

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. NM 0467932  
6. If Indian, Allottee or Tribe Name \_\_\_\_\_

**SUBMIT IN TRIPLICATE** - Other instructions on page 2.

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator  
 Apache Corporation (873)

3a. Address  
 303 Veterans Airpark Lane, Suite 1000  
 Midland, TX 79705

3b. Phone No. (include area code)  
 432/818-1062

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
 NENE21, 17S 30E, NMP, Eddy County, NM

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

8. Well Name and No.  
 E L Federal #5

9. API Well No.  
 30-015-30259

10. Field and Pool or Exploratory Area \_\_\_\_\_

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 recomplate 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 recompletion 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

URD 7-29-14  
Accepted for record  
NMDOD

SEE 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 by \_\_\_\_\_ Title \_\_\_\_\_

Office \_\_\_\_\_

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.

**APPROVED**  
JUL 18 2014  
Date  
JAMES A. AMOS  
SUPERVISOR EPS

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.

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

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp °F	Gauge Press. psi	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		CO <sub>2</sub> Press psi
		Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	
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

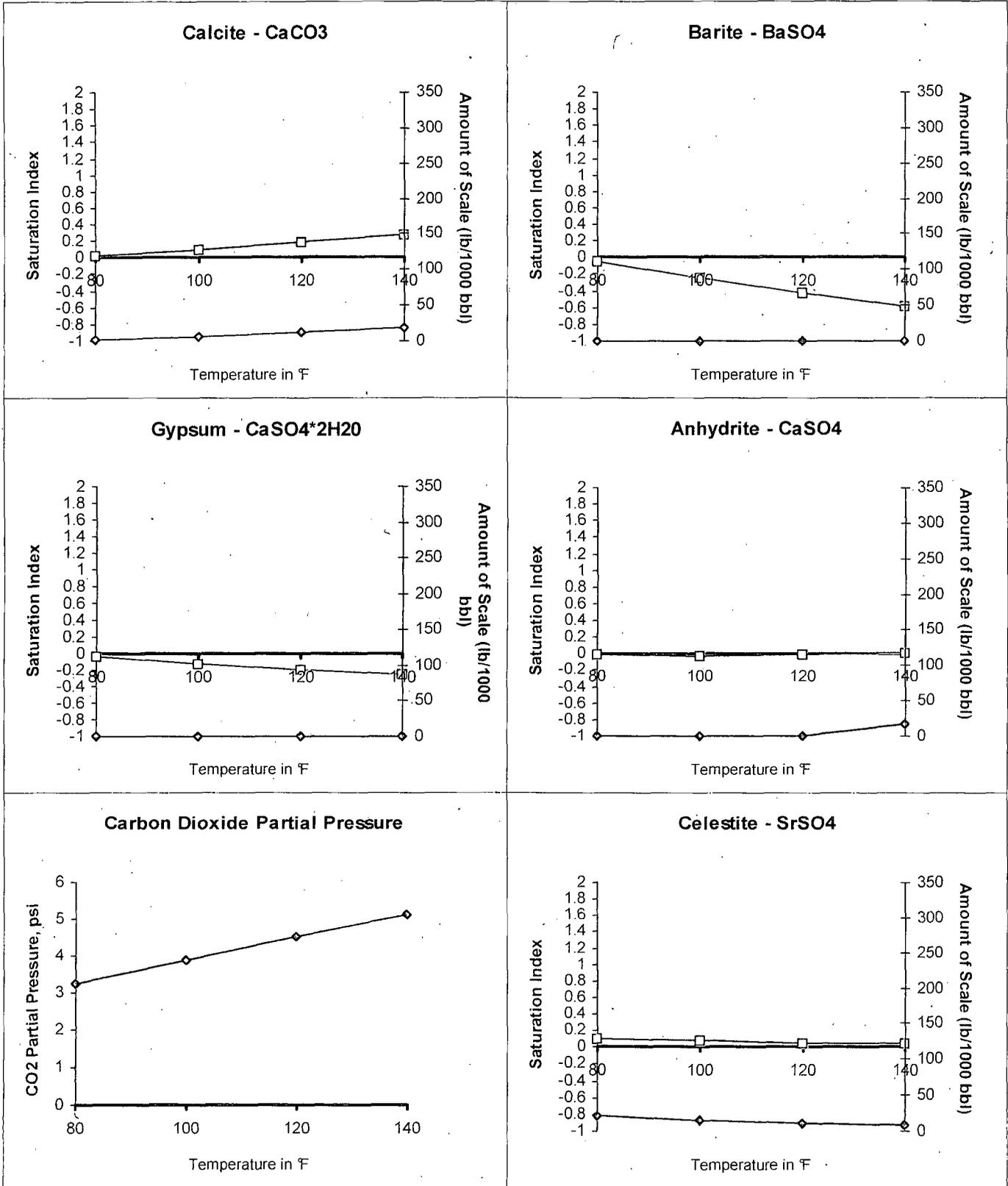
Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

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 CO<sub>2</sub> pressure is actually the calculated CO<sub>2</sub> fugacity. It is usually nearly the same as the CO<sub>2</sub> partial pressure.

# Scale Predictions from Baker Petrolite

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



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 recompleate 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 recompleation 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

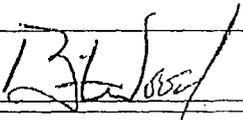
SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

cc: Hardin

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

Title CONSULTANT (505 466-8120)

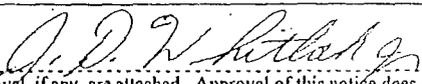
Signature



Date 09/03/2012

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by



Title

SPEIT

Date

9/16/12

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

CFO

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