

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

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

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on page 2

RECEIVED
AUG 22 2019

5. Lease Serial No.
NMLC066438 ✓

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
891001066X *nmnm 05292X*

8. Well Name and No.
BELL LAKE UNIT NORTH 401H

9. API Well No.
30-025-44693-00-S1

10. Field and Pool or Exploratory Area
OJO CHISO; WOLFCAMP SW

11. County or Parish, State
LEA COUNTY, NM

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other.

2. Name of Operator
KAISER FRANCIS OIL COMPANY Contact: CHARLOTTE VAN VALKENBURG
E-Mail: Charlottv@kfoc.net

3a. Address
TULSA, OK 74121-1468

3b. Phone No. (include area code)
Ph: 918-491-4314

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 1 T23S R33E SWNW 2100FNL 325FWL
32.335163 N Lat, 103.533562 W Lon

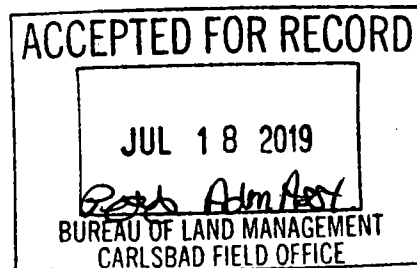
12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☒ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

This is to request approval to dispose of produced water from the above well

1. Formation Wolfcamp
2. Amount of water produced 1085 BWPD
3. See attached water analysis
4. Storage method Multiple 1000 bbl coated steel tanks
5. Method of removal from lease pipelined
6. Operator and disposal facility
Oilfield Water Logistics
Madera SWD McCloy SWD
14 24S 34E 15 24S 32E
Lea Cp., NM Lea Co., NM



14. I hereby certify that the foregoing is true and correct.
Electronic Submission #473616 verified by the BLM Well Information System
For KAISER FRANCIS OIL COMPANY, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 07/18/2019 (19PP2565SE)

Name (Printed/Typed) CHARLOTTE VAN VALKENBURG Title MGR., REGULATORY COMPLIANCE

Signature (Electronic Submission) Date 07/16/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____ Title _____ Date _____

Conditions of approval, if any, are attached. Approval of this notice 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.

Office _____

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

K2



DownHole SAT®
SURFACE WATER CHEMISTRY INPUT

Kaiser Francis

NBLU 401

Sep

Account Manager: Steve Tigert

Report Date: 05-10-2019

Sampled: 05-03-2019

Sample #: 4687

at 1245

CATIONS

Calcium (as Ca)	4936
Magnesium (as Mg)	575.70
Barium (as Ba)	1.10
Strontium (as Sr)	296.14
Sodium (as Na)	36953
Iron (as Fe)	18.37
Manganese (as Mn)	0.800

ANIONS

Chloride (as Cl)	67000
Sulfate (as SO ₄)	1193
Dissolved CO ₂ (as CO ₂)	50.00
Bicarbonate (as HCO ₃)	103.00
H ₂ S (as H ₂ S)	0.00

PARAMETERS

Calculated T.D.S.	109074
Molar Conductivity	154098
Resistivity	6.49
Sp.Gr.(g/mL)	1.08
Pressure(psia)	50.00
pCO ₂ (atm)	0.0113
pH ₂ S(atm)	0.00
Temperature (°F)	70.00
pH	6.70

COMMENTS

Analyst: Steven Kennedy

ROCKWATER ENERGY SOLUTIONS
7906 West Highway 80, Midland, TX 79706



DownHole SAT®
SURFACE WATER
DEPOSITION POTENTIAL INDICATORS

Kaiser Francis

NBLU 401

Sep

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SATURATION LEVEL

Calcite (CaCO ₃)	0.865
Aragonite (CaCO ₃)	0.757
Witherite (BaCO ₃)	< 0.001
Strontianite (SrCO ₃)	0.100
Magnesite (MgCO ₃)	0.0960
Anhydrite (CaSO ₄)	0.493
Gypsum (CaSO ₄ *2H ₂ O)	0.741
Barite (BaSO ₄)	7.32
Celestite (SrSO ₄)	1.27
Siderite (FeCO ₃)	3.06
Halite (NaCl)	0.0383
Iron sulfide (FeS)	0.00

MOMENTARY EXCESS (Lbs/1000 Barrels)

Calcite (CaCO ₃)	-0.00381
Aragonite (CaCO ₃)	-0.00782
Witherite (BaCO ₃)	-23.93
Strontianite (SrCO ₃)	-0.322
Magnesite (MgCO ₃)	-0.193
Anhydrite (CaSO ₄)	-236.85
Gypsum (CaSO ₄ *2H ₂ O)	-93.56
Barite (BaSO ₄)	0.562
Celestite (SrSO ₄)	29.63
Siderite (FeCO ₃)	0.0190
Halite (NaCl)	-142804
Iron sulfide (FeS)	-0.128

SIMPLE INDICES

Langelier	0.270
Ryznar	6.16
Puckorius	5.58
Larson-Skold Index	1198
Stiff Davis Index	-0.403
Oddo-Tomson	-0.816

BOUND IONS

Calcium	4936	4752
Barium	1.10	1.10
Carbonate	1.54	0.0420
Sulfate	1193	506.86

TOTAL

FREE

OPERATING CONDITIONS

Temperature (°F)	70.00
Time(secs)	0.00

ROCKWATER ENERGY SOLUTIONS
7906 West Highway 80, Midland, TX 79706



DownHole SAT®
WATER CHEMISTRY VERSUS PRESSURE

Kaiser Francis

NBLU 401

Sep

Account Manager: Steve Tigert

Report Date: 05-10-2019

Sampled: 05-03-2019

Sample #: 4687

at 1245

	Pressure (psi)						
CATIONS	14.70	257.25	499.80	742.35	984.90	1227	1470
Calcium(as Ca)	4936	4936	4936	4936	4936	4936	4936
Magnesium(as Mg)	575.70	575.70	575.70	575.70	575.70	575.70	575.70
Barium(as Ba)	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Strontium(as Sr)	296.14	296.14	296.14	296.14	296.14	296.14	296.14
Sodium(as Na)	36953	36953	36953	36953	36953	36953	36953
Iron(as Fe)	18.37	18.37	18.37	18.37	18.37	18.37	18.37
Manganese (as Mn)	0.800	0.800	0.800	0.800	0.800	0.800	0.800
ANIONS							
Chloride(as Cl)	67000	67000	67000	67000	67000	67000	67000
Sulfate(as SO ₄)	1193	1193	1193	1193	1193	1193	1193
Acidity	81.78	297.76	554.68	855.36	1206.67	1628.40	2135.62
"M" Alkalinity	76.33	73.04	71.74	62.49	44.09	27.15	16.33
Oxalic acid(as C ₂ O ₄)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H ₂ S(as H ₂ S)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PARAMETERS							
pH	7.12	5.73	5.40	5.18	5.01	4.88	4.76
Temperature(°F)	70.00	70.00	70.00	70.00	70.00	70.00	70.00
Pressure(psia)	14.70	257.25	499.80	742.35	984.90	1227	1470
Sp.Gr.(g/mL)	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Calculated TDS	109056.	109195.	109366.	109560.	109782.	110052.	110383.
Calc. Conductivity	154096.	154094.	154090.	154087.	154085.	154083.	154080.
Calc. Resistivity	6.49	6.49	6.49	6.49	6.49	6.49	6.49

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DownHole SAT®
DEPOSITION POTENTIAL INDICATORS
VERSUS PRESSURE

Kaiser Francis

NBLU 401

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at 1245

SATURATION LEVEL	Pressure (psi)						
	14.70	257.25	499.80	742.35	984.90	1227	1470
Calcite	2.24	0.0912	0.0404	0.0209	0.00984	0.00435	0.00199
Aragonite	1.96	0.0799	0.0354	0.0183	0.00861	0.00381	0.00174
Witherite	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Strontianite	0.260	0.0107	0.00482	0.00252	0.00121	< 0.001	< 0.001
Magnesite	0.248	0.0103	0.00468	0.00247	0.00119	< 0.001	< 0.001
Anhydrite	0.497	0.473	0.451	0.430	0.409	0.390	0.371
Gypsum	0.746	0.715	0.685	0.655	0.627	0.600	0.574
Barite	7.37	7.02	6.70	6.38	6.07	5.78	5.50
Celestite	1.28	1.22	1.16	1.11	1.06	1.01	0.957
Siderite	7.89	0.329	0.149	0.0786	0.0378	0.0170	0.00797
Halite	0.0384	0.0377	0.0370	0.0363	0.0357	0.0350	0.0344
Iron sulfide	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SIMPLE INDICES							
Langelier	0.695	-0.712	-1.06	-1.29	-1.47	-1.62	-1.76
Ryznar	5.73	7.15	7.52	7.76	7.95	8.12	8.27
Oddo-Tomson	-0.393	-1.79	-2.12	-2.34	-2.50	-2.64	-2.76
Stiff-Davis	0.0203	-1.37	-1.71	-1.92	-2.09	-2.23	-2.35
Puckorius	5.56	5.61	5.65	5.77	6.02	6.35	6.71
Larson-Skold	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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DEPOSITION POTENTIAL INDICATORS
VERSUS PRESSURE

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Sample #: 4687

at 1245

		Pressure (psi)						
TOTAL VS FREE IONS		14.70	257.25	499.80	742.35	984.90	1227	1470
Ca	Total	4936	4936	4936	4936	4936	4936	4936
	Free	4753	4749	4745	4743	4742	4741	4738
Ba	Total	1.10	1.10	1.10	1.10	1.10	1.10	1.10
	Free	1.10	1.10	1.10	1.10	1.10	1.10	1.10
CO ₃	Total	3.97	0.168	0.0777	0.0418	0.0205	0.00944	0.00450
	Free	0.108	0.00458	0.00212	0.00114	< 0.001	< 0.001	< 0.001
PO ₄	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Free	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO ₄	Total	1193	1193	1193	1193	1193	1193	1193
	Free	507.85	501.85	495.94	489.86	483.61	477.28	470.91

FREE ION MOMENTARY EXCESS (Lbs/1000 Barrels)

Calcite	0.0348	-0.0265	-0.0292	-0.0310	-0.0327	-0.0342	-0.0357
Aragonite	0.0309	-0.0307	-0.0335	-0.0355	-0.0374	-0.0391	-0.0408
Witherite	-23.84	-24.28	-24.67	-25.06	-25.46	-25.86	-26.28
Strontianite	-0.264	-0.362	-0.374	-0.385	-0.396	-0.407	-0.418
Magnesite	-0.160	-0.215	-0.220	-0.225	-0.229	-0.233	-0.238
Anhydrite	-234.07	-253.12	-272.72	-292.86	-313.53	-334.90	-357.05
Gypsum	-91.45	-105.71	-120.30	-135.26	-150.59	-166.40	-182.76
Barite	0.563	0.559	0.554	0.549	0.544	0.539	0.533
Celestite	30.47	24.83	19.08	13.14	7.03	0.757	-5.67
Siderite	0.0635	-0.0062	-0.0081	-0.0089	-0.0095	-0.0099	-0.0103
Halite	-142566	-144213	-145876	-147553	-149246	-150954	-152679
Iron sulfide	-0.0504	-0.854	-1.48	-2.06	-2.62	-3.19	-3.76

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