

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

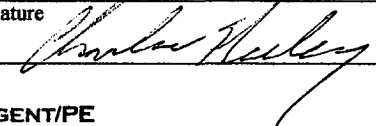
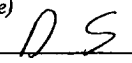
FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>701900001</b>
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>JICARILLA APACHE TRIBE</b>
2. Name of Operator <b>JICARILLA APACHE ENERGY CORPORATION</b>		7. If Unit or CA Agreement, Name and No. <b>JOINT VENTURE AGREEMENT</b>
3a. Address <b>P.O. BOX 710, DULCE, NEW MEXICO 87528</b>		8. Lease Name and Well No. <b>JVA 5A</b>
3b. Phone No. (include area code) <b>505-759-3224</b>		9. API Well No. <b>30-039-27411</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>660' FSL &amp; 1052' FEL</b> At proposed prod. zone <b>A/A</b>		10. Field and Pool, or Exploratory <b>BLANCO MESA VERDE</b>
14. Distance in miles and direction from nearest town or post office* <b>APPROXIMATELY 30 MILES SOUTH OF DULCE, NM</b>		11. Sec., T., R., M., or Blk. and Survey or Area <b>B SEC 29, T27N, R2W, NMPM</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>660'</b>	16. No. of Acres in lease <b>4653</b>	17. Spacing Unit dedicated to this well <b>EAST 1/2 OF 29-27N-2W 216.25</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>1906' W OF JVA 2</b>	19. Proposed Depth <b>6200'</b>	20. BLM/BIA Bond No. on file <b>CD @ BIA</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>7230' UGL</b>	22. Approximate date work will start* <b>JULY 1, 2004</b>	23. Estimated duration <b>15 DRILLING DAYS</b>

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) <b>CHARLES NEELEY</b>	Date <b>5/17/04</b>
Title <b>AGENT/PE</b>		
Approved by (Signature) 	Name (Printed/Typed)	Date <b>7-6-04</b>
Title	Office	

Application approval 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.

Conditions of approval, if any, are attached.

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)

HOLD C104 FOR NSP

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM 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**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. 701900001
2. Name of Operator Jicarilla Apache Energy Corporation		6. If Indian, Allottee or Tribe Name Jicarilla Apache Tribe
3a. Address P.O. Box 710, Dulce, NM 87528	3b. Phone No. (include area code) 505-759-3224	7. If Unit or CA/Agreement, Name and/or No. Joint Venture Agreement
4. Location of Well (Footage, Sec., T, R., M., or Survey Description) 780' FNL & 1158' FWL, Sec 29, T27N, R2W, NMPM		8. Well Name and No. JVA Well No. 5A
		9. API Well No. 30-039-27411
		10. Field and Pool, or Exploratory Area Blanco-Mesaverde
		11. County or Parish, State Rio Arriba, NM

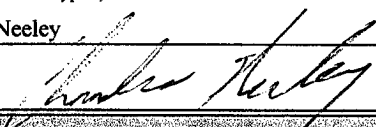
**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

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"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Re-Stake & APD
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Well.
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

3. 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.)

Jicarilla Apache Energy Corporation has re-staked the JVA 5A well to the new footage location of 660' FSL & 1052' FEL, Sec 29, T27N, R2W, NMPM, Rio Arriba County, New Mexico. The original APD was approved 3/27/03, but the well was not drilled for geological reasons. A complete new APD is attached. In conjunction with the new APD, JAECO has applied to the BLM and NMOC for approval for a Non-Standard Production Unit for the JVA Well No. 5. With approvals, the JVA 5A can then be drilled as a Blanco-Mesaverde Infill location to the JVA 5 well as per the attached APD.

Your approval of the attached APD is Appreciated. The location was onsite by Lucas Vargo on April 28, 2004.

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Charles Neeley		Title Agent/PE
Signature 		Date May 17, 2004

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

Approved by (Signature) <b>/s/ David R. Sitzler</b>	Name (Printed/Typed) Division of Multi-Resources
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 Date JUL 6 2004

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.

(Continued on next page)

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

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised June 10, 2003  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-27411	<sup>2</sup> Pool Code 72319	<sup>3</sup> Pool Name Blanco-Mesaverde
<sup>4</sup> Property Code 5415	<sup>5</sup> Property Name JVA	<sup>6</sup> Well Number 5A
<sup>7</sup> OGRID No. 11859	<sup>8</sup> Operator Name Jicarilla Apache Energy Corporation	<sup>9</sup> Elevation 7230' UGL

<sup>10</sup> Surface Location

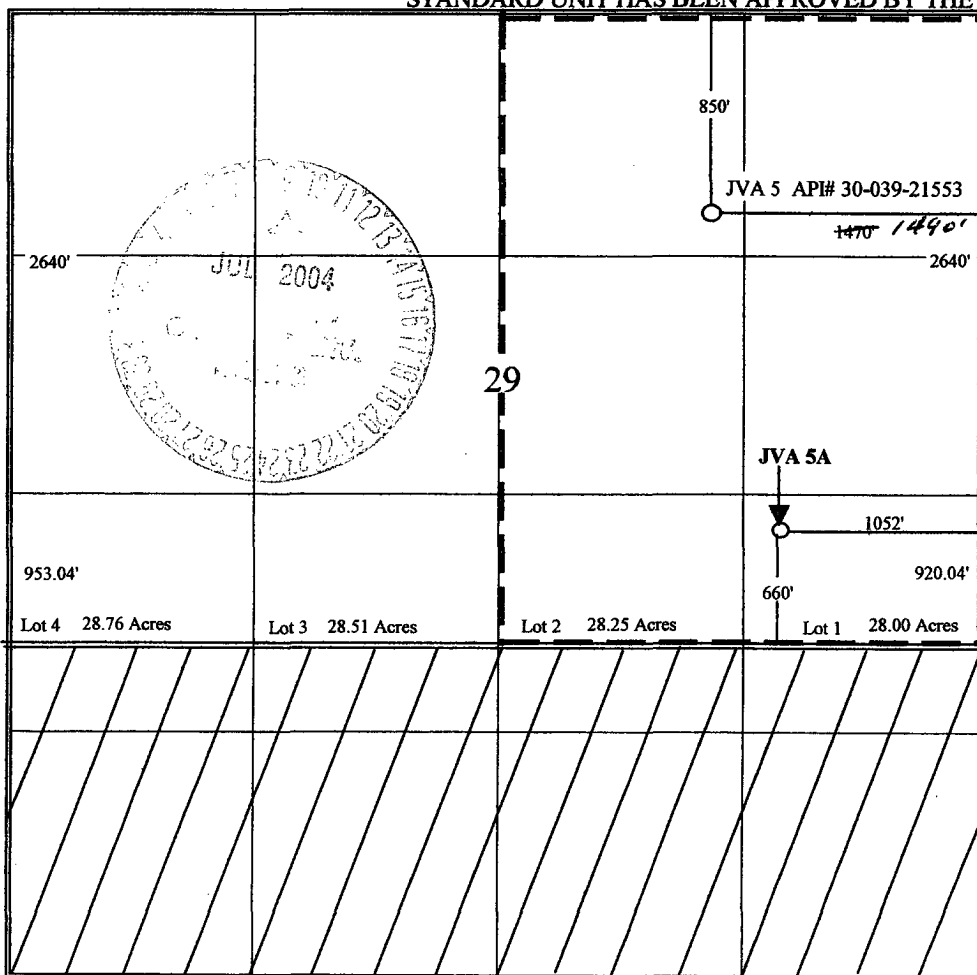
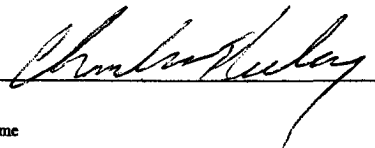
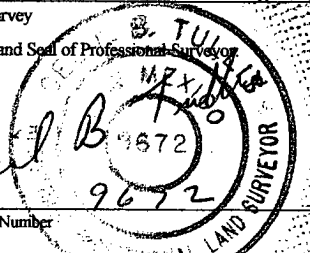
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	29	27N	2W	1	660	South	1052	East	Rio Arriba

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres 216.25	<sup>13</sup> Joint or Infill Y	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

					<p><sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature </p> <p>Printed Name Charles Neeley</p> <p>Title and E-mail Address Agent/PE neelece@acmet.com</p> <p>Date May 12, 2004</p>				
<p><sup>18</sup> SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>4-29-05</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor </p> <p>Certificate Number</p>									

**Jicarilla Apache Energy Corp  
Apache JVA 5A  
660' FSL & 1052' FEL  
Section 29, T27N, R2W, NMPM  
Rio Arriba County, New Mexico**

**TEN POINT DRILLING PROGRAM**

1. **Surface Formation:** San Jose
2. **Surface Elevation:** 7230 ' UGL
3. **Estimated Formation Tops:**

<u>Formation</u>	<u>Top - feet</u>	<u>Expected Production</u>
Nacimiento	1584'	
Ojo Alamo	3238'	
Kirtland	3362'	
Fruitland	3549'	
Pictured Cliffs	3601'	GAS
Lewis	3940'	
Huerfanito	4314'	
Cliff House	5596'	GAS
Menefee	5639'	GAS & OIL
Pt. Lookout	5918'	GAS & OIL
Upper Mancos	6100'	
TOTAL DEPTH	6200'	

4. **Casing and Cementing Program:**

Drill a 12 1/4" Hole to 320'. A string of 9 5/8" 36# J-55 or K-55 ST&C casing will be set and cemented to the surface in a single stage with 170 sacks (201 cf) of Class "B" cement (yield = 1.18 cf/sk) containing 3% CaCl<sub>2</sub> and 1/4 lb/sack cellophane flake. Slurry volume assumes 100% excess over calculated hole volume. If cement does not circulate to surface, cement will be topped off using 1" pipe down the 12 1/4" by 9 5/8" annulus. Clearance between couplings and hole is 1.625". Prior to drilling out the shoe, casing and BOPE will be tested to a minimum of 600 psig. Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8 or 100,000 lb overpull, whichever is greater.

WOC 12 HOURS. Nipple up 11" 2000# BOPE. Pressure test surface casing and BOPE to 600 psi for 15 minutes.

Drill an 8 3/4" hole to 3980' feet, approximately 40' feet into the Lewis Shale.

Run Induction and Compensated density/neutron logs from 3980' to surface casing shoe.

**Drilling Program  
Jicarilla Apache Energy Corporation  
Apache JVA 7A**

Page Two

**4. Casing and Cementing Program: Continued**

A string of 7" 20#, J-55 Intermediate casing will be set at 3980' with a mechanical DV tool set at 1639', 55' below Nacimiento top. **Stage 1** ( 3980' - 1639' ) will be cemented with 225 sacks (423 cf) of 35/65 Poz/B + 6% Gel + 5#/sk Gilsonite and 1/4 #/sk cellophane flake mixed at 12.1 ppg, yield 1.88 cf/sk. Followed by 110 sacks (139 cf) Class B with 5#/sk Gilsonite, 1/4#/sk cellophane flake and mixed at 15.2 ppg, yield 1.26 cf/sk. **Circulate and WOC between stages for four ( 4 ) hours.** **Stage 2** ( 1639' - surface ) will be cemented with 235 sacks ( 447 cf) of 35/65 Poz/B + 6% Gel + 10#/sk Gilsonite and 1/4 #/sk cellophane flake mixed at 12.5 ppg, yield 1.90 cf/sk. Followed by 50 sks (63cf) Class B with 5#/sk Gilsonite and 1/4 #/sk cellophane flake, mixed at 15.2 ppg, yield 1.26 cf/sk.

Slurry volumes assume a 75% excess over gauge hole volume for stage 1 and 83% over gauge volume for stage 2 (consistant with our experience in the area). Cement volume is subject to change after review of open hole caliper logs.. Clearance between couplings and hole is 1.094 ". Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8 or 100,000 lb over pull, whichever is greater

WOC 12 HOURS. Nipple up 11" 2000# BOPE. Pressure test intermediate casing and BOPE to 1500 psi for 15 minutes.

Air drill a 6 1/4" hole from 3980' to 6200' TD, approximately 100' feet into the Upper Mancos.

Run Dual Induction and Compensated density/neutron logs from TD to intermediate casing shoe.

A 4 1/2" 10.5#, J-55 production liner will be run from 6200' TD to a minimum overlap of 120 feet inside the 7" intermediate casing. This string will be cemented in a single stage with 10 bbls POZ spacer w/4% gel, .2% Halad 9, .15# Fe & 3% KCl mixed at 11.0 ppg followed by 280 sacks (369.6 cf) 50/50 Poz/H containing 2% Gel, 5#/sk Gilsonite, 1/4 #/sk Flocele, 4% H-9 and 0.2% HR-5, mixed at 13.5 ppg, yield 1.32 cf/sk. Slurry volume assumes a 50% excess over gauge hole volume. Cement volume is subject to change after review of the open hole caliper log. Clearance between couplings and hole is 1.25". Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8 or 100,000 lb overpull, whichever is greater.

**Drilling Program**  
**Jicarilla Apache Energy Corporation**  
**Apache JVA 7A**

Page Three

**Bits:** 12 1/4" surface hole - MT class 115 or 116 to ~320 feet.  
8 3/4" intermediate hole - TCI class 447 to ~3980'.  
6 1/4" production hole – Air hammer and bit - to TD

**Centralizers:**

Surface string: 3 - 9 5/8" X 12 1/4": One centralizers run in middle of shoe joint with lock ring and two centralizers spaced evenly between shoe joint and 100'.

Intermediate string: 4 – 7" X 8 3/4" turbolizers will be spaced such that one is just below the Basal Fruitland Coal, three (3) across the Fruitland and one (1) into the Ojo Alamo. One centralizer will be run on the 1<sup>st</sup> jt of casing, a centralizer will be run above and one centralizer will be run below the DV tool.

Production string: 7 - 4 1/2" X 6 1/4" bow spring centralizers will be run across all prospective pays; provided well control conditions permit.

**Float Equipment:**

Surface string: Texas pattern guide shoe w/insert float, 1 jt above shoe.

Intermediate string: Cement nose guide shoe, float collar and DV tool with 2 cement baskets.

Production string: Cement nose float shoe, 1 jt of 4 1/2" csg, float collar.

**5. Pressure Control Equipment:**

A 2,000 psi BOP well control system will be utilized. BOP's and choke manifold will be installed and pressure tested to a minimum of 600 psig before drilling out of surface casing. The operating condition of the BOP will then be checked daily.

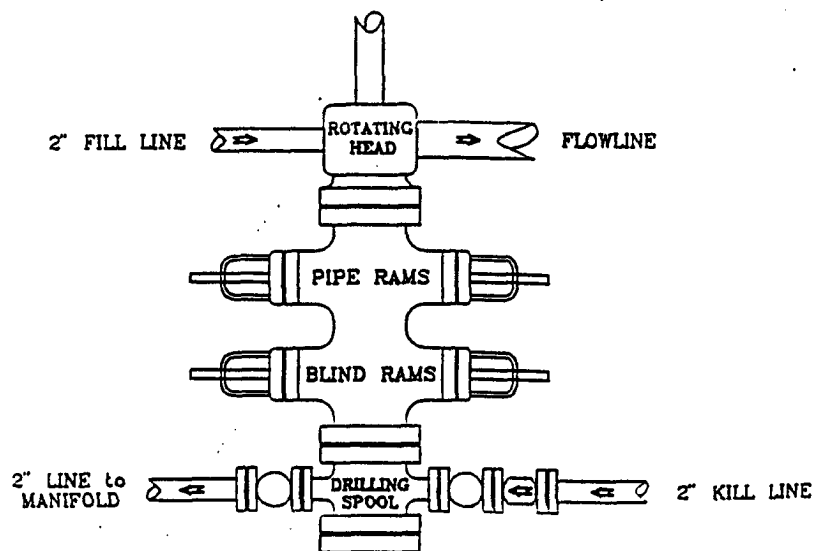
BOP's, intermediate casing and choke manifold will be pressure tested to 1500 psi prior to drill out of the 7" intermediate casing shoe.

7" & 4 1/2" casing rams will be installed prior to running intermediate and production casing, respectfully.

A full opening internal blowout preventor or drill pipe safety valve (capable of fitting all connections) will be on the rig floor at all times.

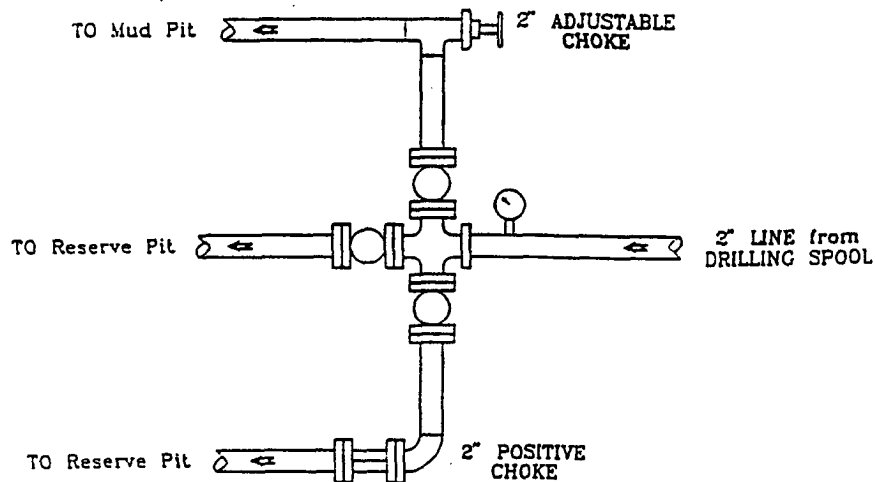
# PRESSURE CONTROL

## Wellhead Assembly



Preventer and Spools are to have a  
6" Bore or larger and a 2000 PSI  
or higher Pressure Rating

## Choke Manifold



District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

March 4, 2004

WELL API NO.

New APD - Not Yet Assigned

5. Indicate Type of Lease

INDIAN ☒ STATE ☐ FEE ☐

6. Oil & Gas Lease No.

701900001

7. Lease Name or Unit Agreement Name

Joint Venture Agreement

8. Well Number

5A

9. OGRID Number

11859

10. Pool name or Wildcat

Blanco Mesa Verde

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:

Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

Jicarilla Apache Energy Corporation

3. Address of Operator

P.O. Box 710, Dulce, NM 87528

4. Well Location

Unit Letter I : 660 feet from the South line and 1052 feet from the East line

Section 29

Township 27N

Range 2W

NMPM

Rio Arriba

County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

7230' UGL

**Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)**

Pit Location: UL I Sect 29 Twp 27N Rng 2W Pit type Reserve Depth to Groundwater 122' Distance from nearest fresh water well 5781'

Distance from nearest surface water 105' Below-grade Tank Location UL I Sect 29 Twp 27N Rng 2W ;

feet from the I line and 660 feet from the East line

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: Application to construct and discharge into reserve pit ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Charles Neeley TITLE Agent/PE DATE 5/17/04

Type or print name Charles Neeley E-mail address: neelee@acrnet.com Telephone No. 505-486-0211

(This space for State use)

APPROVED BY [Signature] TITLE Agent/PE DATE 5/17/04

Conditions of approval, if any:



