

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

RECEIVED

MAY 14 2014

FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996

5. Lease Serial No.
Jicarilla Contract #9
6. If Indian, Allottee or Tribe Name
Jicarilla Apache Nation
7. If Unit or CA/Agreement, Name and/or No.
8. Well Name and No.
Jicarilla Apache A-21
9. API Well No.
30-039-31127
10. Field and Pool, or Exploratory Area
Lindr. Gal-Dak.W
11. County or Parish, State
Rio Arriba, County NM

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1.	<input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other
2. Name of Operator	ELM RIDGE EXPLORATION CO LLC
3a. Address	PO BOX 156 BLOOMFIELD NM 87413
3b. Phone No. (include area code)	505-632-3476 EXT 201
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)	1610' FNL X 899' FEL

"H" Sec.35-T25N-R05W

12. CHECK 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 checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input checked="" 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 Operations (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 shall 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 shall be filed once Testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Elm Ridge Exploration Co LLC re-fractured this well. The job summary is attached.

OIL CONS. DIV DIST. 3

MAY 16 2014

ACCEPTED FOR RECORD

MAY 14 2014

FARMINGTON FIELD OFFICE
BY: William Tambekou

14. I hereby certify that the foregoing is true and correct	Title
Name (Printed/Typed)	Sr. Regulatory Supervisor
Signature	Date
	May 14, 2014

THIS SPACE FOR FEDERAL OR STATE 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, makes 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 reverse)

NMOCDFV

Post Job

HALLIBURTON

Fracturing Service Treatment Report

Legal Data

Date: May 5, 2014 District: Farmington Customer: Elm Ridge S.O. #: 901311015
 Well Name: Jicarilla Apache A #21 Legals: S: 35 T: 25N/R: 5W County/State: Rio Arriba, NM API#: 30-039-31143

Well Data

Job Type	70Q Delta 200 Foam Frac					
Formation	Gallup	Total Depth	7,600	Tubing	-	
Casing	15.5", 5.5", J-55	Liner	-	Packer	-	Interval:
Perforations	6 spf	Perf Size		Total	282	Interval: 6355-6544

Treatment Data

Slurry	Foam	Average Rates	Pressure
Pad Volume: 33,292	Pad Volume: 106,647	Clean: 15.7	Average: 3,620
Treatment: 46,386	Treatment: 117,778	Slurry: 17.8	ISIP: 2,063
Flush: 6,272	Flush: 6,272	Foam: 49.9	5 Minute: 1,854
Total: 85,950	Total: 230,697	N2 / CO2: 50,458	10 Minute: 1,717
Pad %: 39%	Sand Total: 235,520	Q: 69	15 Minute: 1,595

Job Data

Time	Volumes		Rates		Pressure	Sand	Stage Description
Stage Time	Stage Volume	Fluid Total	Slurry Rate	BH Rate	Tubing/Casing	Stage LBS	
9:20						N/A	Start Job
9:23	1,550	1,550	12.1	30.8	250	N/A	Pre-Pad
9:26	33,292	34,842	15.6	50.1	3,522	N/A	Pad
10:17	7,170	7,170	17.2	49.2	3,473	19,540	1#
10:27	16,686	23,856	19.2	49.9	3,577	79,400	2#
1:33	22,530	39,216	20.8	49.4	3,876	136,580	3#
2:01	6,272	28,802	33.5	33.5	2,987	N/A	Flush
2:06		6,272	N/A			N/A	Shut-In

Job Summary & Comments

Frac gradient of 0.75 psi/ft
 Pumped 6272 gallons of 2%KCl water.
 Pumped 70381 gallons of 25# Delta 200 Foam at an average surface dirty rate of 17.74 bbl, bottomhole rate of 49.84 bbl.
 Pumped 5340293 scf of Nitrogen at an average quality of 69%.
 Pumped 235520 pounds of 20/40 CRC, or 2355 sks.
 Total fluid to recover is 2047 bbl of fluid.
 Saw pressure slowly creep up throughout the job, but it did not go over 4040 psi.
 Had slight issues one of the N2 pumps, but issue was resolved and design quality was achieved.

Treater/N2 Treater J. Chavers/E. Acree
 TCC Operator: U. Enabulele
 Engineer: Jun An

Chemicals Pumped

Chemical	Bag Strap	After Prime Up	Ending Strap	Design	Used	Picker Total	Percentage Error
LGC-36	622.5	622.5	368	387	255	255	34%
BC-200	341	337	183	141	154	158	9%
LoSurf 300D	341	333	286	38	47	55	23%
HC-2	309	301	33	282	268	278	6%
SP	45	45	0	50	50	45	1%
Optiflo III	75	75	0	77	60	75	4%