

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM 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		2006 DEC 8 AM 3:50 RECEIVED		5. Lease Serial No. NM 76832
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		2. Name of Operator Energen Resources Corporation		6. If Indian, Allottee or Tribe Name 50
3a. Address 2198 Bloomfield Hwy Farmington, NM 87401		3b. Phone No. (include area code) 505.325.6800		7. Unit or CA Agreement Name and No.
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 820' fnl, 545' fel At proposed prod. zone 1000' fnl, 2500' fwl of section 11		8. Lease Name and Well No. Carracas 11 A #3		9. API Well No. 30-039-30136
14. Distance in miles and direction from nearest town or post office* Approximately 4.5 miles east southeast of Arboles, CO		10. Field and Pool, or Exploratory Basin Fruitland Coal		11. Sec., T., R., M., or Blk. and Survey or Area 10 (H) S10, T32N, R5W
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drg. unit line, if any) 545'	16. No. of Acres in lease 471.76	17. Spacing Unit dedicated to this well 235.04 N/2 sec 11		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 50'	19. Proposed Depth 6858' (MD)	20. BLM/BIA Bond No. on file Nm2707		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7585' GL	22. Approximate date work will start* 5/26/2007	23. Estimated duration 25 days		

24. Attachments

RCVD AUG 27 '07

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

OIL CONS. DIV.

- | | |
|---|---|
| 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 12/07/06
Title Drilling Engineer		

Approved by (Signature) 	Name (Printed/Typed) AFM	Date 8/27/07
Title 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. Min. BOPS test pressure: 750#

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)

HOLD 0104 FOR directional survey ✓
NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

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

NMOCOD 8-31-07
aw

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

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

Submit to Appropriate District Office

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

OIL CONSERVATION DIVISION 8 AM 3 50
2040 South Pacheco
Santa Fe, NM 87505

State Lease - 4 Copies
Fee Lease - 3 Copies
RCVD AUG 27 '07

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

RECEIVED

AMENDED REPORT
OIL CONS. DIV.

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-30136	² Pool Code 71629	³ Pool Name BASIN FRUITLAND COAL	DIST. 3
⁴ Property Code 36692	⁵ Property Name CARRACAS 11A		⁶ Well Number 3
⁷ OGRID No. 162928	⁸ Operator Name ENERGEN RESOURCES CORPORATION		⁹ Elevation 7585'

¹⁰ Surface Location

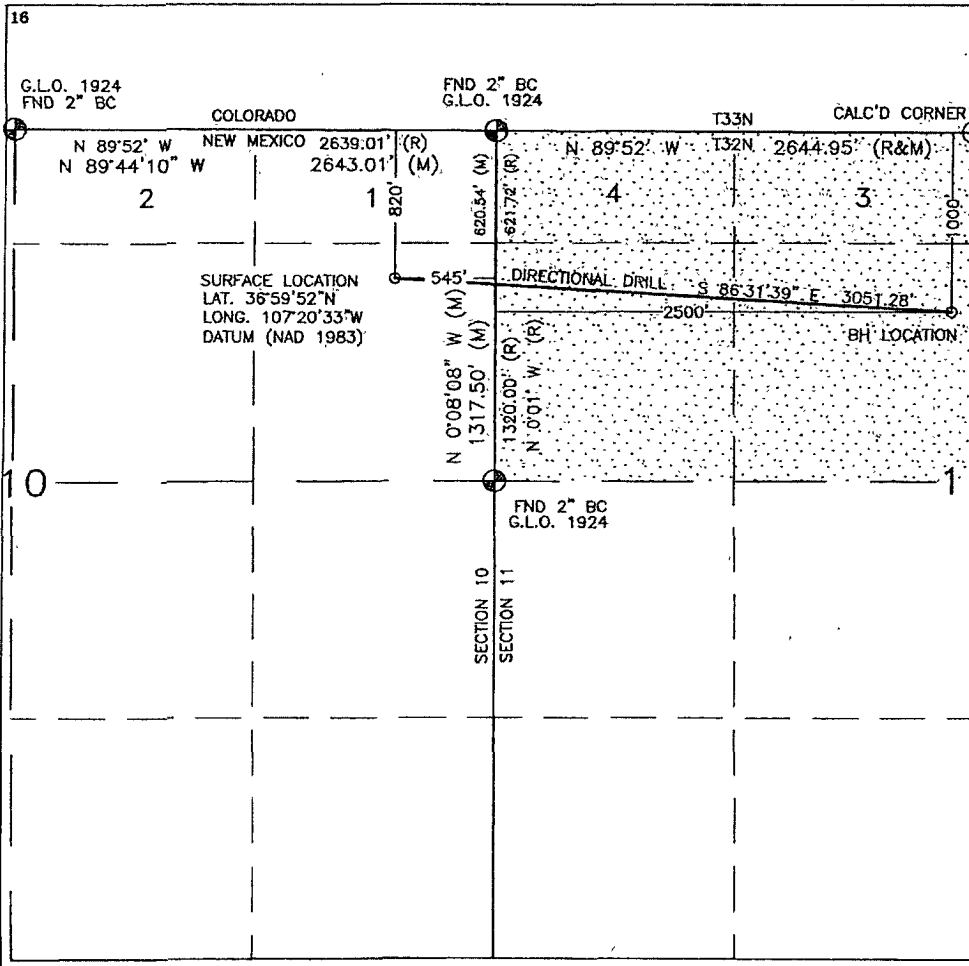
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	10	32N	5W		820'	NORTH	545'	EAST	RIO ARRIBA

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
F	1.1	32N	5W		1000'	NORTH	2500'	WEST	RIO ARRIBA

¹² Dedicated Acres 235.36 Acres - (N/2) 04	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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



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

12/7/06
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 this same is true and correct to the best of my belief.

NOVEMBER 08, 2005
Date of Survey

Signature and Seal of Professional Surveyor:

David R. Russell
Signature

DAVID R. RUSSELL
Certificate Number

10201

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.
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name: Carracas 11 A
8. Well Number #3
9. OGRID Number 162928
10. Pool name or Wildcat Basin Fruitland Coal

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 Hwy Farmington, NM 87401

4. Well Location
 Unit Letter H : 820 feet from the North line and 545 feet from the East line
 Section 10 Township 32N Range 5W NMPM County Rio Arriba

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
 7585' GL

Pit or Below-grade Tank Application or Closure

Pit type Drill Depth to Groundwater >250' 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 <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: Build a drilling pit <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

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' issued on November 1, 2004 and also plans to submit a C-144 form for the closure of such pit in accordance with BLM 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 Nathan Smith TITLE Drilling Engineer DATE 12/8/06
 E-mail address: nsmith@energen.com
 Type or print name Nathan Smith Telephone No. 505.325.6800

For State Use Only
 APPROVED BY [Signature] TITLE Deputy Oil & Gas Inspector, District #3 DATE AUG 31 2007
 Conditions of Approval, if any:

Operations Plan

December 7, 2006

Carracas 11 A #3

General Information

Location	820' fnl, 545' fel at surface 1000' fnl, 2500' fwl at bottom swne S11, T32N, R5W Rio Arriba County, New Mexico
Elevations	7585' GL
Total Depth	6858' (MD), 4103' (TVD)
Formation Objective	Basin Fruitland Coal

Formation Tops

San Jose	Surface
Nacimiento	2141' (TVD)
Ojo Alamo Ss	3524' (TVD), 3524' (MD)
Kirtland Sh	3631' (TVD), 3633' (MD)
Fruitland Fm	3671' (TVD), 3675' (MD)
Top Coal	4088' (TVD), 4482' (MD)
Bottom Coal	4103' (TVD)
Total Depth	4103' (TVD), 6858' (MD)

Drilling

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

The 8 ¾" 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 8.9 ppg to 9.5 ppg.

Projected KOP is 3456' TVD with 9.37°/100' doglegs.

The 6 ¼" wellbore will be drilled with a fresh water or brine water system depending on reservoir characteristics. Anticipated BHP can be as high as 1100 psi.

Blowout Control Specifications:

A 2000 psi minimum double ram or annulus BOP stack will be used following nipple up of casing head. During air drilling operations, a Shaffer Type 50 or equivalent rotating head will be installed on top of the stack. 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: None

Mud logs: From 3598' (TVD), 3600' (MD) to TD.

Surveys: Surface to KOP every 500' and a minimum of every 250' for directional.

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	0'-4096' (TVD) 4625' (MD)	8 3/4"	7"	23.0 ppf	J-55 LT&C
Production	4088'-4103' (TVD) 4595'-6858' (MD)	6 1/4"	4 1/2"	11.6 ppf	J-55 LT&C
Tubing	0'-4070' (MD)		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 with self fill insert float collar on top of bottom joint and casing centralization with standard bow spring and rigid centralizers to optimize standoff. Two turbolating centralizers at the base of the Ojo Alamo are recommended.

Liner: Bull nose guide shoe on bottom of first joint, H-Latch liner drop off tool on top of last joint.

Wellhead

3000 psi 11" x 9 5/8" casing head. 9 5/8" x 7" x 2 3/8" 3000 psi Flanged Wellhead .

Cementing

Surface Casing: 125 sks Std (class B) with 2.0 % CaCl₂ and 1/4 #/sk Flocele (15.6 ppg, 1.18 ft³/sk 148 ft³ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 600 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 642 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 125 sks Sk with 1/4 #/sk Flocele (15.6 ppg, 1.18 ft³/sk). (1388 ft³ of slurry, 100 % excess to circulate to surface). Test casing to 1200 psi for 30 min.

Other Information

- 1) This well will be an open hole completion lined with an uncemented pre-drilled liner.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control. The intermediate 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. This gas is dedicated.



Project: Carson National Forest
Site: Carracas Mesa
Well: Carracas 11 A #3
Wellbore: Preliminary Plan
Plan: Plan #1 (Carracas 11 A #3/Preliminary Plan)



Azimuths to Grid North
 True North: -0.29°
 Magnetic North: 9.99°

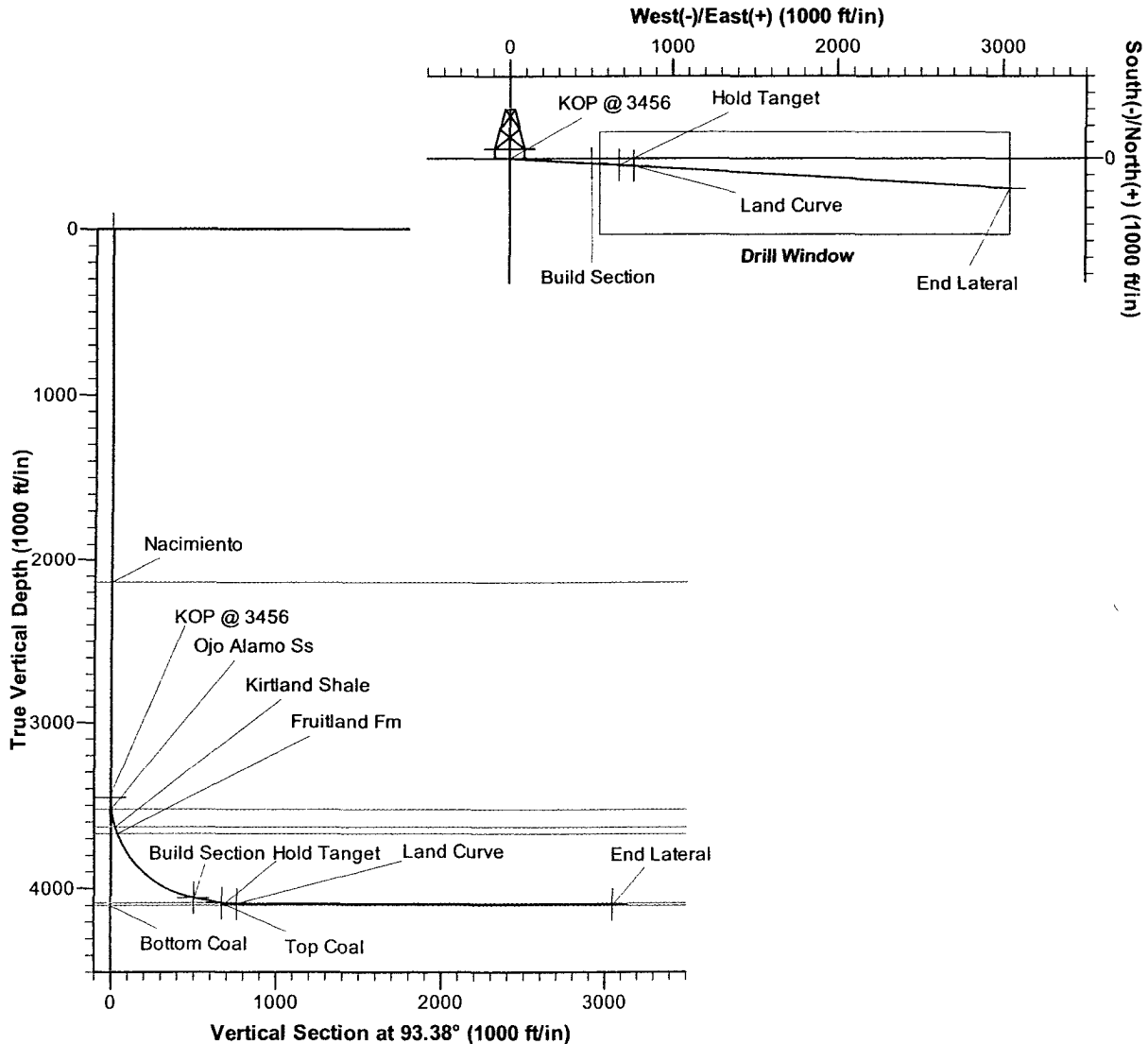
Magnetic Field
 Strength: 51400.7snT
 Dip Angle: 63.88°
 Date: 11/28/2006
 Model: IGRF200510

PROJECT DETAILS: Carson National Forest	
Geodetic System: US State Plane 1983	Datum: North American Datum 1983
Ellipsoid: GRS 1980	Zone: New Mexico Western Zone
System Datum: Mean Sea Level	

SURFACE LOCATION	
Easting:	2866423.65
Northing:	2182893.29

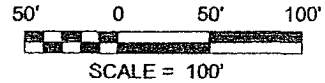
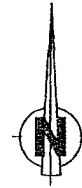
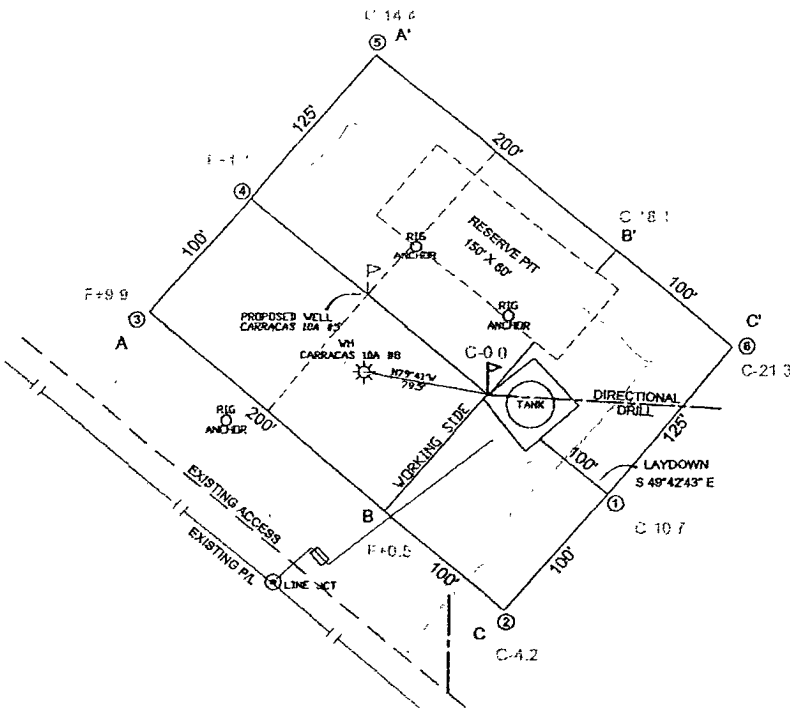
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3456.0	0.00	0.00	3456.0	0.0	0.0	0.00	0.00	0.0	KOP @ 3456
3	4309.6	80.00	93.38	4058.0	-29.8	504.3	9.37	93.38	505.2	Build Section
4	4482.3	79.99	93.36	4088.0	-39.8	674.1	0.02	-122.79	675.3	Hold Target
5	4574.2	90.01	93.41	4096.0	-45.2	765.4	10.90	0.29	766.7	Land Curve
6	6857.8	89.99	93.36	4096.0	-180.0	3045.0	0.00	-114.38	3050.3	End Lateral

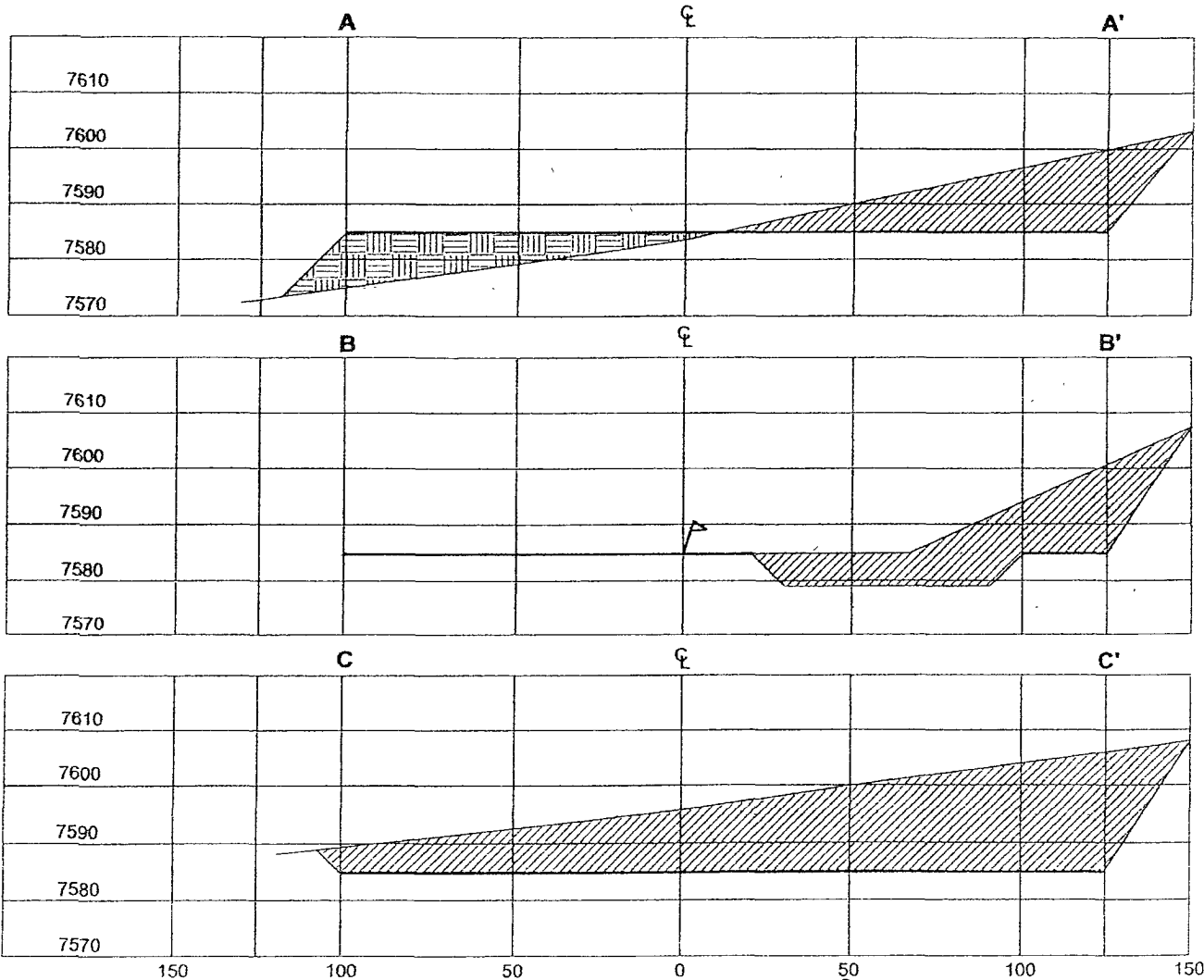


ENERGEN RESOURCES CORPORATION

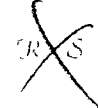
CARRACAS 11A #3
820' FNL & 545' FEL
LOCATED IN THE SE/4 NE/4 OF SEC. 10,
T32N, R5W, N.M.P.M.,
RIO ARRIBA COUNTY, NEW MEXICO
ELEVATION: 7585', NAVD 88



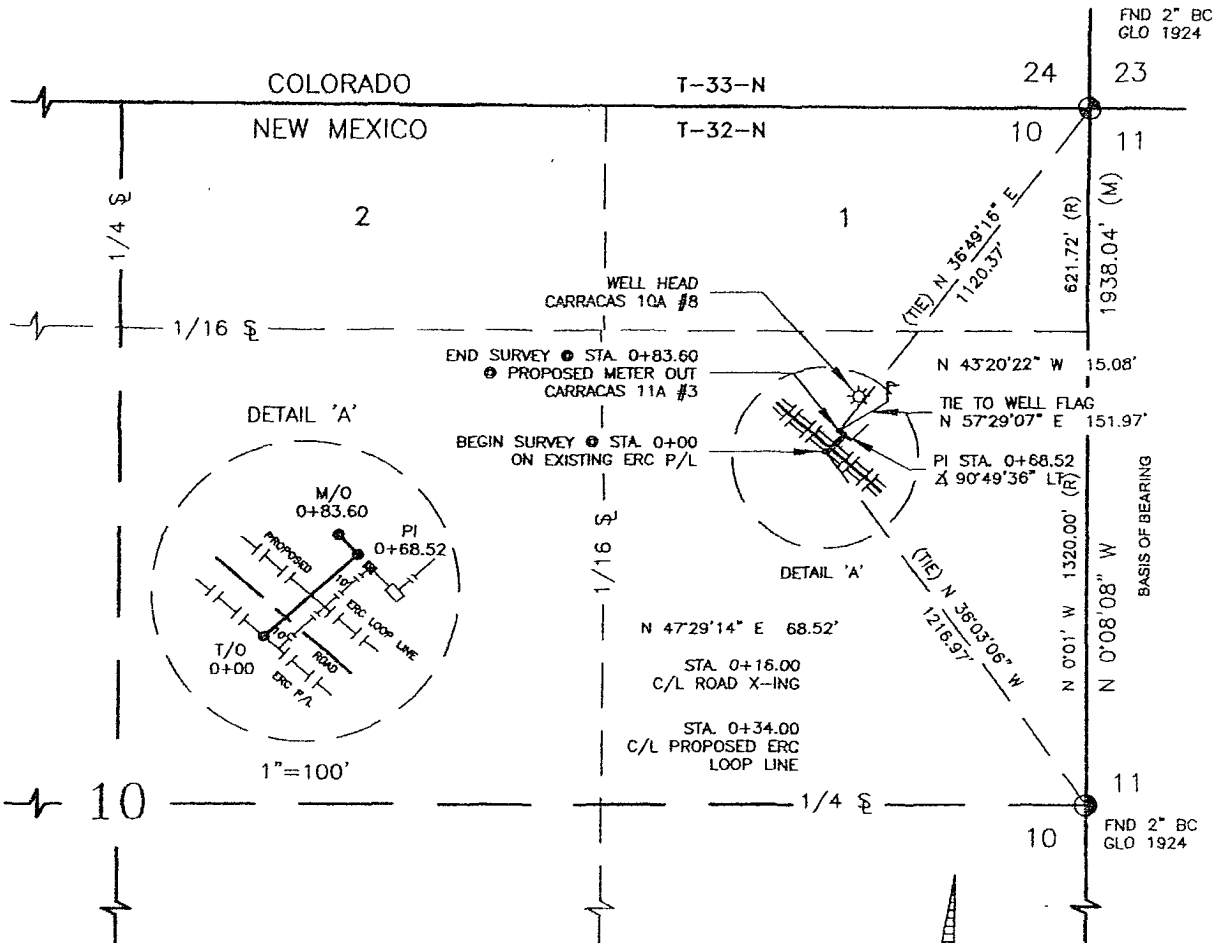
LATITUDE: 36°59'52"N
LONGITUDE: 107°20'33"W
DATUM: NAD 83



HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=30'

**Russell Surveying**
1409 W. Aztec Blvd. #5
Aztec, New Mexico 87410

A PROPOSED PIPELINE SURVEY
FOR
ENERGEN RESOURCES CORPORATION
CARRACAS 11A #3
LOCATED IN THE
NE/4 SECTION 10, T32N, R5W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO



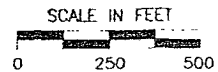
NOTES:

- 1.) BASIS OF BEARING BETWEEN FOUND MONUMENTS AT THE EAST QUARTER CORNER AND THE NORTHWEST CORNER OF SECTION 10, TOWNSHIP 32 NORTH, RANGE 5 WEST, N.M.P.M. RIO ARriba COUNTY, NEW MEXICO. LINE BEARS: N 0°00'00\" W A DISTANCE OF 1938.04 FEET AS MEASURED BY G.P.S.
- 2.) LOCATION OF UNDERGROUND UTILITIES DEPICTED ARE APPROXIMATE. PRIOR TO EXCAVATION UNDERGROUND UTILITIES SHOULD BE FIELD VERIFIED. ALL CONSTRUCTION ACTIVITIES SHOULD BE FIELD VERIFIED WITH NEW MEXICO ONE-CALL AUTHORITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

I, DAVID R. RUSSELL A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY. THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

David R. Russell
DAVID R. RUSSELL PLS
NEW MEXICO L.S. #10201
DATE 11/11/05

~ SURFACE OWNERSHIP ~	
CARSON NATIONAL FOREST	
0+00 TO 0+83.60	
83.60 FT/ 5.07 RODS	
DATE OF SURVEY	11/11/05 RR,RS



Russell Surveying, Inc.
Specializing in Oil field Surveying
1409 W. Aztec Blvd. #5, Aztec, N.M. 87410
Phone (505) 334-8637 Fax (505) 333-2945
REGISTERED LAND SURVEYOR
NEW MEXICO LS #10201