Form 3160-3
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
MAR 08 2011
Farmington Field Office
Bureau of Land Management

FORM APPROVED
OMB NO. 1004-0137
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: Jicarilla Apache 115

1a. Type of Work: [X] DRILL [ ] REENTER

6. If Indian, Allotee or Tribe Name: Jicarilla Apache

1b. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other [ ] Single Zone [ ] Multiple Zone

7. Unit or CA Agreement Name and No.:

2. Name of Operator: Energen Resources Corporation

8. Lease Name and Well No.: Jicarilla 115E #13A

3a. Address: 2010 Afton Place Farmington, New Mexico 87401

3b. Phone No. *(include area code)*: (505)325-6800

9. API Well No.: 30-039-31040

4. Location of Well *(Report location clearly and in accordance with any State equirements)**

At surface: (F) Sec. 03-T26N-R03W, 1,835' FNL & 1,760' FWL

At proposed prod. zone:

10. Field and Pool, or Exploratory: Blanco Mesaverde

11. Sec., T., R., M., or Blk. and Survey or Area: Sec. 03-T26N-R03W

14. Distance in miles and direction from nearest town or post office*: 20 miles northwest of Lindrith

12. County or Parish: Rio Arriba

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any)	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
1,760'	2,222.3	315.76 acres W/2
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
2,443'	7,985' TVD	
21. Elevations (Show whether DF, KDB, RT, GL, etc.	**22. Approximate date work will start***	**23. Estimated duration**
7,070' GL	4/1/2011	15 Days

24. Attachments

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

RCVD MAR 17'11

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

OIL CONS. DIV.

DIST. 3

25. Signature	Name *(Printed/Typed)*	Date
	Andrew Soto	2/16/10

Title: Drilling Engineer

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Stephen Mason		3/15/11
Title	**Office**	
AFM	FFO	

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 knowlingly 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 page 2)

*(Instructions on page 2)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

APR 07 2011

NMOCD

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 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 October 12, 2005

Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-31040	27194/72319	~~Gallup~~ Mancos Gallup/BLANCO MESAVERDE

[4] Property Code	[5] Property Name	[6] Well Number
21942	JICARILLA 115E	13A

[7] OGRID No.	[8] Operator Name	[9] Elevation
162928	ENERGEN RESOURCES CORPORATION	7070'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	3	26N	3W		1835'	NORTH	1760'	WEST	RIO ARRIBA

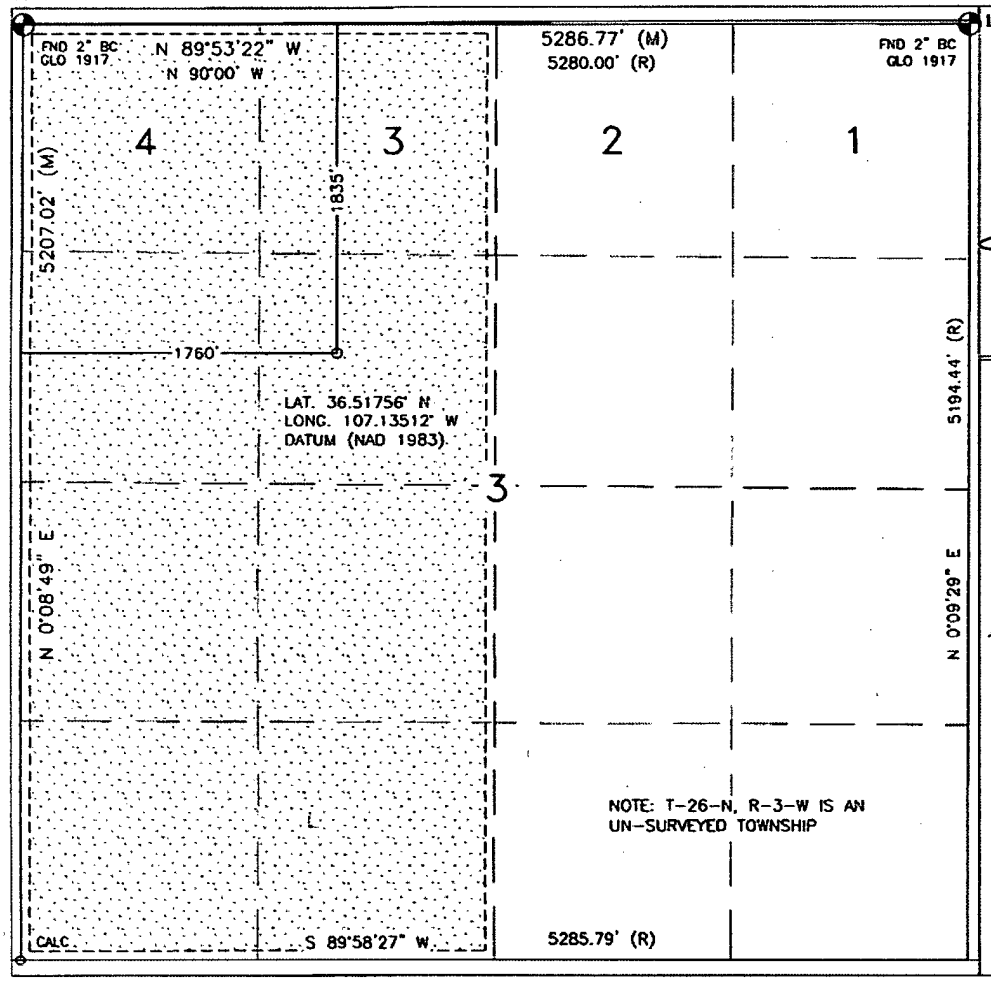
[11] Bottom Hole Location If Different From Surface

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

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320.00 ~~315.76~~ Acres – (W/2)			

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

16



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner or a compulsory pooling order heretofore entered by the division.

Signature — Date: 3-31-11

asoto@energen.com
Printed Name

[18] 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.

NOVEMBER 30, 2006
Date of Survey

Signature and Seal of Professional Surveyor:

DAVID R. RUSSELL NEW MEXICO 10201 REGISTERED PROFESSIONAL LAND SURVEYOR

DAVID RUSSELL
Certificate Number 10201

3/8/2011

ENERGEN RESOURCES

OPERATIONS PLAN

WELL NAME.....Jicarilla 115E #13A
JOB TYPE.....Vertical Blanco Mesaverde
DEPT.....Drilling and Completions
PREPARED BY.....Andrew Soto

GENERAL INFORMATION

Surface Location	1,835' FNL & 1,760' FWL
S-T-R	(F) Sec. 03, T26N, R03W
County, State	Rio Arriba, New Mexico
Elevations	7,070' GL
Total Depth	7,985' +/- (MD)
Formation Objective	Blanco Mesaverde
	Niobrara "C"

FORMATION TOPS

San Jose	Surface
Nacimiento	2,212' (TVD)
Ojo Alamo Ss	3,302' (TVD)
Kirtland Sh	3,502' (TVD)
Fruitland Fm	3,562' (TVD)
Pictured Cliffs SS	3,757' (TVD)
Lewis Shale	3,972' (TVD)
Cliff House SS	5,482' (TVD)
Menefee Fm	5,552' (TVD)
Point Lookout SS	5,912' (TVD)
Mancos Sh	6,182' (TVD)
Gallup SS	6,917' (TVD)
Niobrara "A" Mbr	7,092' (TVD)
Niobrara "B" Mbr	7,152' (TVD)
Niobrara "C" Mbr	7,252' (TVD)
Tocito Mbr.	7,457' (TVD)
Juana Lopez Mbr	7,557' (TVD)
Greenhorn Ls	7,885' (TVD)
Total Depth	**7,985' (MD)/(TVD)**

DRILLING

Surface: 12 1/4" wellbore will be drilled with a fresh water mud system (spud mud).
Intermediate: 8 3/4" wellbore will be drilled with a LSND mud system. Weighting materials will be drill cuttings and if needed barite. Mud density is expected to range from 8.4 ppg to 9.0 ppg.
Production: 6 1/4" wellbore will be drilled with an air hammer system or air/mist system depending on reservoir characteristics. Anticipated BHP can be as high as 2,000 psi.

Blowout Control Specifications:
A 3,000 psi minimum double ram or annulús BOP stack will be used following nipple up of casing head. A 2" nominal, 2,000 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. **Pressure test BOP to 250 psi for 15 min and 2,000 psi for 15 min.**

Logging Program:
Open Hole Logs: Schlumberger's Platform Express from TD back up to Intermediate casing pt.
Mudlogs: From intermediate casing point to TD.
Coring: 350' of Niobrara "C" from 7,100' to 7,450'.
Surveys: Surface casing point and every 500' from surface to TD.

CASING, TUBING & CASING EQUIPMENT

String	Start Depth	End Depth	Wellbore	Size	Wt	Grade
Surface	0	250'	12 1/4"	9 5/8"	32.3 lb/ft	H-40 ST&C
Intermediate	0	4,082'	8 3/4"	7"	23 lb/ft	J-55 LT&C
Prod. Liner	0	3,850'-7,985'	6 1/4"	4 1/2"	11.6 lb/ft	J-55 LT&C
Tubing	0	7,985'	none	2 3/8"	4.7 lb/ft	J-55

Surface Casing: Texas Pattern Guide Shoe on bottom of first joint and an insert float valve on top of first joint. Casing centralization will be done with a minimum of 3 standard bow spring centralizers to achieve optimal standoff.

Intermediate Casing: Self fill float shoe with self fill float collar on bottom and top of first joint. Casing centralization will be done with double bow spring centralizers to optimize standoff.

Production Liner: Self fill float shoe with self fill float collar on bottom and top of the first joint followed by the casing. Casing centralization will be done with double bow spring centralizers to optimize standoff. If multistage cementing is required, DV tools will be place based on formation characteristics.

WELLHEAD

11" x 9 5/8" 3,000 psi weld/slip on casing head. 9 5/8" x 7 1/16" 3,000 psi flanged christmas tree.

CEMENTING

Surface Casing: 133 sks Type V with 2.0 % $CaCl_2$ and 1/4 #/sk Flocele (15.6 ppg, 1.18 ft^3/sk 157 ft^3 of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 750 psi for 30 min.

Intermediate Casing: Depending on wellbore conditions, cement may consist of 392 sks PRB II with 5 #/sk Gilsonite, and 1/4 #/sk Flocele (12.3 ppg, 2.24 ft^3/sk) and a tail of 100 sks PRB II with 5 #/sk Gilsonite and 1/4 #/sk Flocele (13.5 ppg, 1.81 ft^3/sk) (1,058 ft^3 of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 1,500 psi for 30 min.

Production Casing: Depending on wellbore conditions, pre-flush with 10 bbls H20 + 20 bbls Chem Flush + 10 bbls scavenger slurry (mix at lighter density). Follow flush with a lead of 135 sks 65/35 Halliburton Light Premium with 10#/sk Gilsonite, 1/2 #/sk Flocele 1.2% Halad-9 (12.3 ppg, 1.8 ft^3/sk) and a tail of 218 sks 50/50 Poz Premium with 5#/sk Gilsonite, 1/4 #/sk Flocele and 1.2% Halad-9 (13.5 ppg, 1.31 ft^3/sk) (528 ft^3, 20% excess of OH to circulate off liner top). The top of tail is designed to 5,200'FS and the top of lead is designed to 3,650' FS (plus any excess).

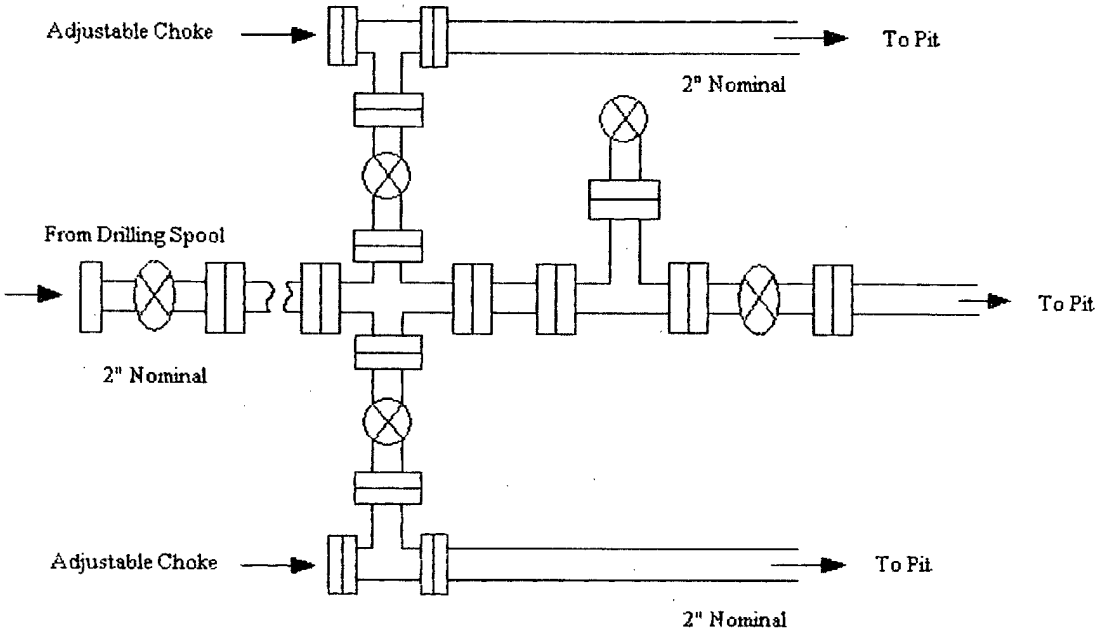
Set slips with full string weight
If cement is not circulated, a CBL will be run to determine TOC.

OTHER INFORMATION

1) This well will be a cased hole completion and the Mesaverde fracture stimulated.
2) TD will be called at the top of the Greenhorn so coring, logging and testing of the Mancos Shale can be performed.
3) This well is intended to be plugged back to the Mesaverde.
4) If lost circulation is encountered, sufficient LCM will be added to the fluid 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.
5) If high reservoir pressures or water flows are encountered slurry design may need to be deviated from those listed above to satisfy wellbore and formation conditions.
6) No abnormal temperatures or pressures are anticipated.
7) This gas is dedicated.

Energen Resources Corporation

Typical 2000 psi Choke Manifold Configuration



Choke manifold installed from surface to TD

Energen Resources Corporation

Typical BOP Configuration for Gas Drilling