate maintaining the lease roads leading to the proposed well pad at least once a year on dry conditions and twice a year in wetter conditions.

2. Proposed Access Road:

The Access Road Map shows that 16,208' of new access road will be required for this location. The access road will be constructed as follows:

The maximum width of the running surface will be 15'. The road will be crowned, ditched and constructed of 6" rolled and compacted caliche. Ditches will be at 3:1 slope and 3' feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns.

- A. The average grade will be less than 2%.
- B. No turnouts are planned.
- C. No cattleguard, culvert, gates, low water crossings or fence cuts are necessary.
- D. Surfacing material will consist of native caliche. Caliche will be obtained from the actual well site if available. If not available onsite, caliche will be hauled from BLM caliche pit in SWSW Section 22-T24S-R34E or caliche pit in NENE Section 20-T23S-R33E.

3. Location of Existing Well:

The 1-Mile Radius attachment shows existing wells within a one-mile radius of the proposed wellbore.

4. Location of Existing and/or Proposed Facilities:

- A. There are currently no production facilities at this well site.
- B. Upon successfully completion of this well, we plan to install a production facility initially consisting of 2-1000 bbl water tanks and 5-1000 bbl oil tanks, a temporary 6x20 horizontal 3-phase separator, a 48" x 10' 3-phase separator, an 8 x 20' heater treater and a 48"x 10' 2-phase separator.
- C. Any additional caliche will be obtained from the actual well site. If caliche does not exist or is not plentiful from the well site, the caliche will be hauled from the nearest BLM approved caliche pit in SWSW Section 22-T24S-R34E. Alternate source will be the BLM caliche pit in NENE Section 20-T23S-R33E. Any additional construction materials will be purchased from contractors.
- D. No power line to this location is planned at this time.
- E. If completion of the well is successful, rehabilitation plans will include the following:
 - The original topsoil from the well site will be returned to the location, and the site will be re-contoured as close as possible to the original site.

5. Location and Type of Water Supply:

The well will be drilled with combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from a private source. Fresh water will come from Mesquite SWD, Inc.'s 128 Fresh water well in Section 31-T22S-R30E and the alternate source is Mesquite SWD, Inc.'s Pulley Fresh water well in Section 26-T24S-R28E. Brine water will come from Mesquite SWD, Inc.'s Malaga I Brine Station in Section 12-T23S-R28E and the alternate source is Mesquite SWD, Inc.'s Malaga II Brine Station in Section 20-T24S-R29E. No water well will be drilled on the location.

6. Source of Construction Materials and Location "Turn-Over" Procedure:

Obtaining caliche: One primary way of obtaining caliche to build locations and roads will be by "turning over" the location. This means, caliche will be obtained from the actual well site. Amount will vary for each pad. The procedure below has been approved by BLM personnel:

A. Equipment that is needed to construct the proposed location will be as follows: Two dozers to flip the site for caliche and to move topsoil, one blade to level the surface, one morograder to roll and compact this site, one backhoe to dig the cellar, one water truck to water location and dust abatement and two dump trucks to haul surface material. If

caliche is not available onsite and have to haul caliche from a private pit, in addition to equipment mentioned above we will have 10 belly dumps and one front end loader.

- B. The time line to complete construction will be approximately 10 days.
- C. The top 6 inches of topsoil is pushed off and stockpiled along the south side of the location. Maximum height of the topsoil stock pile will be 3'.
- D. An approximate 160' X 160' area is used within the proposed well site to remove caliche.
- E. Subsoil is removed and stockpiled within the surveyed well pad.
- F. When caliche is found, material will be stock piled within the pad site to build the location and road.
- G. Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road.
- H. There will be no interim reclamation. Once well is drilled, the stock piled top soil will be seeded in place.
- I. Neither caliche, nor subsoil will be stock piled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in the Well Site Layout or survey plat.

In the event that no caliche is found onsite, caliche will be hauled in from the BLM caliche pit in Section 22-T24S-R34E or the BLM caliche pit in Section 20-T23S-R33E.

7. Methods of Handling Water Disposal:

- A. The well will be drilled utilizing a closed loop mud system. Drill cuttings will be held in roll-off style mud boxes and taken to R360's disposal site located at 4507 West Carlsbad Highway, Hobbs, NM 88240.
- B. Drilling fluids will be contained in steel mud pits and taken to R360's disposal site located at 4507 West Carlsbad Highway, Hobbs, NM 88240.
- C. Water produced from the well during completion will be held temporarily in steel tanks and then taken to an NMOCD approved commercial disposal facility. R360's disposal site located at 4507 West Carlsbad Highway, Hobbs, NM 88240.
- D. It is anticipated that the disposal of produced water will be trucked to Kaiser-Francis Oil Company's North Bell Lake Unit 4-15 SWD located in Section 8 T23S R34E.
- E. Garbage and trash produced during drilling or completion operations will be collected in a trash bin and hauled to an approved landfill-Lea Landfill LLC. Located at Mile Marker

- 64, Highway 62-180 East, P O Box 3247, Carlsbad, NM 88221. No toxic waste or hazardous chemicals will be produced by this operation.
- F. Human waste and grey water will need to be properly contained and disposed of. Proper disposal and elimination of waste and grey water may include but are not limited to portable septic systems and/or portable waste gathering systems (i.e. portable toilets).
- G. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. In the event of a dry hole only a dry hole marker will remain.

8. Ancillary Facilities:

No airstrip, campsite or other facilities will be built as a result of the operation on this well.

9. Well Site Layout:

- A. The drill pad layout, with elevations staked by John West Surveying, is shown in the Wellsite Layout attachment. Dimensions of the pad and pits are shown on the Drilling Site Layout. V door direction is west. Topsoil, if available, will be stockpiled on the east side of location, per BLM specifications. No major cuts will be required. A berm will be constructed on the east side of the pad.
- B. The Drilling Site Layout exhibit shows the proposed orientation of closed loop system and access road. No permanent living facilities are planned, but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.

10. Plans for Restoration of the Surface:

- A. Interim Reclamation will take place within six months after the well has been completed. The pad will be downsized by reclaiming the areas not needed for disposal operations. The portions of the pad that are not needed for disposal operations will be re-contoured to its original state as much as possible. The caliche that is removed will be reused to either build another pad site or for road repairs within the lease. The stockpiled topsoil will then be spread out reclaimed area and reseeded with a BLM approved seed mixture. In the event that the well must be worked over or maintained, it may be necessary to drive, park, and/or operate machinery on reclaimed land. This area will be repaired or reclaimed after work is complete.
- B. Final Reclamation: Upon plugging and abandoning the well all caliche for well pad and lease road will be removed and surface will be recountoured to reflect its surroundings as much as possible within six months. Caliche will be recycled for road repair or reused for another well pad within the lease. If any topsoil remains, it will be spread out and the area

will be re-seeded with a BLM approved mixture and re-vegetated as per BLM orders. When required by BLM, the well pad site will be restored to match pre-construction grades.

11. Surface Ownership:

- A. The surface is owned by the State of New Mexico, Commissioner of Public Lands. Grazing tenant is Mark T. McCloy and Annette E. McCloy, PO Box 795, Tatum, NM 88267. The surface is multiple uses with the primary uses of the region for grazing of livestock and the production of oil and gas.
- B. The proposed road routes and surface location will be restored as directed by the BLM.

12. Other Information:

- A. The area around the well site is grassland and the topsoil is sandy. The vegetation is moderately sparse with native prairie grasses, some mesquite. No wildlife was observed but it is likely that mule deer, rabbits, covotes and rodents traverse the area.
- B. There is no permanent or live water in the immediate area.
- C. There are no dwellings within 2 miles of this location.
- D. A Cultural Resources Examination is being prepared by APAC, PO Box 1982, Carlsbad, New Mexico 88221-1982, phone 575-200-7099, and the results will be forwarded to your office in the near future.

13. Bond Coverage:

Bond Coverage is Statewide Bonds # WYB000055.

15. Operator's Representative:

The Kaiser-Francis Oil Company representative responsible for assuring compliance with the surface use plan is as follows:

Robert Sanford Drilling Engineer

Kaiser-Francis Oil Company

PO Box 21468 Tulsa, OK 74121 Cell: 918-770-2682

Office: 918-491-4201

Matt Warner Drilling Engineer

Kaiser-Francis Oil Company

PO Box 21468 Tulsa, OK 74121 Cell: 720-556-2313

Office: 918-491-4379



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



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? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

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:

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:

PWD disturbance (acres):

Section 3 - Unlined Pits

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

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 Dissol that of the existing water to be protected?	ved Solids (TDS) concentration equal to or less that
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	
The specific to a single injection is the options, its	
Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):

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:	



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

Bond Info Data Report

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:

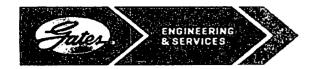
Reclamation bond rider amount:

Additional reclamation bond information attachment:

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT NORTH Well Number: 119H

	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	FSL	350	FWL	238	33E	1	Aliquot SWS W	32.34092 9	- 103.5334 19	LEA	l .	NEW MEXI CO	s	STATE	- 572 2	122 00	925 0
EXIT Leg #1	330	FNL	350	FWL	228	33E	36	Aliquot NWN W	32.35454 3	- 103.5335 07	LEA	NEW MEXI CO	1 —	s	STATE	- 572 2	I	925 0
BHL Leg #1	330	FNL	350	FWL	228	33E	36	Aliquot NWN W	32.35454 3	- 103.5335 07	LEA	NEW MEXI CO	—	s	STATE	- 572 2	1	925 0



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	
Product Description:	10K3	.035.0CM4.1/16FLGE/E	
	10K3 4 -1/16 10K FLANGE - FIXED	.035.0CM4.1/16FLGE/E End Fitting 2 :	4 -1/16 10K FLANGE - FLOATING
Product Description: End Fitting 1: Gates Part No. :		7	4 -1/16 10K FLANGE - FLOATING L39789092117H-100317-2

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

10/3/2017

Quality:

Date:

Signature :

Produciton:

Date :

Signature:

PRODUCTION

10/3/201**7**/

Form PTC - 01 Rev.0 2

