District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr.

Form C-144 CLEZ July 21, 2008

For closed-loop systems that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, submit to the appropriate NMOCD District Office.

Closed-Loop System Permit or Closure Plan Application

Santa Fe, NM 87505

(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

Type of action: | Permit | Closure

Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinance.

environment. Nor does approval relieve the operator of its responsibility to comply v	with any other applicable governmental authority's rules, regulations or ordinances.						
operator: Apache Corporation	OGRID #: 873						
Address: 303 Veterans Airpark Lane, Suite 3000 Midland, TX 79705							
Facility or well name: Raven Federal #1 (39330)							
	D Permit Number: 214369						
U/L or Qtr/Qtr L Section 07 Township 17S	Range 31E County: Eddy						
Center of Proposed Design: Latitude 32.8477672749222 Lo	ongitude <u>-103.913707059512</u> NAD: ⊠1927 ☐ 1983						
Surface Owner: X Federal State Private Tribal Trust or Indian Allo	tment						
2. Subsection H of 19.15.17.11 NMAC							
Operation: ☐ Drilling a new well ☒ Workover or Drilling (Applies to activit ☐ Above Ground Steel Tanks or ☐ Haul-off Bins	ties which require prior approval pharecultur purice of fintent) P&A						
☐ Above Ground Steel Tanks or ☐ Haul-off Bins	RECEIVED						
3. Signs: Subsection C of 19.15.17.11 NMAC	MAY 2 2 2013						
12"x 24", 2" lettering, providing Operator's name, site location, and emerg	ency telephone numbers						
⊠ Signed in compliance with 19.15.3.103 NMAC	NMOCD ARTESIA						
Closed-loop Systems Permit Application Attachment Checklist: Subsection Instructions: Each of the following items must be attached to the application attached. □ Design Plan - based upon the appropriate requirements of 19.15.17.11 N □ Operating and Maintenance Plan - based upon the appropriate requirements Closure Plan (Please complete Box 5) - based upon the appropriate requirements of 19.15.17.11 N □ Previously Approved Design (attach copy of design) API Number: □ □ Previously Approved Operating and Maintenance Plan API Number: □	n. Please indicate, by a check mark in the box, that the documents are NMAC ents of 19.15.17.12 NMAC						
s. Waste Removal Closure For Closed-loop Systems That Utilize Above Gro Instructions: Please indentify the facility or facilities for the disposal of liqu facilities are required.	ids, drilling fluids and drill cuttings. Use attachment if more than two						
Disposal Facility Name: CRI	Disposal Facility Permit Number: NM-01-0006						
Disposal Facility Name: Sundance, Inc.	Disposal Facility Permit Number: NM-01-0003						
Will any of the proposed closed-loop system operations and associated activiti ☐ Yes (If yes, please provide the information below) ☑ No	es occur on or in areas that will not be used for future service and operations?						
Required for impacted areas which will not be used for future service and open Soil Backfill and Cover Design Specifications based upon the approp Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection	oriate requirements of Subsection H of 19.15.17.13 NMAC etion I of 19.15.17.13 NMAC						
6. Operator Application Certification:							
I hereby certify that the information submitted with this application is true, ac-	curate and complete to the best of my knowledge and belief.						
Name (Print): Fatima Vasquez	Title: Regulatory Tech I						
ignature:							
e-mail address: Fatima.Vasquez@apachecorp.com	Telephone: (432) 818-1015						

OCD Approval: Permit Application (including closure plan) Closure F	lan (only)					
OCD Representative Signature:	Approval Date: 5/24/2013 D Permit Number: 2143 69 9.15.17.13 NMAC Jementing any closure activities and submitting the closure report. Impletion of the closure activities. Please do not complete this activities have been completed. Closure Completion Date:					
Title: DIST ASUPEWISON	OCD Permit Number: 214369					
8. Closure Report (required within 60 days of closure completion): Subsection Instructions: Operators are required to obtain an approved closure plan prior The closure report is required to be submitted to the division within 60 days of section of the form until an approved closure plan has been obtained and the c	to implementing any closure activities and submitting the closure report. the completion of the closure activities. Please do not complete this					
Closure Report Regarding Waste Removal Closure For Closed-loop System Instructions: Please indentify the facility or facilities for where the liquids, dri two facilities were utilized. Disposal Facility Name:	lling fluids and drill cuttings were disposed. Use attachment if more than					
Disposal Facility Name:						
Were the closed-loop system operations and associated activities performed on or in areas that <i>will not</i> be used for future service and operations? Yes (If yes, please demonstrate compliance to the items below) No						
Required for impacted areas which will not be used for future service and operated Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	ions:					
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan. Name (Print): Fatima Vasquez						
Signature:	Date:					
e-mail address: Fatima.Vasquez@apachecorp.com	Telephone: (432) 818-1015					

5/21/2013

APACHE CORPORATION

API 30-015-40465 Raven Federal #1

RE-COMPLETION PROCEDURE

Relative Data:

Casing: 5-1/2", 17 lb/ft, J-55

ID = 4.892"

Drift = 4.767"

Capacity = 0.02324 BBL/ft

Burst = 5320 psi; 80% = 4256 psi

Tubing: 2-7/8", 6.5 lb/ft, J-55, 8rd, EUE

Capacity = 0.005794 bbl/ft

Burst = 7260 psi; 80% = 5808 psi

Collapse 7680 psi; 80% = 6144 psi

Yield 99,660 lbs; 80% = 79,728 lbs

5-1/2" x 2-7/8" Annular capacity 0.0152 BBL/ft KB = 13 ft (AGL) PBTD = x,xxx' KB TD = 6,416' KB

- 1. MIRU. POH w/Production Equipment. RIH set & test CBP @ +/-5850'. Load csg & test CBP & csg to 1000 psi. Rlse pressure
- 2. Spot 600 gallons 15% HCL across perf area. TOH.
- 3. Perforate the Blinebry zone @ 5320, 28, 54, 65, 85, 5410, 31, 50, 67, 90, 5516, 28, 49, 60, 78, 97, 5616, 38, 47, 77, 5715, 33, 50, 65, 90 & 5810'. (1 JSPF) (26 holes) using a charge that generates a .37" .42" diameter hole with a minimum 21" penetration.
- 4. RU wellhead tree saver & multi-stg frac tool for fracture stimulating.
- 5. Acidize/Frac the Blinebry dn csg according to vendor recommended procedure.
- 6. MIRU wireline. RIH W/WL set CBP for 5-1/2" 17#/ft csg on bottom of first perforating gun & set @ +/-5270'. Load csg & test CBP & csg to 1000 psi. Rlse pressure.
- 7. Perforate the Paddock @ 4655, 71, 85, 99, 4720, 43, 54, 79, 89, 4810, 28, 58, 78, 94, 4910, 36, 60, 81, 95, 5013, 26, 50, 85, 5115, 37, 61, 80, 5200 & 30'. (1 JSPF) (29 holes) using a charge that generates a .37" .42" diameter hole with a min. 21" penetration.
- 8. Acidize & frac the Paddock perfs dn csg according to vendor recommended procedure.
- 9. Flow back well until dead. RU reverse unit & swivel.
- 10. TIH W/4-3/4" bit, bit sub, XO, 6 3" DCs, XO, & 2-7/8" tbg to top of fill. DO CBPs @ +/-5270', 5850' and CO well to PBTD (COMMINGLING ALL ZONES). Reverse circ clean. TOH & LD DCs & bit.
- 11. Hydrotest in hole with W/tbg for production as specified by the Artesia office. TIH W/pump & rods as specified by the Artesia office.
- 12. MIRU pumping unit. Connect electrical service. Construct & tie in flowline. Place well into production.

Apache Corp. **Current Wellbore** May. 20, 2013 DATE: **GROUP:** Permian North SNH FIELD: Cedar Lake BY: LEASE/UNIT: Raven Federal WELL: #1 COUNTY: Eddy STATE: **New Mexico** API NUMBER: 30-015-40465 Spud Date: 10/3/2012 KB = 14'GL = 3715'Rig Release Date: 10/21/2012 17-1/2" 13-3/8" 48# H-40 @ 375' Cmt w/520 sx circ to surf 11" 8-5/8" 32# J-55 Set @ 3505' Cmt w/ 1640 sx circ to surf 7-7/8" 2-7/8" TUBING @ 6121' LOWER BLINEBRY 5880'-5980' (1 JSPF, 21 holes) 5 1/2" 17# J-55 Set @ 6414' Cmt w/ 1170 sx circ to surf TD = 6416'PBTD = 6380'

Apache Corp. **Proposed Wellbore GROUP:** Permian North DATE: May. 20, 2013 FIELD: Cedar Lake BY: SNH Raven Federal LEASE/UNIT: WELL: #1 **COUNTY:** Eddy STATE: **New Mexico** API NUMBER: 30-015-40465 Spud Date: 10/3/2012 $KB = 14^{\circ}$ Rig Release Date: 10/21/2012 GL = 3715'17-1/2" 13-3/8" 48# H-40 @ 375' Cmt w/520 sx circ to surf 11" 8-5/8" 32# J-55 Set @ 3505' Cmt w/ 1640 sx circ to surf 7-7/8" **PADDOCK** 4655'-5230' (1 JSPF, 29 holes) **BLINEBRY** 5320'-5810' (1 JSPF, 26 holes) LOWER BLINEBRY 5880'-5980' (1 JSPF, 21 holes) 2-7/8" TUBING @ 6121' 5 1/2" 17# J-55 Set @ 6414' Cmt w/ 1170 sx circ to surf TD = 6416'PBTD = 6380'

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

30-015-40465

39330

873

⁴ Property Code

OGRID No.

¹ API Number

96831

Raven Federal

State of New Mexico

OIL CONSERVATION DIVISION 1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102 Energy, Minerals & Natural Resources Departmen EIVED Revised August 1, 2011

OH. CONSERVATION DIVISION MAY 2 2 2013 District Office **A**MENDED REPORT NMOCD ARTES

001

Certificate Number

3715' GR

⁶ Well Number

⁹ Elevation

WELL LOCATION AND ACREAGE DEDICATION PLAT

⁵ Property Name

8 Operator Name

Apache Corporation: 303 Veterans Airpark Lane, Suite 3000 Midland, TX 79705

Cedar Lake; Glorieta-Yeso (O)

						10 Surface 1	Location			
UL or lot no.	Section	Township	Range		Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	07	17S	31E	3		2190	South	990	West	Eddy
			¹¹ Во	tto	m Ho	le Location If	Different From	n Surface		
UL or lot no.	Section	Township	Range		Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
			İ				·			
12 Dedicated Acres	3 Joint o	r Infill	⁴ Consolidation	Code	: 15 Oı	rder No.	l	L		
40.0										
No allowable vidivision.	will be ass	signed to	this complet	lion	until a		been consolidated	In the proposed to the best of to the best of to the best of to owns a working the proposed to cation purst interest, or to order hereufally. Signature Fatima Marketima Market	PERATOR CERT by that the information contains my knowledge and belief, and in g interest or unleased mineral bottom hole location or has a in want to a contract with an owne a voluntary pooling agreement are entered by the division. Vasquez e Vasquez@apache ess VEYOR CERT ertify that the well location follotted from field notes the or under my superv we and correct to the believer to the believe	TIFICATION red herein is true and complete that this organization either i interest in the land including right to drill this well at this or of such a mineral or working to a compulsory pooling 05/20/2013 Date PECOTP. COM IFICATION attion shown on this of actual surveys ision, and that the
	2190'							Date of Sur Signature an	vey nd Seal of Professional Sur	veyor: