

Form 3160-5
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires January 31, 2004

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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
SF-079761

6. If Indian, Allottee or Tribe Name
J/A

7. If Unit or CA/Agreement, Name and/or No.
EPUG #10-36

8. Well Name and No.
SAW TEAU 29-4 NO.10

9. API Well No.
30-039-07488

10. Field and Pool, or Exploratory Area
PICTURED CLIFFS

11. County or Parish, State
RIO ARriba

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other **GROUNDWATER MONITORING WELL**

2. Name of Operator
UNITED STATES DEPARTMENT OF ENERGY

3a. Address **P.O. Box 98518 LAS VEGAS, NV, 89193-8518**

3b. Phone No. (include area code)
(702) 295-0160

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1650' FSL & 1700' FWL, SECTION 36, T29N, R24W

12. CHECK 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"/> Coaling Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" 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 recomplete 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 recompletion 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.)

SHAW ENVIRONMENTAL, INC (US DOE CONTRACTOR) INTENDS TO PLUG AND ABANDON THE ABOVE REFERENCED WELL, AS PER BLM REQUIREMENTS.

A-PLUS WELL SERVICE SHALL PERFORM PLUGGING OPERATIONS IN ACCORDANCE WITH ATTACHED PROCEDURE.

ESTIMATED START DATE IS SEPTEMBER 15, 2003.

Verble to plug 9/11/03

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

Name (Printed/Typed) **MONICA L. SAUCHEZ** Title **ENVIRONMENTAL RESTORATION DIVISION OFFSITES PROJECT MANAGER**

Signature *[Signature]* Date **9/10/03**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by *[Signature]* Title **DE** Date **SEP 11 2003**

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 enable the applicant to conduct operations thereon. Office **FFO**

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 reverse)

INWOOD

PLUG AND ABANDONMENT PROCEDURE

September 10, 2003

EPNG #10-36

Chaco Mesa Pictured Cliffs
1650' FSL & 1700' FWL, Section 36, T29N, R4W
Rio Arriba County, New Mexico / API #30-39-07488

Note: All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement is ASTM Type II, (15.6ppg and 1.18 cf/sx).

1. Install and test rig anchors. Prepare blow pit. Comply with all NMOCD and BLM safety rules and regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Blow well down; kill with water as necessary. ND wellhead and NU BOP and stripping head; test BOP.
2. ~~Connect pump line to casing valve and pump 100 bbls fresh water down the casing to displace the fluid in the annulus into the formation.~~
3. Prepare a 2-3/8" tubing work string. Round trip 5-1/2" wireline gauge ring or casing scraper to 3521'.
4. **Plug #1 (Ojo Alamo perforations, 3611' – 3410'):** TIH and set 5-1/2" cement retainer at 3521'. Pressure test tubing to 1000#. Load casing and displace well surface to surface with fresh water, circulate returns into ~~a steel pit a water tanker which will transport the wellbore fluid to an appropriate disposal facility at Aragonite, Utah (Shaw Environmental will obtain the necessary approvals) . Transport waste fluid to an approved disposal facility.~~ Pressure test casing to 500#. If casing does not test, then spot or tag subsequent plugs as appropriate. Mix and pump 40 sxs cement, squeeze 21 sxs cement below cement retainer and spot a 19 sxs above the CR to fill the Ojo Alamo perforations and to cover the top. *Circulate the fresh water from the well and the cement wash water to a steel pit for containment until it is hauled to a local disposal fluid.* LD tubing to 2260' and TOH.
5. **Plug #2 (Nacimiento top, 2260' - 2160'):** Perforate 3 HSC squeeze holes at 2260'. If casing pressure tested above, establish injection into squeeze holes. TIH and set 5-1/2" cement retainer at 2210'. Mix and pump 60 sxs cement, squeeze 43 sxs cement outside 5-1/2" casing and leave 17 sxs inside casing to cover the Nacimiento top. LD tubing to 174' and TOH.
6. **Plug #3 (9-5/8" Surface Casing, 174' - Surface):** Attempt to pressure test the bradenhead annulus to 300#. Note the volume required to fill the annulus before it pressures up.
 - If it tests, then perforate the 5-1/2" casing at 174'. Establish an injection rate into the squeeze holes. Mix and pump 42 sxs down the 5-1/2" casing, squeeze 22 sxs outside the 5-1/2" casing and leave 20 sxs inside the casing to surface. Shut in well and WOC.
 - If unable to establish an injection rate into the squeeze holes, then TIH to 224'. Establish circulation out casing valve with water. Mix approximately 25 sxs cement to fill the inside of the 5-1/2" casing or and spot a plug from 174' to surface, circulate good cement out casing valve. TOH and LD tubing. Shut in well and WOC.
 - If the bradenhead annulus does not pressure test, then perforate 174' and attempt to establish circulation to surface out the BH valve. Cement as appropriate. Need to set cement plugs across the surface casing shoe and from the perforations to surface, circulate good cement out bradenhead.
7. ND BOP and cut off well head below surface casing flange. Install P&A marker with cement to

comply with regulations. RD, MOL and cut off anchors. Restore location per BLM stipulations.

EPNG #10-36**Current**

Chaco Mesa Pictured Cliffs

1650' FSL & 1700' FWL, Section 36, T-29-N, R-4-W

Rio Arriba County, NM / API # 30-039-07488

Today's Date: 8/12/03
 Spud: 7/6/56
 PC Completed: 1956
 PC P&A: 1967
 OA Completed: 1968
 Elevation: 7184' GL
 7194' KB

13-3/8" hole

Nacimiento @ 2210'

Ojo Alamo @ 3460'

Kirtland @ 3650'

Fruitland @ 3760'

Pictured Cliffs @ 3896'

8-3/4" Hole

PBSD 3616'

TD 4210'

Bradenhead annuls cemented
 from 120' to surface. (1967)

9-5/8" 25.4#, S W Casing set @ 124'
 Cement with 100 sxs, (Circulated to surface)

Well History

Oct '67: P&A PC: Pull tubing. Set CIBP at 3880' and spot 112 cf cement above up to 3205'. Tag cement and spot 40 cf from 3205' to 2941'. Perforate at 5-1/2" casing at 120'. Cement BH annulus with 56 cf, circulate cement to surface out bradenhead. Clean out well to 2941' and MOL.

Oct'68: Perforate OA: Change out tubing head to flanged. Drill out cement to 3616'. Perforate OA from 3571' to 3611'. Land tubing and swab well.

2002: Pull tubing. Conduct MIT of casing.

TOC @ 3055' (T.S.)

Ojo Alamo Perforations:
 3571' - 3611'

CIBP @ 3880' (1967)
 Capped with 112 cf cement,
 then 40 cf up to 2941'.

Pictured Cliffs Perforations:
 3901' - 4166'
 Covered with sand (1967)

5-1/2" 15.5#, J55 casing at 4203'
 Cement with 300 sxs (407 cf)

EPNG #10-36**Proposed P&A**

Chaco Mesa Pictured Cliffs

1650' FSL & 1700' FWL, Section 36, T-29-N, R-4-W

Rio Arriba County, NM / API # 30-039-07488

Today's Date: 8/12/03
 Spud: 7/8/56
 PC Completed: 1956
 PC P&A: 1967
 OA Completed: 1968
 Elevation: 7184' GL
 7194' KB

13-3/8" hole

Nacimiento @ 2210'

Ojo Alamo @ 3460'
 58

Kirtland @ 3650'

Fruitland @ 3760'
 3876

Pictured Cliffs @ 3886'
 4188

PBSD 3616'

8-3/4" Hole

TD 4210'
 PBSD 3616'

Bradenhead annuls cemented
 from 120' to surface. (1967)

9-5/8" 25.4#, S W Casing set @ 124'
 Cement with 100 sxs, (Circulated to surface)

Perforate @ 174' Plug #3 174' - Surface
 Cement with 42 sxs.
 22 sxs outside casing
 and 20 sxs inside casing.
 $174 / 7.483 (1.18) = 20 \text{ sxs}$

Set CR @ 2210' Plug #2 2260' - 2160'
 Cement with 60 sxs,
 43 sxs outside casing,
 17 sxs inside casing.

$$43 (3.9589) 1.18 = 201'$$

$$17 (7.483) 1.18 = 150'$$

TOC @ 3055' (T.S.)

Set CR @ 3521'

Ojo Alamo Perforations:
 3571' - 3611'

Plug #1 3611' - 3410'
 Cement with 40 sxs,
 21 sxs below CR
 and 19 sxs above.
 $(3521 - 3410) + 50 / 7.483 (1.18) = 185'$

CIBP @ 3880' (1967)

Pictured Cliffs Perforations:
 3901' - 4166'
 Squeezed with 112 cf (1967)

5-1/2" 15.5#, J55 casing at 4209'
 Cement with 300 sxs (407 cf)