

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.*5. Lease Serial No.
NMLC066438

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 27. If Unit or CA/Agreement, Name and/or No.
891001066X *nmmlc292X*1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other8. Well Name and No.
BELL LAKE UNIT NORTH 301H2. Name of Operator
KAISER FRANCIS OIL COMPANYContact: CHARLOTTE VAN
E-Mail: Charlottv@kfoc.net9. API Well No.
30-025-44691-00-S13a. Address
TULSA, OK 74121-14683b. Phone No. (include area code)
Ph: 918-491-431410. Field and Pool or Exploratory Area
OJO CHISO; BONE SPRING SW4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 1 T23S R33E SWNW 2120FNL 325FWL
32.335110 N Lat, 103.533562 W Lon11. County or Parish, State
LEA COUNTY, NM

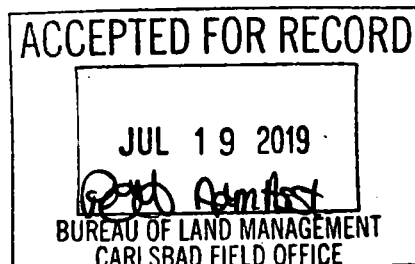
12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

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 Bone Spring
2. Amount of water produced 1064 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 Co., NM Lea Co., NM



14. I hereby certify that the foregoing is true and correct.

Electronic Submission #473608 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 (19PP2564SE)

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

FOR RECORD ONLY

XJ NMOC 8-26-19



DownHole SAT®
SURFACE WATER CHEMISTRY INPUT

Kaiser Francis

NBLU 301

Sep

Account Manager: Steve Tigert

Report Date: 05-10-2019

Sampled: 05-03-2019

Sample #: 4688

at 1246

CATIONS

Calcium (as Ca)	4933
Magnesium (as Mg)	571.80
Barium (as Ba)	1.00
Strontium (as Sr)	298.60
Sodium (as Na)	36341
Iron (as Fe)	19.63
Manganese (as Mn)	0.790

ANIONS

Chloride (as Cl)	66000
Sulfate (as SO ₄)	1310
Dissolved CO ₂ (as CO ₂)	110.00
Bicarbonate (as HCO ₃)	79.00
H ₂ S (as H ₂ S)	0.00

PARAMETERS

Calculated T.D.S.	107628
Molar Conductivity	150506
Resistivity	6.64
Sp.Gr.(g/mL)	1.08
Pressure(psia)	50.00
pCO ₂ (atm)	0.00861
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

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SATURATION LEVEL

Calcite (CaCO ₃)	0.652
Aragonite (CaCO ₃)	0.571
Witherite (BaCO ₃)	< 0.001
Strontianite (SrCO ₃)	0.0777
Magnesite (MgCO ₃)	0.0717
Anhydrite (CaSO ₄)	0.537
Gypsum (CaSO ₄ *2H ₂ O)	0.809
Barite (BaSO ₄)	7.38
Celestite (SrSO ₄)	1.42
Siderite (FeCO ₃)	2.50
Halite (NaCl)	0.0365
Iron sulfide (FeS)	0.00

MOMENTARY EXCESS (Lbs/1000 Barrels)

Calcite (CaCO ₃)	-0.0100
Aragonite (CaCO ₃)	-0.0141
Witherite (BaCO ₃)	-23.99
Strontianite (SrCO ₃)	-0.328
Magnesite (MgCO ₃)	-0.205
Anhydrite (CaSO ₄)	-219.78
Gypsum (CaSO ₄ *2H ₂ O)	-69.95
Barite (BaSO ₄)	0.512
Celestite (SrSO ₄)	44.03
Siderite (FeCO ₃)	0.0130
Halite (NaCl)	-144906
Iron sulfide (FeS)	-0.121

SIMPLE INDICES

Langelier	0.142
Ryznar	6.42
Puckorius	6.01
Larson-Skold Index	1548
Stiff Davis Index	-0.538
Oddo-Tomson	-0.938

BOUND IONS

Calcium	4933
Barium	1.00
Carbonate	1.13
Sulfate	1310

TOTAL

FREE

4736
1.000
0.0323
561.09

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 301

Sep

Account Manager: Steve Tigert

Report Date: 05-10-2019

Sampled: 05-03-2019

Sample #: 4688

at 1246

	Pressure (psi)						
CATIONS	14.70	257.25	499.80	742.35	984.90	1227	1470
Calcium(as Ca)	4933	4933	4933	4933	4933	4933	4933
Magnesium(as Mg)	571.80	571.80	571.80	571.80	571.80	571.80	571.80
Barium(as Ba)	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Strontium(as Sr)	298.60	298.60	298.60	298.60	298.60	298.60	298.60
Sodium(as Na)	36341	36341	36341	36341	36341	36341	36341
Iron(as Fe)	19.63	19.63	19.63	19.63	19.63	19.63	19.63
Manganese (as Mn)	0.790	0.790	0.790	0.790	0.790	0.790	0.790
ANIONS							
Chloride(as Cl)	66000	66000	66000	66000	66000	66000	66000
Sulfate(as SO ₄)	1310	1310	1310	1310	1310	1310	1310
Acidity	62.32	227.39	423.87	653.71	922.38	1245.10	1633.22
"M" Alkalinity	57.89	55.47	54.41	47.16	32.99	20.13	11.95
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	107614.	107721.	107852.	108001.	108172.	108380.	108634.
Calc. Conductivity	150505.	150502.	150497.	150493.	150490.	150487.	150484.
Calc. Resistivity	6.64	6.64	6.64	6.64	6.64	6.65	6.65

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DEPOSITION POTENTIAL INDICATORS
VERSUS PRESSURE

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at 1246

SATURATION LEVEL	Pressure (psi)						
	14.70	257.25	499.80	742.35	984.90	1227	1470
Calcite	1.67	0.0687	0.0304	0.0157	0.00734	0.00324	0.00148
Aragonite	1.46	0.0601	0.0266	0.0137	0.00642	0.00283	0.00130
Witherite	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Strontianite	0.198	0.00828	0.00372	0.00195	< 0.001	< 0.001	< 0.001
Magnesite	0.183	0.00769	0.00349	0.00184	< 0.001	< 0.001	< 0.001
Anhydrite	0.541	0.515	0.491	0.468	0.446	0.424	0.403
Gypsum	0.814	0.780	0.747	0.715	0.685	0.655	0.626
Barite	7.43	7.08	6.75	6.43	6.13	5.83	5.55
Celestite	1.43	1.36	1.30	1.24	1.18	1.13	1.07
Siderite	6.37	0.269	0.122	0.0640	0.0306	0.0138	0.00644
Halite	0.0366	0.0359	0.0352	0.0346	0.0340	0.0333	0.0327
Iron sulfide	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SIMPLE INDICES							
Langelier	0.561	-0.841	-1.19	-1.42	-1.60	-1.75	-1.88
Ryznar	5.99	7.41	7.77	8.01	8.21	8.38	8.53
Oddo-Tomson	-0.521	-1.91	-2.24	-2.46	-2.63	-2.76	-2.88
Stiff-Davis	-0.121	-1.51	-1.84	-2.06	-2.22	-2.36	-2.48
Puckorius	5.99	6.04	6.08	6.20	6.46	6.80	7.16
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

Kaiser Francis

NBLU 301

Sep

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Report Date: 05-10-2019

Sampled: 05-03-2019

Sample #: 4688

at 1246

		Pressure (psi)						
TOTAL VS FREE IONS		14.70	257.25	499.80	742.35	984.90	1227	1470
Ca	Total	4933	4933	4933	4933	4933	4933	4933
	Free	4736	4732	4728	4725	4723	4721	4717
Ba	Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Free	1.000	1.00	1.00	1.00	1.00	1.00	1.00
CO ₃	Total	2.88	0.124	0.0571	0.0306	0.0149	0.00686	0.00327
	Free	0.0822	0.00352	0.00163	< 0.001	< 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	1310	1310	1310	1310	1310	1310	1310
	Free	562.18	555.56	549.05	542.37	535.51	528.57	521.58

FREE ION MOMENTARY EXCESS (Lbs/1000 Barrels)

Calcite	0.0191	-0.0278	-0.0301	-0.0319	-0.0335	-0.0350	-0.0366
Aragonite	0.0151	-0.0320	-0.0346	-0.0365	-0.0383	-0.0400	-0.0418
Witherite	-23.91	-24.33	-24.72	-25.11	-25.51	-25.92	-26.33
Strontianite	-0.284	-0.361	-0.372	-0.383	-0.394	-0.405	-0.416
Magnesite	-0.180	-0.223	-0.228	-0.232	-0.237	-0.241	-0.245
Anhydrite	-216.91	-236.57	-256.78	-277.56	-298.93	-321.01	-343.87
Gypsum	-67.76	-82.54	-97.66	-113.18	-129.09	-145.50	-162.45
Barite	0.512	0.508	0.504	0.500	0.495	0.490	0.485
Celestite	44.87	39.29	33.59	27.72	21.65	15.42	9.03
Siderite	0.0466	-0.0064	-0.0079	-0.0085	-0.0090	-0.0094	-0.0096
Halite	-144665	-146327	-148005	-149698	-151406	-153130	-154871
Iron sulfide	-0.0482	-0.829	-1.45	-2.02	-2.59	-3.15	-3.72

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