(April 2004)

#### UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

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

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SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an

6. If Indian, Allottee or Tribe Name abandoned well. Use Form 3160-3 (APD) for such proposals. 7. If Unit or CA/Agreement, Name and/or No. SUBMIT IN TRIPLICATE - Other instructions on reverse side 1. Type of Well Oil Well X Gas Well 8. Well Name and No. Other SJ 32-5 Unit 110 2. Name of Operator Energen Resources Corporation 9. API Well No. 3a. Address 3b. Phone No. (include area code) 30-039-26721 2198 Bloomfield Highway, Farmington, NM 87401 (505) 325-6800 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Basin Fruitland Coal SHL: 155' FSL, 65' FEL (P) BHL: 2530' FSL, 1880 FEL (J) 11. County or Parish, State Sec. 22, T32N, 6W Rio Arriba NM CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF SUBMISSION TYPE OF ACTION X Notice of Intent Acidize Production (Start/Resume) Water Shut-Off Deepen Alter Casing Fracture Treat Well Integrity Reclamation Subsequent Report Casing Renair New Construction Recomplete Change Plans Plug and Abandon Temporarily Abandon Final Abandonment Notice Convert to Injection Plug Back Water Disposal Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.) Energen Resources would like to recomplete the San Juan 32-5 Unit #110 by drilling a horizontal lateral off of the existing vertical wellbore as indicated on the revised attached C-102 and directional wellplan. A whipstock will be set at 2773' +/- (TVD) and a window milled in the existing 7" casing from 2761-2767' +/- (TVD). The lateral will be drilled to 5864'MD, 2961' TVD. A 4.5" 11.6 ppf, J-55, LTC pre-drilled liner will be ran and set from 2763-5864' MD. A 2 3/8" tubing string will be landed at 3032' TVD in the 7" casing Top of the fruitland fm. @ ± 2726'

- 7" csq. was comented to surface.

HOLDOMAFOR directional survey
as dvilled plat THE CHIEN ROUD SEP 11'07 14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Jason Kincaid Drilling Engineer 8/31/2007 THIS SPACE FOR FEDERAL OR STATE OFFICE USE Approved by Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease Office which would entitle the applicant to conduct operations thereon.

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 or agency of the United

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

<u>District I</u>
1625 N. French Dr., Hobbs, NM 88240
<u>District II</u>
1301 W. Grand Avenue, Artesia, NM 88210

1301 W. Grand Avenue, Artesia, NM 882 <u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410

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.

1220 South St. Francis Dr. Santa Fe, NM 87505

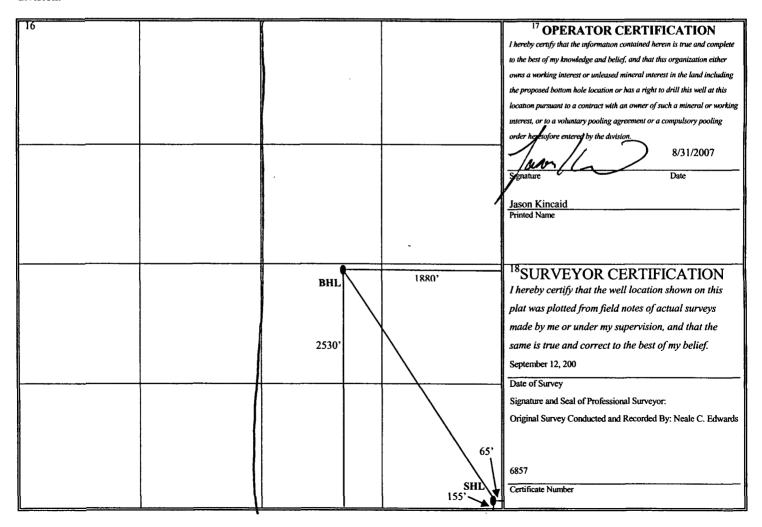
Form C-102 Revised October 12, 2005 Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>3</sup> API Number <sup>2</sup> Pool Code <sup>3</sup> Pool Name						me					
3	0-039-26721			71629		Basin Fruitland Coal					
<sup>4</sup> Property Code <sup>5</sup> Property N						erty Name "Weli Num					
	Ì	San Juan 32-5 Unit							#110		
<sup>7</sup> OGRID	No.		8 Operator Name Selevation								
162928					Energen Resources	Corporation			6322' GL		
					<sup>10</sup> 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	32N	6W		155	South	65	East	Rio Arriba		
	I		11 Bo	ottom Ho	le Location I	f Different Fro	m Surface				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
J	22	32N	6W		2530	South	1880	East Rio Arriba			
12 Dedicated Acre		r Infill 14 C	onsolidation	Code 15 Or	der 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.



Energen Resources SJBR-S22, T32N, R6W Eul Canyon San Juan 32-5 Unit #110 San Juan 32-5 Unit #110 ST

Plan: Preliminary Plan

# Plan Design

31 August, 2007



Project: SJBR-S22, T32N, R6W

Site: Eul Canyon

Well: San Juan 32-5 Unit #110 Wellbore: San Juan 32-5 Unit #110 ST

Plan: Preliminary Plan (San Juan 32-5 Unit #110/San Juan 32-5 Unit #110 ST)

PROJECT DETAILS: SJBR-S22, T32N, R6W

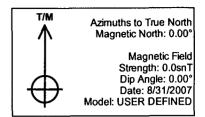
Geodetic System: US State Plane 1983

Datum: North American Datum 1983

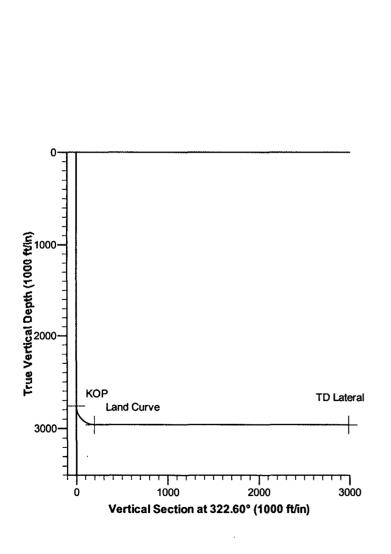
Ellipsoid: GRS 1980

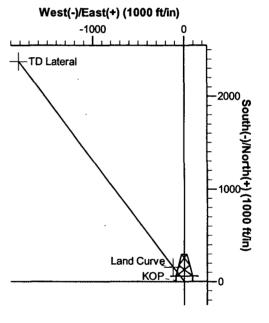
Zone: New Mexico Central Zone

System Datum: Mean Sea Level



Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	<b>TFace</b>	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	_
2	2761.0	0.00	0.00	2761.0	0.0	0.0	0.00	0.00	0.0	KOP
3	3075.2	90.01	322.60	2961.0	158.9	-121.5	28.65	322.60	200.0	Land Curve
4	5864.3	89.99	322.60	2961.0	2374.6	-1815.5	0.00	158.83	2989.1	TD Lateral





#### **Energen**

#### Plan Design

Company: **Energen Resources** SJBR-S22, T32N, R6W Project:

Site:

Well:

**Eul Canyon** San Juan 32-5 Unit #110

Wellbore: San Juan 32-5 Unit #110 ST

Design: Preliminary Plan Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Database:

Well San Juan 32-5 Unit #110 KB @ 6344.0ft (Drilling Rig)

KB @ 6344.0ft (Drilling Rig)

True

Minimum Curvature EDM 2003.16 Single User Db

**Project** SJBR-S22, T32N, R6W

Map System:

US State Plane 1983 North American Datum 1983

Geo Datum: Map Zone:

New Mexico Central Zone

System Datum:

Mean Sea Level

**Eul Canyon** Site'

Site Position:

Lat/Long

Northing:

2,170,581.42ft

Latitude:

36° 57' 32.940 N

From: **Position Uncertainty:** 

Easting: **Slot Radius:**  1,293,873.65ft

Longitude: **Grid Convergence:**  107° 26' 10.032 W -0.71 °

Well: San Juan 32-5 Unit #110

**Well Position** 

+N/-S +E/-W 0.0 ft 0.0 ft

0.0 ft

Northing: Easting:

2,170,581.42 ft 1,293,873.65 ft Latitude: Longitude:

36° 57' 32.940 N 107° 26' 10.032 W

**Position Uncertainty** 

0.0 ft

Wellhead Elevation:

6,322.0 ft

0.00

**Ground Level:** 

6,322.0 ft

Wellbore \*\* San Juan 32-5 Unit #110 ST

Magnetics

Model Name

8/31/2007

Declination

Field Strength

**User Defined** 

Design Preliminary Plan

**Audit Notes:** 

Version:

Phase:

**PROTOTYPE** 

Tie On Depth:

0.0

0.00

**Vertical Section:** 

Depth From (TVD) (ft)

+N/-S

Direction

0.0 0.0 0.0 322.60

Survey Tool Program From

(ft)

(ft)

Survey (Wellbore)

Date 8/31/2007

Description

0.0

5,864.3 Preliminary Plan (San Juan 32-5 Unit #110

MWD

MWD - Standard

Planned Survey	Inc	Azi	Build	NS	<b>EW</b>	V. Sec	
(0)	0	(*)	(°/100ft)	(n)	(ft)	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	a fasta filozofia
0.0	0.00	0.00	0.00	0.0	0.0	0.0	
100.0	0.00	0.00	0.00	0.0	0.0	0.0	
200.0	0.00	0.00	0.00	0.0	0.0	0.0	
300.0	0.00	0.00	0.00	0.0	0.0	0.0	
400.0	0.00	0.00	0.00	0.0	0.0	0.0	
500.0	0.00	0.00	0.00	0.0	0.0	0.0	
600.0	0.00	0.00	0.00	0.0	0.0	0.0	
700.0	0.00	0.00	0.00	0.0	0.0	0.0	
800.0	0.00	0.00	0.00	0.0	0.0	0.0	{
900.0	0.00	0.00	0.00	0.0	0.0	0.0	
1,000.0	0.00	0.00	0.00	0.0	0.0	0.0	
1,100.0	0.00	0.00	0.00	0.0	0.0	0.0	ļ

## Energen

#### Plan Design

Company: Project: Site: Energen Resources SJBR-S22, T32N, R6W

Well: Wellbore: Design:

**Eul Canyon** San Juan 32-5 Unit #110

San Juan 32-5 Unit #110 ST

Preliminary Plan

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well San Juan 32-5 Unit #110

KB @ 6344.0ft (Drilling Rig) KB @ 6344.0ft (Drilling Rig)

True

Minimum Curvature

EDM 2003.16 Single User Db

nned Survey	n general and make a	and a mark of the contract of	- section		45	
MD	Ing h	Azi	Build	N/S	E/W	V. Sec
(ft)	(°)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(°/100ft)	(ft)	(n)	(m)
1,200.0	0.00	0.00	0.00	0.0	0.0	0.0
1,300.0	0.00	0.00	0.00	0.0	0.0	0.0
1,400.0	0.00	0.00	0.00	0.0	0.0	0.0
1,500.0	0.00	0.00	0.00	0.0	0.0	0.0
1,600.0	0.00	0.00	0.00	0.0	0.0	0.0
1,700.0	0.00	0.00	0.00	0.0	0.0	0.0
1,800.0	0.00	0.00	0.00	0.0	0.0	0.0
1,900.0	0.00	0.00	0.00	0.0	0.0	0.0
2,000.0	0.00	0.00	0.00	0.0	0.0	0.0
2,100.0	0.00	0.00	0.00	. 0.0	0.0	0.0
2,200.0	0.00	0.00	0.00	0.0	0.0	0.0
2,300.0	0.00	0.00	0.00	0.0	0.0	0.0
2,400.0	0.00	0.00	0.00	0.0	0.0	0.0
2,500.0	0.00	0.00	0.00	0.0	0.0	0.0
2,600.0	0.00	0.00	0.00	0.0	0.0	0.0
2,700.0	0.00	0.00	0.00	0.0	0.0	0.0
2,761.0	0.00	0.00	0.00	0.0	0.0	0.0
2,780.0	5.44	322.60	28.65	0.7	-0.5	0.9
2,800.0	11.17	322.60	28.65	3.0	-2.3	3.8
2,820.0	16.90	322.60	28.65	6.9	-5.2	8.6
2,840.0	22.63	322.60	28.65	12.2	-9.4	15.4
2,860.0	28.36	322.60	28.65	19.1	-14.6	24.0
2,880.0	34.09	322.60	28.65	27.3	-20.9	34.4
2,900.0	39.82	322.60	28.65	36.9	-28.2	46.4
2,920.0	45.55	322.60	28.65	47.6	-36.4	59.9
2,940.0	51.28	322.60	28.65	59.5	-45.5	74.9
2,960.0	57.01	322.60	28.65	72.4	-55.3	91.1
2,980.0	62.74	322.60	28.65	86.1	-65.8	108.4
3,000.0	68.47	322.60	28.65	100.6	-76.9	126.6
3,020.0	74.20	322.60	28.65	115.6	-88.4 400.2	145.5
3,040.0 3,060.0	79.93 85.66	322.60	28.65	131.1	-100.2	165.0
3,060.0	90.01	322.60 322.60	28.65 28.65	146.8 158.9	-112.3 121.5	184.9 200.0
					-121.5	
3,100.0	90.01	322.60	0.00	178.6	-136.6	224.8
3,200.0	90.01	322.60	0.00	258.0	-197.3	324.8
3,300.0	90.01	322.60	0.00	337.5	-258.1	424.8
3,400.0	90.01	322.60	0.00	416.9	-318.8	524.8
3,500.0	90.01	322.60	0.00	496.4	-379.5	624.8
3,600.0	90.01	322.60	0.00	575.8	-440.3	724.8
3,700.0	90.00	322.60	0.00	655.2	-501.0	824.8
3,800.0	90.00	322.60	0.00	734.7	-561.8	924.8
3,900.0	90.00	322.60	0.00	814.1	-622.5	1,024.8
4,000.0	90.00	322.60	0.00	893.6	-683.2	1,124.8
4,100.0	90.00	322.60	0.00	973.0	-744.0	1,224.8

### Energen

#### Plan Design

Company: Energen Resources
Project: SJBR-S22, T32N, R6W

Eul Canyon

Site: Well: San Juan 32-5 Unit #110

Wellbore:

🚀 San Juan 32-5 Unit #110 ST

Design: Preliminary Plan Local Co-ordinate Reference: 4 --- Well San Juan 32-5 Unit #110

MD Reference:

TVD Reference: KB @ 6344.0ft (Drilling Rig) KB @ 6344.0ft (Drilling Rig)

MD Reference:

Survey Calculation Method: Minimum Curvature

Database: EDM 2003.16 Single

EDM 2003.16 Single User Db

nned Survey							The second state of
MD (ft)	Inc (°)	Azi (°)	Build (°/100ft)	NS (ft)	EW (ft)	V. Sec	
4,200.0	90.00	322.60	0.00	1,052.5	-804.7	1,324.8	•
4,300.0	90.00	322.60	0.00	1,131.9	-865.4	1,424.8	
4,400.0	90.00	322.60	0.00	1,211.3	-926.2	1,524.8	
4,500.0	90.00	322.60	0.00	1,290.8	-986.9	1,624.8	
4,600.0	90.00	322.60	0.00	1,370.2	-1,047.7	1,724.8	
4,700.0	90.00	322.60	0.00	1,449.7	-1,108.4	1,824.8	
4,800.0	90.00	322.60	0.00	1,529.1	-1,169.1	1,924.8	
4,900.0	90.00	322.60	0.00	1,608.5	-1,229.9	2,024.8	
5,000.0	90.00	322.60	0.00	1,688.0	-1,290.6	2,124.8	
5,100.0	90.00	322.60	0.00	1,767.4	-1,351.3	2,224.8	
5,200.0	90.00	322.60	0.00	1,846.9	-1,412.1	2,324.8	
5,300.0	90.00	322.60	0.00	1,926.3	-1,472.8	2,424.8	
5,400.0	89.99	322.60	0.00	2,005.8	-1,533.5	2,524.8	
5,500.0	89.99	322.60	0.00	2,085.2	-1,594.3	2,624.8	
5,600.0	89.99	322.60	0.00	2,164.7	-1,655.0	2,724.8	
5,700.0	89.99	322.60	0.00	2,244.1	-1,715.7	2,824.8	
5,800.0	89.99	322.60	0.00	2,323.5	-1,776.5	2,924.8	
5,864.3	89.99	322.60	0.00	2,374.6	-1,815.5	2,989.1	

Target Name - hit/miss target Di - Shape	p Angle . D (°)	oip Dir. (°)	TVD (R)	+N-S (n)	+E/-W (ft)	Northing (ft)	≟Easting ≟ √(ft)	Latitude	Longitude
KOP - plan hits target - Point	0.00	0.00	2,761.0	0.0	0.0	2,170,581.42	1,293,873.65	36° 57′ 32.940 N	107° 26' 10.032 W
TD Lateral - plan hits target - Point	0.00	0.00	2,961.0	2,374.6	-1,815.5	2,172,978.44	1,292,087.85	36° 57' 56.417 N	107° 26' 32.401 W
Land Curve - plan hits target - Point	0.00	0.00	2,961.0	158.9	-121.5	2,170,741.82	1,293,754.13	36° 57' 34.511 N	107° 26' 11.529 W

Checked By:	Approved By	:	Date:	
i Cnecked By:	· · · · · · · · · · · · · · · · · · ·	•	Date:	