

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007


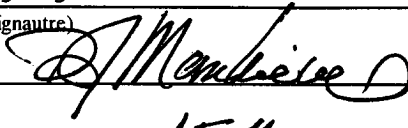
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM 013861
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
2. Name of Operator Energen Resources Corporation		7. Unit or CA Agreement Name and No.
3a. Address 2198 Bloomfield Highway Farmington, New Mexico 87401	3b. Phone No. (include area code) (505) 325-6800	8. Lease Name and Well No. Grambling A #801S
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 670' fsl 1205' fel At proposed prod. zone AT		9. API Well No. 30-045-33797
14. Distance in miles and direction from nearest town or post office* Approximately 10.6 miles south east of Blanco		10. Field and Pool, or Exploratory Basin Fruitland Coal
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 0670'	16. No. of Acres in lease 960	11. Sec., T., R., M., or Blk. and Survey or Area P S22, T28N, R08W
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1000'	19. Proposed Depth 2440' +/-	12. County or Parish San Juan
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL 5826'	22. Approximate date work will start* 11/05/06	13. State NM
23. Estimated duration 14 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 06/13/06
Title Drilling Engineer		
Approved by (Signature) 	Name (Printed/Typed) AFM	Date 7/28/06
Title AFM	Office PFO	

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 3165.4
and appeal pursuant to 43 CFR 3165.4NMCCD
8

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

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-33797	² Pool Code 71629	³ Pool Name FRUITLAND COAL
⁴ Property Code 21234	⁵ Property Name GRAMBLING A	⁶ Well Number 801 S
⁷ GRID No. 162928	⁸ Operator Name ENERGEN RESOURCES CORPORATION	⁹ Elevation 5826'

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
P	22	28N	8W		670'	SOUTH	1205'	EAST	SAN JUAN

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 320.00 Acres - (S/2)					¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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

				FND 2" BC GLO 1916	
				5280.00' (R) 5287.60' (M)	
22				N 0°01' W N 0°05' 17" W	
GRAMBLING BOT.				LAT. 36.84153° N LONG. 107.66344° W DATUM (NAD 1983)	
REVISION #1				FND 2" BC GLO 1916	
S 89°54' W S 89°26'54" W				1205' 2643.63' (R) 2648.64' (M) DP CAL'D POINT	

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
6/13/06
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.

MAY 19, 2006

Date of Survey

Signature and Seal of Professional Surveyor:

David R. Russell
Signature
DAVID R. RUSSELL
Printed Name
10201
Certificate Number
10201
PROFESSIONAL SURVEYOR

Operations Plan

June 6, 2006

Grambling A # 801S

General Information

Location	0670' fsl, 1205' fel sese S22, T28N, R8W San Juan County, New Mexico
Elevations	5826' GL
Total Depth	2440' (MD)
Formation Objective	Basin Fruitland Coal

Formation Tops

Nacimiento	Surface
Ojo Alamo Ss	1315'
Kirtland Sh	1445'
Fruitland Fm	1945'
Top Coal	2095'
Bottom Coal	2250'
Pictured Cliffs Ss	2255'
Total Depth	2440'

Drilling

The 12 ¼" wellbore will be drilled with a fresh water mud system.

The 7 7/8" wellbore will be drilled with a low solids fresh water/polymer mud system. Weighting materials will be drill cuttings and if needed barite. Mud density is expected to range from 8.3 ppg to 8.9 ppg.

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: Induction/Gamma Ray and Density Logs

Coring: None

Surveys: Surface and/or every 500' to TD

Tubulars

Casing, Tubing, & Casing Equipment:

String	Interval	Wellbore	Casing	Csg Wt	Grade
Surface	0'-300'	12 1/4"	8 5/8"	24.0 ppf	J-55 ST&C
Production	o 300'-2440'	7 7/8"	5 1/2"	15.5 ppf	J-55 LT&C
Tubing	0'-2375'		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.

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

Wellhead

8 5/8" 2000 x 5 1/2" Larkin casing head. 5 1/2" 2000 x 2" tubing head.

Cementing

Surface Casing: 225 sks Std (class B) with 2.0 % CaCl₂ and 1/4 #/sk Flocele (15.6 ppg, 1.18 ft³/sk ²⁴⁷247 ft³ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

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 350 sks 65/35 with 6.0 % Bentonite, 2.0 % CaCl₂, 10 #/sk Gilsonite, and 1/2 #/sk Flocele (12.3 ppg, 1.96 ft³/sk) and a tail of 145 sks of Standard (Class B) cement with 5.0 #/sk Gilsonite, and 1/4 #/sk Flocele (15.2ppg, 1.24 ft³/sk). (866.0 ft³ of slurry, 100 % excess to circulate to surface).

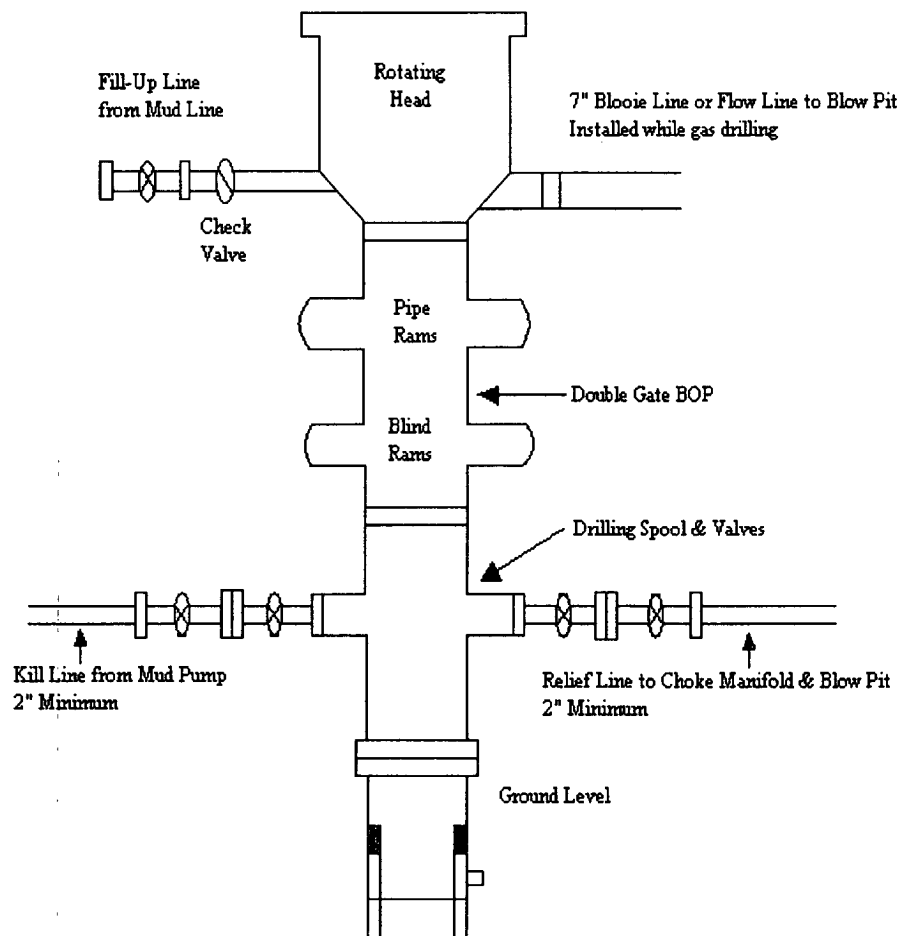
Pump 20 bbls gelled water and 10 bbls fresh water spacer ahead of lead cement.

Other Information

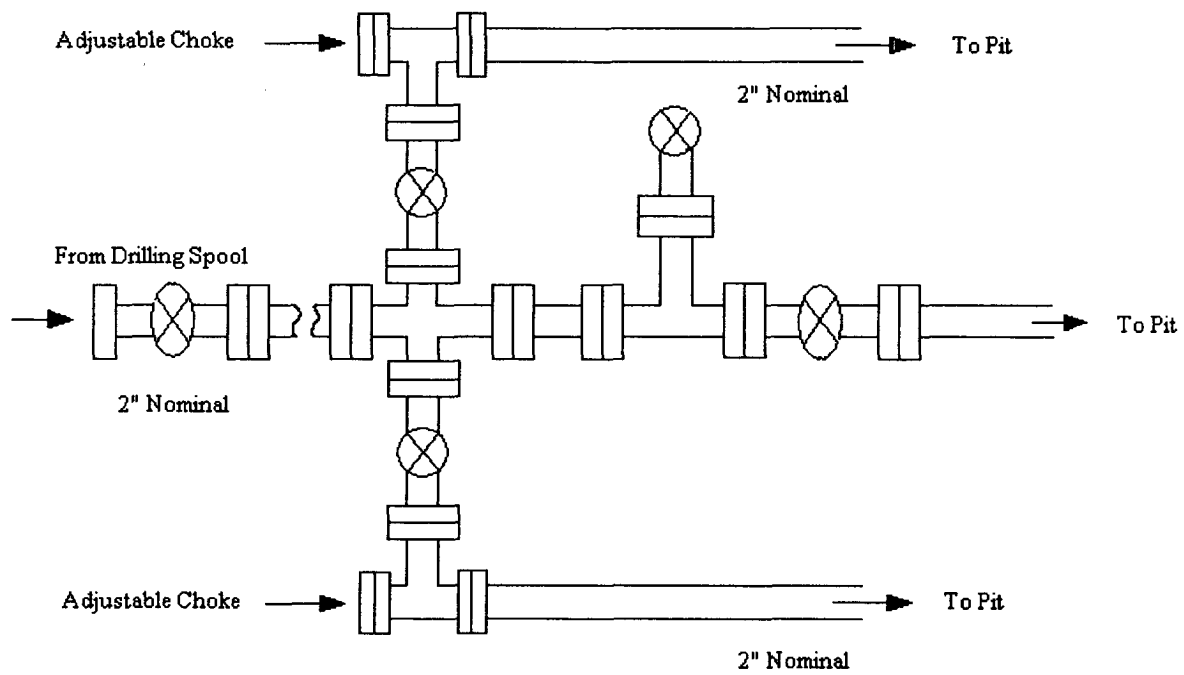
- 1) This well will be cased and the Basin Fruitland Coal fracture stimulated.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control. The production string may need to be cemented in multiple stages with a slurry design deviated from that listed above.
- 3) If high reservoir pressures or water flows are encountered slurry design may need to be deviated to from those listed above to satisfy wellbore and formation conditions.
- 4) No abnormal temperatures or pressures are anticipated.
- 5) This gas is dedicated.

Energen Resources Corporation

Typical BOP Configuration for Gas Drilling



Typical 2000 psi Choke Manifold Configuration

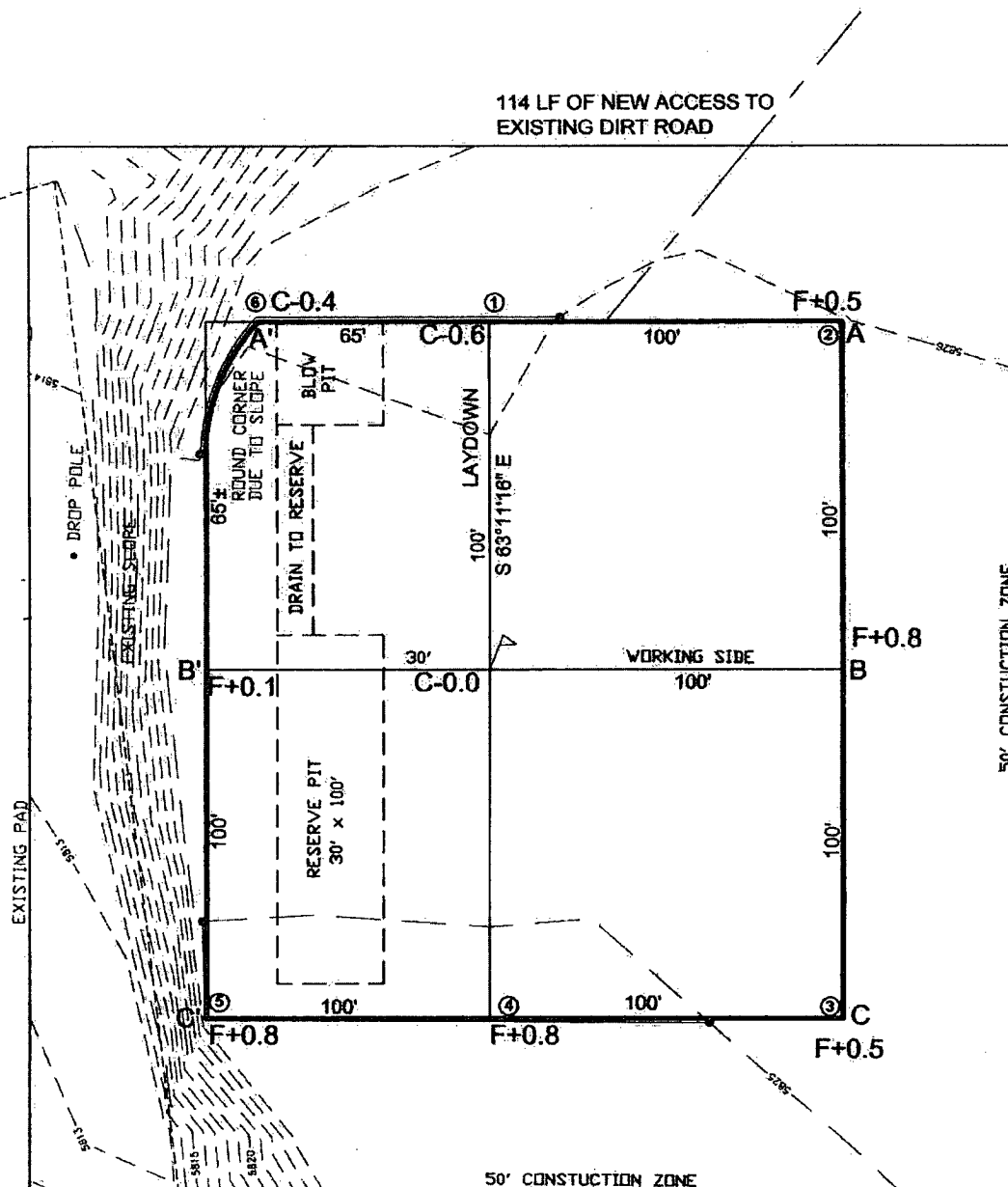
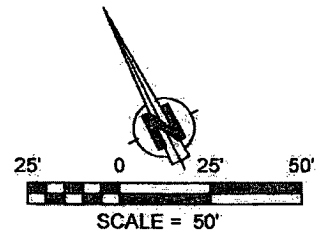


Choke manifold installed from surface to TD

LATITUDE: 36.64153°N
LONGITUDE: 107.66344°W
DATUM: NAD 83

ENERGEN RESOURCES CORPORATION

GRAMBLING #801 S
670' FSL & 1205' FEL
LOCATED IN THE SE/4 SE/4 OF SECTION 22,
T28N, R8W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
ELEVATION: 5825.6', NAVD 88



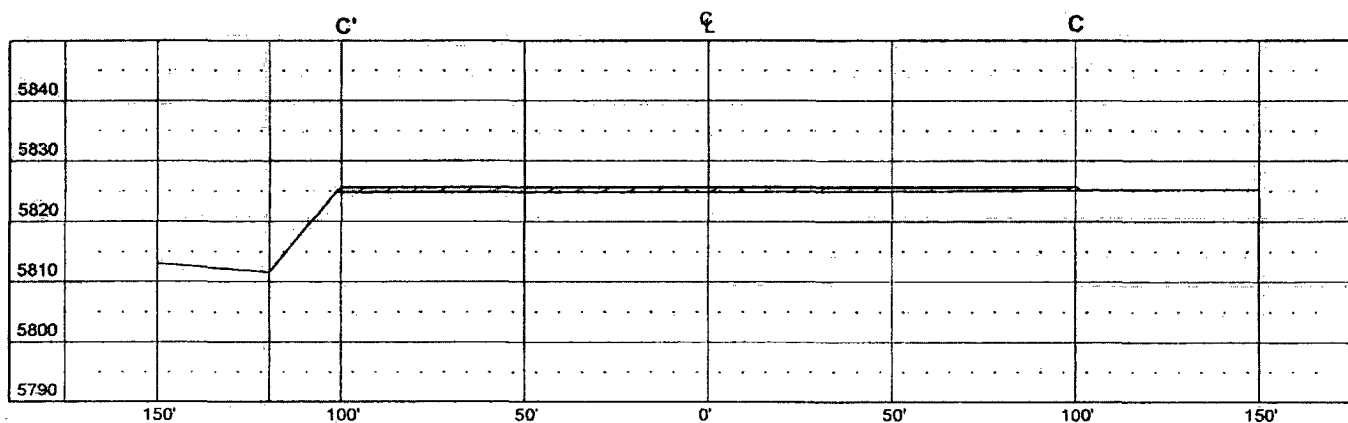
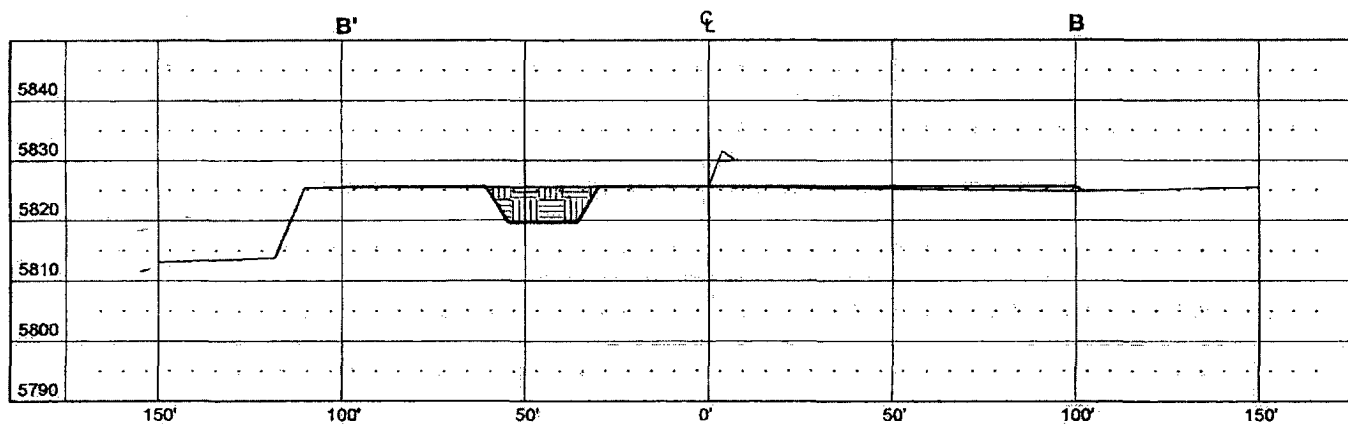
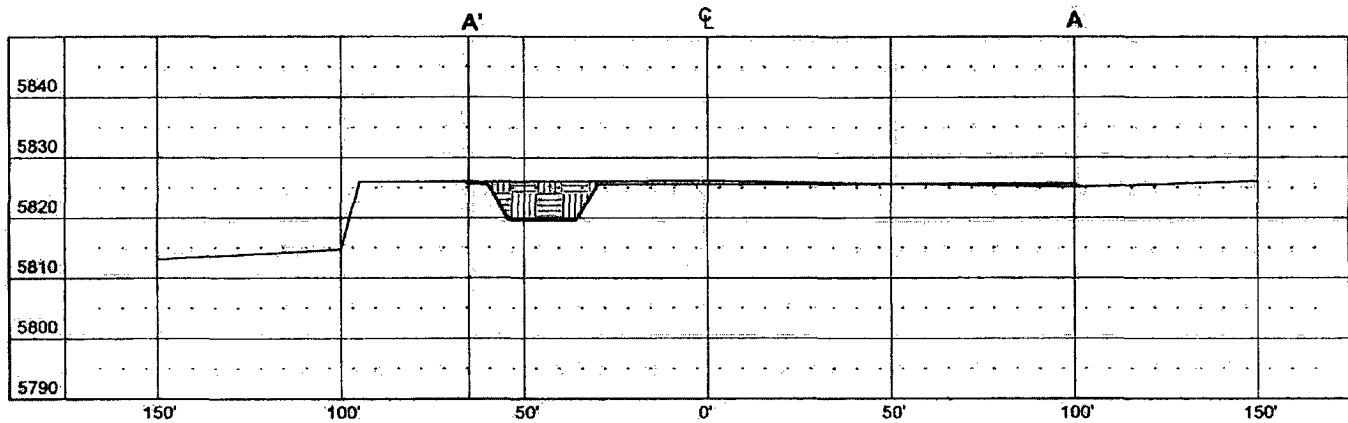
1 FOOT CONTOUR INTERVAL SHOWN
SCALE: 1" = 50'
JOB No.: ERG104
DATE: 05/19/06
REVISION #1



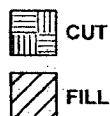
Russell Surveying
1409 W. Aztec Blvd. #5
Aztec, New Mexico 87410
(505) 334-8637

ENERGEN RESOURCES CORPORATION

GRAMBLING #801 S
670' FSL & 1205' FEL
LOCATED IN THE SE/4 SE/4 OF SECTION 22,
T28N, R8W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
ELEVATION: 5825.6', NAVD 88



VERT. SCALE: 1" = 30'
HORZ. SCALE: 1" = 50'
JOB No.: ERG104
DATE: 05/19/06
REVISION #1



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