

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

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.

NIM 0462932

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2.

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well

☐ Oil Well☐ Gas Well☒ Other

8. Well Name and No.

E L Federal #5

2. Name of Operator

Apache Corporation (873)

9. API Well No.

30-015-30259

3a. Address

303 Veterans Airpark Lane, Suite 1000
Midland, TX 79705

3b. Phone No. (include area code)

432/818-1062

10. Field and Pool or Exploratory Area

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

NENE21, 17S 30E, NMP, Eddy County, NM

11. County or Parish, State

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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.)

Please see attached for requested water disposal information.

NM OIL CONSERVATION
ARTESIA DISTRICT
JUL 25 2014

RECEIVED

UPD 7-29-14
Accepted for record
NIMDODSEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Kathy Erskine

Title Production Accounting Associate

Signature

Kathy Erskine

Date

5/20/14

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED

Approved by

Title

Office

JUL 18 2014

Date

JAMES A. AMOS

SUPERVISOR EPS

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.

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)

WATER PRODUCTION & DISPOSAL INFORMATION

In order to process your disposal request, the following information must be completed.

1. Name(s) of formation(s) producing water on the lease.
Glorieta Paddock, Blinobry/Tubb
2. Amount of water produced from all formations in barrels per day.
393 bbls. / day
3. Attach a current water analysis of produced water from all zones showing at least the total dissolved solids, ph, and the concentrations of chlorides and sulfates. (One sample will suffice if water is commingled).

4. How water is stored on lease.
500 bbl. fiberglass tanks
5. How water is moved to the disposal facility.
By pipeline
6. Identify the Disposal Facility by:
 - A. Facility Operators name. Apache Corporation
 - B. Name of facility or well name and number. EL Federal #8
 - C. Type of facility or well (WDW) (WIW) etc. WDW - SWD-748
 - D. Location by ¼ ¼ 21 Section 17S Township 30E Range
7. Attach a copy of the State issued permit for the Disposal Facility.

Submit to this office, **620 EAST GREENE ST, CARLSBAD NM, 88220**, the above required information on a Sundry Notice 3160-5. Submit 1 original and 3 copies, within abatement period. (This form may be used as an attachment to the Sundry Notice).

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	APACHE CORPORATION	Sales RDT:	33514
Region:	PERMIAN BASIN	Account Manager:	REGGIE GUY (575) 513-9135
Area:	ARTESIA, NM	Sample #:	657111
Lease/Platform:	E.L. FEDERAL	Analysis ID #:	132818
Entity (or well #):	11	Analysis Cost:	\$90.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 657111 @ 75 °F					
Sampling Date:	4/30/2013	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	5/29/2013	Chloride:	130000.0	3666.83	Sodium:	76761.3	3338.93
Analyst:	SANDRA GOMEZ	Bicarbonate:	368.0	6.03	Magnesium:	1023.0	84.16
TDS (mg/l or g/m3):	216455	Carbonate:	0.0	0.	Calcium:	5294.0	264.17
Density (g/cm3, tonne/m3):	1.146	Sulfate:	1959.0	40.79	Strontium:	177.0	4.04
Anion/Cation Ratio:	1	Phosphate:			Barium:	0.1	0.
		Borate:			Iron:	3.5	0.13
		Silicate:			Potassium:	869.0	22.22
Carbon Dioxide:	100 PPM	Hydrogen Sulfide:		17 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		5.9	Chromium:		
Comments:		pH at time of analysis:			Copper:		
RESISTIVITY .044 OHM-M @ 75°		pH used in Calculation:		5.9	Lead:		
					Manganese:	0.050	0.
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ *2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.02	1.14	-0.04	0.00	-0.01	0.00	0.10	21.32	-0.04	0.00	3.24
100	0	0.10	7.11	-0.13	0.00	-0.03	0.00	0.07	15.07	-0.25	0.00	3.9
120	0	0.18	13.08	-0.20	0.00	-0.02	0.00	0.05	11.09	-0.43	0.00	4.54
140	0	0.27	19.05	-0.26	0.00	0.01	16.21	0.04	9.38	-0.59	0.00	5.13

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

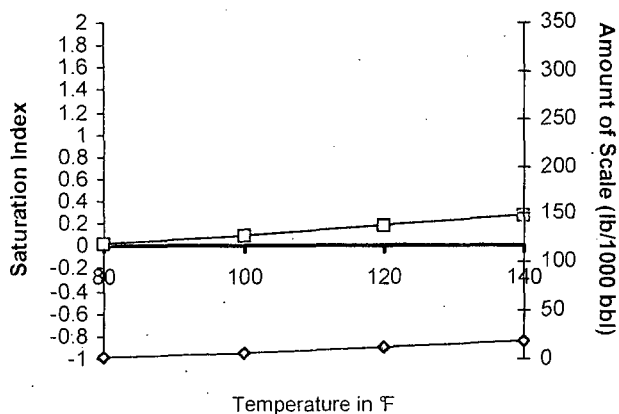
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO₂ pressure is actually the calculated CO₂ fugacity. It is usually nearly the same as the CO₂ partial pressure.

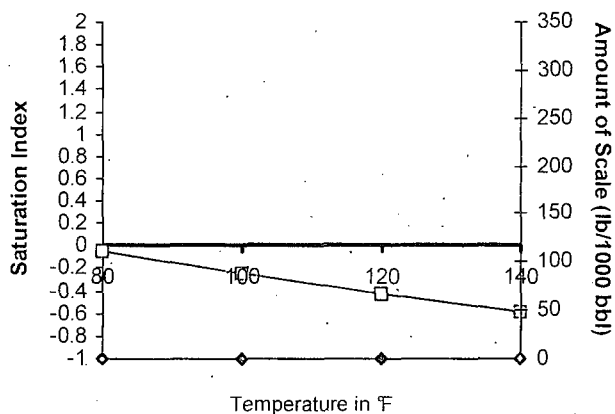
Scale Predictions from Baker Petrolite

Analysis of Sample 657111 @ 75 °F for APACHE CORPORATION, 5/29/2013

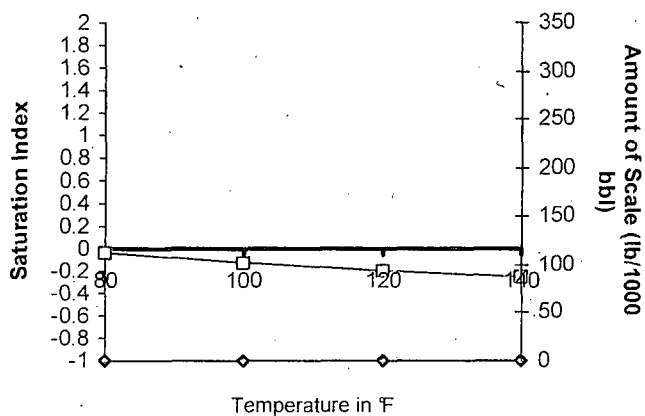
Calcite - CaCO_3



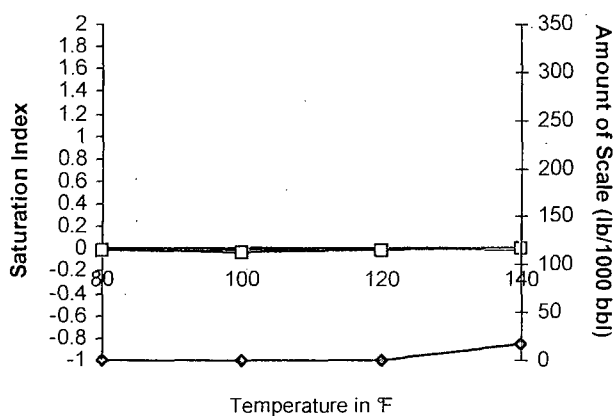
Barite - BaSO_4



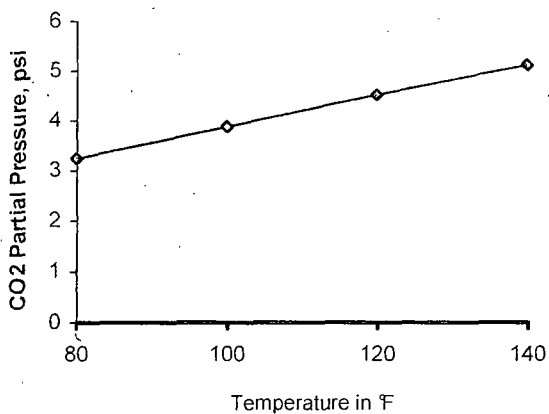
Gypsum - $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$



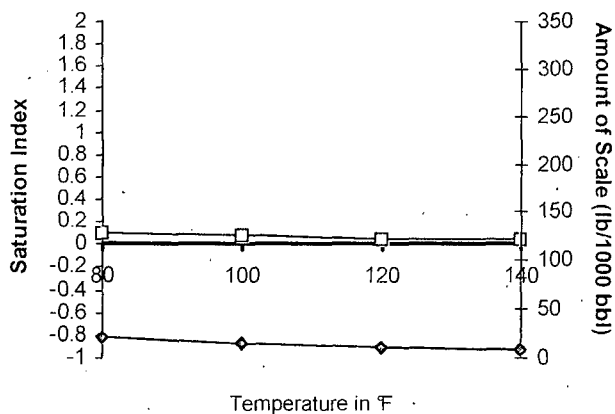
Anhydrite - CaSO_4



Carbon Dioxide Partial Pressure



Celestite - SrSO_4



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Operator Copy

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

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.
NMNM-467932 0467932
6. If Indian, Allottee or Tribe Name
N/A

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well

☒ Oil Well ☐ Gas Well ☒ Other salt water disposal

2. Name of Operator
Apache Corporation

3a. Address
303 Veterans Airpark Lane, Suite 3000, Midland, TX 79705

3b. Phone No. (include area code)
(432) 818-1052

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
380' FSL & 990' FEL SEC. 21, T. 17 S., R. 30 E., NMPM

7. If Unit of CA/Agreement, Name and/or No.
N/A

8. Well Name and No.
E L Federal 8

9. API Well No.
30-015-30262

10. Field and Pool or Exploratory Area
SWD; Paddock

11. Country or Parish, State
Eddy County, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>CHANGE TO WDW</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>TO TAKE OFF LEASE</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<u>WATER</u>

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.)

Request permission to dispose of water from off lease. SF-299 is being filed simultaneously with this Sundry for a salt water disposal easement.
Water will come from Apache's Yeso wells in Sections 3-10, T. 17 S., R. 31 E.
Approved by NMOCD's Will Jones on 7-5-12.
SWD -748.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

cc: Hardin

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
BRIAN WOOD

Title CONSULTANT (505 466-8120)

Signature

Date 09/03/2012

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)

Bureau of Land Management

Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

Conditions of Approval

September 16, 2012 .

**Apache Corporation
E L Federal 8
NM0467932
3001530262**

1. Submit for Right Of Way for water disposal well if you have not already done so.

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

Disposal of Produced Water From Federal Wells
Conditions of Approval

Approval of the produced water disposal methodology is subject to the following conditions of approval:

1. This agency shall be notified of any change in your method or location of disposal.
2. Compliance with all provisions of Onshore Order No. 7.
3. This agency shall be notified of any spill or discharge as required by NTL-3A.
4. This agency reserves the right to modify or rescind approval whenever it determines continued use of the approved method may adversely affect the surface or subsurface environments.
5. Any on-lease open top storage tanks shall be covered with a protective cover to prevent entry by birds and other wildlife.
6. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
7. If water is transported via a pipeline that extends beyond the lease boundary, then you need to submit within 30 days an application for right-of-way approval to the Realty Section in this office if you have not already done so.
8. Disposal at any other site will require prior approval.
9. Subject to like approval by NMOCD.

7/10/14