State of New Mexico
Energy, Minerals and Natural Resources Department

New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-4 or 3160-5 form.

Operator Signature Date: 11/13/2019
Well information:

30-039-22914 AXI A #011
DJR OPERATING, LLC

Application Type:

☒ P&A ☐ Drilling/Casing Change ☐ Location Change

☐ Recomplete/DHC (For hydraulic fracturing operations review EPA Underground injection control Guidance #84; Submit Gas Capture Plan form prior to spudding or initiating recompletion operations)

☐ Other:

Conditions of Approval:

- Notify NMOCD 24hrs prior to beginning operations.
- Extend plug #1 to 2071'-1550' to cover the Ojo Alamo. OCD Ojo Alamo pick @ 1600'.

Kathleen Allred

NMOCD Approved by Signature

12/3/19
Date

Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

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 page 2

5. Lease Serial No.
JIC77

6. If Indian, Allottee or Tribe Name
JICARILLA APACHE

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
AXI APACHE A 11

2. Name of Operator
DJR OPERATING LLC
Contact: ALICE MASCARENAS
E-Mail: amascarenas@djrllc.com

9. API Well No.
30-039-22914-00-S1

3a. Address
1600 BROADWAY SUITE 1600
DENVER, CO 80202

3b. Phone No. (include area code)
Ph: 505-632-3476

10. Field and Pool or Exploratory Area
BALLARD

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 15 T23N R5W NESW 1800FSL 1790FWL

11. County or Parish, State
RIO ARRIBA COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☒ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 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.

DJR Operating, LLC request permission to Plug and Abandon the subject well per the attached procedure, wellbore diagram, and Reclamation Plan.

NMOCD
DEC 03 2019
DISTRICT III

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #492279 verified by the BLM Well Information System
For DJR OPERATING LLC, sent to the Rio Puerco
Committed to AFMSS for processing by JOE KILLINS on 11/13/2019 (20JK0004SE)

Name *(Printed/Typed)* ALICE MASCARENAS — Title REGULATORY TECHNICIAN

Signature (Electronic Submission) — Date 11/13/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By JOE KILLINS — Title PETROLEUM ENGINEER — Date 12/03/201

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 Rio Puerco

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)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FARMINGTON DISTRICT OFFICE
6251 COLLEGE BLVD.
FARMINGTON, NEW MEXICO 87402

Attachment to notice of
Intention to Abandon:

Re: Permanent Abandonment
Well: DJR AXI Apache A11

API: 30-039-22914

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."

2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.

3. BLM pick: top of Ojo Alamo is 1652 ft. Modify Plug #1 to cover up to 1602 feet plus required excess.

A+

PLUG AND ABANDONMENT PROCEDURE

February 14, 2019

AXI Apache A 11

Ballard Pictured Cliffs
1800' FSL and 1790' FWL, Section 15, T23N, R5W
Rio Arriba County, New Mexico / API 30-039-22914
Lat: N _____/ Lat: W _____

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 will be Class G, mixed at 15.8 ppg with a 1.15 cf/sx yield.

1. Install and test location rig anchors. Comply with all NMOCD, BLM, and Operator safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. ND wellhead and NU BOP. Function test BOP.

2. Rods: Yes____, No__X__, Unknown_____.
   Tubing: Yes _X__, No ____, Unknown_____, Size _1.25"____, Length _2141'_____
   Packer: Yes____, No _X__, Unknown_____, Type _____.

3. **Plug #1 (Pictured Cliffs interval, Fruitland, Kirtland and Ojo Alamo tops, 2071' – 1629'):** Round trip 2.875" gauge ring to 2071' or as deep as possible. RIH and set 2.875" wireline CIBP at 2071'. Circulate well clean. Pressure test casing to 800#. *If casing does not test then spot or tag subsequent plugs as appropriate.* PU tubing workstring and RIH. Spot 14 sxs Class G cement inside casing from 2071' to cover through the Ojo Alamo top. PUH.

4. **Plug #2 (7" surface casing shoe, 344' - Surface)**: Attempt to pressure test the bradenhead annulus to 300 PSI; note the volume to load. If the BH annulus holds pressure, then establish circulation out casing valve with water. Mix approximately 10 sxs cement and spot a balanced plug from 344' to surface, circulate good cement out casing valve. TOH and LD tubing. Shut well in and WOC. If the BH annulus does not test, then perforate at the appropriate depth and attempt to circulate cement to surface filling the casing and annulus from the squeeze holes to surface. Shut in well and WOC.

5. ND cementing valves and cut off wellhead. Fill annuli with cement as necessary. Install P&A marker to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. RD, MOL and cut off anchors. Restore location per BLM stipulations

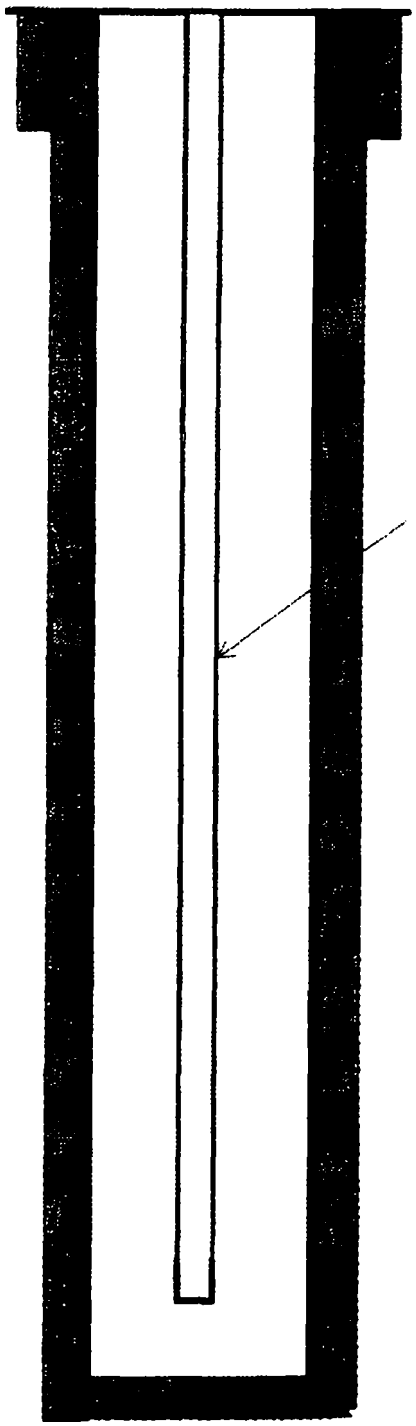
AXI Apache A 11

Current

Ballard Pictured Cliffs
1800' FSL, 1790' FWL, Section 15, T-23-N, R-5-W
Rio Arriba County, NM, API #30-039-22914

Today's Date: 2/14/19
Spud: 4/4/82
Completed: 7/17/82
Elevation: 6733' GI
6741' KB

9-7/8" hole



Cement circulated to surface

7" 23# Casing set @ 95'
Cement with 59cf, circulated

Nacimiento @ 294'

1.25" tubing @ 2141'

Ojo Alamo @ 1679'

Kirtland @ 1830'

Fruitland @ 1932'

Pictured Cliffs @ 2121'

Pictured Cliffs Perforations:
2121' – 2148'

6.25" Hole

2.875", 6.5#, Casing set at 2234'
Cement with 609 cf, circulated 9 sxs to surface

PBTD 2194'
TD 2260'

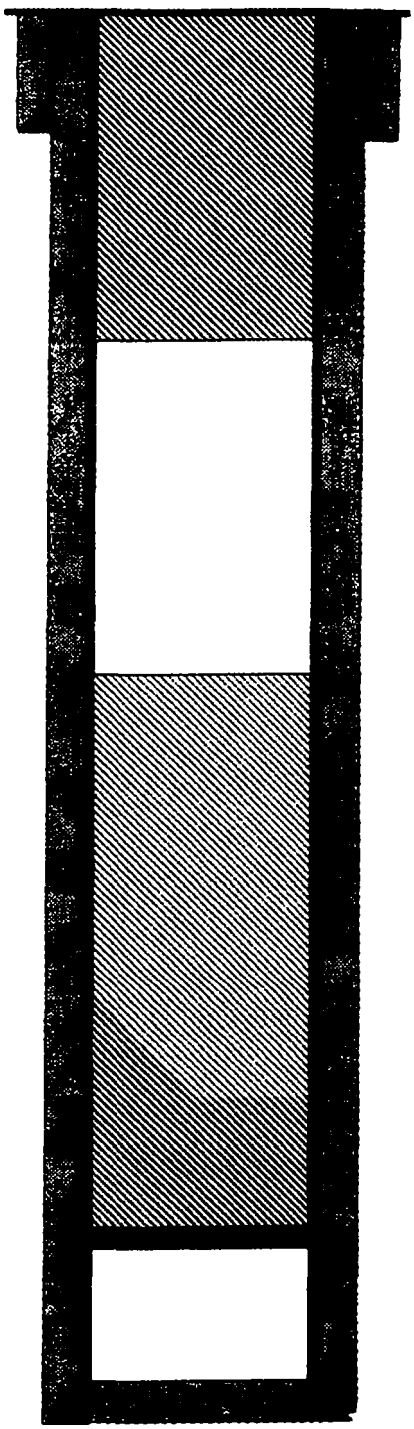
AXI Apache A 11

Proposed P&A

Ballard Pictured Cliffs
1800' FSL, 1790' FWL, Section 15, T-23-N, R-5-W
Rio Arriba County, NM, API #30-039-22914

Today's Date: 2/14/19
Spud: 4/4/82
Completed: 7/17/82
Elevation: 6733' GI
6741' KB

9-7/8" hole



Cement circulated to surface

7" 23# Casing set @ 95'
Cement with 59cf, circulated

Plug #2: 344' – 0'
Class G cement, 10 sxs

Nacimiento @ 294'

Ojo Alamo @ 1679'

Kirtland @ 1830'

Plug #1: 2071' – 1629'
Class G cement, 14 sxs

Fruitland @ 1932'

Pictured Cliffs @ 2121'

Set CIBP @ 2071'

Pictured Cliffs Perforations:
2121' – 2148'

6.25" Hole

2.875", 6.5#, Casing set at 2234'
Cement with 609 cf, circulated 9 sxs to surface

PBTD 2194'
TD 2280'

P & A RECLAMATION PLAN

Date: July 11, 2019

Attendees:

BIA: Kurt Sandoval, Real Estate Services

BLM Specialist: Bob Switzer (Not in Attendance)

JOGA Specialist: Orson Harrison

DJR Pipeline Specialist: Bobby Hawkins

DJR Regulatory: Paul Lehrman

Jicarilla THPO: Dr. Jeffrey Blythe

Operator: DJR Operating, LLC

Well Name & Number: AXI Apache A 11

API No. 30-039-22914

Section 15 Township 23 North Range 5 West

Lease No: 77

Footage 1800 FSL 1790 FWL

County Rio Arriba State New Mexico

Latitude/Longitude: Lat: 36.2216076446 Long: -107.351964275

Surface: Jicarilla Apache Nation

Twinned Location: No

USDI-Geological Survey: Tancosa Windmill 7.5 Minute Quad

WELL PAD

Topography: Rolling Sage Hills

Stockpile Topsoil: No

Soil Type: Sandy

Vegetation Community: Mesa Seed Mix

Vegetation Specifics:

Common Name	Scientific Name	Variety	Form	PLS lbs/Acre
Sandberg Bluegrass	Poa Secunda		Bunch	1.0
Indian Ricegrass Rimrock	Oryzopsis hymenoides		Bunch	1.1
Lewis Flax	Linum lewissi		Grass	.80
Small Burnet	Sanguisorba minor		Forb	2.0
UT Sweetvetch	Hedysarum boreale		Legume	1.0
Antelope Bitterbrush	Purshia tridentata		Shrub	1.5

Sand Dropseed	*Sporobolus cryptandrus*		Bunch	.50
Mtn. Mahogany	***Cercocarpus montanus***		Shrub	1.0
Sideoats Grama	Bouteloua curtipendula		Grass	1.0
Blue Gramma	Bouteloua gracilis		Bunch	1.0
Galleta	***Pleuraphis jamesii***		Bunch	2.0
			Total	12.90

Straw mulch (i.e. barley, wheat. Oat, etc.) will be uniformly applied and crimped on reclaimed areas of the well site.

Vegetation Cages: No

Noxious Weeds: No

Facilities on Location:

- Well Head
- Pipeline (DJR)

Gravel Present: Minimal

Steel Pits: No

Cathodic Ground bed: No

Trash on Location: Minor, all trash and debris will be removed

Power Poles: No

Construct Diversion Ditch: No

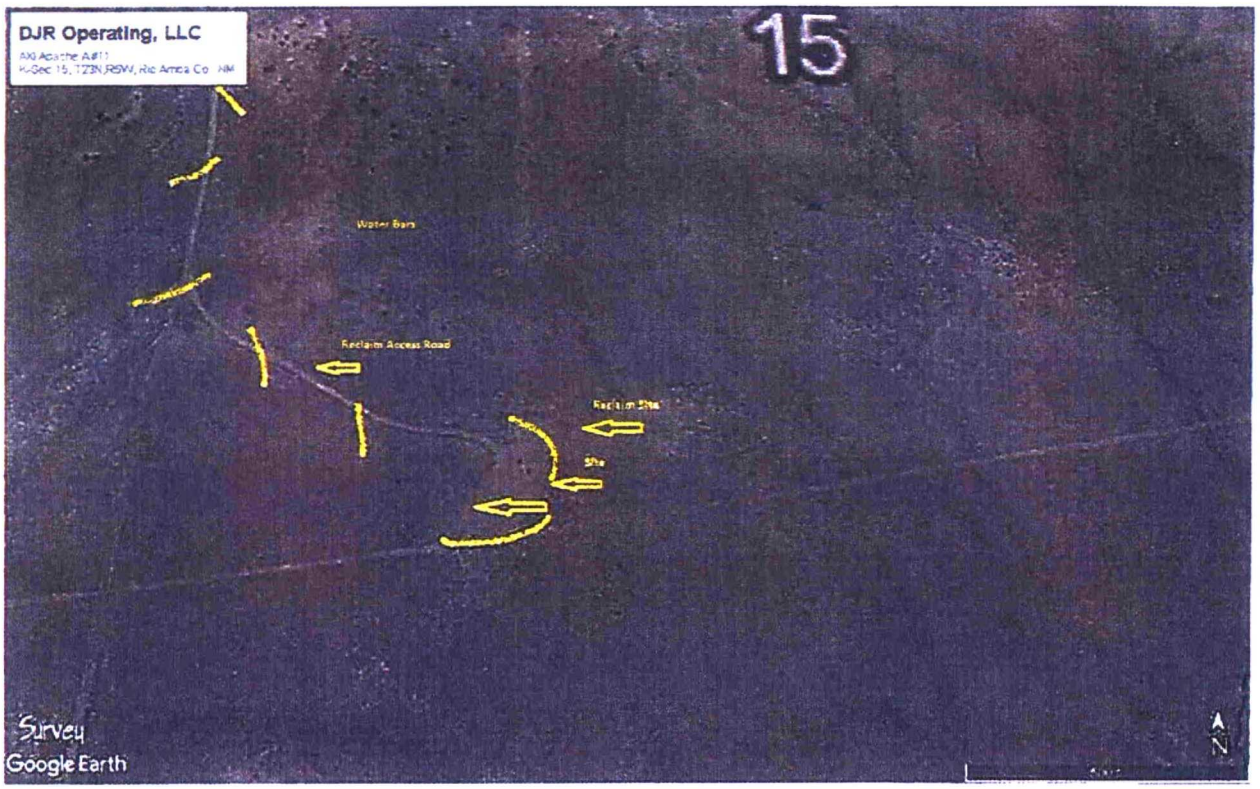
Contaminated Soil: None

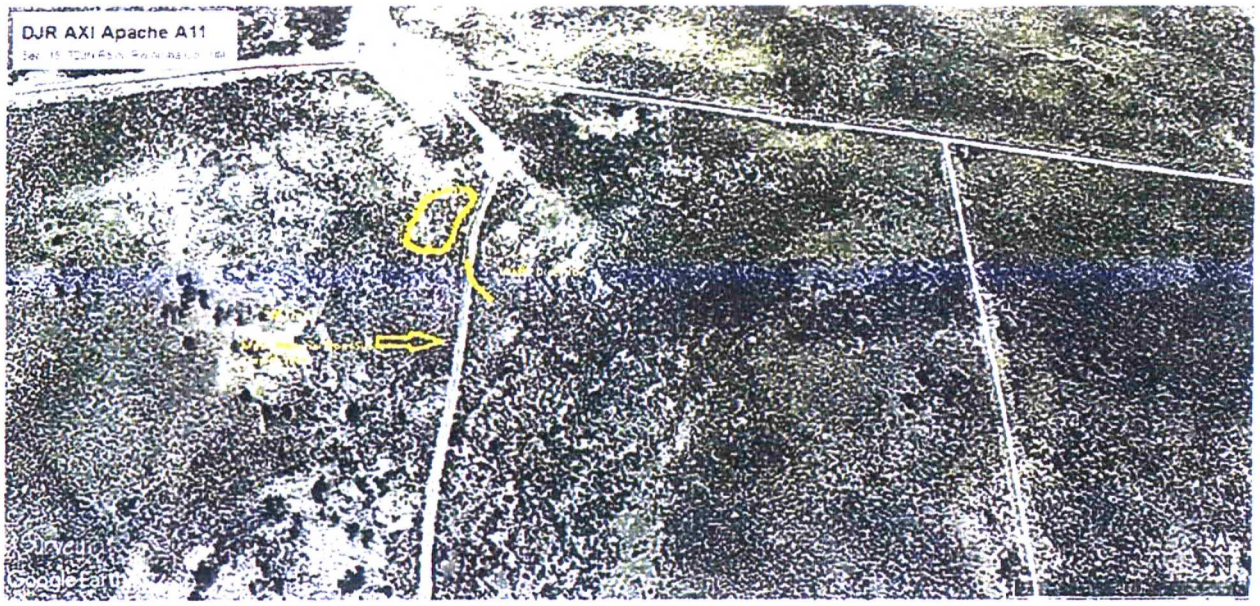
Construct Silt Trap: Yes/recontour site (See Plat) and (See Plan Discussion)

Recontour Disturbed Areas to Natural Terrain: Yes

Location and Access Barricade: Yes, fence off location from main access road. Use steel posts and woven hog wire with appropriate signage.

Site Layout:


DJR Operating, LLC
15
Water Bars
Reclaim Access Road
Survey
Google Earth
N

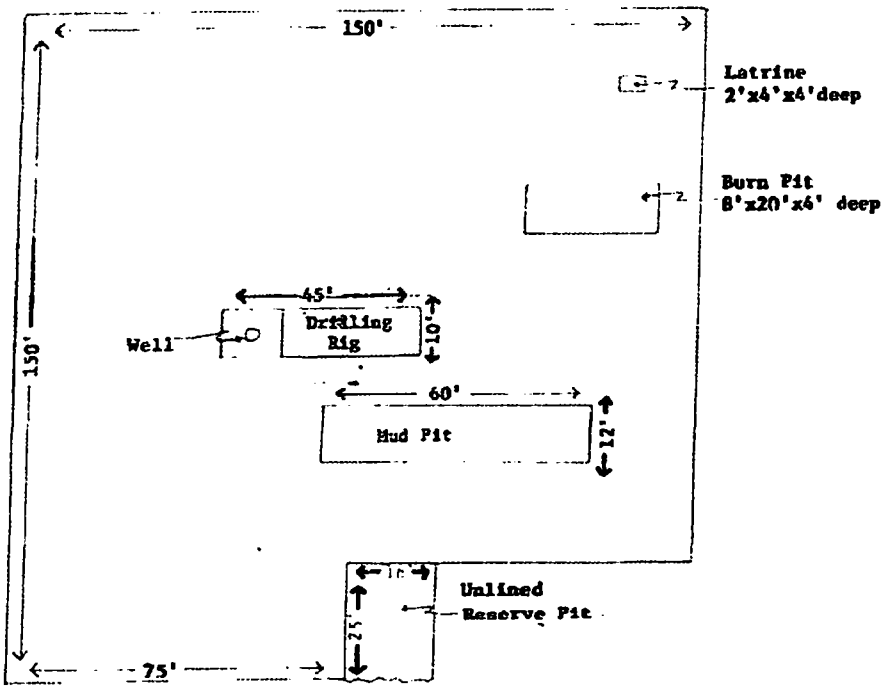

DJR AXI Apache A11

ROBERT L. BAYLESS

LOCATION AND EQUIPMENT LAYOUT

Shallow Wells

AXI "A" #11
SW/4 Section 15, T23N, R5W
Rio Arriba County, New Mexico



Scale: 1" = 30'

Site layout per APD.

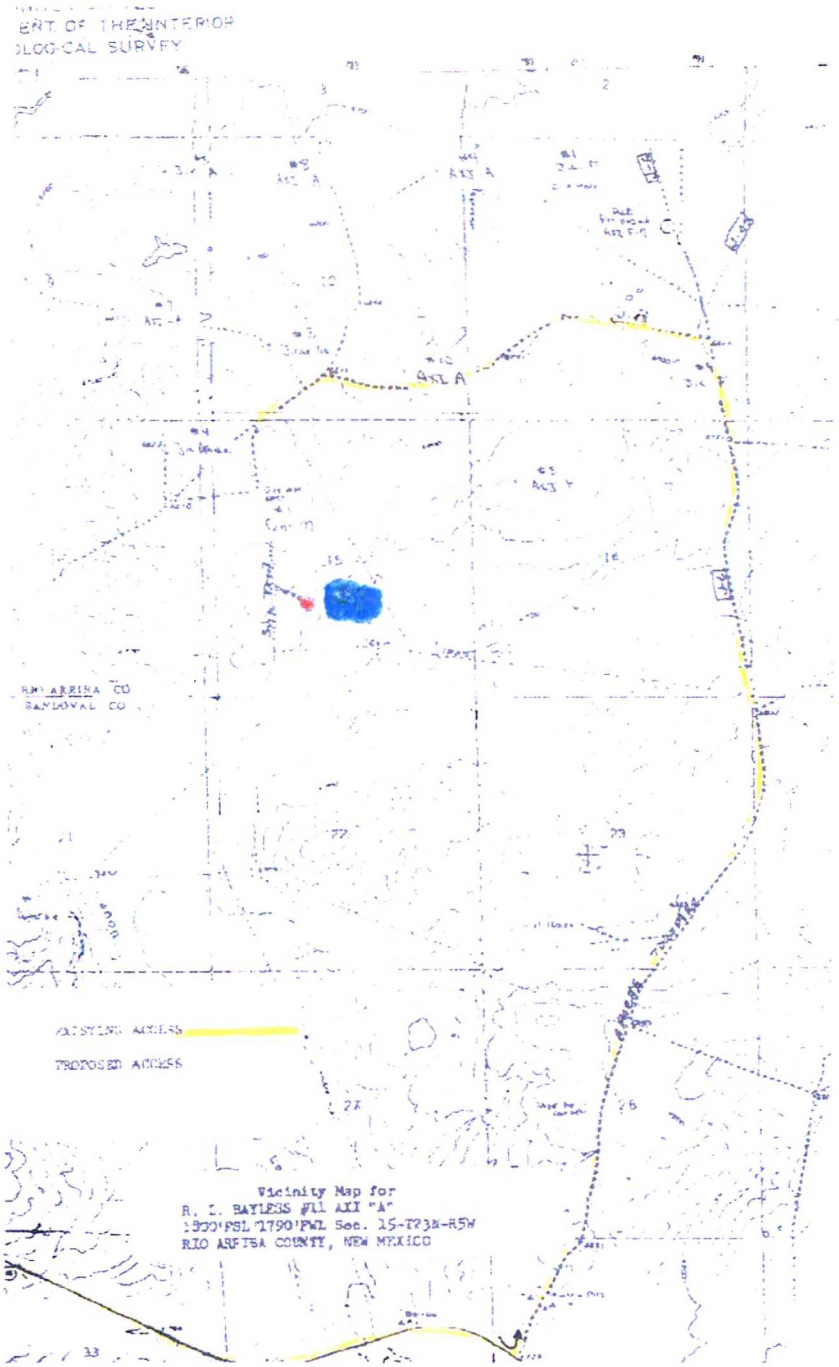
TOPO PLAT

TANCOSA WINDMILL 7.5 MINUTE QUAD

ACCESS ROAD

Access Length:	2500' Access from South (NM 550), via J-6, turn North at Gate, go 3.9 miles north on J-6, then left on J-43 veer south to site.
Remediation Method:	Reclaim access from pad to main road.
Culverts:	No
Cattle Guard:	No
Other:	Place water bars as shown on plat. Silt Trap as shown on Plat Barrier Fence at top of Mesa on Road

Access per APD:



PIPELINE

Pipeline Company	DJR
Relocate Riser	No, remove meter run, drips and **all pipe within well pad boundaries above and below grade**, and remove pipeline to 50' north of pad boundary and any above ground equipment.

GRAZING

Stipulations, if any, per approval.

GENERAL RECLAMATION PLAN NARRATIVE

On July 11, 2019, an on-site to discuss Surface Reclamation was conducted with attendees, Kurt Sandoval of the Jicarilla Agency Bureau of Indian Affairs, Robert Switzer of the BLM FFO, and Orson Harrison of the Jicarilla Oil and Gas Administration, and DJR Operating, LLC Representatives, Paul Lehrman and Bobby Hawkins, and Jicarilla THPO Dr. Jeffrey Blythe. The following was discussed:

Re-contour well site using materials from the existing site. Pull soils from East side into cut on West side. Spread soil from all areas on reclaimed pad before reseeding. Feather areas taken to pad level. Remove tank, drips, piping etc. from location.

Reclaim access road from Main road to well site and place water bars on access road as shown on plat, along with silt trap as shown on plat. Construct silt trap just south/west of road.

Reclamation work will begin as soon as the well is plugged, (to allow for better seed germination), or at a later date as approved by JOGA/BIA, and after the submitted approved plugging Sundry. Timing of the seeding may change and will be contingent on the plugging of the well, weather and the optimal time to seed. Seeding will be repeated if a satisfactory stand in not obtained as determined by JOGA/BIA upon evaluation of the second growing season.

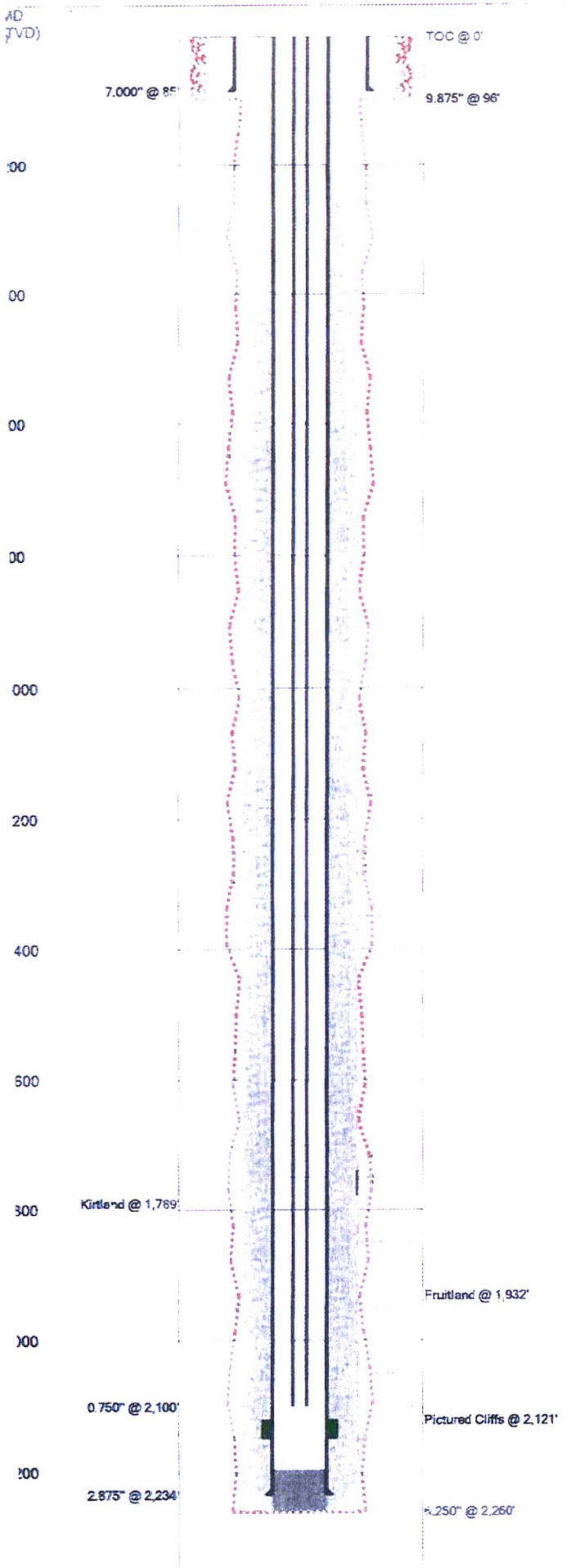
Notification will be provided via e-mail, or phone to Kurt Sandoval, Alfred Vigil, Jr., and Robert Switzer. This will be done 48 hours prior to starting dirt work. Kurt Sandoval email: kurt.sandoval@bia.gov, phone 575-759-3951, Alfred Vigil, Jr. email: alfredvigiljr@jicarillaoga.com, phone 575-419-0003, and Robert Switzer email: rswitzer@blm.gov and cell 505-793-1809. DJR will also submit a Permission to Perform Work (PTPW) form to the BIA prior to beginning any work associated with this plan. An affidavit of completion will be submitted once the work has been completed.

All fences (if any), production equipment, concrete slabs, anchors, flowlines on pad, risers/drips, if any, tanks, debris, and **trash** will be removed from location and disposed of at the proper facilities.

Please walk entire pad and area outside pad area for trash identification and trash removal.

The reclaimed areas of the pad to be ripped to a sufficient depth to accept seed and the straw mulch (crimped), leaving the surface as rough as needed, to provide sufficient root establishment, growth, and stabilization of disturbed areas.

All Seed will be distributed via drill seeding.



Last Updated: 5/31/2018 10:21 AM

Field Name	Lease Name	Well No.
South	Axi Apache A	11

County	State	API No.
Rio Arriba	New Mexico	30039229140000

Version	Version Tag
0	2018

GL (ft)	KB (ft)	Section	Township/Block	Range/Survey
6,733.0	8.0	15	23N	5W

Operator	Well Status	Latitude	Longitude
DJR Operating, LLC	Producing	36.22196	-107.35145

Dist. N/S (ft)	N/S Line	Dist. E/W (ft)	E/W Line	Footage From
1800	FSL	1790	FWL	

Prop Num	Spud Date	Comp. Date
	4/4/1982	7/14/1982

Additional Information

Other 1	Other 2	Other 3	Other 4

Prepared By	Updated By	Last Updated
cmick	cmick	5/31/2018 10:21 AM

Hole Summary

Date	Diam. (in)	Top (MD ft)	Bottom (MD ft)	Comments
4/4/1982	9.875	0	96	
4/7/1982	6.250	96	2,260	

Tubular Summary

Date	Description	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)
4/4/1982	Surface Casing	7.000	23.00	J-55	0	85
4/7/1982	Production Casing	2.875	6.50	J-55	0	2,234
3/16/1983	Tubing	0.750	1.20	J-55	0	2,100

Casing Cement Summary

C	Date	No. Sx	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	4/4/1982	50	7.000	0	96	class "B" cmt with 2% CaCl circ 9 sx to surf
	4/7/1982	250	2.875	0	2,260	lead with 200 sx class "B" cmt woth 2% econofill and tail with 50 sx class "B" with 2% CaCl circulated 30 sx to surf

Cement Plug Summary

Date	No. Sx	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
4/7/1982		2.875	2,194	2,260	

Perforation Summary

C	Date	Perf. Status	Formation	OA Top (MD ft)	OA Bottom (MD ft)
	5/11/1982	Open		2121	2,148

Formation Tops Summary

Formation	Top (TVD ft)	Comments
Kirtland	1,789	
Fruitland	1,932	
Pictured Cliffs	2,121	

Last Updated: 5/31/2018 10:21 AM

Field Name	Lease Name	Well No.	County	State	API No.
South	Axi Apache A	11	Rio Arriba	New Mexico	30039229140000

Version	Version Tag	Spud Date	Comp. Date	GL (ft)	KB (ft)
0	2018	4/4/1982	7/14/1982	6,733.0	8.0

Section	Township/Block	Range/Survey	Dist. N/S (ft)	N/S Line	Dist. E/W (ft)	E/W Line	Footage From
5	23N	5W	1,800	FSL	1,790	FWL	

Operator	Well Status	Latitude	Longitude	Prop Num
DJR Operating, LLC	Producing	36.22196	-107.35145	

Other 1	Other 2	Other 3	Other 4

Last Updated	Prepared By	Updated By
5/31/2018 10:21 AM	cmick	cmick

Additional Information

Hole Summary

Date	Diam. (in)	Top (MD ft)	Bottom (MD ft)	Comments
4/4/1982	9.875	0	96	
4/7/1982	6.250	96	2,260	

Tubular Summary

Date	Description	No. Jts	O.D. (in)	Wt (lb/ft)	Grade	Coupling	Top (MD ft)	Bottom (MD ft)	Comments
4/4/1982	Surface Casing		7.000	23.00	J-55		0	85	
4/7/1982	Production Casing	68	2.875	6.50	J-55		0	2,234	
3/16/1983	Tubing	72	0.750	1.20	J-55		0	2,100	

Casing Cement Summary

Date	No. Sx	Yield (ft3/sk)	Vol. (ft3)	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Description	Comments
4/4/1982	50	1.00	50	7.000	0	96		class "B" cmt with 2% CaCl circ 9 sx to surf
4/7/1982	250	1.00	250	2.875	0	2,260		lead with 200 sx class "B" cmt woth 2% econofill and tail with 50 sx class "B" with 2% CaCl circulated 30 sx to surf

Cement Plug Summary

Date	No. Sx	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
4/7/1982		2.875	2,194	2,260	

Perforation Summary

Date	Perf. Status	Formation	Closed Date	Comments
5/11/1982	Open			

Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments
2121	2,148	1	27		

Formation Top Summary

Formation Name	Top(TVD ft)	Comments
Ojo Alamo	1,789	
Kirtland	1,932	
Fruitland	2,121	
Pictured Cliffs		

BLM FLUID MINERALS
Geologic Report

Date Completed: 11/18/2019

Well No.	AXI Apache A #11		Location	1800	FSL	&	1790	FWL
Lease No.	Jicarilla Contract 77		Sec. 15	T23N				R05W
Operator	DJR Operating		County	Rio Arriba		State	New Mexico	
Total Depth	2260	PBTD 2194	Formation	Pictured Cliffs				
Elevation (GL)	6733		Elevation (KB)	6741				

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm			Surface	294	Surface/Fresh water sands
Nacimiento Fm			294	1652	Fresh water sands
Ojo Alamo Ss			1652	1827	Aquifer (fresh water)
Kirtland Shale			1827	1932	
Fruitland Fm			1932	2120	Coal/Gas/Possible water
Pictured Cliffs Ss			2120	PBTD	Gas
Lewis Shale					
Chacra					
Cliff House Ss					Water/Possible gas
Menefee Fm					Coal/Ss/Water/Possible O&G
Point Lookout Ss					Probable water/Possible O&G
Mancos Shale					
Gallup					O&G/Water
Graneros Shale					
Dakota Ss					O&G/Water

Remarks:
P & A

- BLM geologist's pick for the top of the Ojo Alamo formation varies from operators.
- Log analysis of reference well #2 (attached worksheet) indicates the Nacimiento and Ojo Alamo sands investigated contain fresh water (≤5,000 ppm TDS).
- Please ensure that the tops of the Pictured Cliffs, Fruitland, and Kirtland formations, as well as the entire Ojo Alamo fresh water aquifer identified in this report are isolated by proper placement of cement plugs. This will protect the fresh water sands in this well bore.

Reference Well:
1) Same — Fm. Tops

2) Elm Ridge Exploration — Water Analysis
AXI Apache A #1
990' FNL, 1140' FWL
Sec. 15, T23N, R05W
GL 6854', KB 6865'

Prepared by: *Chris Wenman*

GENERAL REQUIREMENTS FOR PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES FARMINGTON FIELD OFFICE

1.0 The approved plugging plans may contain variances from the following minimum general requirements.

1.1 Modification of the approved plugging procedure is allowed only with the prior approval of the Authorized Officer, Farmington Field Office.

1.2 Requirements may be added to address specific well conditions.

2.0 Materials used must be accurately measured. (densometer/scales)

3.0 A tank or lined pit must be used for containment of any fluids from the wellbore during plugging operations and all pits are to be fenced with woven wire. These pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced.

3.1 Pits are not to be used for disposal of any hydrocarbons. If hydrocarbons are present in the pit, the fluids must be removed prior to filling in.

4.0 All cement plugs are to be placed through a work string. Cement may be bull-headed down the casing with prior approval. Cement caps on top of bridge plugs or cement retainers may be placed by dump bailer.

4.1 The cement shall be as specified in the approved plugging plan.

4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, or annular void(s) between casings, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.3 Surface plugs may be no less than 50' in length.

4.4 All cement plugs placed to fill annular void(s) between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, calculated using the bit size, or 100' of annular capacity, determined from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.5 All cement plugs placed to fill an open hole shall be of sufficient volume to fill a minimum of 100' of hole, as calculated from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug. In the absence of a caliper log, an excess of 100% shall be required.

4.6 **A cement bond log or other accepted cement evaluation tool is required to be run if one had not been previously ran or cement did not circulate to surface during the original casing cementing job or subsequent cementing jobs.**

5.0 All cement plugs spotted across, or above, any exposed zone(s), when; the wellbore is not full of fluid or the fluid level will not remain static, and in the case of lost circulation or partial returns during cement placement, shall be tested by tagging with the work string.

5.1 The top of any cement plug verified by tagging must be at or above the depth specified in the approved plan, without regard to any excess.

5.2 Testing will not be required for any cement plug that is mechanically contained by use of a bridge plug and/or cement retainer, if casing integrity has been established.

5.3 Any cement plug which is the only isolating medium, for a fresh water interval or a zone containing a prospectively valuable deposit of minerals, shall be tested by tagging.

5.4 If perforations are required below the surface casing shoe, a 30 minute minimum wait time will be required to determine if gas and/or water flows are present. If flow is present, the well will be shut-in for a minimum of one hour and the pressure recorded. Short or long term venting may be necessary to evacuate trapped gas. If only a water flow occurs with no associated gas, shut well in and record the pressures. Contact the Engineer as it may be necessary to change the cement weight and additives.

6.0 Before setting any cement plugs the hole needs to be rolled. All wells are to be controlled by means of a fluid that is to be of a weight and consistency necessary to stabilize the wellbore. This fluid shall be left in place as filler between all plugs.

6.1 Drilling mud may be used as the wellbore fluid in open hole plugging operations.

6.2 The wellbore fluid used in cased holes shall be of sufficient weight to balance known pore pressures in all exposed formations.

7.0 A blowout preventer and related equipment (BOPE) shall be installed and tested prior to working in a wellbore with any exposed zone(s); (1) that are over pressured, (2) where the pressures are unknown, or (3) known to contain H_2S.

8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), five copies, with the Field Manager, Bureau of Land Management, 6251 College Blvd., Suite A, Farmington, NM 87402. The report should show the manner in which the plugging work was carried out, the extent, by depth(s), of cement plugs placed, and the size and location, by depth(s), of casing left in the well. Show date well was plugged.

9.0 All permanently abandoned wells are to be marked with a permanent monument as specified in 43 CFR 3162.6(d). Unless otherwise approved.

10.0 If this well is located in a Specially Designated Area (SDA), compliance with the appropriate seasonal closure requirements will be necessary.

All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.