Form 3160-5 (April 2004)

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 to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals. JAN 25

FORM APPROVED OMB NO. 1004-0137 Expires March 31, 2007

5. Lease Serial No.

Jicarilla Contract 152

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5.	If Indian,	Allottee o	r Tribe Name	

	<u> </u>			Integrating b	Pecie
SUBMIT IN TRIPLICATE -	Other instructions	on reverse side	RECEIVED	7. If Unit or CA	Agreement, Name and/or No
1. Type of Well Oil Well X Gas Well Other		070 F	ARITHUTE	8. Well Name as Jicarilla 1	
2. Name of Operator					
Energen Resources Corporation 3a. Address		3h Phone No (include as	aa coda)	9. API Well No.	
3a. Address 3b. Phone No. (include area code) 2198 Bloomfield Highway, Farmington, NM 87401 505.325.6800			30-039-29294		
4. Location of Well (Footage, Sec., T., R., M., or Survey I	Description)	303.323.6600		Blanco MV/E	ool, or Exploratory Area Basin DK
730' fnl, 1960' fwl. C S5, T26N,	R5W NMPM			11. County or I	·
				Rio Arriba	
12. CHECK APPROPRIATE	BOX(ES) TO INC	DICATE NATURE OF I	NOTICE, REP	ORT, OR OTH	ER DATA
TYPE OF SUBMISSION		TYI	PE OF ACTION		
X Notice of Intent	Acidize Alter Casing	Deepen Fracture Treat	Production Reclamatic	n (Start/Resume) [Water Shut-Off Well Integrity
Subsequent Report	Casing Repair	New Construction	Recomple	te	Other
	X Change Plans	Plug and Abandon		ly Abandon	
Final Abandonment Notice	Convert to Injecti		Water Dis	•	
13. Describe Proposed or Completed Operation (clearly				•	
testing has been completed. Final Abandonment is determined that the final site is ready for final inspection. Energen Resources plans to make the *Change the 10.5 ppf production 1 from 0-7636'.	ction.) The following ch	anges to the Jicar	illa 152W #	4B well:	
*Cement with 675 sacks of 50/50 C		•			
Gilsonite, and 1/4 #/sk Flocele w	_	nt at 3361 (200 fe	et into Int	ermediate Ca	sing). (878 cuft
of slurry, 100% cement to circula		·			N 2006 SENED COMS. DIV. 89 HST. 8
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)		Title		E. LI	9/5/1/200
Nathan Smith		Drill	ing Engineer	<u> </u>	
Nothesth		Date 1/24/06			
A (A THI	S SPACE FOR FEI	DERAL OR STATE OF	FICE USE		
Approved by Approved by Approved by	less	Title Pod	. Fm	Da	ite 1/27/06
Conditions of approval, if any, are attacked. Approval of certify that the applicant holds legal or equitable title to which would entitle the applicant to conduct operations to	of this notice does not to those rights in the sulthereon.	warrant or Office	FO		

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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Drilling Plan

Revised January 13, 2006

Jicarilla 152W #4B

General Information

Location

730' fnl, 1960' fwl nenw S5, T26N, R05W

Rio Arriba County, New Mexico

Elevations Total Depth 6554' GL 7636' (MD)

Formation Objective

Blanco MV / Basin DK

Formation Tops

ion rops			
San Jose	Surface	Cliffhouse Ss	4846'
Nacimiento	1631'	Menefee Fm	4971'
Ojo Alamo Ss	2536'	Point Lookout Ss	5381'
Kirtland Sh	2756'	Mancos Shale	5711'
Fruitland Fm	2971'	Graneros Shale	7366'
Top Coal	3031'	Dakota "Twowells" Ss	7406'
Bottom Coal	3191	Dakota "Paguate" Ss	7486'
Pictured Cliffs Ss	3191'	Dakota "Cubero" Ss	7521'
Lewis Shale	3361'	Dakota "Oak Canyon" Sh	7631'
Int Csg Point	3561	Total Depth	7636'

Drilling

The 12 1/4" wellbore will be drilled with a fresh water mud system.

The 8 3/4" wellbore will be drilled with a low solids non-dispersed fresh water mud system. Weighting materials will be drill cuttings. Mud density is expected to range from 8.3 ppg to 8.9 ppg. Air/mist from intermediate setting depth to TD.

Blowout Control Specifications:

A 2000 psi minimum double ram or annulus BOP stack (figure 1) will be used following nipple up of casing head. A 2" nominal, 2000 psi minimum choke manifold will also be used. An upper Kelly Cock valve handle and drill string valve should be available to fit each drill string and be available on the rig floor during drilling operations.

Logging Program:

Open hole logs: From Surface to Intermediate setting depth - None

From Intermediate setting depth to TD - Temp / HRI / CNT, LDT / GR

Mud Logs: From 3600' to TD

Coring: None

Surveys: Surface and/or every 500' to TD

Tubulars

Casing, Tubing, & Casing Equipment:

String Surface Intermediate Production	Interval	Wellbore	Casing	Csg Wt	Grade
	0'-200'	12 1⁄4"	9 5/8"	32.3 ppf	H-40 ST&C
	200'-3561'	8 3⁄4"	7"	23.0 ppf	J-55 LT&C
	0'-7636'	6 1⁄4"	4 ½"	11.6 ppf	J-55 LT&C
Tubing	0'-7616'	0 /4	2 3/8"	4.7 ppf	J-55

Casing Equipment:

Surface Casing: Depending on wellbore conditions, a Texas Pattern Guide Shoe on bottom. Casing centralization with standard bow spring centralizers to achieve optimal standoff.

Intermediate Casing: Depending on wellbore conditions, a cement nose guide shoe on bottom with self fill insert float collar on top of shoe joint and casing centralization with bow spring centralizers to optimize standoff. Two turbolating centralizers at the base of the Ojo Alamo are recommended.

Production Casing: Depending on wellbore conditions, a cement nose guide shoe on bottom with self fill insert float collar on top of shoe joint and casing centralization with standard bow spring centralizers to optimize standoff. If multistage cementing is required, DV tool will be placed based on formation characteristics.

Wellhead

11" 3000 x 9 5/8" Casing Head. 11" 3000 x 11" 3000 spool. 11" 5000 x 7 1/16" 5000 Christmas Tree

Cementing

Surface Casing: 225 sks Std (class B) with 2.0 % CaCl₂ and ½ #/sk Flocele (15.6 ppg, 1.18 ft³/sk 247 ft³ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

Intermediate Casing: Before cementing, circulate hole at least 1 $\frac{1}{2}$ hole volumes of mud and reduce funnel viscosity to minimum to aide in hole cleanout. Depending on wellbore conditions, cement may consist of 485 sks 65/35 with 6.0 % Bentonite, 2.0 % CaCl₂, 10 #/sk Gilsonite, and $\frac{1}{2}$ #/sk Flocele (12.3 ppg, 1.96 ft³/sk) and a tail of 100 sks of Standard (Class B) cement with 5.0 #/sk Gilsonite, and $\frac{1}{4}$ #/sk Flocele (15.2ppg, 1.24 ft³/sk). (1074.6 ft³ of slurry, 100 % excess to circulate to surface).

Production Casing: Before cementing, circulate hole at least 1 $\frac{1}{2}$ hole volumes of mud and reduce funnel viscosity to minimum to aide in hole cleanout. Depending on wellbore conditions, cement may consist of 675 sks 50/50 with 2.0 % Bentonite, 0.50% Halad-9, 0.10% HR-5, 0.10% CFR-3, 5 #/sk Gilsonite, and $\frac{1}{2}$ #/sk Flocele (13.5 ppg, 1.30 ft³/sk). (878 ft³ of slurry, 100 % excess to circulate to surface).

Other Information

- 1) This well will be cased and the Blanco Mesa Verde / Basin Dakota fracture stimulated.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control. The production string may need to be cemented in multiple stages with a slurry design deviated from that listed above.
- 3) Mesa Verde pore pressure is anticipated to be 800 psi, the Pictured Cliffs is 600 psi and the Fruitland is 500 psi.
- 4) No abnormal temperatures or pressures are anticipated.
- 5) This gas is dedicated.