Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
MAR 16 2011
Farmington Field Office
Bureau of Land Management

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

SUNDRY NOTICES AND REPORTS ON WELLS

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)*
SHL: (I) Sec. 30-T32N-R05W ; 2300'FSL, 950'FEL
BHL: (P) Sec. 30-T32N-R05W ; 100'FSL, 700'FEL

Lease Serial No.
NMNM-02850-B

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 111S H

9. API Well No.
30-039-27700

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	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☒ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 #111S as follows:

*Set a plug and whipstock at ~~3050'~~ 2852 TVD and mill a window from ~~3050'~~ - ~~3058'~~. 2830 - 2843' 4-5-11 cp/section breaks

*Drill a curve and horizontal lateral to a MD of 5393' (3276' TVD) with a BHL of 100'FSL, 700'FEL.

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

Attached is a revised C-102, operations and directional plans depicting this recompletion.

Liner to ℓ 2900??

Hold C104
for Directional Survey
and "As Drilled" plat + mud log

RCVD MAR 17'11
OIL CONS. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)* Stephen Byers — Title Drilling Engineer

Signature Stephen Byers — Date 03/15/2011

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Original Signed: Stephen Mason — Title — Date MAR 17 2011

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

NMOCD

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.

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 July 16, 2010
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-27700	71629	Basin Fruitland Coal

[4] Property Code	[5] Property Name	[6] Well Number
21996	San Juan 32-5 Unit	111$H

[7] OGRID No.	[8] Operator Name	[9] Elevation
162928	Energen Resources Corporation	6522'

[10] Surface Location

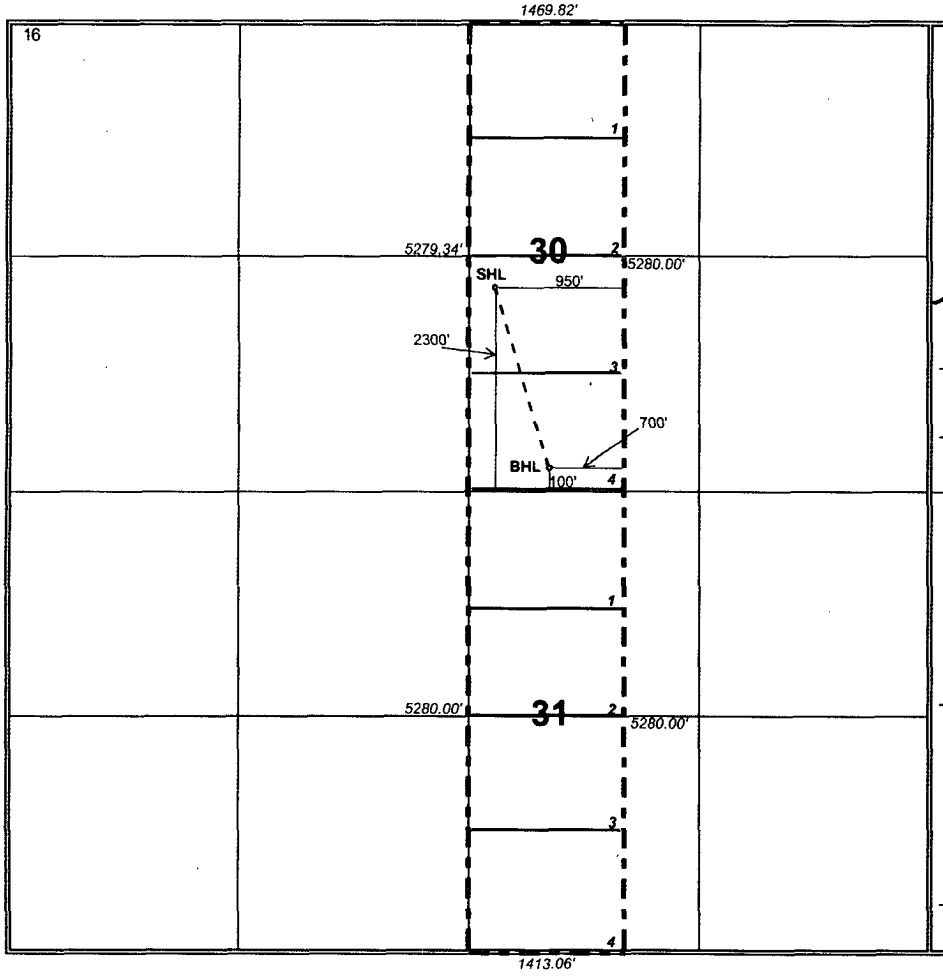
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	30	32N	5W		2300	South	950	East	Rio Arriba

[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
P	30	32N	5W		100	South	700	East	Rio Arriba

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
345.59 (Sec. 30 & 31)			NSP 1847

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, 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.

Stephen Byers 10/14/2010
Signature Date

Stephen Byers
Printed Name

sbyers@energen.com
E-mail Address

[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.

August 25, 2003
Date of Survey

Signature and Seal of Professional Surveyor:

Jason C. Edwards
Certificate Number 15269

3/15/2011

ENERGEN RESOURCES

OPERATIONS PLAN

WELL NAME.....San Juan 32-5 Unit #111S ST
JOB TYPE.....Re-entry Sidetrack
DEPT.....Drilling and Completions
RIG.....D & J #1
PREPARED BY.....Stephen Byers

General Information

Surface Location	2300 FSL 950 FEL
S-T-R	(I) Sec.30, T32N, R5W
Bottom Hole Location	100 FSL 700 FEL
S-T-R	(P) Sec.30, T32N, R5W
County, State	Rio Arriba, New Mexico
Elevations	6522' GL
Total Depth	5393' +/- (MD); 3276' (TVD)
Formation Objective	Basin Fruitland Coal

Formation Tops

Top Target Coal	3266' (TVD), 3337' (MD)
Base Target Coal	3284' (TVD)
Total Depth	**3276' (TVD), 5393' +/- (MD)**

Drilling

1. Set whipstock on top of the composite bridge plug left by the workover rig.
2. Orientate the whipstock at an azimuth of 173.52°. KOP is 3050' TVD.
3. Run in hole with a 6-1/4" milling assembly and mill window and 20-30' of formation
4. Pick up 6-1/4" directional tools and follow attached directional plan
    a. The build section will be drilled with and LSND or polymer and water as directed by the mud engineer.
    b. The mud density range for the lateral section should range from 8.4-8.6 ppg based on offset data. No more than 5 ppb of LCM added to system.
5. Pull out of hole. If problems are encountered before reaching the window run back to bottom and condition well for casing run. If problems are encountered continue pulling out and pick up a cleanout assembly.
6. Prior to running liner and hook hanger system, trip in hole and retrieve whipstock.
7. Run 4-1/2" 11.6# J-55 pre-drilled liner and hanger system through window.

Blowout Control Specifications:

A 3000 psi minimum double ram or annulus BOP stack 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. **Pressure test BOP to 250 psi for 15 min and 2000 psi for 15 min.**

Logging Program:

Open hole logs: None
Mudlogs: From KOP to TD.
Coring: None
Surveys: Every 250' while directional drilling to TD.

3/15/2011

ENERGEN RESOURCES

Casing, Tubing, & Casing Equipment

String	Interval	Wellbore	Size	Wt	Grade
Production	~~3050~~ 2832-5393' MD 3276' TVD	6 ¼"	4 ½"	11.6 lb/ft	J-55 LT&C
Tubing	0'- 3400'MD	7"	2 3/8"	4.7 lb/ft	J-55

Casing Equipment:

Production Liner: Bull nose guide shoe on the bottom of the first joint. Perforated liner to be run in producing interval. Blank or non-perforated joints from the landing point up to the milled window. B-hook liner hanger to hang the production casing.

Wellhead

3000 psi 11" x 9 5/8" casing head. 9 5/8" x 7" x 2 3/8" 5000psi Flanged wellhead.

Cementing

Production: Open Hole Completion – NO CEMENT

Other Information

1) This well will be an open hole completion
2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control.
3) No abnormal temperatures or pressures for the region are anticipated. BHP can be as high as 1500 psi.
4) This gas is dedicated.

ENERGEN
RESOURCES

Energen Resources Corp.

SJBR Sec 30-T32N-R05W
Eul Canyon
San Juan 32-5 Unit #111S
Re-Entry Sidetrack OPE FTC

Plan: Plan #1

DIRECTIONAL PLAN

15 March, 2011

Prepared By: Stephen Byers

ENERGEN RESOURCES

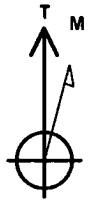
Project: SJBR Sec 30-T32N-R05W
Site: Eul Canyon
Well: San Juan 32-5 Unit #111S
Wellbore: Re-Entry Sidetrack OPE FTC

PROJECT DETAILS:

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Central Zone

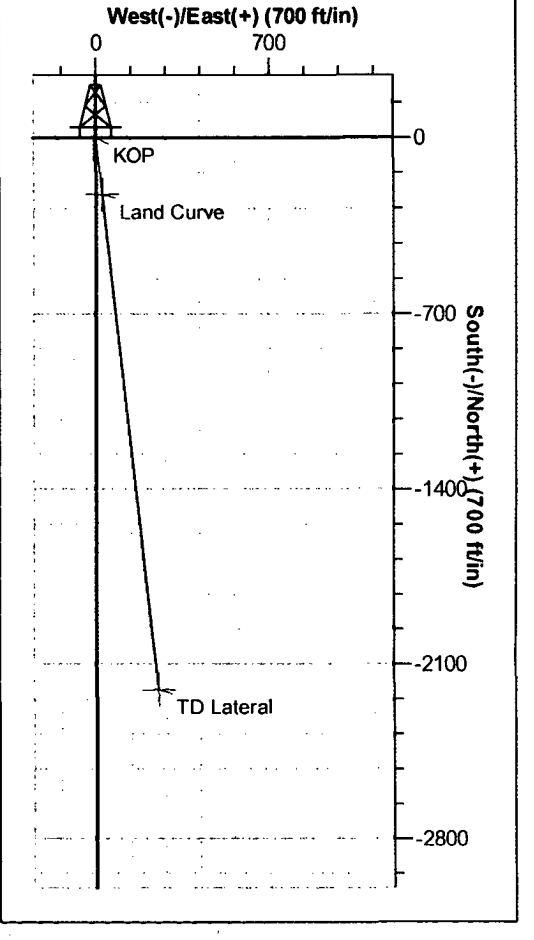
SECTION DETAILS

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	3050.0	0.00	0.00	3050.0	0.0	0.0	0.00	0.00	0.0	KOP
3	3227.5	45.02	173.52	3209.8	-65.8	7.5	25.36	173.52	66.2	
4	3227.6	45.02	173.52	3209.8	-65.8	7.5	0.00	0.00	66.3	
5	3405.0	90.00	173.52	3276.0	-224.6	25.5	25.35	-0.01	226.0	Land Curve
6	5393.1	90.00	173.51	3276.0	-2200.0	250.0	0.00	0.00	2214.2	TD Lateral



Azimuths to True North
Magnetic North: 9.93°

Magnetic Field
Strength: 51077.9snT
Dip Angle: 63.76°
Date: 12/31/2009
Model: IGRF200510



Energen

DIRECTIONAL PLAN

Company:	Energen Resources	**Local Co-ordinate Reference:**	Well San Juan 32-5 Unit #111S
Project:	SJBR Sec 30-T32N-R05W	**TVD Reference:**	KB @ 6538.0ft (KB)
Site:	Eul Canyon	**MD Reference:**	KB @ 6538.0ft (KB)
Well:	San Juan 32-5 Unit #111S	**North Reference:**	True
Wellbore:	Re-Entry Sidetrack OPE FTC	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	EDM 2003.16 Single User Db

Project	SJBR Sec 30-T32N-R05W		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Central Zone		

Site	Eul Canyon				
Site Position:		**Northing:**	2,167,213.12 ft	**Latitude:**	36° 57' 1.001 N
From:	Lat/Long	**Easting:**	1,305,118.60 ft	**Longitude:**	107° 23' 51.000 W
Position Uncertainty:	0.0 ft	**Slot Radius:**	"	**Grid Convergence:**	-0.69 °

Well	San Juan 32-5 Unit #111S					
Well Position	**+N/-S**	0.0 ft	**Northing:**	2,167,213.12 ft	**Latitude:**	36° 57' 1.001 N
	+E/-W	0.0 ft	**Easting:**	1,305,118.60 ft	**Longitude:**	107° 23' 51.000 W
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	6,522.0 ft	**Ground Level:**	6,522.0 ft

Wellbore	Re-Entry Sidetrack OPE FTC			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	12/31/2009	9.93	63.76	51,078

Design	Plan #1				
Audit Notes:					
Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**	
	0.0	0.0	0.0	173.52	

Survey Tool Program **Date** 3/15/2011

From (ft)	**To (ft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
0.0	5,393.1	Plan #1 (Re-Entry Sidetrack OPE FTC)	MWD	MWD - Standard

Planned Survey

MD (ft)	**TVD (ft)**	**Inc (°)**	**Azi (°)**	**Build (°/100ft)**	**N/S (ft)**	**E/W (ft)**	**V. Sec (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

DIRECTIONAL PLAN

Company:	Energen Resources	**Local Co-ordinate Reference:**	Well San Juan 32-5 Unit #111S
Project:	SJBR Sec 30-T32N-R05W	**TVD Reference:**	KB @ 6538.0ft (KB)
Site:	Eul Canyon	**MD Reference:**	KB @ 6538.0ft (KB)
Well:	San Juan 32-5 Unit #111S	**North Reference:**	True
Wellbore:	Re-Entry Sidetrack OPE FTC	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	EDM 2003.16 Single User Db

Planned Survey

MD (ft)	TVD (ft)	Inc (°)	Azi (°)	Build (°/100ft)	N/S (ft)	E/W (ft)	V. Sec (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
2,800.0	2,800.0	0.00	0.00	0.00	0.0	0.0	0.0
2,900.0	2,900.0	0.00	0.00	0.00	0.0	0.0	0.0
3,000.0	3,000.0	0.00	0.00	0.00	0.0	0.0	0.0
3,050.0	3,050.0	0.00	0.00	0.00	0.0	0.0	0.0
			KOP				
3,060.0	3,060.0	2.54	173.52	25.36	-0.2	0.0	0.2
3,080.0	3,079.9	7.61	173.52	25.36	-2.0	0.2	2.0
3,100.0	3,099.6	12.68	173.52	25.36	-5.5	0.6	5.5
3,120.0	3,118.9	17.75	173.52	25.36	-10.7	1.2	10.8
3,140.0	3,137.6	22.82	173.52	25.36	-17.6	2.0	17.7
3,160.0	3,155.7	27.89	173.52	25.36	-26.1	3.0	26.3
3,180.0	3,172.9	32.97	173.52	25.36	-36.1	4.1	36.4
3,200.0	3,189.2	38.04	173.52	25.36	-47.7	5.4	48.0
3,220.0	3,204.4	43.11	173.52	25.36	-60.6	6.9	61.0
3,227.5	3,209.8	45.02	173.52	25.43	-65.8	7.5	66.2
3,227.6	3,209.8	45.02	173.52	0.00	-65.8	7.5	66.3
3,240.0	3,218.4	48.17	173.52	25.35	-74.8	8.5	75.3
3,260.0	3,231.0	53.24	173.52	25.35	-90.2	10.2	90.8
3,280.0	3,242.3	58.31	173.52	25.35	-106.6	12.1	107.3
3,300.0	3,252.0	63.38	173.52	25.35	-124.0	14.1	124.8
3,320.0	3,260.2	68.45	173.52	25.35	-142.1	16.1	143.0
3,337.6	3,266.0	72.90	173.52	25.35	-158.6	18.0	159.6
			Top Target Coal				
3,340.0	3,266.7	73.52	173.52	25.35	-160.9	18.3	161.9
3,360.0	3,271.5	78.59	173.52	25.35	-180.2	20.5	181.3
3,380.0	3,274.6	83.66	173.52	25.35	-199.8	22.7	201.1
3,400.0	3,275.9	88.73	173.52	25.35	-219.6	24.9	221.0
3,405.0	3,276.0	90.00	173.52	25.24	-224.6	25.5	226.0
			Land Curve				

Energen

DIRECTIONAL PLAN

Company:	Energen Resources	**Local Co-ordinate Reference:**	Well San Juan 32-5 Unit #111S
Project:	SJBR Sec 30-T32N-R05W	**TVD Reference:**	KB @ 6538.0ft (KB)
Site:	Eul Canyon	**MD Reference:**	KB @ 6538.0ft (KB)
Well:	San Juan 32-5 Unit #111S	**North Reference:**	True
Wellbore:	Re-Entry Sidetrack OPE FTC	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	EDM 2003.16 Single User Db

Planned Survey

MD (ft)	TVD (ft)	Inc (°)	Azi (°)	Build (°/100ft)	N/S (ft)	E/W (ft)	V. Sec (ft)
3,500.0	3,276.0	90.00	173.52	0.00	-319.0	36.2	321.0
3,600.0	3,276.0	90.00	173.52	0.00	-418.3	47.5	421.0
3,700.0	3,276.0	90.00	173.52	0.00	-517.7	58.8	521.0
3,800.0	3,276.0	90.00	173.52	0.00	-617.1	70.1	621.0
3,900.0	3,276.0	90.00	173.52	0.00	-716.4	81.4	721.0
4,000.0	3,276.0	90.00	173.52	0.00	-815.8	92.6	821.0
4,100.0	3,276.0	90.00	173.52	0.00	-915.1	103.9	921.0
4,200.0	3,276.0	90.00	173.52	0.00	-1,014.5	115.2	1,021.0
4,300.0	3,276.0	90.00	173.52	0.00	-1,113.9	126.5	1,121.0
4,400.0	3,276.0	90.00	173.52	0.00	-1,213.2	137.8	1,221.0
4,500.0	3,276.0	90.00	173.52	0.00	-1,312.6	149.1	1,321.0
4,600.0	3,276.0	90.00	173.52	0.00	-1,411.9	160.4	1,421.0
4,700.0	3,275.9	90.00	173.52	0.00	-1,511.3	171.6	1,521.0
4,800.0	3,275.9	90.01	173.52	0.00	-1,610.7	182.9	1,621.0
4,900.0	3,275.9	90.01	173.52	0.00	-1,710.0	194.2	1,721.0
5,000.0	3,275.9	90.01	173.52	0.00	-1,809.4	205.5	1,821.0
5,100.0	3,275.9	90.01	173.52	0.00	-1,908.7	216.8	1,921.0
5,200.0	3,275.9	90.01	173.52	0.00	-2,008.1	228.1	2,021.0
5,300.0	3,275.9	90.01	173.52	0.00	-2,107.5	239.4	2,121.0
5,393.1	3,276.0	90.00	173.51	-0.01	-2,200.0	250.0	2,214.2
				TD Lateral			

Energen

DIRECTIONAL PLAN

Company:	Energen Resources	**Local Co-ordinate Reference:**	Well San Juan 32-5 Unit #111S
Project:	SJBR Sec 30-T32N-R05W	**TVD Reference:**	KB @ 6538.0ft (KB)
Site:	Eul Canyon	**MD Reference:**	KB @ 6538.0ft (KB)
Well:	San Juan 32-5 Unit #111S	**North Reference:**	True
Wellbore:	Re-Entry Sidetrack OPE FTC	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	EDM 2003.16 Single User Db

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
TD Lateral - plan hits target - Point	0.00	0.00	3,276.0	-2,200.0	250.0	2,165,010.27	1,305,342.09	36° 56' 39.249 N	107° 23' 47.921 W
KOP - plan hits target - Point	0.00	0.00	3,050.0	0.0	0.0	2,167,213.12	1,305,118.60	36° 57' 1.001 N	107° 23' 51.000 W
Land Curve - plan hits target - Point	0.00	0.00	3,276.0	-224.6	25.5	2,166,988.23	1,305,141.39	36° 56' 58.780 N	107° 23' 50.686 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
5,393.0	3,275.9	Liner	4-1/2	6-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,337.6	3,266.0	Top Target Coal		0.00	
	3,284.0	Base Target Coal		0.00	

Checked By: _____ Approved By: _____ Date: _____