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Form 3160-3
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.
NMLC0063993

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

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

7. If Unit or CA Agreement, Name and No.
BELL LAKE / NMNM068292X

8. Lease Name and Well No.
BELL LAKE UNIT SOUTH
301H (316706)

2. Name of Operator
KAISER FRANCIS OIL COMPANY (12361)

9. API Well No.
30-025-45909

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

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

10. Field and Pool, or Exploratory (98264)
BELL LAKE SOUTH / BONE SPRING SO

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface SWNW / 2000 FNL / 295 FWL / LAT 32.2483633 / LONG -103.533657

At proposed prod. zone SWSW / 330 FSL / 350 FWL / LAT 32.2257605 / LONG -103.5334751

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 1 / T24S / R33E / NMP

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

12. County or Parish
LEA

13. State
NM

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

16. No of acres in lease
160

17. Spacing Unit dedicated to this well
240

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

19. Proposed Depth
11660 feet / 19497 feet

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3632 feet

22. Approximate date work will start*
01/01/2019

23. Estimated duration
40 days

24. Attachments

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

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

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	Melanie Wilson / Ph: (575)914-1461	11/02/2018

Title
Regulatory Analyst

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575)234-5959	04/05/2019

Title	Office
Assistant Field Manager Lands & Minerals	CARLSBAD

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

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

GCP Rec 05/02/19

APPROVED WITH CONDITIONS

KZ 05/06/19

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 04/05/2019

INSTRUCTIONS

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

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

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

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

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

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

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

NOTICES

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

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

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

(Continued on page 3)

Additional Operator Remarks

Location of Well

1. SHL: SWNW / 2000 FNL / 295 FWL / TWSP: 24S / RANGE: 33E / SECTION: 1 / LAT: 32.2483633 / LONG: -103.533657 (TVD: 0 feet, MD: 0 feet)
   PPP: NWSW / 2640 FSL / 350 FWL / TWSP: 24S / RANGE: 33E / SECTION: 12 / LAT: 32.2321277 / LONG: -103.533607 (TVD: 11660 feet, MD: 17187 feet)
   PPP: NWNW / 0 FNL / 350 FWL / TWSP: 24S / RANGE: 33E / SECTION: 12 / LAT: 32.239384 / LONG: -103.533544 (TVD: 11660 feet, MD: 14550 feet)
   PPP: NWSW / 2600 FSL / 350 FWL / TWSP: 24S / RANGE: 33E / SECTION: 1 / LAT: 32.2465352 / LONG: -103.5334829 (TVD: 11660 feet, MD: 11939 feet)
   BHL: SWSW / 330 FSL / 350 FWL / TWSP: 24S / RANGE: 33E / SECTION: 12 / LAT: 32.2257605 / LONG: -103.5334751 (TVD: 11660 feet, MD: 19497 feet)

BLM Point of Contact

Name: Tanja Baca
Title: Admin Support Assistant
Phone: 5752345940
Email: tabaca@blm.gov

Review and Appeal Rights

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

PECOS DISTRICT
DRILLING OPERATIONS
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Kaiser Francis Oil Company
LEASE NO.:	NMLC0063993
WELL NAME & NO.:	Bell Lake Unit South 301H
SURFACE HOLE FOOTAGE:	2000'/N & 295'/E
BOTTOM HOLE FOOTAGE	330'/S & 350'/W
LOCATION:	Section 1, T.24 S., R.33 E., NMPM
COUNTY:	Lea County, New Mexico

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
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☐ COM	☑ Unit

A. HYDROGEN SULFIDE

1. 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 **10-3/4"** surface casing shall be set at approximately **1375'** (a minimum of 25' into the Rustler Anhydrite and above the salt) and cemented to surface.
   a. **If cement does not circulate to 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 **6 hours** after pumping cement, ideally between 8-10 hours after completing the cement job.
   b. WOC time for a primary cement job will be a minimum of **8 hours** or **500 psi** compressive strength, whichever is greater. This is to include the lead cement.
   c. If cement falls back, remedial cementing will be done prior to drilling out that string.
   d. WOC time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.

2. The **9-5/8"** intermediate casing shall be set at approximately **10900'** and cemented to surface.
   a. **If cement does not circulate to surface,** see B.1.a, b & d. Proposed cement volumes are not sufficient to reach surface based on BLM calculations. More cement may be required.
   b. **This casing must be kept at least 1/3 full at all times in order to meet BLM collapse requirements.**
3. The minimum required fill of cement behind the **5-1/2"** production casing is:
   a. Cement shall tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

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.

D. SPECIAL REQUIREMENTS

1. 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 once it has been established.
2. A commercial well determination shall be submitted after production has been established for at least six months.

DR 3/29/2019

GENERAL REQUIREMENTS

1. The BLM is to be notified in advance for a representative to witness:
   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)
      ☒ Chaves and Roosevelt Counties
      Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
      During office hours call (575) 627-0272.
      After office hours call (575)
      ☒ Eddy County
      Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
      ☒ Lea County
      Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

2. 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.

3. 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.

4. The record of the drilling rate along with the GR/N well log (one log per well pad is acceptable) 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 4 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).

b. 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).
c. 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.
d. 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.
e. 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.
f. 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.
g. 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

1. 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

2. 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.

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

AFMSS

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

Operator Certification Data Report

04/05/2019

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:** 11/02/2018

Title: Regulatory Analyst

Street Address: 106 W. Riverside Drive

City: Carlsbad **State:** NM **Zip:** 88220

Phone: (575)914-1461

Email address: nmogrservices@gmail.com

Field Representative

Representative Name: Eric Hanson

Street Address: 6733 S Yale Ave

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

Phone: (918)770-2682

Email address: erich@kfoc.net

APD ID: 10400035917 **Submission Date:** 11/02/2018

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

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

[redacted]

Show Final Text

Section 1 - General

APD ID: 10400035917 **Tie to previous NOS?** **Submission Date:** 11/02/2018

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

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

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

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

Agreement in place? 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.

Zip: 74121

Operator PO Box: PO Box 21468

Operator City: Tulsa **State:** OK

Operator Phone: (918)491-0000

Operator Internet Address:

Section 2 - Well Information

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

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

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

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** BELL LAKE SOUTH **Pool Name:** BONE SPRING SOUTH

Is the proposed well in an area containing other mineral resources? POTASH

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

Describe other minerals:

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

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

Well Class: HORIZONTAL **Number of Legs:** 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: EXPLORATORY (WILDCAT)

Describe sub-type:

Distance to town: 25 Miles **Distance to nearest well:** 70 FT **Distance to lease line:** 295 FT

Reservoir well spacing assigned acres Measurement: 240 Acres

Well plat: Bell_Lake_South_Unit_301H_C102_20181102091916.pdf

Bell_Lake_South_Unit_301H_Pymt_Receipt_20181102162255.pdf

Well work start Date: 01/01/2019 **Duration:** 40 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number:

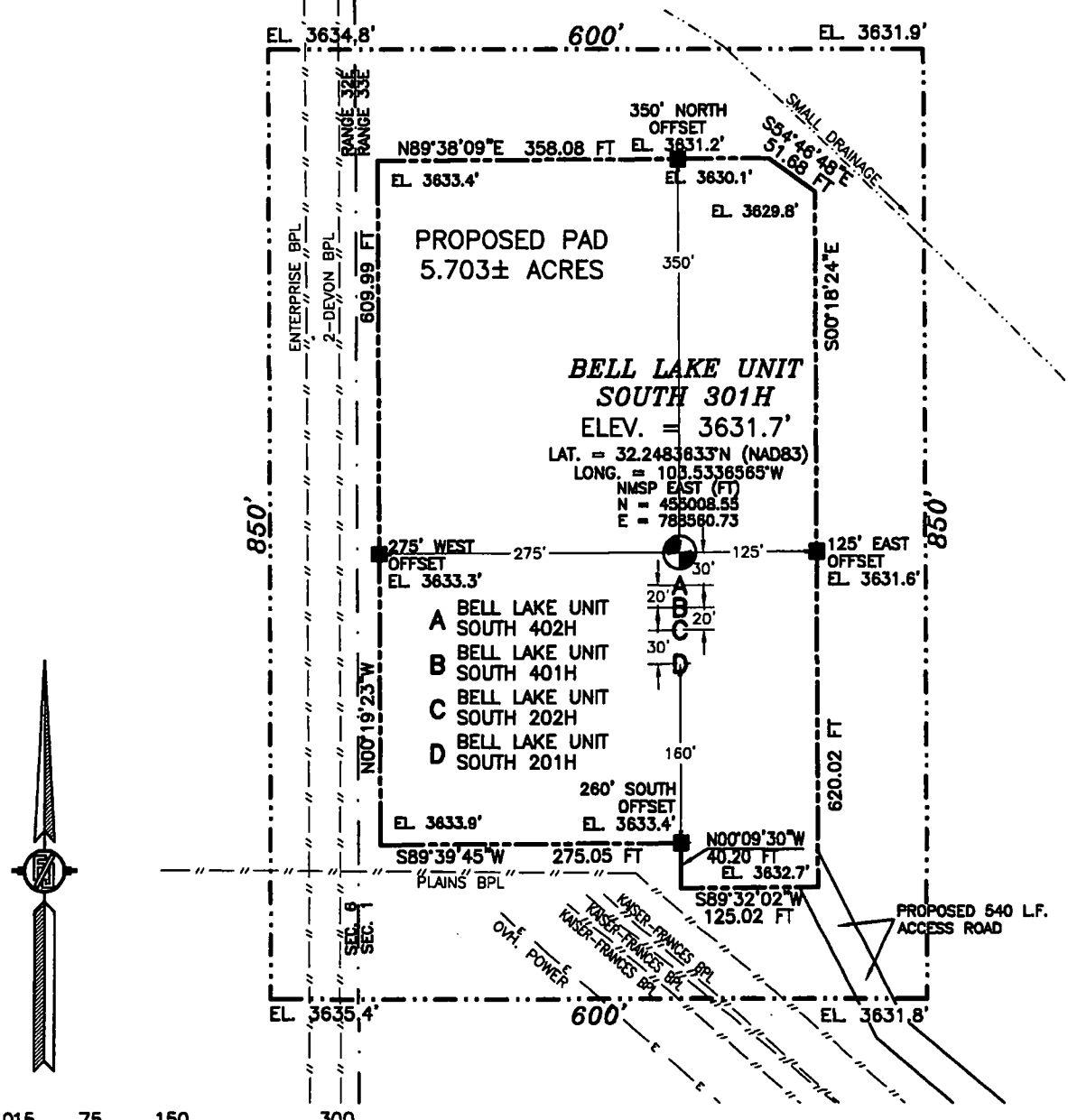
	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	2000	FNL	295	FWL	24S	33E	1	Aliquot SWNW	32.2483633	-103.533657	LEA	NEW MEXICO	NEW MEXICO	S	STATE	3632	0	0
KOP Leg #1	2000	FNL	295	FWL	24S	33E	1	Aliquot SWNW	32.2483633	-103.533657	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-4363	7995	7995
PPP Leg #1	2600	FSL	350	FWL	24S	33E	1	Aliquot NWSW	32.2465352	-103.5334829	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-8028	11939	11660

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
PPP Leg #1	0	FNL	350	FWL	24S	33E	12	Aliquot NWNW	32.239384	-103.533544	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0063993	-8028	14550	11660
PPP Leg #1	2640	FSL	350	FWL	24S	33E	12	Aliquot NWSW	32.232127 7	-103.533607	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0063798	-8028	17187	11660
EXIT Leg #1	330	FSL	350	FWL	24S	33E	12	Aliquot SWSW	32.225760 5	-103.533475 1	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0063798	-8028	19497	11660
BHL Leg #1	330	FSL	350	FWL	24S	33E	12	Aliquot SWSW	32.225760 5	-103.533475 1	LEA	NEW MEXICO	NEW MEXICO	F	NMLC0063798	-8028	19497	11660

SECTION 1, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
SITE MAP



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY 128 & CO. RD. E21 (DELAWARE BASIN), GO NORTH ON CO. RD. E21 APPROX. 2.6 MILES, TURN LEFT AND GO WEST ON BELL LAKE ROAD APPROX 1.3 MILES TO PROPOSED ACCESS ROAD, FOLLOW ACCESS ROAD NORTHWEST-NORTH 540 FEET TO THE SOUTHEAST END OF THE PAD.

KAISER-FRANCIS OIL COMPANY
BELL LAKE UNIT SOUTH 301H
LOCATED 2000 FT. FROM THE NORTH LINE AND 295 FT. FROM THE WEST LINE OF SECTION 1, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO

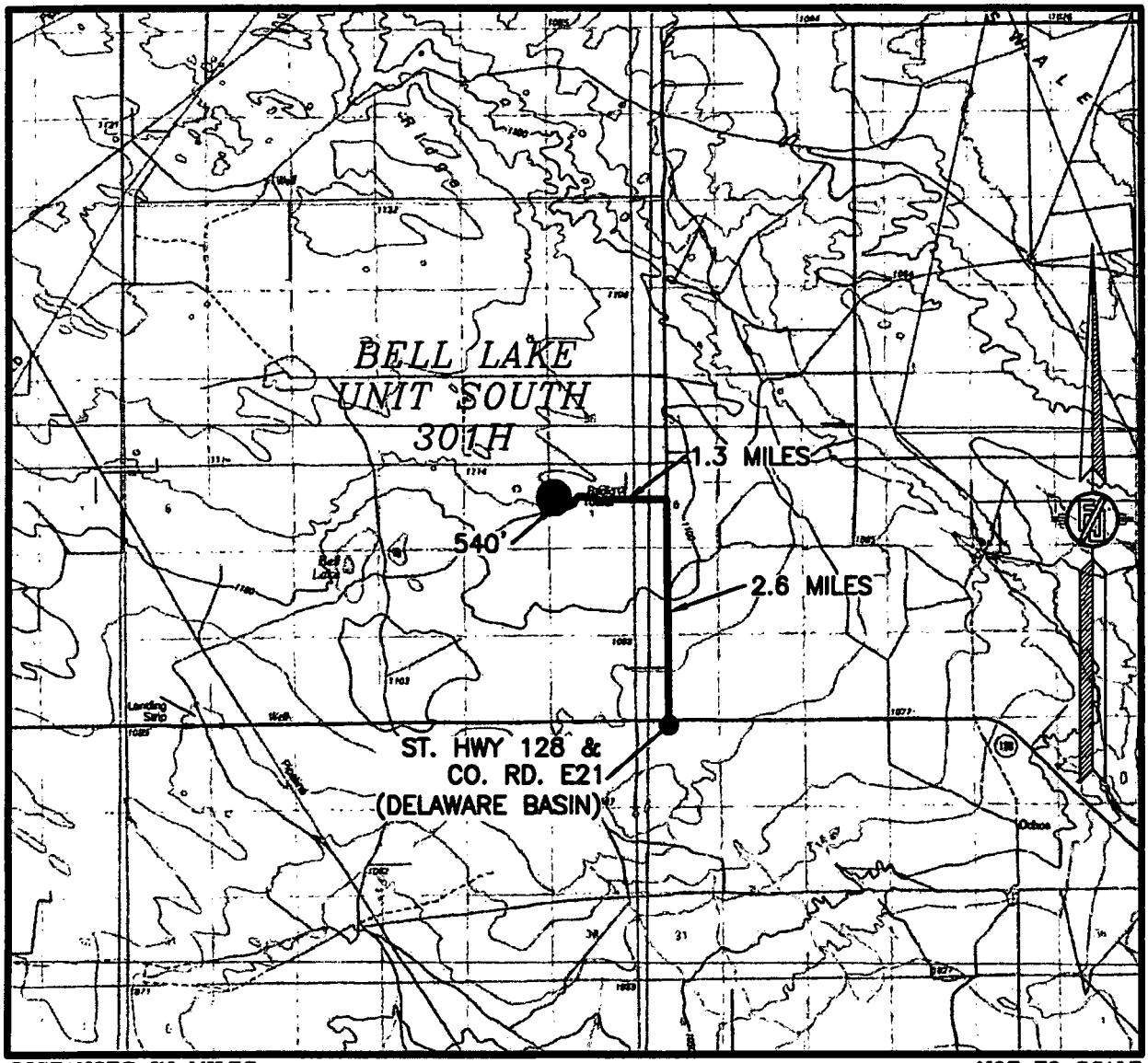
OCTOBER 15, 2018

SURVEY NO. 6600

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

SECTION 1, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION
FROM THE INTERSECTION OF ST. HWY 128 & CO. RD. E21 (DELAWARE BASIN), GO NORTH ON CO. RD. E21 APPROX. 2.6 MILES, TURN LEFT AND GO WEST ON BELL LAKE ROAD APPROX 1.3 MILES TO PROPOSED ACCESS ROAD, FOLLOW ACCESS ROAD NORTHWEST–NORTH 540 FEET TO THE SOUTHEAST END OF THE PAD.

KAISER–FRANCIS OIL COMPANY
BELL LAKE UNIT SOUTH 301H
LOCATED 2000 FT. FROM THE NORTH LINE AND 295 FT. FROM THE WEST LINE OF SECTION 1, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M.
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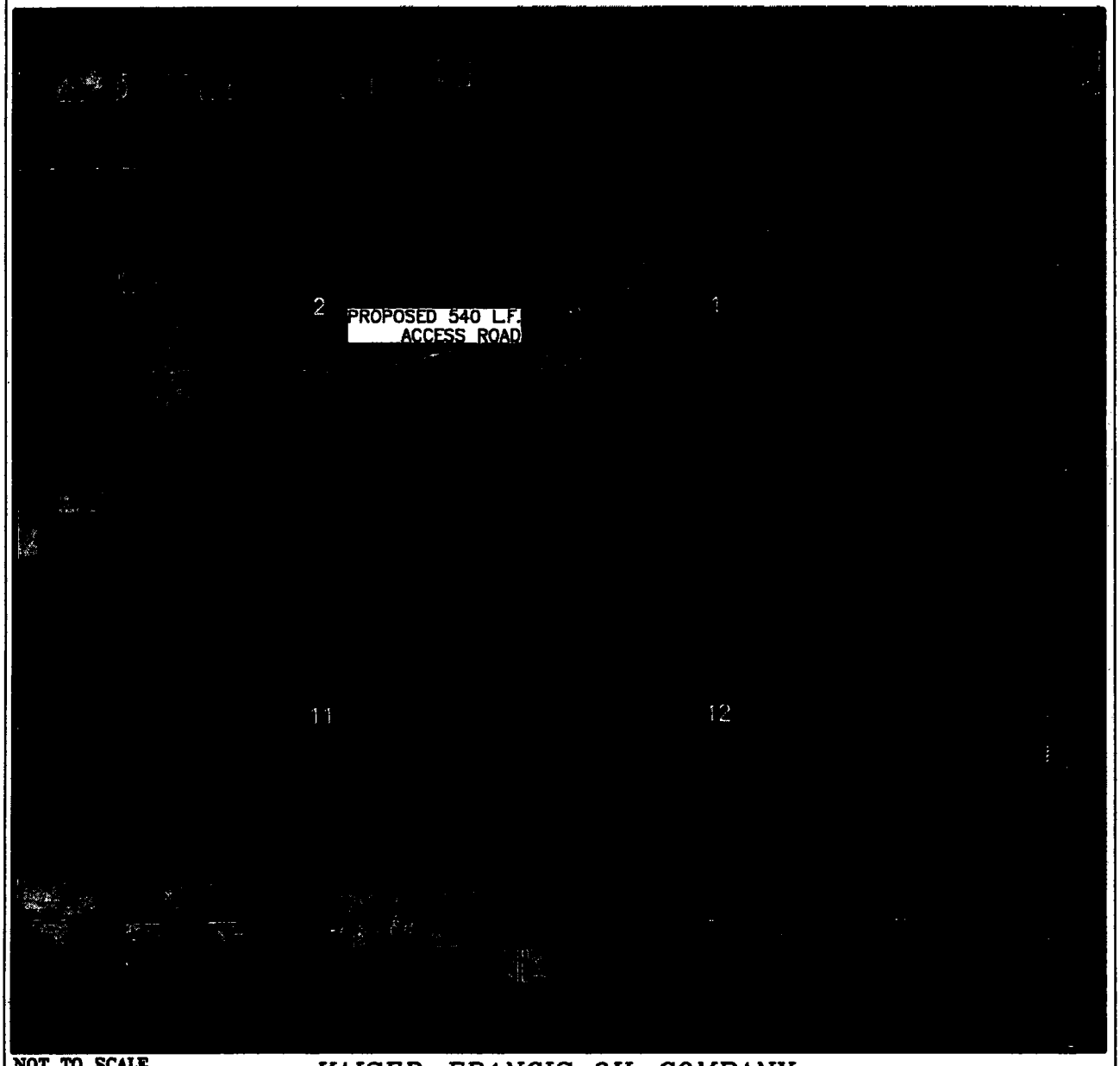
SECTION 1, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
NOV. 2017

KAISER-FRANCIS OIL COMPANY

BELL LAKE UNIT SOUTH 301H

LOCATED 2000 FT. FROM THE NORTH LINE
AND 295 FT. FROM THE WEST LINE OF
SECTION 1, TOWNSHIP 24 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

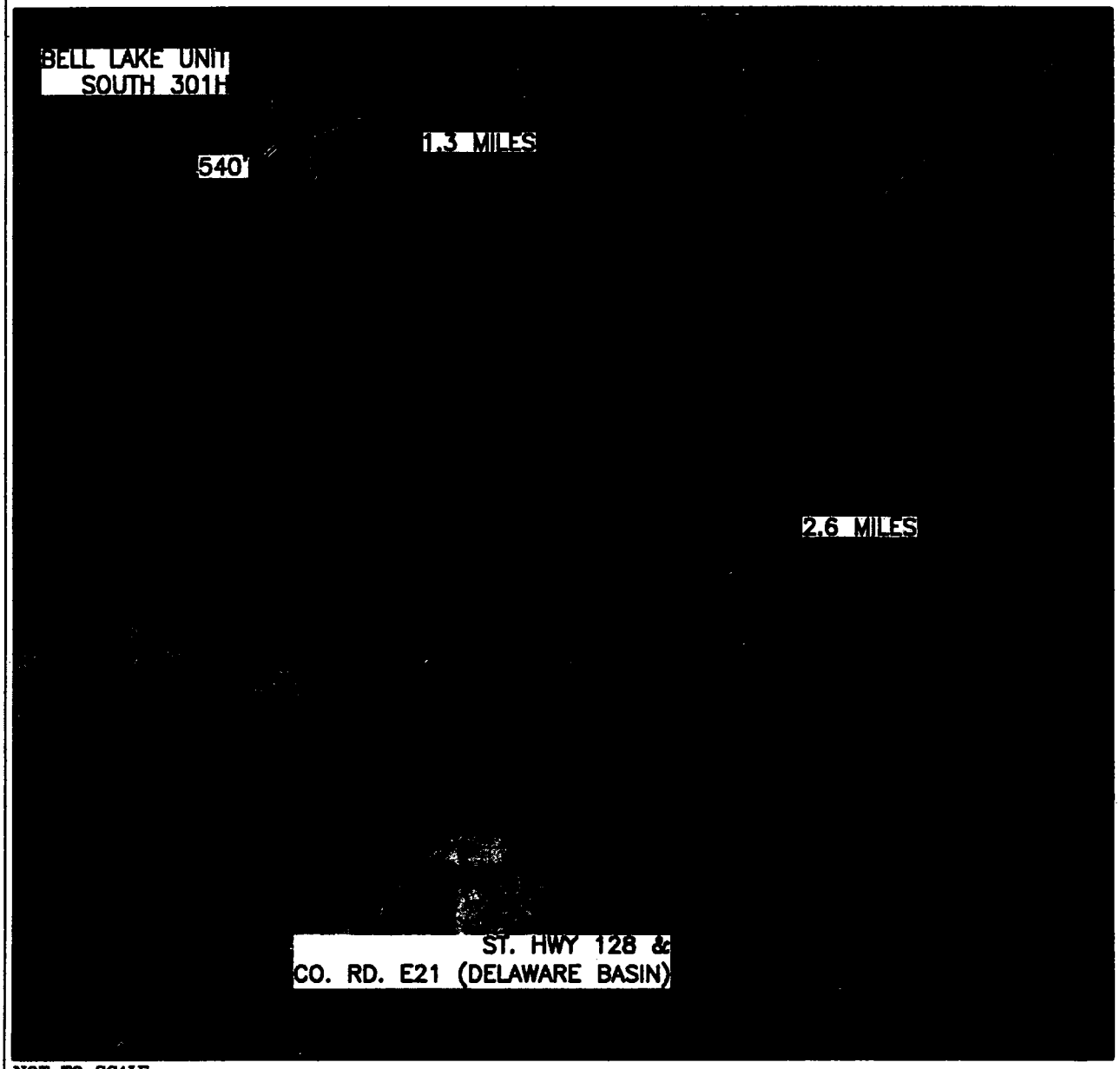
OCTOBER 15, 2018

SURVEY NO. 6600

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

SECTION 1, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

AERIAL ACCESS ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
NOV. 2017

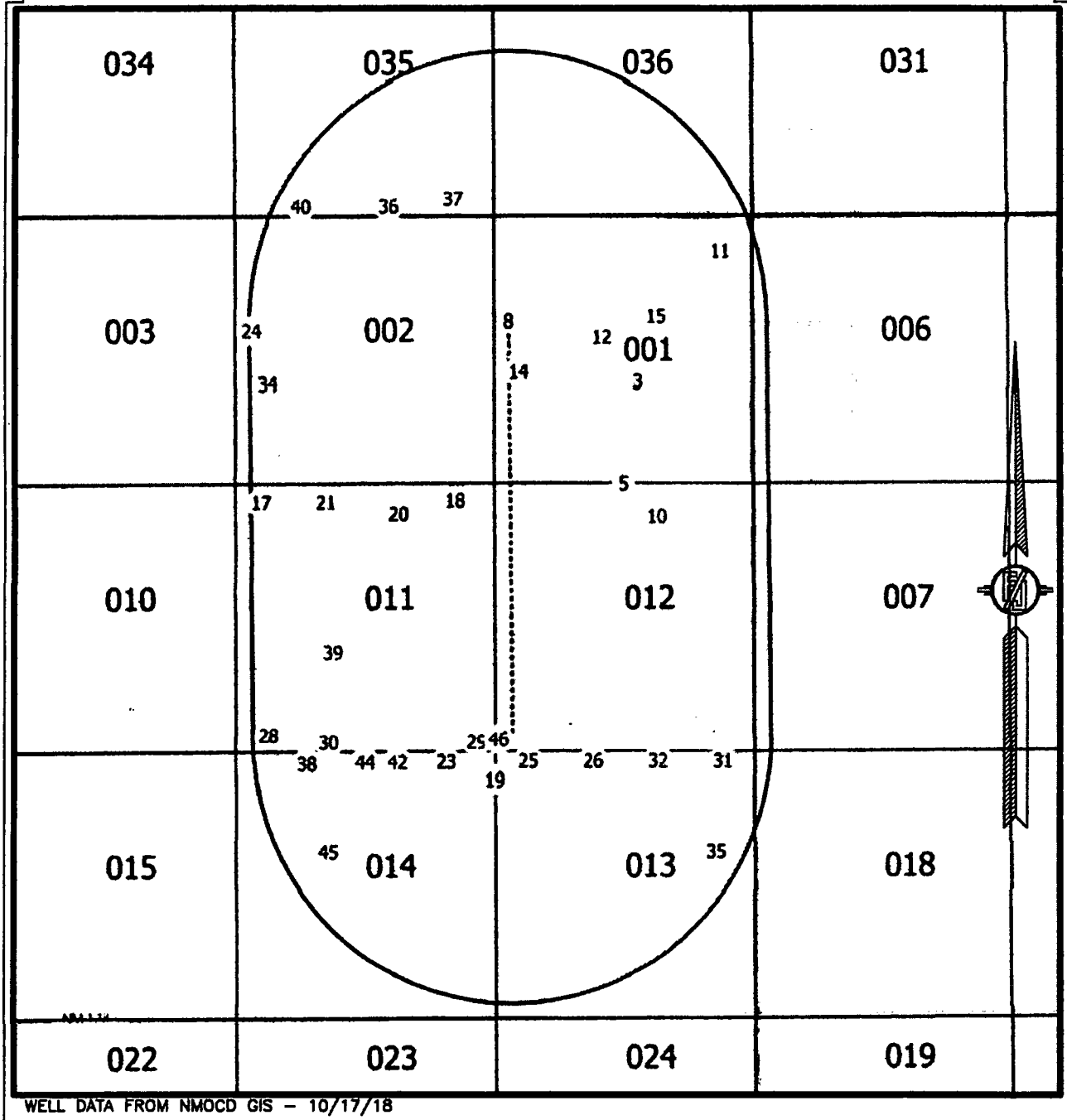
KAISER-FRANCIS OIL COMPANY
BELL LAKE UNIT SOUTH 301H
LOCATED 2000 FT. FROM THE NORTH LINE
AND 295 FT. FROM THE WEST LINE OF
SECTION 1, TOWNSHIP 24 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

OCTOBER 15, 2018

SURVEY NO. 6600

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

1-MILE WELLS



WELL DATA FROM NMOCD GIS - 10/17/18

SH SURFACE LOCATION

BH BOTTOM OF HOLE

XX WELLS WITHIN 1 MILE

WELL PATH

1-MILE BOUNDARY

KAISER-FRANCIS OIL COMPANY

BELL LAKE UNIT SOUTH 301H

LOCATED 2000 FT. FROM THE NORTH LINE AND 295 FT. FROM THE WEST LINE OF SECTION 1, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO

OCTOBER 15, 2018

SURVEY NO. 6600

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

APD ID: 10400035917 **Submission Date:** 11/02/2018

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

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

[redacted]

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	—	3632	0	0		NONE	No
2	RUSTLER	2233	1400	1400		NONE	No
3	SALADO	1808	1825	1825		NONE	No
4	TOP SALT	1633	2000	2000		NONE	No
5	BASE OF SALT	-1367	5000	5000		NONE	No
6	LAMAR	-1567	5200	5200		NATURAL GAS,OIL	No
7	BELL CANYON	-1767	5400	5400		NATURAL GAS,OIL	No
8	CHERRY CANYON	-2617	6250	6250		NATURAL GAS,OIL	No
9	BRUSHY CANYON	-4092	7725	7725		NATURAL GAS,OIL	No
10	BONE SPRING	-5232	8865	8865		NATURAL GAS,OIL	No
11	AVALON SAND	-5424	9057	9057		NATURAL GAS,OIL	No
12	BONE SPRING 1ST	-6467	10100	10100		NATURAL GAS,OIL	No
13	BONE SPRING 2ND	-7002	10635	10635		NATURAL GAS,OIL	Yes
14	BONE SPRING LIME	-7517	11150	11150		NATURAL GAS,OIL	No
15	BONE SPRING 3RD	-7997	11630	11630		NATURAL GAS,OIL	No
16	WOLFCAMP	-8302	11935	11935		NATURAL GAS,OIL	No

Section 2 - Blowout Prevention

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

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

Equipment: A 10M 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.
Requesting Variance? YES

Variance request: Flex Hose Variance

Testing Procedure: See attached

Choke Diagram Attachment:

Bell_Lake_South_Unit_301H_Choke_Manifold_20181102100823.pdf

BOP Diagram Attachment:

Bell_Lake_South_Unit_301H_BOP_20181102100846.pdf

Bell_Lake_South_Unit_301H_Flex_Hose_20181102100856.pdf

Bell_Lake_Unit_South_301H_BOP_Test_Procedure_20181102102010.docx

Bell_Lake_South_Unit_301H__Wellhead_Diagram_20190129093143.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	14.75	10.75	NEW	API	N	0	1500	0	1500			1500	J-55	40.5	STC	3.7	7.3	DRY	11.4	DRY	17.1
2	INTERMEDIATE	9.625	7.625	NEW	API	N	0	10900	0	10900			10900	P-110	29.7	LTC	1.2	1.7	DRY	2.2	DRY	2.7
3	PRODUCTION	6.75	5.5	NEW	API	N	0	19497	0	11660			19497	P-110	20	OTHER - Eagle SF	1.3	1.5	DRY	2.5	DRY	2.6

Casing Attachments

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Bell_Lake_South_Unit_301H_Csg_Assumptions_20181102103411.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Bell_Lake_South_Unit_301H_Csg_Assumptions_20181102103431.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Bell_Lake_South_Unit_301H_Csg_Assumptions_20181102103448.pdf

Bell_Lake_South_Unit_301H_5.5_Csg_Specs_20181102155345.pdf

Section 4 - Cement

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1500	937	1.34	14.8	834	50	Premium C	Accelerator
INTERMEDIATE	Lead	5100	0	10900	464	2.85	11	1321	50	NeoCem	Ko-Seal
INTERMEDIATE	Tail		0	10900	224	1.2	15.6	268	25	Halcem	Halad R-9
PRODUCTION	Lead		10700	19497	442	1.9	13.2	723	15	Premium C	Retarder

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
10900	19497	OIL-BASED MUD	9	10.5							
1500	10900	OTHER : Diesel-Brine Emulsion	8.8	9.2							
0	1500	OTHER : Fresh Water	8.4	9							

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

Section 6 - Test, Logging, Coring

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

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

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

GR,MUDLOG

Coring operation description for the well:

None planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6366 **Anticipated Surface Pressure:** 3800.8

Anticipated Bottom Hole Temperature(F): 199

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Bell_Lake_South_Unit_301H_H2S_Plan_20181102160105.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Bell_Lake_South_Unit_301H_Directional_Plan_20181102160150.pdf

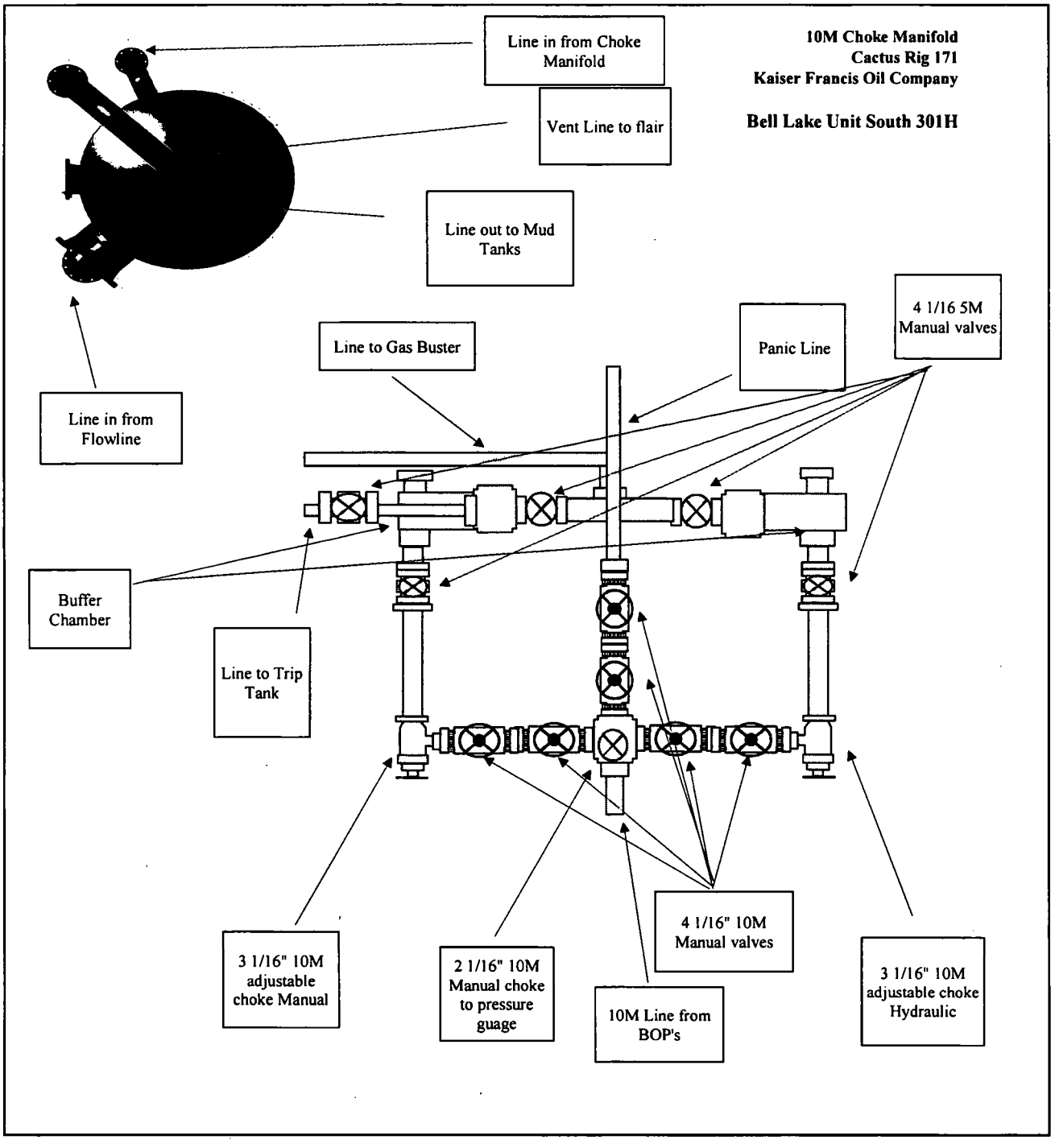
Other proposed operations facets description:

Gas Capture Plan attached

Other proposed operations facets attachment:

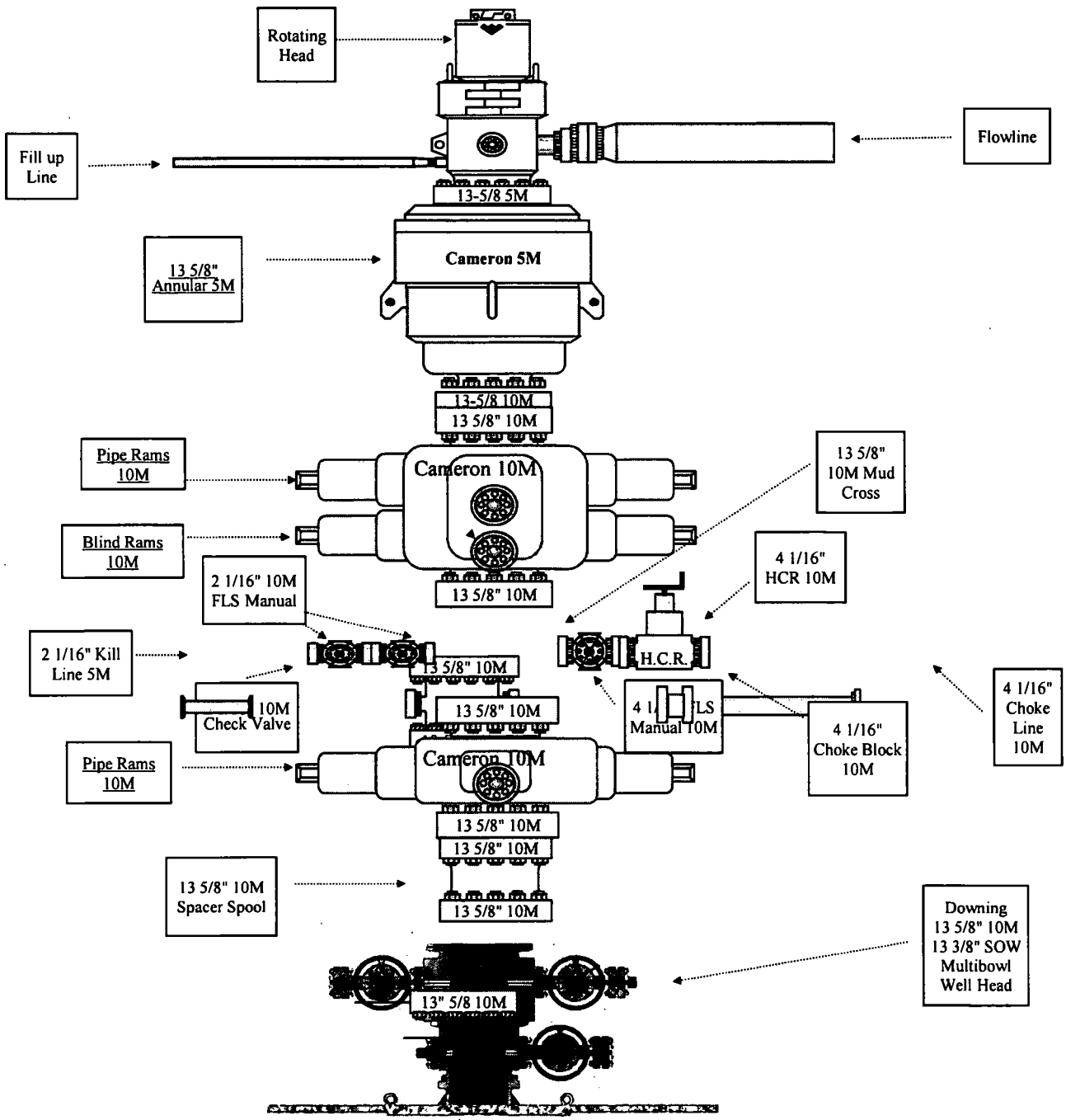
Bell_Lake_South_Unit_301H_GCP_20181102160245.pdf

Other Variance attachment:


10M Choke Manifold
Cactus Rig 171
Kaiser Francis Oil Company
Bell Lake Unit South 301H
Line in from Choke Manifold
Vent Line to flair
Line out to Mud Tanks
4 1/16 5M Manual valves
Panic Line
Line to Gas Buster
Line in from Flowline
Buffer Chamber
Line to Trip Tank
3 1/16" 10M adjustable choke Manual
2 1/16" 10M Manual choke to pressure guage
10M Line from BOP's
4 1/16" 10M Manual valves
3 1/16" 10M adjustable choke Hydraulic

10M BOP with 5M Annular
Kaiser Francis Oil Company
Bell Lake Unit South 301H

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



GATES E & S NORTH AMERICA, INC.
1450 Montana Rd
Iola, KS 66749

PHONE: 620-365-4147
FAX: 620-365-4119
EMAIL: *Eileen.Johns@gates.com*
WEB: www.gates.com

ASS# M14311

10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

Customer :	A-7 AUSTIN INC DBA AUSTIN HOSE	Test Date:	9/1/2017
Customer Ref. :	4085873	Hose Serial No.:	IO-090117-2
Invoice No. :	508456	Created By:	BENJAMIN ALLEN
Comments:	N/A		
Hose Temperature:	-4°F to +180°F (-20°C to +82°C)		
Product Description:	10K3.035.0CM4116FIXXFLTFLG SS\LE		

End Fitting 1 :	4 1/16 10K FIXED FLANGE	End Fitting 2 :	4 1/16 10K FLOATING FLANGE
Gates Part No. :	4773-4290	Assembly Code :	L3962908181710-090117-2
Working Pressure :	10,000 PSI	Test Pressure :	15,000 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Sixth Edition, June 2015, Test pressure 9.6.7 and per Table 9 to 15,000 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

Quality:	QUALITY	Produciton:	PRODUCTION
Date :	9/1/2017	Date :	9/1/2017
Signature :		Signature :	

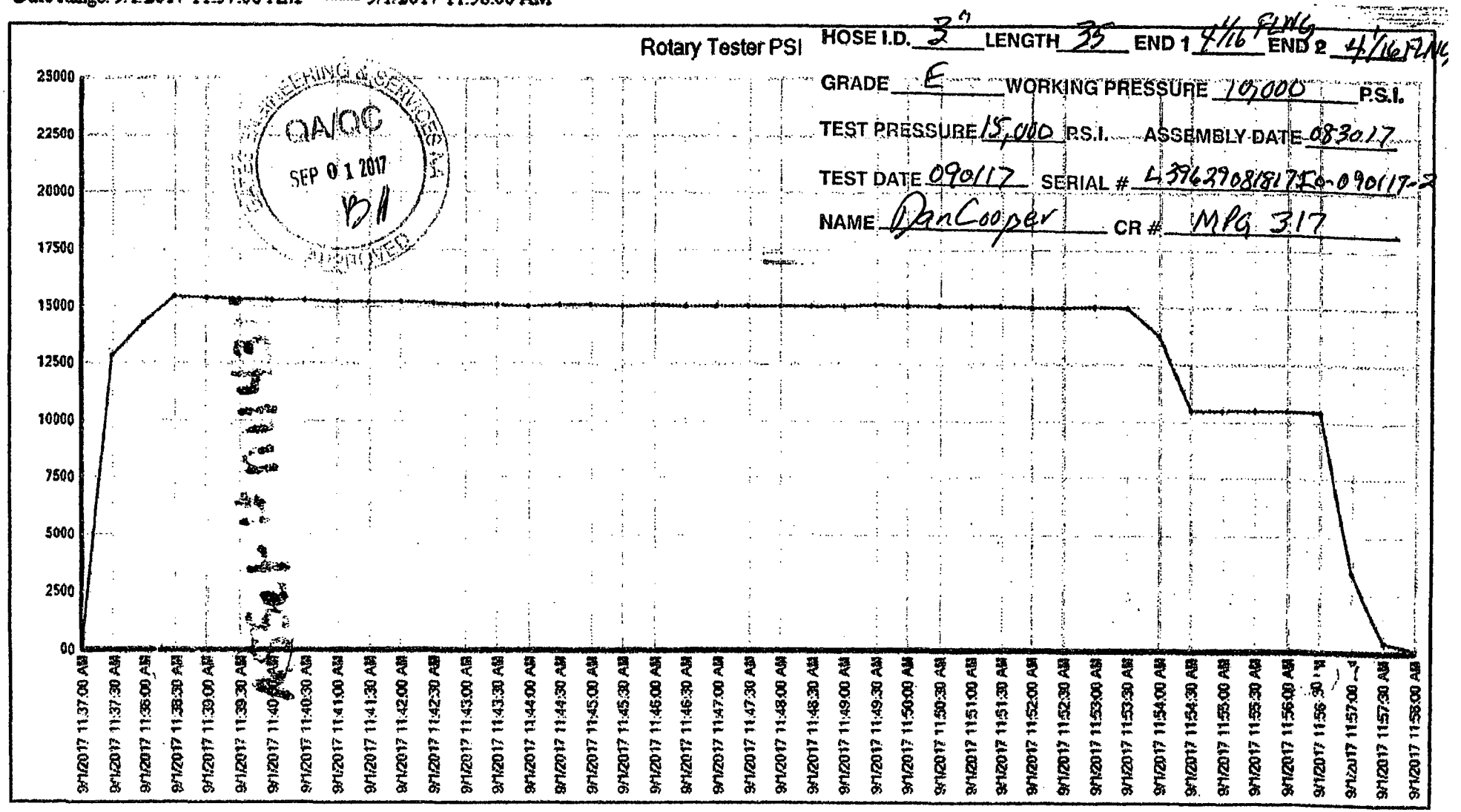
Form PTC - 01 Rev.0 2

Rotary Tester

StartDate: 9/1/2017 EndDate: 9/1/2017 ☑ Do Not Average Values

StartTime: 11:37 AM EndTime: 11:58 AM Lookup

Date Range: 9/1/2017 11:37:00 AM ------- 9/1/2017 11:58:00 AM



Friday, Sep 01, 2017 01:24 PM

Company: Kaiser-Francis
Site: Bell Lake Unit South 301H
Well: Bell Lake Unit South 301H
Project: Lea County, New Mexico (NAD 83)
Rig: Cactus 171

Kaiser-Francis Oil Company

MS Directional

T G M

Azimuths to Grid North
True North: -0.43°
Magnetic North: 6.42°

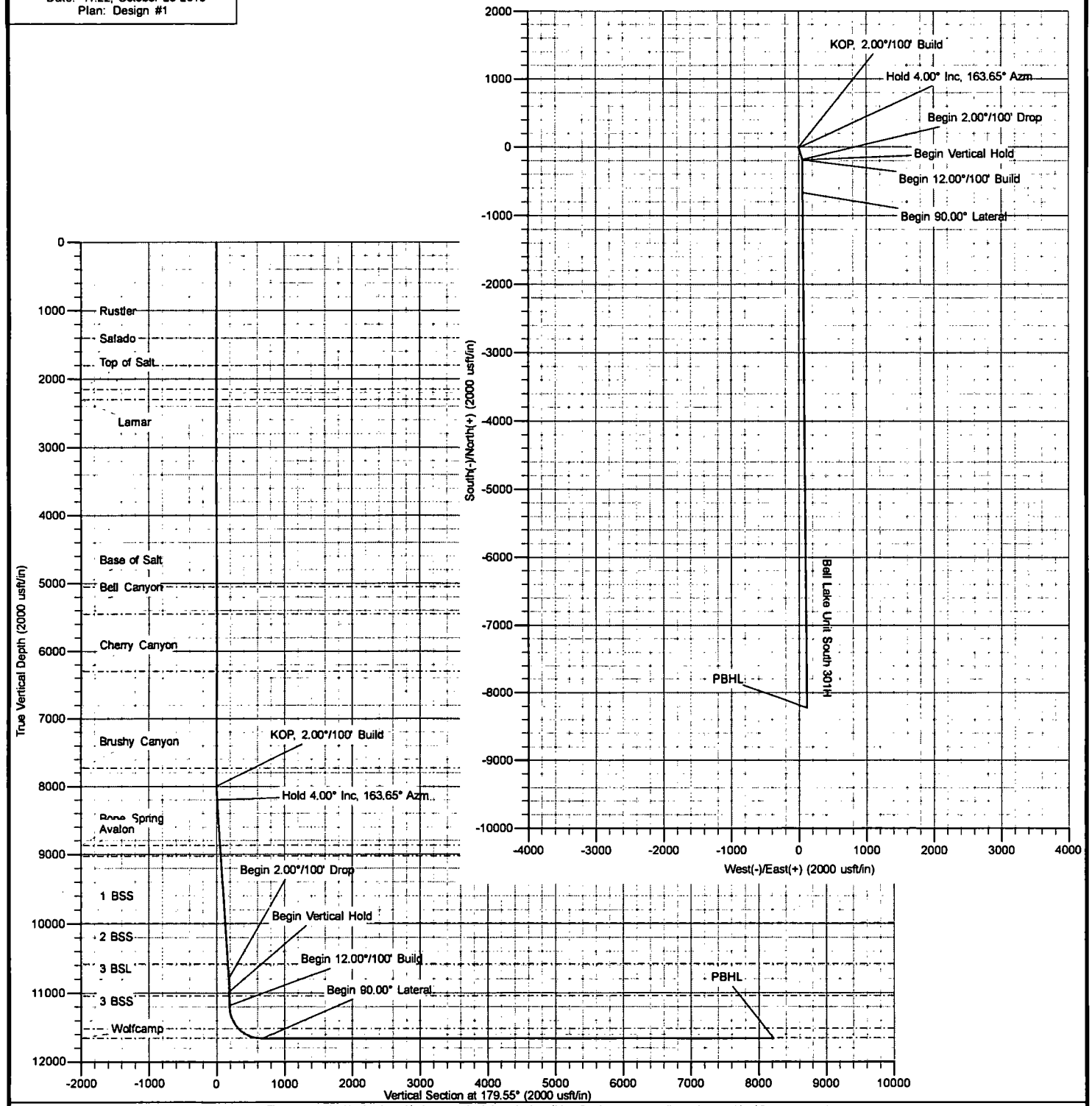
Magnetic Field
Strength: 47843.5nT
Dip Angle: 60.03°
Date: 12/1/2018
Model: BGGM2018

US State Plane 1983
New Mexico Eastern Zone

Created By: JA
Date: 11:22, October 26 2018
Plan: Design #1

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
7995.00	0.00	0.00	7995.00	0.00	0.00	0.00	0.00	KOP, 2.00°/100' Build
8195.15	4.00	163.65	8194.99	-6.71	1.97	6.72	6.99	Hold 4.00° Inc, 163.65° Azm
10789.04	4.00	163.65	10782.55	-180.46	52.93	180.87	188.06	Begin 2.00°/100' Drop
10989.19	0.00	0.00	10982.54	-187.17	54.89	187.60	195.05	Begin Vertical Hold
11189.19	0.00	0.00	11182.54	-187.17	54.89	187.60	195.05	Begin 12.00°/100' Build
11939.19	90.00	179.55	11660.00	-664.62	58.60	665.06	672.52	Begin 90.00° Lateral
19497.23	90.00	179.55	11660.00	-8222.43	117.31	8223.10	8230.56	PBHL



Kaiser-Francis Oil Company

Kaiser-Francis

Lea County, New Mexico (NAD 83)
Bell Lake Unit South 301H
Bell Lake Unit South 301H

Wellbore #1

Plan: Design #1

Standard Planning Report

26 October, 2018

MS Directional

Database:	EDM 5000.14 Conroe Db	**Local Co-ordinate Reference:**	Well Bell Lake Unit South 301H
Company:	Kaiser-Francis	**TVD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 83)	**MD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Site:	Bell Lake Unit South 301H	**North Reference:**	Grid
Well:	Bell Lake Unit South 301H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Lea County, New Mexico (NAD 83)		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Bell Lake Unit South 301H				
Site Position:		**Northing:**	455,008.55 usft	**Latitude:**	32° 14' 54.108 N
From:	Map	**Easting:**	788,560.73 usft	**Longitude:**	103° 32' 1.163 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "		

Well	Bell Lake Unit South 301H					
Well Position	**+N/-S**	0.00 usft	**Northing:**	455,008.55 usft	**Latitude:**	32° 14' 54.108 N
	+E/-W	0.00 usft	**Easting:**	788,560.73 usft	**Longitude:**	103° 32' 1.163 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,631.70 usft
Grid Convergence:		0.427 °				

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	BGGM2018	12/1/2018	6.850	60.027	47,843.53

Design	Design #1				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.00	0.00	0.00	179.55	

Plan Survey Tool Program **Date** 10/26/2018

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	19,497.23	Design #1 (Wellbore #1)	MWD	
				OWSG MWD - Standard	

Database:	EDM 5000.14 Conroe Db	**Local Co-ordinate Reference:**	Well Bell Lake Unit South 301H
Company:	Kaiser-Francis	**TVD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 83)	**MD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Site:	Bell Lake Unit South 301H	**North Reference:**	Grid
Well:	Bell Lake Unit South 301H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Plan Sections

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
7,995.00	0.00	0.00	7,995.00	0.00	0.00	0.00	0.00	0.00	0.000	
8,195.15	4.00	163.65	8,194.99	-6.71	1.97	2.00	2.00	0.00	163.654	
10,789.04	4.00	163.65	10,782.55	-180.46	52.93	0.00	0.00	0.00	0.000	
10,989.19	0.00	0.00	10,982.54	-187.17	54.89	2.00	-2.00	0.00	180.000	
11,189.19	0.00	0.00	11,182.54	-187.17	54.89	0.00	0.00	0.00	0.000	
11,939.19	90.00	179.55	11,660.00	-664.62	58.60	12.00	12.00	0.00	179.555	
19,497.23	90.00	179.55	11,660.00	-8,222.43	117.31	0.00	0.00	0.00	0.000	PBHL BLUS 301

Database:	EDM 5000.14 Conroe Db	**Local Co-ordinate Reference:**	Well Bell Lake Unit South 301H
Company:	Kaiser-Francis	**TVD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 83)	**MD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Site:	Bell Lake Unit South 301H	**North Reference:**	Grid
Well:	Bell Lake Unit South 301H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned 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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado									
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,150.00	0.00	0.00	2,150.00	0.00	0.00	0.00	0.00	0.00	0.00
Top of Salt									
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
Lamar									
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00

Database:	EDM 5000.14 Conroe Db	**Local Co-ordinate Reference:**	Well Bell Lake Unit South 301H
Company:	Kaiser-Francis	**TVD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 83)	**MD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Site:	Bell Lake Unit South 301H	**North Reference:**	Grid
Well:	Bell Lake Unit South 301H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned 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)
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,050.00	0.00	0.00	5,050.00	0.00	0.00	0.00	0.00	0.00	0.00
Base of Salt									
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,450.00	0.00	0.00	5,450.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon									
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyon									
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,730.00	0.00	0.00	7,730.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Canyon									
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,995.00	0.00	0.00	7,995.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP, 2.00°/100' Build									
8,000.00	0.10	163.65	8,000.00	0.00	0.00	0.00	2.00	2.00	0.00
8,100.00	2.10	163.65	8,099.98	-1.85	0.54	1.85	2.00	2.00	0.00
8,195.15	4.00	163.65	8,194.99	-6.71	1.97	6.72	2.00	2.00	0.00
Hold 4.00° Inc, 163.65° Azm									
8,200.00	4.00	163.65	8,199.83	-7.03	2.06	7.05	0.00	0.00	0.00
8,300.00	4.00	163.65	8,299.58	-13.73	4.03	13.76	0.00	0.00	0.00
8,400.00	4.00	163.65	8,399.34	-20.43	5.99	20.48	0.00	0.00	0.00
8,500.00	4.00	163.65	8,499.09	-27.13	7.96	27.19	0.00	0.00	0.00
8,600.00	4.00	163.65	8,598.85	-33.83	9.92	33.90	0.00	0.00	0.00

Database:	EDM 5000.14 Conroe Db	**Local Co-ordinate Reference:**	Well Bell Lake Unit South 301H
Company:	Kaiser-Francis	**TVD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 83)	**MD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Site:	Bell Lake Unit South 301H	**North Reference:**	Grid
Well:	Bell Lake Unit South 301H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned 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)
8,700.00	4.00	163.65	8,698.61	-40.52	11.89	40.62	0.00	0.00	0.00
8,800.00	4.00	163.65	8,798.36	-47.22	13.85	47.33	0.00	0.00	0.00
8,870.00	4.00	163.65	8,868.19	-51.91	15.23	52.03	0.00	0.00	0.00
Bone Spring									
8,900.00	4.00	163.65	8,898.12	-53.92	15.81	54.04	0.00	0.00	0.00
9,000.00	4.00	163.65	8,997.87	-60.62	17.78	60.76	0.00	0.00	0.00
9,030.00	4.00	163.65	9,027.80	-62.63	18.37	62.77	0.00	0.00	0.00
Avalon									
9,100.00	4.00	163.65	9,097.63	-67.32	19.74	67.47	0.00	0.00	0.00
9,200.00	4.00	163.65	9,197.39	-74.02	21.71	74.19	0.00	0.00	0.00
9,300.00	4.00	163.65	9,297.14	-80.72	23.67	80.90	0.00	0.00	0.00
9,400.00	4.00	163.65	9,396.90	-87.42	25.64	87.61	0.00	0.00	0.00
9,500.00	4.00	163.65	9,496.65	-94.11	27.60	94.33	0.00	0.00	0.00
9,600.00	4.00	163.65	9,596.41	-100.81	29.57	101.04	0.00	0.00	0.00
9,700.00	4.00	163.65	9,696.17	-107.51	31.53	107.76	0.00	0.00	0.00
9,800.00	4.00	163.65	9,795.92	-114.21	33.50	114.47	0.00	0.00	0.00
9,900.00	4.00	163.65	9,895.68	-120.91	35.46	121.18	0.00	0.00	0.00
10,000.00	4.00	163.65	9,995.43	-127.61	37.43	127.90	0.00	0.00	0.00
1 BSS									
10,100.00	4.00	163.65	10,095.19	-134.31	39.39	134.61	0.00	0.00	0.00
10,200.00	4.00	163.65	10,194.95	-141.01	41.35	141.33	0.00	0.00	0.00
10,300.00	4.00	163.65	10,294.70	-147.70	43.32	148.04	0.00	0.00	0.00
10,400.00	4.00	163.65	10,394.46	-154.40	45.28	154.75	0.00	0.00	0.00
10,500.00	4.00	163.65	10,494.21	-161.10	47.25	161.47	0.00	0.00	0.00
10,590.00	4.00	163.65	10,584.00	-167.13	49.02	167.51	0.00	0.00	0.00
2 BSS									
10,600.00	4.00	163.65	10,593.97	-167.80	49.21	168.18	0.00	0.00	0.00
10,700.00	4.00	163.65	10,693.73	-174.50	51.18	174.90	0.00	0.00	0.00
10,789.04	4.00	163.65	10,782.55	-180.46	52.93	180.87	0.00	0.00	0.00
Begin 2.00°/100' Drop									
10,800.00	3.78	163.65	10,793.48	-181.18	53.14	181.59	2.00	-2.00	0.00
10,900.00	1.78	163.65	10,893.36	-185.84	54.50	186.26	2.00	-2.00	0.00
10,989.19	0.00	0.00	10,982.54	-187.17	54.89	187.60	2.00	-2.00	0.00
Begin Vertical Hold									
11,000.00	0.00	0.00	10,993.35	-187.17	54.89	187.60	0.00	0.00	0.00
11,050.00	0.00	0.00	11,043.35	-187.17	54.89	187.60	0.00	0.00	0.00
3 BSL									
11,100.00	0.00	0.00	11,093.35	-187.17	54.89	187.60	0.00	0.00	0.00
11,189.19	0.00	0.00	11,182.54	-187.17	54.89	187.60	0.00	0.00	0.00
Begin 12.00°/100' Build - VP BLUS 301									
11,200.00	1.30	179.55	11,193.35	-187.29	54.90	187.72	12.00	12.00	0.00
11,225.00	4.30	179.55	11,218.31	-188.51	54.90	188.94	12.00	12.00	0.00
11,250.00	7.30	179.55	11,243.18	-191.04	54.92	191.46	12.00	12.00	0.00
11,275.00	10.30	179.55	11,267.89	-194.86	54.95	195.29	12.00	12.00	0.00
11,300.00	13.30	179.55	11,292.35	-199.97	54.99	200.40	12.00	12.00	0.00
11,325.00	16.30	179.55	11,316.52	-206.35	55.04	206.78	12.00	12.00	0.00
11,350.00	19.30	179.55	11,340.32	-213.99	55.10	214.42	12.00	12.00	0.00
11,375.00	22.30	179.55	11,363.69	-222.87	55.17	223.30	12.00	12.00	0.00
11,400.00	25.30	179.55	11,386.56	-232.96	55.25	233.38	12.00	12.00	0.00
11,425.00	28.30	179.55	11,408.88	-244.23	55.34	244.65	12.00	12.00	0.00
11,450.00	31.30	179.55	11,430.57	-256.65	55.43	257.07	12.00	12.00	0.00

Database:	EDM 5000.14 Conroe Db	**Local Co-ordinate Reference:**	Well Bell Lake Unit South 301H
Company:	Kaiser-Francis	**TVD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 83)	**MD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Site:	Bell Lake Unit South 301H	**North Reference:**	Grid
Well:	Bell Lake Unit South 301H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned 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)
11,475.00	34.30	179.55	11,451.58	-270.19	55.54	270.61	12.00	12.00	0.00
11,500.00	37.30	179.55	11,471.86	-284.81	55.65	285.24	12.00	12.00	0.00
11,525.00	40.30	179.55	11,491.34	-300.47	55.77	300.90	12.00	12.00	0.00
11,550.00	43.30	179.55	11,509.97	-317.13	55.90	317.56	12.00	12.00	0.00
11,560.00	44.50	179.55	11,517.18	-324.06	55.96	324.49	12.00	12.00	0.00
3 BSS									
11,575.00	46.30	179.55	11,527.71	-334.74	56.04	335.17	12.00	12.00	0.00
11,600.00	49.30	179.55	11,544.50	-353.26	56.18	353.69	12.00	12.00	0.00
11,625.00	52.30	179.55	11,560.30	-372.63	56.33	373.06	12.00	12.00	0.00
11,650.00	55.30	179.55	11,575.07	-392.80	56.49	393.23	12.00	12.00	0.00
11,675.00	58.30	179.55	11,588.76	-413.71	56.65	414.15	12.00	12.00	0.00
11,700.00	61.30	179.55	11,601.33	-435.32	56.82	435.75	12.00	12.00	0.00
11,725.00	64.30	179.55	11,612.76	-457.55	56.99	457.98	12.00	12.00	0.00
11,750.00	67.30	179.55	11,623.01	-480.35	57.17	480.78	12.00	12.00	0.00
11,775.00	70.30	179.55	11,632.05	-503.65	57.35	504.09	12.00	12.00	0.00
11,800.00	73.30	179.55	11,639.86	-527.40	57.54	527.83	12.00	12.00	0.00
11,825.00	76.30	179.55	11,646.41	-551.52	57.72	551.96	12.00	12.00	0.00
11,850.00	79.30	179.55	11,651.69	-575.95	57.91	576.39	12.00	12.00	0.00
11,875.00	82.30	179.55	11,655.69	-600.63	58.11	601.06	12.00	12.00	0.00
11,885.00	83.50	179.55	11,656.93	-610.55	58.18	610.99	12.00	12.00	0.00
Wolfcamp									
11,900.00	85.30	179.55	11,658.39	-625.48	58.30	625.92	12.00	12.00	0.00
11,925.00	88.30	179.55	11,659.79	-650.43	58.49	650.87	12.00	12.00	0.00
11,939.19	90.00	179.55	11,660.00	-664.62	58.60	665.06	12.00	12.00	0.00
Begin 90.00° Lateral - FTP BLUS 301									
12,000.00	90.00	179.55	11,660.00	-725.43	59.08	725.87	0.00	0.00	0.00
12,100.00	90.00	179.55	11,660.00	-825.43	59.85	825.87	0.00	0.00	0.00
12,200.00	90.00	179.55	11,660.00	-925.42	60.63	925.87	0.00	0.00	0.00
12,300.00	90.00	179.55	11,660.00	-1,025.42	61.41	1,025.87	0.00	0.00	0.00
12,400.00	90.00	179.55	11,660.00	-1,125.42	62.18	1,125.87	0.00	0.00	0.00
12,500.00	90.00	179.55	11,660.00	-1,225.41	62.96	1,225.87	0.00	0.00	0.00
12,600.00	90.00	179.55	11,660.00	-1,325.41	63.74	1,325.87	0.00	0.00	0.00
12,700.00	90.00	179.55	11,660.00	-1,425.41	64.51	1,425.87	0.00	0.00	0.00
12,800.00	90.00	179.55	11,660.00	-1,525.41	65.29	1,525.87	0.00	0.00	0.00
12,900.00	90.00	179.55	11,660.00	-1,625.40	66.07	1,625.87	0.00	0.00	0.00
13,000.00	90.00	179.55	11,660.00	-1,725.40	66.84	1,725.87	0.00	0.00	0.00
13,100.00	90.00	179.55	11,660.00	-1,825.40	67.62	1,825.87	0.00	0.00	0.00
13,200.00	90.00	179.55	11,660.00	-1,925.39	68.40	1,925.87	0.00	0.00	0.00
13,300.00	90.00	179.55	11,660.00	-2,025.39	69.17	2,025.87	0.00	0.00	0.00
13,400.00	90.00	179.55	11,660.00	-2,125.39	69.95	2,125.87	0.00	0.00	0.00
13,500.00	90.00	179.55	11,660.00	-2,225.38	70.73	2,225.87	0.00	0.00	0.00
13,600.00	90.00	179.55	11,660.00	-2,325.38	71.50	2,325.87	0.00	0.00	0.00
13,700.00	90.00	179.55	11,660.00	-2,425.38	72.28	2,425.87	0.00	0.00	0.00
13,800.00	90.00	179.55	11,660.00	-2,525.38	73.06	2,525.87	0.00	0.00	0.00
13,900.00	90.00	179.55	11,660.00	-2,625.37	73.83	2,625.87	0.00	0.00	0.00
14,000.00	90.00	179.55	11,660.00	-2,725.37	74.61	2,725.87	0.00	0.00	0.00
14,100.00	90.00	179.55	11,660.00	-2,825.37	75.39	2,825.87	0.00	0.00	0.00
14,200.00	90.00	179.55	11,660.00	-2,925.36	76.16	2,925.87	0.00	0.00	0.00
14,300.00	90.00	179.55	11,660.00	-3,025.36	76.94	3,025.87	0.00	0.00	0.00
14,400.00	90.00	179.55	11,660.00	-3,125.36	77.72	3,125.87	0.00	0.00	0.00
14,500.00	90.00	179.55	11,660.00	-3,225.35	78.49	3,225.87	0.00	0.00	0.00
14,600.00	90.00	179.55	11,660.00	-3,325.35	79.27	3,325.87	0.00	0.00	0.00

Database:	EDM 5000.14 Conroe Db	**Local Co-ordinate Reference:**	Well Bell Lake Unit South 301H
Company:	Kaiser-Francis	**TVD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 83)	**MD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Site:	Bell Lake Unit South 301H	**North Reference:**	Grid
Well:	Bell Lake Unit South 301H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned 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)
14,700.00	90.00	179.55	11,660.00	-3,425.35	80.05	3,425.87	0.00	0.00	0.00
14,800.00	90.00	179.55	11,660.00	-3,525.35	80.82	3,525.87	0.00	0.00	0.00
14,900.00	90.00	179.55	11,660.00	-3,625.34	81.60	3,625.87	0.00	0.00	0.00
15,000.00	90.00	179.55	11,660.00	-3,725.34	82.38	3,725.87	0.00	0.00	0.00
15,100.00	90.00	179.55	11,660.00	-3,825.34	83.15	3,825.87	0.00	0.00	0.00
15,200.00	90.00	179.55	11,660.00	-3,925.33	83.93	3,925.87	0.00	0.00	0.00
15,300.00	90.00	179.55	11,660.00	-4,025.33	84.71	4,025.87	0.00	0.00	0.00
15,400.00	90.00	179.55	11,660.00	-4,125.33	85.48	4,125.87	0.00	0.00	0.00
15,500.00	90.00	179.55	11,660.00	-4,225.32	86.26	4,225.87	0.00	0.00	0.00
15,600.00	90.00	179.55	11,660.00	-4,325.32	87.04	4,325.87	0.00	0.00	0.00
15,700.00	90.00	179.55	11,660.00	-4,425.32	87.81	4,425.87	0.00	0.00	0.00
15,800.00	90.00	179.55	11,660.00	-4,525.32	88.59	4,525.87	0.00	0.00	0.00
15,900.00	90.00	179.55	11,660.00	-4,625.31	89.37	4,625.87	0.00	0.00	0.00
16,000.00	90.00	179.55	11,660.00	-4,725.31	90.15	4,725.87	0.00	0.00	0.00
16,100.00	90.00	179.55	11,660.00	-4,825.31	90.92	4,825.87	0.00	0.00	0.00
16,200.00	90.00	179.55	11,660.00	-4,925.30	91.70	4,925.87	0.00	0.00	0.00
16,300.00	90.00	179.55	11,660.00	-5,025.30	92.48	5,025.87	0.00	0.00	0.00
16,400.00	90.00	179.55	11,660.00	-5,125.30	93.25	5,125.87	0.00	0.00	0.00
16,500.00	90.00	179.55	11,660.00	-5,225.29	94.03	5,225.87	0.00	0.00	0.00
16,600.00	90.00	179.55	11,660.00	-5,325.29	94.81	5,325.87	0.00	0.00	0.00
16,700.00	90.00	179.55	11,660.00	-5,425.29	95.58	5,425.87	0.00	0.00	0.00
16,800.00	90.00	179.55	11,660.00	-5,525.29	96.36	5,525.87	0.00	0.00	0.00
16,900.00	90.00	179.55	11,660.00	-5,625.28	97.14	5,625.87	0.00	0.00	0.00
17,000.00	90.00	179.55	11,660.00	-5,725.28	97.91	5,725.87	0.00	0.00	0.00
17,100.00	90.00	179.55	11,660.00	-5,825.28	98.69	5,825.87	0.00	0.00	0.00
17,200.00	90.00	179.55	11,660.00	-5,925.27	99.47	5,925.87	0.00	0.00	0.00
17,300.00	90.00	179.55	11,660.00	-6,025.27	100.24	6,025.87	0.00	0.00	0.00
17,400.00	90.00	179.55	11,660.00	-6,125.27	101.02	6,125.87	0.00	0.00	0.00
17,500.00	90.00	179.55	11,660.00	-6,225.26	101.80	6,225.87	0.00	0.00	0.00
17,600.00	90.00	179.55	11,660.00	-6,325.26	102.57	6,325.87	0.00	0.00	0.00
17,700.00	90.00	179.55	11,660.00	-6,425.26	103.35	6,425.87	0.00	0.00	0.00
17,800.00	90.00	179.55	11,660.00	-6,525.25	104.13	6,525.87	0.00	0.00	0.00
17,900.00	90.00	179.55	11,660.00	-6,625.25	104.90	6,625.87	0.00	0.00	0.00
18,000.00	90.00	179.55	11,660.00	-6,725.25	105.68	6,725.87	0.00	0.00	0.00
18,100.00	90.00	179.55	11,660.00	-6,825.25	106.46	6,825.87	0.00	0.00	0.00
18,200.00	90.00	179.55	11,660.00	-6,925.24	107.23	6,925.87	0.00	0.00	0.00
18,300.00	90.00	179.55	11,660.00	-7,025.24	108.01	7,025.87	0.00	0.00	0.00
18,400.00	90.00	179.55	11,660.00	-7,125.24	108.79	7,125.87	0.00	0.00	0.00
18,500.00	90.00	179.55	11,660.00	-7,225.23	109.56	7,225.87	0.00	0.00	0.00
18,600.00	90.00	179.55	11,660.00	-7,325.23	110.34	7,325.87	0.00	0.00	0.00
18,700.00	90.00	179.55	11,660.00	-7,425.23	111.12	7,425.87	0.00	0.00	0.00
18,800.00	90.00	179.55	11,660.00	-7,525.22	111.89	7,525.87	0.00	0.00	0.00
18,900.00	90.00	179.55	11,660.00	-7,625.22	112.67	7,625.87	0.00	0.00	0.00
19,000.00	90.00	179.55	11,660.00	-7,725.22	113.45	7,725.87	0.00	0.00	0.00
19,100.00	90.00	179.55	11,660.00	-7,825.22	114.22	7,825.87	0.00	0.00	0.00
19,200.00	90.00	179.55	11,660.00	-7,925.21	115.00	7,925.87	0.00	0.00	0.00
19,300.00	90.00	179.55	11,660.00	-8,025.21	115.78	8,025.87	0.00	0.00	0.00
19,400.00	90.00	179.55	11,660.00	-8,125.21	116.55	8,125.87	0.00	0.00	0.00
19,497.23	90.00	179.55	11,660.00	-8,222.43	117.31	8,223.10	0.00	0.00	0.00
PBHL - PBHL BLUS 301									

Database:	EDM 5000.14 Conroe Db	**Local Co-ordinate Reference:**	Well Bell Lake Unit South 301H
Company:	Kaiser-Francis	**TVD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Project:	Lea County, New Mexico (NAD 83)	**MD Reference:**	22 KB + 3631.7 GL @ 3653.70usft (Cactus 171)
Site:	Bell Lake Unit South 301H	**North Reference:**	Grid
Well:	Bell Lake Unit South 301H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #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
VP BLUS 301 - plan hits target center - Point	0.00	0.00	11,182.54	-187.17	54.89	454,821.38	788,615.62	32° 14' 52.252 N	103° 32' 0.540 W
PBHL BLUS 301 - plan hits target center - Point	0.00	0.00	11,660.00	-8,222.43	117.31	446,786.12	788,678.04	32° 13' 32.738 N	103° 32' 0.510 W
FTP BLUS 301 - plan hits target center - Point	0.00	0.00	11,660.00	-664.62	58.60	454,343.93	788,619.33	32° 14' 47.527 N	103° 32' 0.539 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,400.00	1,400.00	Rustler		0.000	179.18
1,800.00	1,800.00	Salado		0.000	179.18
2,150.00	2,150.00	Top of Salt		0.000	179.18
2,300.00	2,300.00	Lamar		0.000	179.18
5,050.00	5,050.00	Base of Salt		0.000	179.18
5,450.00	5,450.00	Bell Canyon		0.000	179.18
6,300.00	6,300.00	Cherry Canyon		0.000	179.18
7,730.00	7,730.00	Brushy Canyon		0.000	179.18
8,870.00	8,868.19	Bone Spring		0.000	179.18
9,030.00	9,027.80	Avalon		0.000	179.18
10,000.00	9,995.43	1 BSS		0.000	179.18
10,590.00	10,584.00	2 BSS		0.000	179.18
11,050.00	11,043.35	3 BSL		0.000	179.18
11,560.00	11,517.18	3 BSS		0.000	179.18
11,885.00	11,656.93	Wolfcamp		0.000	179.18

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
7,995.00	7,995.00	0.00	0.00	KOP, 2.00°/100' Build
8,195.15	8,194.99	-6.71	1.97	Hold 4.00° Inc, 163.65° Azm
10,789.04	10,782.55	-180.46	52.93	Begin 2.00°/100' Drop
10,989.19	10,982.54	-187.17	54.89	Begin Vertical Hold
11,189.19	11,182.54	-187.17	54.89	Begin 12.00°/100' Build
11,939.19	11,660.00	-664.62	58.60	Begin 90.00° Lateral
19,497.23	11,660.00	-8,222.43	117.31	PBHL

APD ID: 10400035917 **Submission Date:** 11/02/2018

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

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

[redacted]

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Bell_Lake_South_Unit_301H_Existing_Roads_20181102160534.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? NO

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Bell_Lake_South_Unit_301H_1_Mile_Radius_20181102160641.pdf

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

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 8-1000 bbl oil tanks, a temporary 6X20 horizontal 3-phase sep, a 48" X 10' 3-phase sep, a 8 X 20' heater treater and a 48"X 10' 2-phase sep

Section 5 - Location and Types of Water Supply

Water Source Table

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

Describe type: BRINE WATER

Source latitude: **Source longitude:**

Source datum:

Water source permit type: PRIVATE CONTRACT

Source land ownership: PRIVATE

Water source transport method: TRUCKING

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

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

Source volume (gal): 840000

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

Describe type: FRESH WATER

Source latitude: **Source longitude:**

Source datum:

Water source permit type: PRIVATE CONTRACT

Source land ownership: PRIVATE

Water source transport method: TRUCKING

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

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

Source volume (gal): 10500000

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

Water source and transportation map:

Bell_Lake_Unit_South_301H__Wtr_Source_Map_20181102160943.pdf

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

New water well? NO

New Water Well Info

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

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

Aquifer comments:

Aquifer documentation:

Well depth (ft): **Well casing type:**

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

New water well casing? **Used casing source:**

Drilling method: **Drill material:**

Grout material: **Grout depth:**

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

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: On site caliche will be used for construction if sufficient. In the event insufficient quantities of caliche are available onsite, caliche will be trucked in from BLM's caliche pit in NWNW Section 23-T25S-R33E or NWNW Section 1-T25S-R33E

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drilling fluids and cuttings

Amount of waste: 3900 barrels

Waste disposal frequency : One Time Only

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

Safe containmant attachment:

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

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

Disposal location description: Cuttings will be hauled to R360's facility on US 62/180 at Halfway, NM

Waste type: SEWAGE

Waste content description: Human waste and grey water

Amount of waste: 1000 gallons

Waste disposal frequency : One Time Only

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

Safe containmant attachment:

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

Disposal location description: Trucked to an approved disposal facility

Waste type: GARBAGE

Waste content description: Miscellaneous trash

Amount of waste: 500 pounds

Waste disposal frequency : One Time Only

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

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

Disposal location description: Trucked to an approved disposal facility

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

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

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

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

Reserve pit liner

Reserve pit liner specifications and installation description

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? YES

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

Cuttings area length (ft.) **Cuttings area width (ft.)**

Cuttings area depth (ft.) **Cuttings area volume (cu. yd.)**

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

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Bell_Lake_South_Unit_301H_Drlg_Layout_20181102161448.pdf

Bell_Lake_South_Unit_301H_Wellsite_Layout_20181102161448.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: No New Surface Disturbance **Multiple Well Pad Name:** SOUTH BELL LAKE UNIT

Multiple Well Pad Number: 0

Recontouring attachment:

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

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

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

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

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

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

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

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

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

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline:

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances:

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed type: **Seed source:**

Seed name:

Source name: **Source address:**

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre: **Proposed seeding season:**

Seed Summary

Seed Type	Pounds/Acre

Total pounds/Acre:

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: **Last Name:**

Phone: **Email:**

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

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

Weed treatment plan attachment:

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

Monitoring plan attachment:

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

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

Pit closure description: N/A

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: WELL PAD

Describe:

Surface Owner: STATE GOVERNMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

[redacted]

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

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

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

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

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: Agreement

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

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Operator Name: KAISER FRANCIS OIL COMPANY

Well Name: BELL LAKE UNIT SOUTH **Well Number:** 301H

Section 12 - Other Information

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

ROW Type(s):

ROW Applications

SUPO Additional Information: SUPO will be attached with APD.

Use a previously conducted onsite? YES

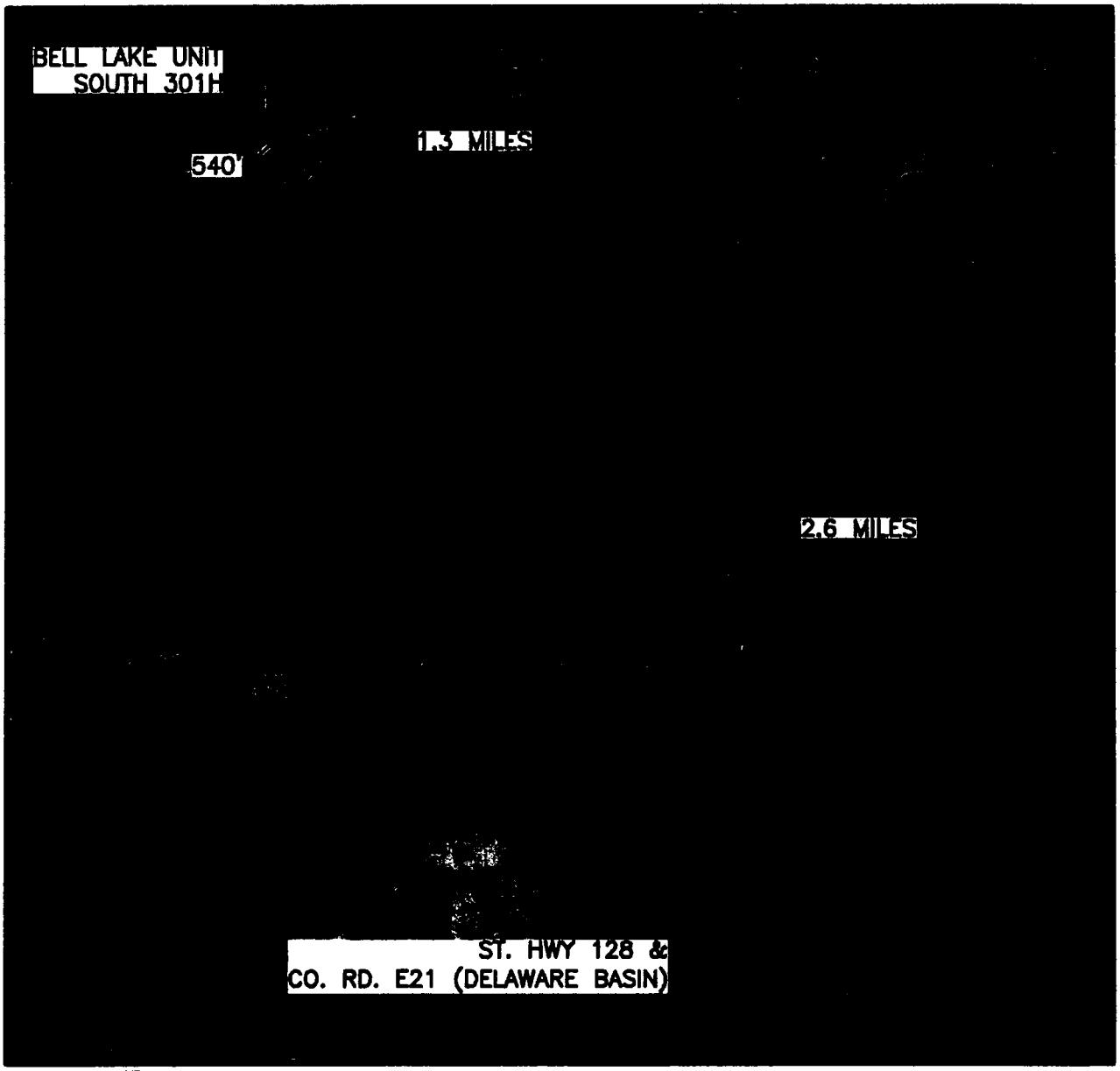
Previous Onsite information: Onsite conducted 04/19/18 by William DeGrush (BLM), Matt Warner (Kaiser-Francis), Frank Jaramillo (Madron Surveying) and Jeff (APAC archaeologist)

Other SUPO Attachment

Bell_Lake_South_Unit_301H_SUP_20181102161705.pdf

SECTION 1, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

AERIAL ACCESS ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
NOV. 2017

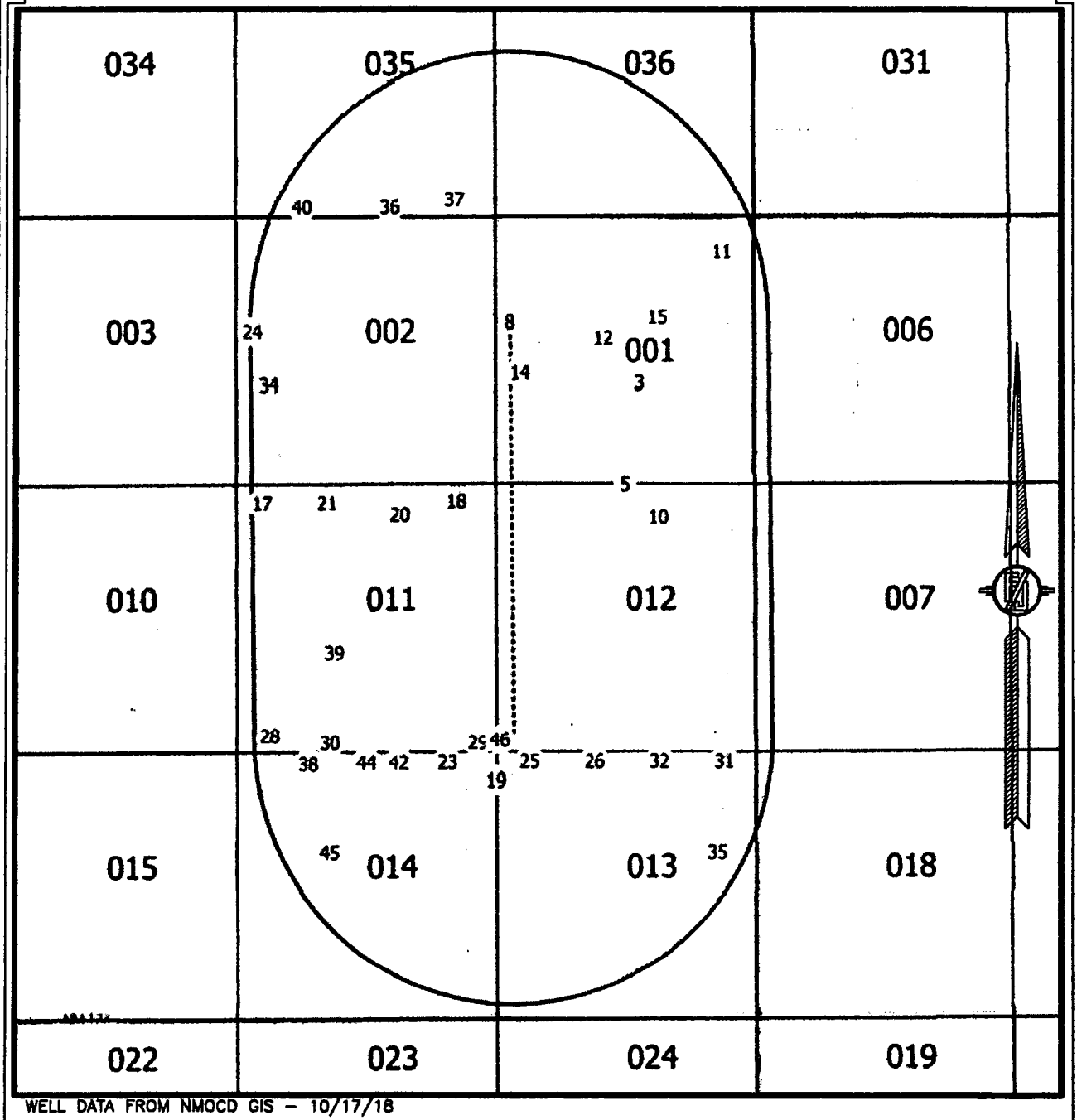
KAISER-FRANCIS OIL COMPANY
BELL LAKE UNIT SOUTH 301H
LOCATED 2000 FT. FROM THE NORTH LINE
AND 295 FT. FROM THE WEST LINE OF
SECTION 1, TOWNSHIP 24 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

OCTOBER 15, 2018

SURVEY NO. 6600

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

1-MILE WELLS



WELL DATA FROM NMOCD GIS – 10/17/18

SH SURFACE LOCATION

BH BOTTOM OF HOLE

(XX) WELLS WITHIN 1 MILE

WELL PATH

1-MILE BOUNDARY

KAISER-FRANCIS OIL COMPANY

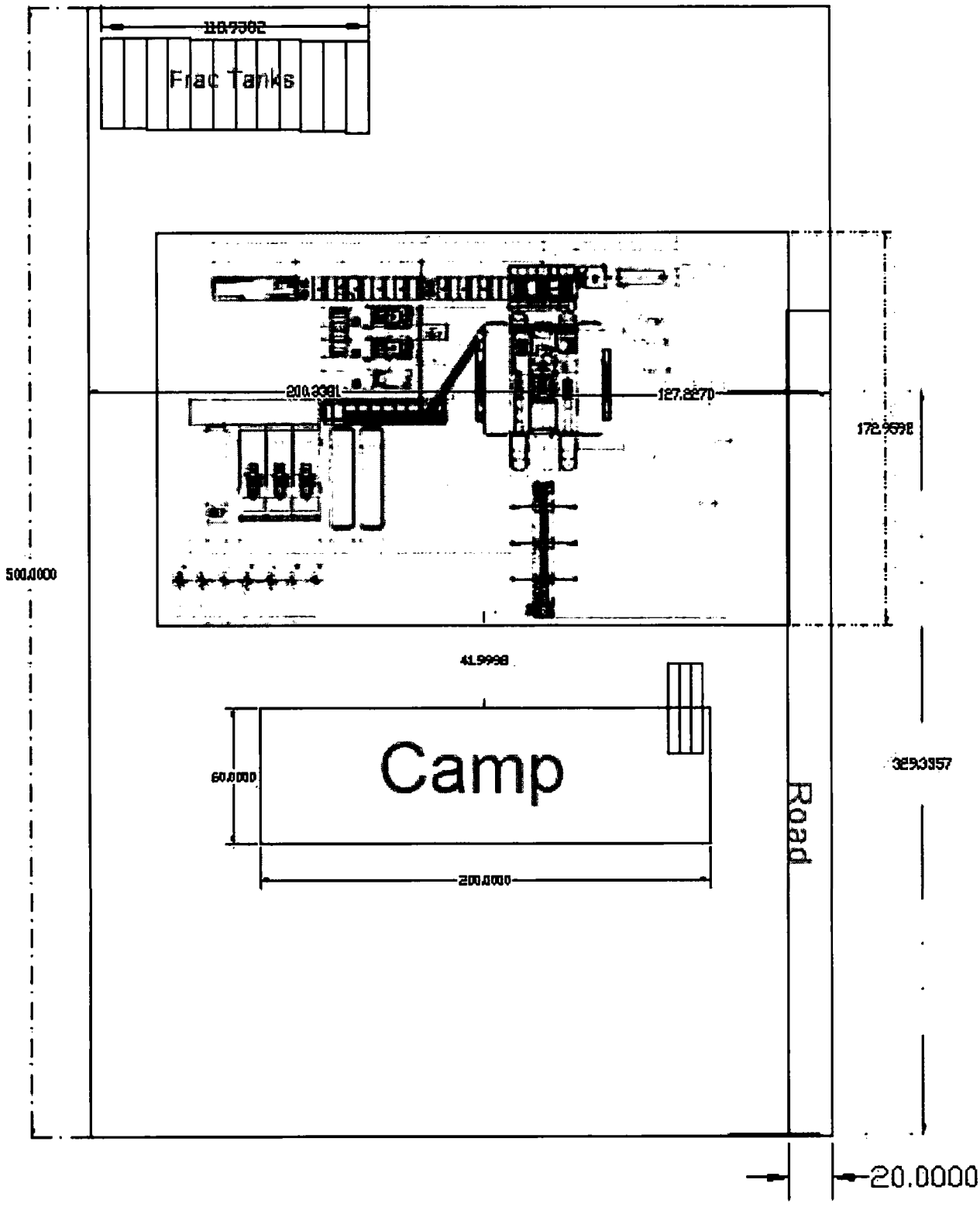
BELL LAKE UNIT SOUTH 301H

LOCATED 2000 FT. FROM THE NORTH LINE AND 295 FT. FROM THE WEST LINE OF SECTION 1, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO

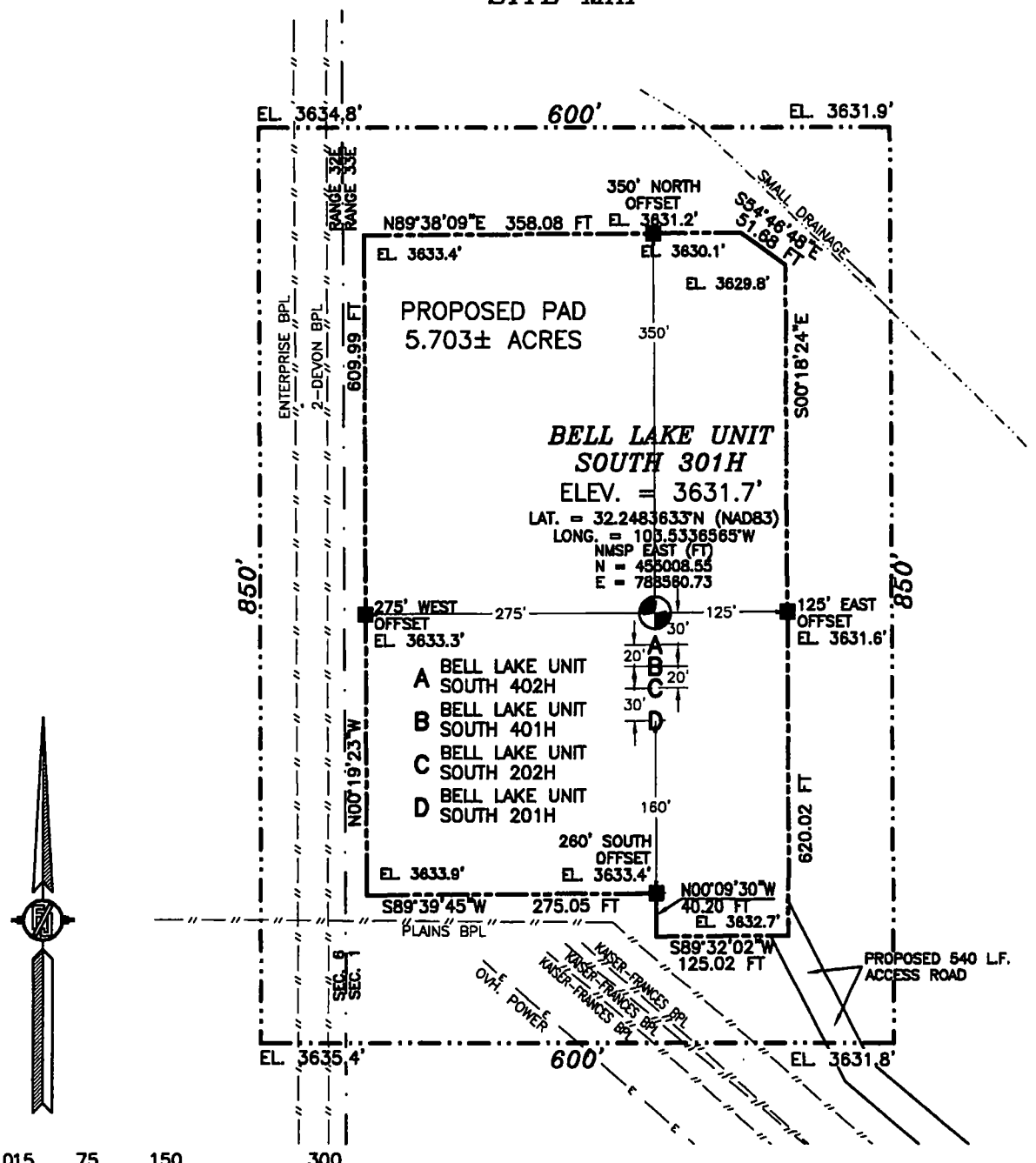
OCTOBER 15, 2018

SURVEY NO. 6600

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


Frac Tanks
200.3381
127.8270
500.0000
41.9998
Camp
60.0000
200.0000
Road
20.0000

SECTION 1, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
SITE MAP



015 75 150 300

SCALE 1" = 150'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY 128 & CO. RD. E21 (DELAWARE BASIN), GO NORTH ON CO. RD. E21 APPROX. 2.6 MILES, TURN LEFT AND GO WEST ON BELL LAKE ROAD APPROX 1.3 MILES TO PROPOSED ACCESS ROAD, FOLLOW ACCESS ROAD NORTHWEST-NORTH 540 FEET TO THE SOUTHEAST END OF THE PAD.

KAISER-FRANCIS OIL COMPANY
BELL LAKE UNIT SOUTH 301H

LOCATED 2000 FT. FROM THE NORTH LINE AND 295 FT. FROM THE WEST LINE OF SECTION 1, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO

OCTOBER 15, 2018

SURVEY NO. 6600

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

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:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

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

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

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

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

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

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

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

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

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

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

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

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: **Injection well name:**

Assigned injection well API number? **Injection well API number:**

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

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

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

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

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

AFMSS

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

Bond Info Data Report

04/05/2019

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: