

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007
RECD DEC 7 06
OIL CONS. DIV.
DIST. 3


APPLICATION FOR PERMIT TO DRILL OR REENTER

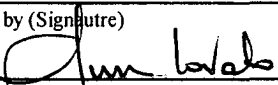
1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. Jicarilla Apache 126	
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name Jicarilla Apache	
2. Name of Operator Energen Resources Corporation		7. Unit or CA Agreement Name and No.	
3a. Address 2198 Bloomfield Hwy Farmington, NM 87401		8. Lease Name and Well No. Jicarilla 126S #1E	
3b. Phone No. (include area code) 505.325.6800		9. APL Well No. 20-039-30040	
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 2535' fnl, 1735' fwl At proposed prod. zone		10. Field and Pool, or Exploratory Callup - Dakota West	
14. Distance in miles and direction from nearest town or post office* Approximatley 9.6 miles from Lindreth, NM		11. Sec., T., R., M., or Blk. and Survey or Area (E) S1, T24N, R4W	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 1735'		12. County or Parish Rio Arrina	
16. No. of Acres in lease 2810.48		13. State NM	
17. Spacing Unit dedicated to this well NW/4 216.76			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1500'		19. Proposed Depth 7796'	
20. BLM/BIA Bond No. on file			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6974' GL		22. Approximate date work will start* 3/15/07	
23. Estimated duration 25 days			

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) Nathan Smith	Date 8/18/06
Title Drilling Engineer		

Approved by (Signature) 	Name (Printed/Typed)	Date 12/15/06
Title Acting AFM Minerals	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 page 2)

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".This action is subject to technical and
procedural review pursuant to 43 CFR 3165.8
and appeal pursuant to 43 CFR 3165.4

NMOCD

86 12/12/06

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

DISTRICT II
811 South First, Artesia, N.M. 88210

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

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

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-30040		*Pool Code 39189	*Pool Name Lindrith GALLUP-DAKOTA west
*Property Code 21947	*Property Name JICARILLA 126 S		*Well Number 1E
*GRID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION		*Elevation 6974'

10 Surface Location

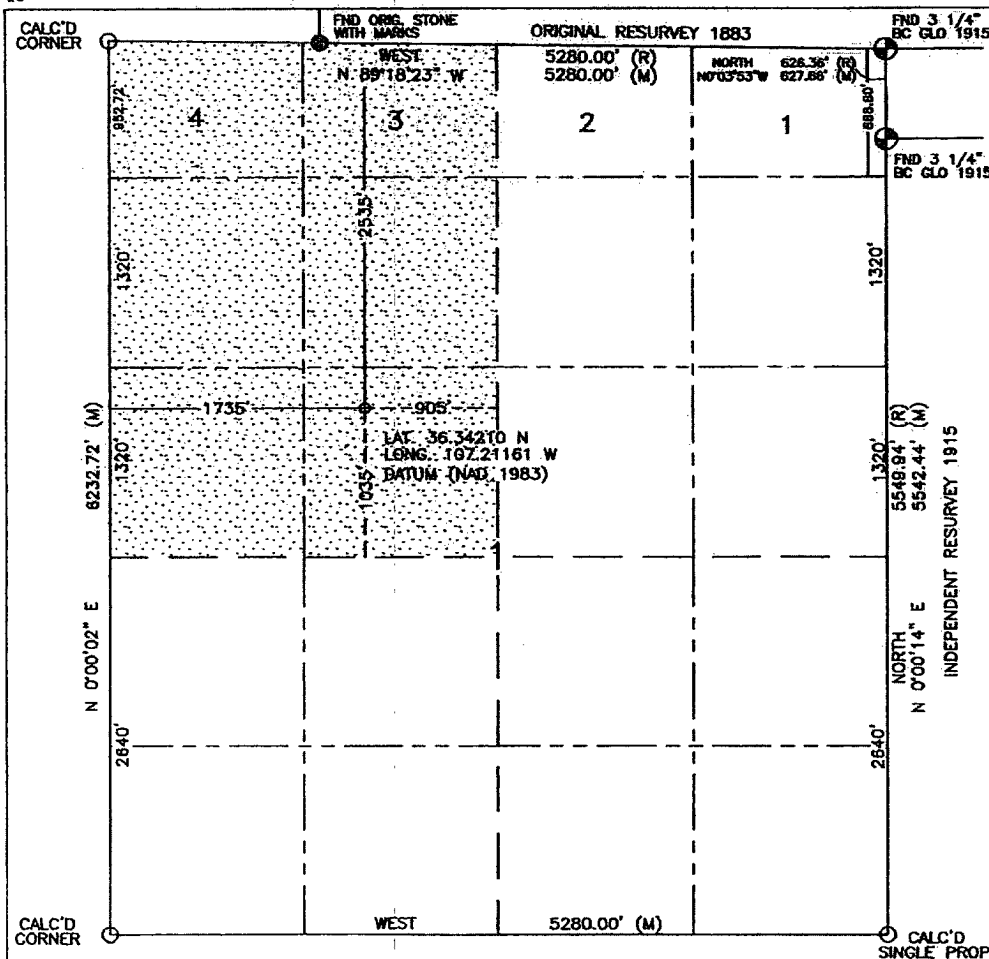
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	1	24N	4W		2535'	NORTH	1735'	WEST	RIO ARriba

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
*Dedicated Acres 216.76 Acres - (NW/4)			*Joint or Infill		*Consolidation Code		*Order No.		

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.

Nathan Smith
Signature
Nathan Smith
Printed Name
Drilling Engineer
Title
8/8/06
Date

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.

APRIL 18 2006
Date of Survey
David Russell
Signature and Seal of Professional Surveyor
DAVID RUSSELL
REGISTERED PROFESSIONAL SURVEYOR
10201
Certificate Number

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 87240
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

Form C-103
May 27, 2004

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

WELL API NO. 30-039-30040

5. Indicate Type of Lease
STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name:
Jicarilla 126

8. Well Number
1E

9. OGRID Number
162928

10. Pool name or Wildcat
Gallup-Dakota

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
Energen Resources Corporation
3. Address of Operator
2198 Bloomfield Highway, Farmington, NM 87401
4. Well Location

Unit Letter F : 2535 feet from the north line and 1735 feet from the West line

Section 01 Township 24N Range 04W NMPM County Rio Arriba

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6974' GL

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type Drill Depth to Groundwater >100' Distance from nearest fresh water well >1000' Distance from nearest surface water >250'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume _____ bbls; Construction Material _____

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ REMEDIAL WORK ☐ ALTERING CASING ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐ COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐ CASING TEST AND CEMENT JOB ☐
OTHER: Build drilling pit ☒ 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.

Energen Resources plans to build a lined pit according to "OCD Pit and Below-grade Tank Guidelines", as issued on November 1, 2004. Energen anticipates the submittal of a C-144 for closure of this pit in accordance with HIM and "OCD Pit and Below-grade Tank Guidelines".

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 Vicki Donaghey TITLE Regulatory Analyst DATE 8/18/06

Type or print name Vicki Donaghey E-mail address: vdonaghe@energen.com Telephone No. 505.325.6800

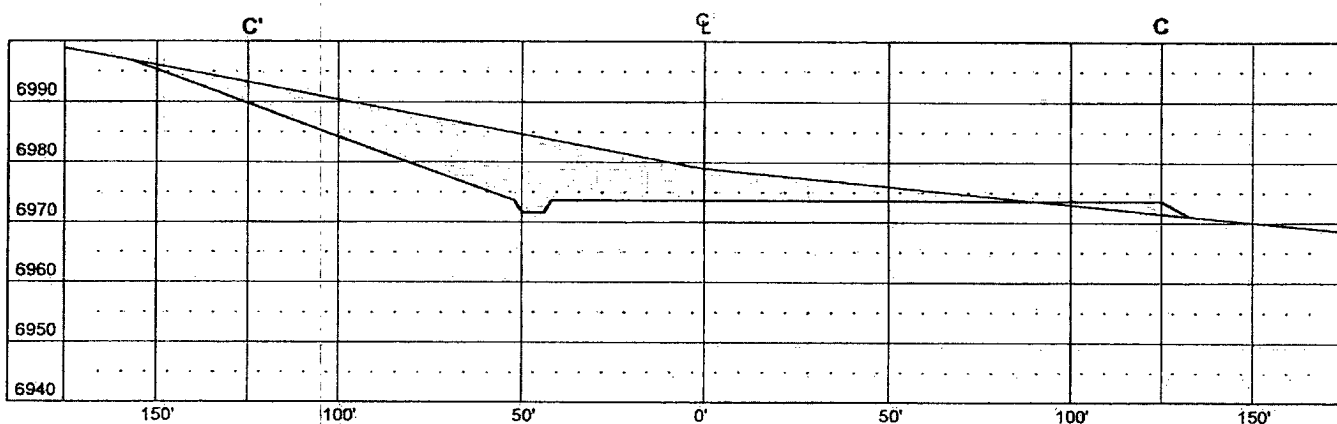
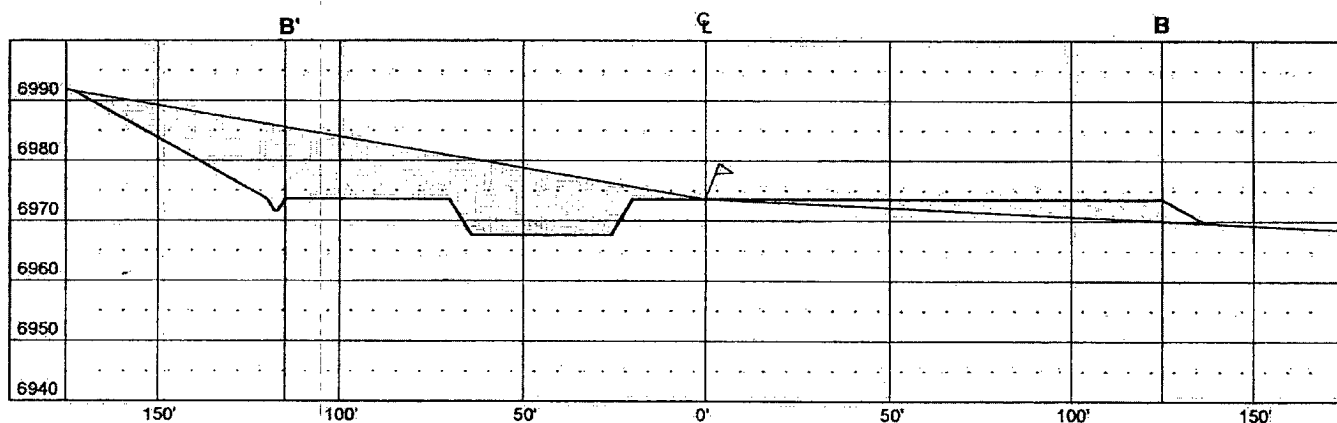
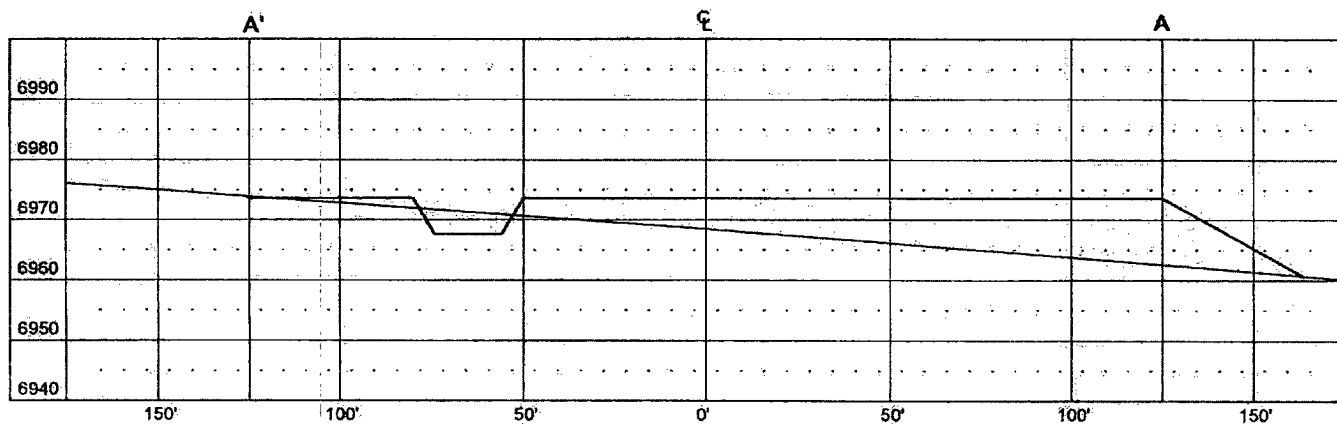
For State Use Only

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. I DATE DEC 12 2006

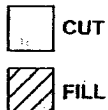
Conditions of Approval, if any:

ENERGEN RESOURCES CORPORATION

JICARILLA 126 #1E
 2535' FNL & 1735' FWL
 LOCATED IN THE SE/4 NW/4 OF SECTION 1,
 T24N, R4W, N.M.P.M.,
 RIO ARriba COUNTY, NEW MEXICO
 GROUND ELEVATION: 6974', NAVD 88
 FINISHED PAD ELEVATION: 6973.6', NAVD 88



VERT. SCALE: 1" = 30'
 HORZ. SCALE: 1" = 50'
 JOB No.: ERG102
 DATE: 04/27/06; REVISED: 07/13/06

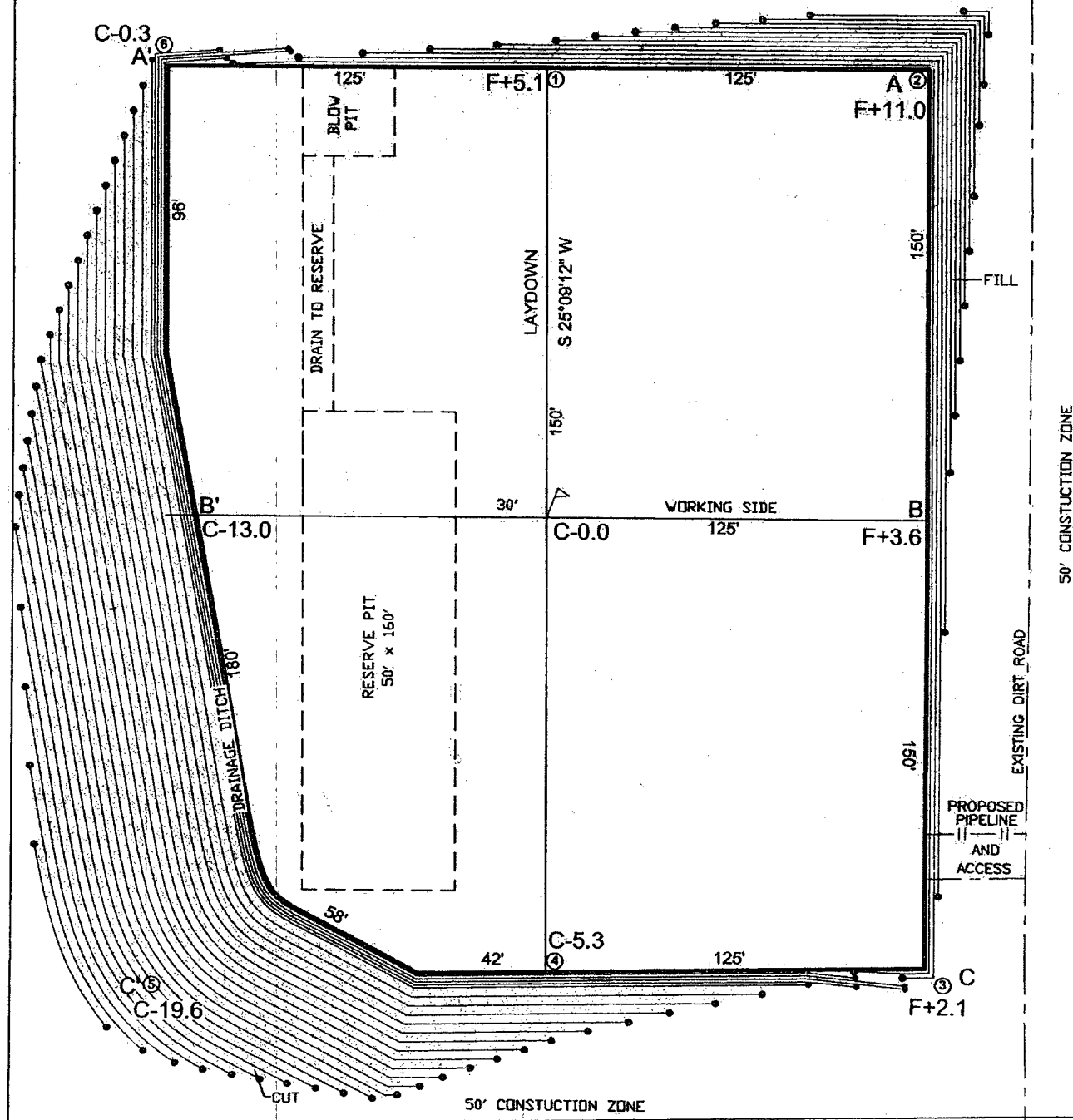
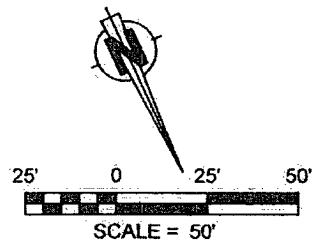


Russell Surveying
 1409 W. Aztec Blvd. #5
 Aztec, New Mexico 87410
 (505) 334-8637

LATITUDE: 36.34210°N
LONGITUDE: 107.21161°W
DATUM: NAD 83

ENERGEN RESOURCES CORPORATION

JICARILLA 126 #1E
2535' FNL & 1735' FWL
LOCATED IN THE SE/4 NW/4 OF SECTION 1,
T24N, R4W, N.M.P.M.,
RIO ARriba COUNTY, NEW MEXICO
GROUND ELEVATION: 6974', NAVD 88
FINISHED PAD ELEVATION: 6973.6', NAVD 88



1 FOOT CONTOUR INTERVAL SHOWN
SCALE: 1" = 50'
JOB No.: ERG102
DATE: 04/27/06; REVISED 07/13/06



Russell Surveying
1409 W. Aztec Blvd. #5
Aztec, New Mexico 87410
(505) 334-8637

Operations Plan

August 8, 2006

Jicarilla 126 #1E

A
S

General Information

Location

2535' fnl, 1735' fwl
senw S1, T24N, R04W
Rio Arriba County, New Mexico

Elevations

6974' GL

Total Depth

7796' (MD)

Formation Objective

Blanco MV / Basin DK

Formation Tops

San Jose	Surface	Cliffhouse Ss	4870'
Nacimiento	1745'	Menefee Fm	4895'
Ojo Alamo Ss	2715'	Point Lookout Ss	5375'
Kirtland Sh	2885'	Mancos Shale	5560'
Fruitland Fm	3015'	Graneros Shale	7406'
Top Coal	3100'	Dakota "Twowells" Ss	7426'
Bottom Coal	3205	Dakota "Paguete" Ss	7501'
Pictured Cliffs Ss	3210'	Dakota "Cubero" Ss	7591'
Lewis Shale	3365'	Burro Canyon FM	7741'
Int Csg Point	3565'	Total Depth	7796'

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: None

Coring: None

Surveys: Surface and/or every 500' to TD

Tubulars

Casing, Tubing, & Casing Equipment:

String	Interval	Wellbore	Casing	Csg Wt	Grade
Surface	0'-200'	12 1/4"	9 5/8"	32.3 ppf	H-40 ST&C
Intermediate	200'-3565'	8 3/4"	7"	23.0 ppf	J-55 LT&C
Production	0'-7796'	6 1/4"	4 1/2"	11.6 ppf	J-55 LT&C
Tubing	0'-7700'		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 % CaCl_2 and 1/4 #/sk Flocele (15.6 ppg, 1.18 ft³/sk ²⁴⁷ 247 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 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 % CaCl_2 , 10 #/sk Gilsonite, and 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 1/4 #/sk Flocele (15.2ppg, 1.24 ft³/sk). (1074.6 ft³ of slurry, 100 % excess to circulate to surface).

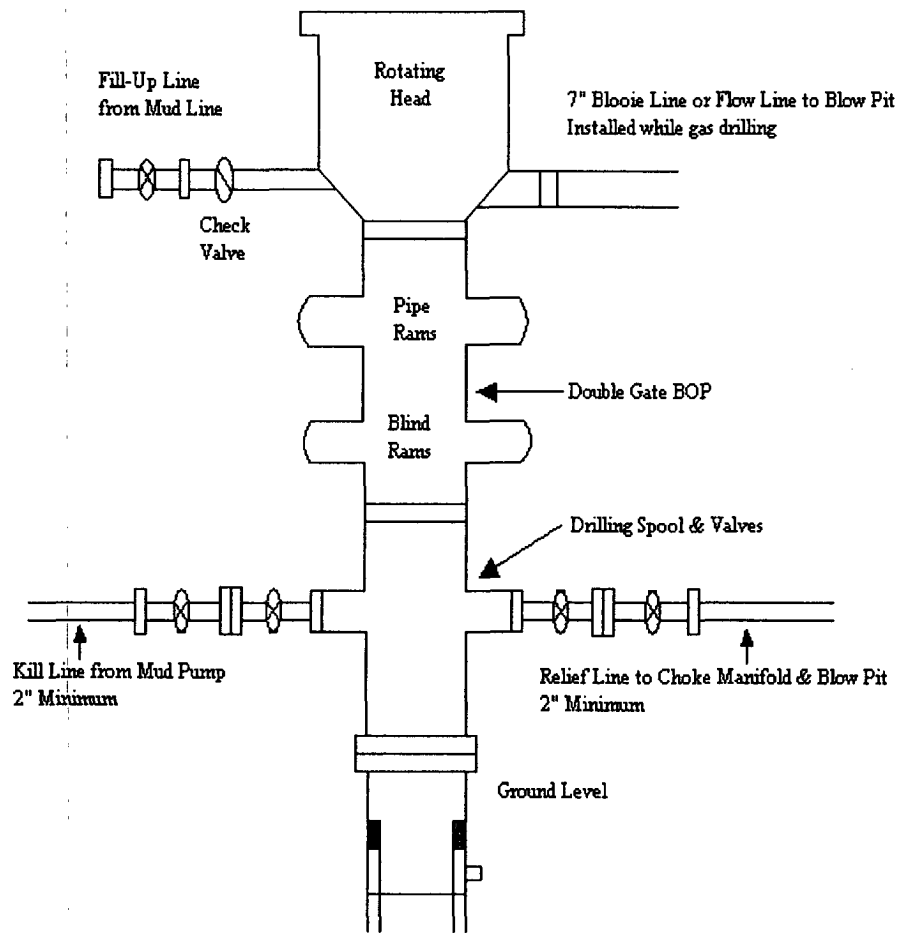
Production Casing: Before cementing, circulate hole at least 1 1/2 hole volumes of mud and reduce funnel viscosity to minimum to aide in hole cleanout. Depending on wellbore conditions, cement may consist of 700 sks 50/50 with 2.0 % Bentonite, 0.50% Halad-9, 0.10% HR-5, 0.10% CFR-3, 5 #/sk Gilsonite, and 1/4 #/sk Flocele (13.5 ppg, 1.30 ft³/sk). (910 ft³ of slurry, 100 % excess to circulate to surface).

Other Information

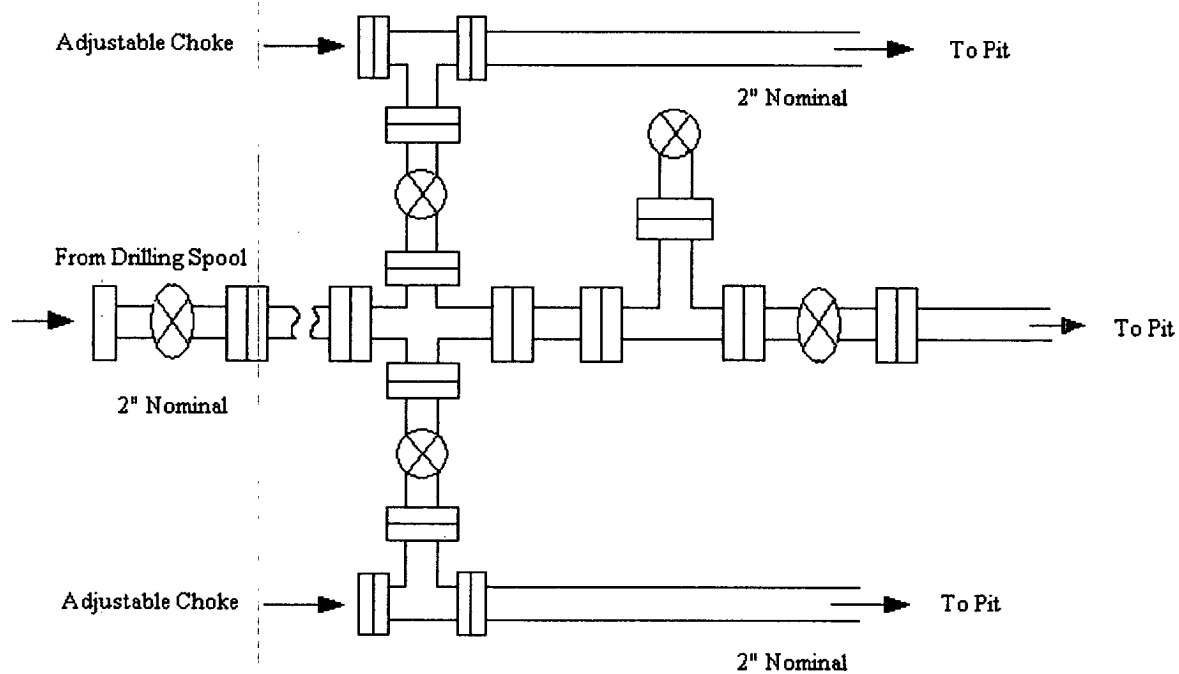
- 1) This well will be cased and the Blanco Mesa Verde / Basin Dakota fracture stimulated.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control. The production string may need to be cemented in multiple stages with a slurry design deviated from 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.

Energen Resources Corporation

Typical BOP Configuration for Gas Drilling



Energen Resources Corporation
Typical 2000 psi Choke Manifold Configuration



Choke manifold installed from surface to TD