

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

AUG 05 2008

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

**SUNDRY NOTICES AND REPORTS ON WELLS** of Land Management  
Farmington Field Office  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

**Energen Resources Corporation**

3a. Address

**2010 Afton Place, Farmington, NM 87401**

3b. Phone No. (include area code)

**(505) 325-6800**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**2385 ENL, 2460 FWL 23 - 32N-6W**

5. Lease Serial No.

**NMSF079011**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

**San Juan 32-5 Unit**

8. Well Name and No.

**San Juan 32-5 Unit 100S**

9. API Well No.

**30-039-27270**

10. Field and Pool, or Exploratory Area

**Basin Fruitland Coal**

11. County or Parish, State

**Rio Arriba NM**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- |   |   |  |   |
|---|---|--|---|
| <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction | <input checked="" type="checkbox"/> Recomplete     | <input type="checkbox"/> Other _____    |
| <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon       |   |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back        | <input type="checkbox"/> Water Disposal            |   |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. 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 re-complete the San Juan 32-5 Unit #100S as follows:**

**\*Set a plug and whipstock at 2789' TVD and mill a window from 2789' - 2777'.**

**\*Drill a curve and horizontal lateral to a MD of 5775' (2995' TVD) with a BHL of 760 ENL, 100 FWL.**

**\*Line the lateral with a perforated 4 1/2", 11.60 ppf, J-55 LTC liner string.**

**Attached is a revised C-102 and directional plan depicting this recompletion.**

**NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT**

**RCVD AUG 11 '08**

**OIL CONS. DIV.**

**DIST. 3**

Hold C104

for Directional Survey  
and "As Drilled" plat

**PA**

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS

14. I hereby certify that the foregoing is true and correct.

Name (Printed/Typed)

**Nathan Smith**

Signature

*Nathan Smith*

Title **Drilling Engineer**

Date **8/5/08**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

**Original Signed: Stephen Mason**

Title

Date

**AUG 07 2008**

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 which would entitle the applicant to conduct operations thereon.

Office

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.

**NMOCD**

**District I**  
1625 N. French Dr., Hobbs, NM 88240

**District II**  
1301 W. Grand Avenue, 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 & 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**

<sup>1</sup> API Number 30-039-27270	<sup>2</sup> Pool Code 71629	<sup>3</sup> Pool Name Basin Fruitland Coal
<sup>4</sup> Property Code	<sup>5</sup> Property Name San Juan 32-5 Unit	<sup>6</sup> Well Number #100S
<sup>7</sup> OGRID No. 162928	<sup>8</sup> Operator Name Energen Resources Corporation	<sup>9</sup> Elevation 6388' GL

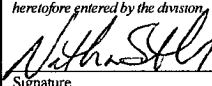
<sup>10</sup> Surface Location

UL or lot no. F	Section 23	Township 32N	Range 6W	Lot Idn	Feet from the 2385	North/South line North	Feet from the 2460	East/West line West	County Rio Arriba
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no. D	Section 23	Township 32N	Range 6W	Lot Idn	Feet from the 760	North/South line North	Feet from the 100	East/West line West	County Rio Arriba
<sup>12</sup> Dedicated Acres 320.00 W/2		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> 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.

	<p><sup>17</sup> <b>OPERATOR CERTIFICATION</b></p> <p><i>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 of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p> 8/4/2008</p> <p>Signature Date</p> <p>Nathan Smith</p> <p>Printed Name</p>
	<p><sup>18</sup> <b>SURVEYOR CERTIFICATION</b></p> <p><i>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.</i></p> <p>October 9, 2002</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor.</p> <p>Original Survey Conducted and Recorded By Jason C. Edwards</p>
	<p>15269</p> <p>Certificate Number</p>

**SJ BR**

**NW Sec 23, T32N, R6W**

**Eul Canyon**

**San Juan 32-5 Unit #100S**

**Proposed Sidetrack**

**Plan: Plan #1**

## **Planned Wellpath**

**05 August, 2008**

Project: NW Sec 23, T32N, R6W  
 Site: Eul Canyon  
 Well: San Juan 32-5 Unit #100S  
 Wellbore: Proposed Sidetrack  
 Plan: Plan #1 (San Juan 32-5 Unit #100S/Proposed Sidetrack)

PROJECT DETAILS: NW Sec 23, 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



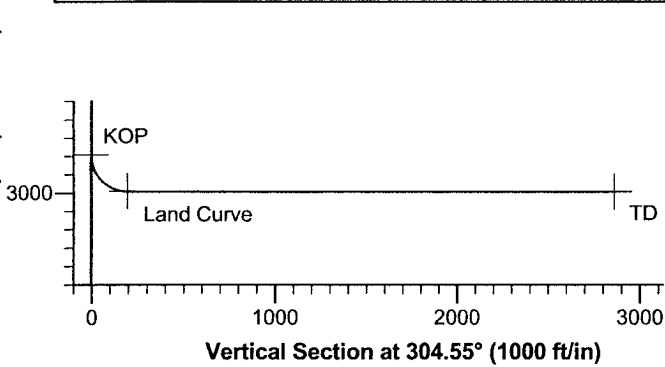
Azimuths to True North  
 Magnetic North: 10.12°

Magnetic Field  
 Strength: 51218.7snT  
 Dip Angle: 63.80°  
 Date: 8/5/2008  
 Model: IGRF200510

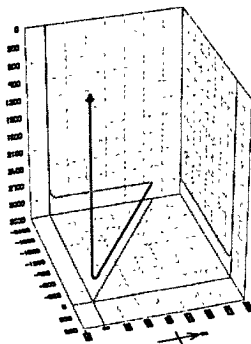
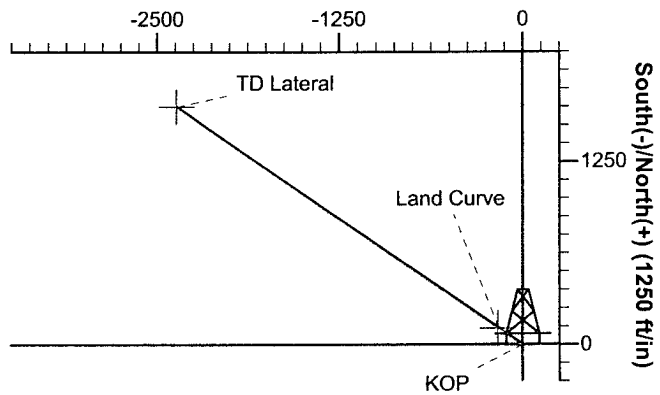
SECTION DETAILS

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	2795.0	0.00	0.00	2795.0	0.0	0.0	0.00	0.00	0.0	KOP
3	3109.1	89.99	304.55	2995.0	113.4	-164.7	28.65	304.55	200.0	Land Curve
4	5774.5	90.01	304.55	2995.0	1625.0	-2360.0	0.00	8.04	2865.3	TD Lateral

True Vertical Depth (1000 ft/in)



West(-)/East(+) (1250 ft/in)



# Energen

## Planned Wellpath

**Company:** SJ BR  
**Project:** NW Sec 23, T32N, R6W  
**Site:** Eul Canyon  
**Well:** San Juan 32-5 Unit #100S  
**Wellbore:** Proposed Sidetrack  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well San Juan 32-5 Unit #100S  
**TVD Reference:** Assumed KB @ 6403.0ft (Drilling Rig)  
**MD Reference:** Assumed KB @ 6403.0ft (Drilling Rig)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.16 Single User Db

<b>Project</b>	NW Sec 23, T32N, R6W		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Central Zone		

<b>Site</b> Eul Canyon			
<b>Site Position:</b>	<b>Northing:</b>	2,173,184.77 ft	<b>Latitude:</b>
<b>From:</b> Lat/Long	<b>Easting:</b>	1,296,506.02 ft	<b>Longitude:</b>
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"
		<b>Grid Convergence:</b>	-0.71 °

<b>Well</b> San Juan 32-5 Unit #100S			
<b>Well Position</b>	<b>Northing:</b>	2,173,184.77 ft	<b>Latitude:</b>
<b>+N/-S</b>	0.0 ft		36° 57' 59.000 N
<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	<b>Longitude:</b>
		1,296,506.02 ft	107° 25' 37.999 W
<b>Position Uncertainty</b>	0.0 ft	<b>Wellhead Elevation:</b>	<b>Ground Level:</b>
		6,388.0 ft	6,388.0 ft

<b>Wellbore</b> Proposed Sidetrack						
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)	
	IGRF200510	8/5/2008	10.12	63.80	51,219	

<b>Design</b> Plan #1				
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	304.55

<b>Survey Tool Program</b>		<b>Date:</b> 8/5/2008		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	5,774.5	Plan #1 (Proposed Sidetrack)		

<b>Planned Survey</b>							
MD (ft)	TVD (ft)	Inc (°)	Azi (°)	Build (°/100ft)	V. Sec (ft)	N/S (ft)	E/W (ft)
0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0
100.0	100.0	0.00	0.00	0.00	0.0	0.0	0.0
200.0	200.0	0.00	0.00	0.00	0.0	0.0	0.0
300.0	300.0	0.00	0.00	0.00	0.0	0.0	0.0
400.0	400.0	0.00	0.00	0.00	0.0	0.0	0.0
500.0	500.0	0.00	0.00	0.00	0.0	0.0	0.0
600.0	600.0	0.00	0.00	0.00	0.0	0.0	0.0
700.0	700.0	0.00	0.00	0.00	0.0	0.0	0.0
800.0	800.0	0.00	0.00	0.00	0.0	0.0	0.0
900.0	900.0	0.00	0.00	0.00	0.0	0.0	0.0
1,000.0	1,000.0	0.00	0.00	0.00	0.0	0.0	0.0
1,100.0	1,100.0	0.00	0.00	0.00	0.0	0.0	0.0

# Energen

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### Planned Survey

MD (ft)	TVD (ft)	Inc (°)	Azi (°)	Build (°/100ft)	V. Sec (ft)	N/S (ft)	E/W (ft)
1,200.0	1,200.0	0.00	0.00	0.00	0.0	0.0	0.0
1,300.0	1,300.0	0.00	0.00	0.00	0.0	0.0	0.0
1,400.0	1,400.0	0.00	0.00	0.00	0.0	0.0	0.0
1,500.0	1,500.0	0.00	0.00	0.00	0.0	0.0	0.0
1,600.0	1,600.0	0.00	0.00	0.00	0.0	0.0	0.0
1,700.0	1,700.0	0.00	0.00	0.00	0.0	0.0	0.0
1,800.0	1,800.0	0.00	0.00	0.00	0.0	0.0	0.0
1,900.0	1,900.0	0.00	0.00	0.00	0.0	0.0	0.0
2,000.0	2,000.0	0.00	0.00	0.00	0.0	0.0	0.0
2,100.0	2,100.0	0.00	0.00	0.00	0.0	0.0	0.0
2,200.0	2,200.0	0.00	0.00	0.00	0.0	0.0	0.0
2,300.0	2,300.0	0.00	0.00	0.00	0.0	0.0	0.0
2,400.0	2,400.0	0.00	0.00	0.00	0.0	0.0	0.0
2,500.0	2,500.0	0.00	0.00	0.00	0.0	0.0	0.0
2,600.0	2,600.0	0.00	0.00	0.00	0.0	0.0	0.0
2,700.0	2,700.0	0.00	0.00	0.00	0.0	0.0	0.0
2,795.0	2,795.0	0.00	0.00	0.00	0.0	0.0	0.0
<b>KOP</b>							
2,800.0	2,800.0	1.43	304.55	28.65	0.1	0.0	-0.1
2,820.0	2,819.9	7.16	304.55	28.65	1.6	0.9	-1.3
2,840.0	2,839.6	12.89	304.55	28.65	5.0	2.9	-4.2
2,860.0	2,858.9	18.62	304.55	28.65	10.5	5.9	-8.6
2,880.0	2,877.5	24.35	304.55	28.65	17.8	10.1	-14.7
2,900.0	2,895.2	30.08	304.55	28.65	26.9	15.3	-22.2
2,920.0	2,912.0	35.81	304.55	28.65	37.8	21.4	-31.1
2,940.0	2,927.6	41.54	304.55	28.65	50.3	28.5	-41.4
2,960.0	2,941.9	47.27	304.55	28.65	64.3	36.5	-53.0
2,980.0	2,954.7	53.00	304.55	28.65	79.6	45.2	-65.6
3,000.0	2,965.9	58.73	304.55	28.65	96.2	54.5	-79.2
3,020.0	2,975.5	64.46	304.55	28.65	113.8	64.5	-93.7
3,040.0	2,983.2	70.19	304.55	28.65	132.2	75.0	-108.9
3,060.0	2,989.0	75.92	304.55	28.65	151.3	85.8	-124.6
3,080.0	2,992.9	81.65	304.55	28.65	170.9	96.9	-140.8
3,100.0	2,994.8	87.38	304.55	28.65	190.8	108.2	-157.2
3,109.1	2,995.0	89.99	304.55	28.65	200.0	113.4	-164.7
<b>Land Curve</b>							
3,200.0	2,995.0	89.99	304.55	0.00	290.8	164.9	-239.6
3,300.0	2,995.0	89.99	304.55	0.00	390.8	221.6	-321.9
3,400.0	2,995.0	89.99	304.55	0.00	490.8	278.4	-404.3
3,500.0	2,995.1	89.99	304.55	0.00	590.8	335.1	-486.6
3,600.0	2,995.1	89.99	304.55	0.00	690.8	391.8	-569.0
3,700.0	2,995.1	89.99	304.55	0.00	790.8	448.5	-651.4
3,800.0	2,995.1	90.00	304.55	0.00	890.8	505.2	-733.7
3,900.0	2,995.1	90.00	304.55	0.00	990.8	561.9	-816.1
4,000.0	2,995.1	90.00	304.55	0.00	1,090.8	618.6	-898.5

# Energen

## Planned Wellpath

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**Wellbore:** Proposed Sidetrack  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well San Juan 32-5 Unit #100S  
**TVD Reference:** Assumed KB @ 6403.0ft (Drilling Rig)  
**MD Reference:** Assumed KB @ 6403.0ft (Drilling Rig)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.16 Single User Db

### Planned Survey

MD (ft)	TVD (ft)	Inc (°)	Azi (°)	Build (°/100ft)	V. Sec (ft)	N/S (ft)	E/W (ft)
4,100.0	2,995.1	90.00	304.55	0.00	1,190.8	675.3	-980.8
4,200.0	2,995.1	90.00	304.55	0.00	1,290.8	732.0	-1,063.2
4,300.0	2,995.1	90.00	304.55	0.00	1,390.8	788.8	-1,145.6
4,400.0	2,995.1	90.00	304.55	0.00	1,490.8	845.5	-1,227.9
4,500.0	2,995.1	90.00	304.55	0.00	1,590.8	902.2	-1,310.3
4,600.0	2,995.1	90.00	304.55	0.00	1,690.8	958.9	-1,392.6
4,700.0	2,995.1	90.00	304.55	0.00	1,790.8	1,015.6	-1,475.0
4,800.0	2,995.1	90.00	304.55	0.00	1,890.8	1,072.3	-1,557.4
4,900.0	2,995.1	90.00	304.55	0.00	1,990.8	1,129.0	-1,639.7
5,000.0	2,995.1	90.00	304.55	0.00	2,090.8	1,185.7	-1,722.1
5,100.0	2,995.1	90.01	304.55	0.00	2,190.8	1,242.5	-1,804.5
5,200.0	2,995.1	90.01	304.55	0.00	2,290.8	1,299.2	-1,886.8
5,300.0	2,995.1	90.01	304.55	0.00	2,390.8	1,355.9	-1,969.2
5,400.0	2,995.1	90.01	304.55	0.00	2,490.8	1,412.6	-2,051.5
5,500.0	2,995.0	90.01	304.55	0.00	2,590.8	1,469.3	-2,133.9
5,600.0	2,995.0	90.01	304.55	0.00	2,690.8	1,526.0	-2,216.3
5,700.0	2,995.0	90.01	304.55	0.00	2,790.8	1,582.7	-2,298.6
5,774.5	2,995.0	90.01	304.55	0.00	2,865.3	1,625.0	-2,360.0

TD Lateral

### Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
KOP - plan hits target - Point	0.00	0.00	2,795.0	0.0	0.0	2,173,184.77	1,296,506.02	36° 57' 59.000 N	107° 25' 37.999 W
Land Curve - plan hits target - Point	0.00	0.00	2,995.0	113.4	-164.7	2,173,300.19	1,296,342.73	36° 58' 0.122 N	107° 25' 40.028 W
TD Lateral - plan hits target - Point	0.00	0.00	2,995.0	1,625.0	-2,360.0	2,174,838.81	1,294,166.28	36° 58' 15.066 N	107° 26' 7.080 W

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_