

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

RECEIVED

JUN 30 2011

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)

SH: 931' FNL 1,055' FEL Sec. 17-T30N-R04W (A)

BHL: 950' FNL 1,800' FEL Sec. 17-T30N-R04W (C)

5. Lease Serial No.

NMSF 079485-B

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No

San Juan 30-4 Unit #106H

9. API Well No

30-039-31005

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

☐ Acidize

☐ Deepen

☐ Production (Start/Resume)

☐ Water Shut-Off

☐ Alter Casing

☐ Fracture Treat

☐ Reclamation

☐ Well Integrity

☐ 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 recompleat 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 recompleat 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 intends to drill the subject well as a S-shape directional well according to the attached reports.

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

Hold C104

for Directional Survey
and "As Drilled" plat

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Andrew Soto

Signature

Title -- Drilling Engineer

Date 6/27/11

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Troy L. Salyers

Title

Petroleum Engineer

Date

7/11/2011

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

FEO

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

NMOC 12



DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised July 16, 2010

DISTRICT II
1301 W. Grand Avenue, Artesia, N.M. 88210

Submit one copy to appropriate
District Office

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

OIL CONSERVATION DIVISION

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

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-31005	² Pool Code 71629	³ Pool Name FRUITLAND COAL
⁴ Property Code 21994	⁵ Property Name SAN JUAN 30-4 UNIT	⁶ Well Number 106H
⁷ OGRID No. 162928	⁸ Operator Name ENERGEN RESOURCES CORPORATION	⁹ Elevation 7321'

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
A	17	30N	4W		931'	NORTH	1055'	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
C	17	30N	4W		950'	NORTH	1800'	WEST	RIO ARRIBA

¹² Dedicated Acres 320Ac N/2	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

16

S 89°58'23" W S 89°59' W		5280.97' (M) 5277.36' (R)	N=2118971.8 E=1342037.90	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 undivided 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>[Signature]</i> Signature Date 6-27-09 Andrew Soto Printed Name asoto@energen.com E-mail Address
FND 3/4" BC BLM 1953 N=2115319.01 E=1336777.54	950'	N=2118970.56 E=1340067.42 N=2118320.56 E=1340068.03	FND 3/4" BC BLM 1953	
1800'		DIRECTIONAL DRILL S 89°31'13" W 2425.88'	1055'	
N=2116029.85 E=1338567.81		BOTTOM HOLE LAT. 36.81625° N (83) LONG. 107.28123° W (83) LAT. 36.81624° N (27) LONG. 107.28063° W (27)	N=2118050.16 E=1340993.60	
N=2116344.94 E=1338779.37		WELL FLAG LAT. 36.81638° N (83) LONG. 107.27294° W (83) LAT. 36.81637° N (27) LONG. 107.27234° W (27)	N=2115342.87 E=1342040.40	
NOTE: NORTHINGS AND EASTINGS SHOWN HEREON REFLECT THE CENTRAL ZONE OF THE NEW MEXICO STATE PLANE COORDINATE SYSTEM (NAD83)				
FND 3/4" BC BLM 1953				

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

MARCH 24, 2009

Date of Survey

Signature and Seal of Professional Surveyor:

DAVID RUSSELL

Certificate Number

10201

6/28/2011



OPERATIONS PLAN

WELL NAME.....San Juan 30-4 Unit #106H
JOB TYPE.....S-Shape OPE FTC
DEPT.....Drilling and Completions
PREPARED BY.....Andrew Soto

GENERAL INFORMATION

Surface Location	931 FNL 1055 FEL
S-T-R	(A) Sec. 17, T30N, R04W
Bottom Hole Location	950' FNL 1,800' FWL
S-T-R	(C) Sec. 17, T30N, R04W
County, State	Rio Arriba, New Mexico
Elevations	7321' GL
Total Depth	5,208' +/- (MD); 4,192' (TVD)
Formation Objective	Basin Fruitland Coal

FORMATION TOPS

San Jose	Surface
Nacimiento	2,699' (TVD), 3,156' MD
Ojo Alamo Ss	3,436' (TVD), 4,270' MD
Kirtland Sh	3,679' (TVD), 4,636' MD
Fruitland Fm	3,857' (TVD), 4,860' MD
Top Target Coal	4,026' (TVD), 5,041' MD
Base Target Coal	4,042' (TVD), 5,057' MD
Total Depth	4,192' (TVD), 5,209' MD

DRILLING

Surface: 12 1/4" wellbore will be drilled with a fresh water mud system (spud mud).

Production: 8 3/4" wellbore will be drilled with a LSD mud system. Weighting materials will be drill cuttings and if needed barite. Mud density is expected to range from 8.4 ppg to 9.0 ppg. Only acid soluble LCM may be used in production section. Anticipated BHP can be as high as 1,100 psi.

Projected KOP is 1,406' TVD with 8.0°/100' doglegs.

Blowout Control Specifications:

A 3,000 psi minimum double ram or annulus BOP stack will be used following nipple up of casing head. A 2" nominal, 2,000 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 2,000 psi for 15 min.**

Logging Program:

Open hole logs: Schlumberger Platform Express

Mudlogs: 3,389' TVD, 4,200' MD to TD

Surveys: Surface to KOP every 500' and a minimum of every 200' for directional.

6/28/2011

CASING, TUBING & CASING EQUIPMENT

String	Start Depth	End Depth	Wellbore	Size	Wt	Grade
Surface	0	500	12 1/4"	9 5/8"	32.3 lb/ft	H-40 ST&C
Production	0	5,209'	8 3/4"	7"	23 lb/ft	J-55 LT&C
TVD	0	4,192'				
Tubing	0	5,100'	None	2 3/8"	4.7 lb/ft	J-55

Surface Casing: Texas Pattern Guide Shoe on bottom of first joint and an insert float valve on top of first joint. Casing centralization with a minimum of 3 standard bow spring centralizers to achieve optimal standoff.

Production Casing: Self fill float shoe with self fill float collar on bottom and top of first joint. Casing centralization with double bow spring centralizers to optimize standoff. DV tool set at 3,400' MD for cement operations!

WELLHEAD

~~11" 3,000 x 9-5/8" weld/slip on casing head. 9-5/8" x 7" x 2 3/8" 5,000 psi Flanged Wellhead.~~

CEMENTING

Surface Casing: 266 sks Type V with 2.0 % CaCl₂ and 1/4 #/sk Flocele (15.6 ppg, 1.18 ft³/sk 314 ft³ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 750 psi for 30 min.

Production Casing: Circulate hole at least 1-1/2 hole volumes of mud and reduce funnel viscosity to aid in hole cleanout. Stage 1 to begin at 3,400' – 5,209' MD.

First Stage: Pre-flush with 5 bbls H2O + 20 bbls Mud Flush + 5 bbls H2O and follow with Lead with 170 sks San Juan PRB II with 5#/sk Gilsonite and 1/4 #/sk Flocele (12.3 ppg, 2.24 ft³/sk, 381 ft³) and a tail of 50 sks San Juan PRB II with 5#/sk Gilsonite and 1/4 #/sk Flocele (13.5 ppg, 1.81 ft³/sk, 90.5 ft³). Circulate 100% excess lead off of stage tool. Circulated 4-5 hours between stages at time plug down on first stage.

Second Stage: 456 sks of San Juan PRB II with 5#/sk Gilsonite and 1/4 #/sk Flocele (12.3 ppg, 2.24 ft³/sk, 1,021 ft³) of slurry. Circulate 100% excess to surface.

Set slips with full string weight. Completions will test casing to 1,200 psi for 30 min. (See COR)
If cement does not circulate, run temperature survey in 8 hrs. to determine TOC.

OTHER INFORMATION

- 1) This well will be hydraulically fractured.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control.
- 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. The 30-4 Unit #62 well in the NW/4 of section 18 will be shut in during drilling operations.
- 4) No abnormal temperatures or pressures are anticipated.
- 5) This gas is dedicated.

Energen Resources

Rio Arriba County

Sec17 T30N-R04W

San Juan 30-4 Unit #106H

Wellbore #1

Plan: Design #3

Standard Planning Report

27 June, 2011

Energen Resources

San Juan 30-4 Unit #106H

Sec17 T30N-R04W

Rio Arriba, New Mexico

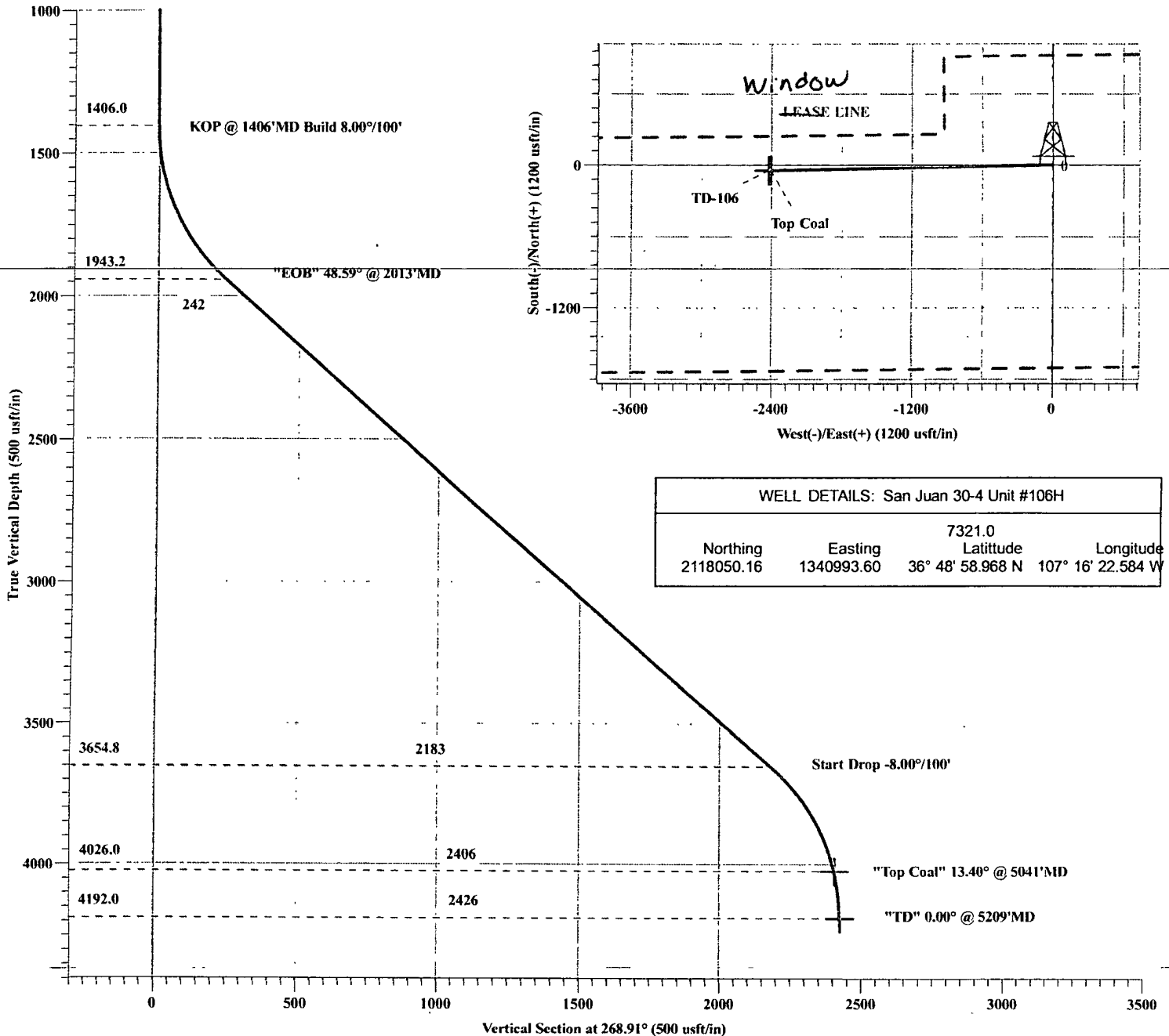
GL: 7321' KB: 13'



A Schlumberger Company

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Top Coal	4026.0	-45.9	-2405.9	2118030.01	1338587.31	Point
TD-106	4192.0	-46.3	-2425.4	2118029.85	1338567.81	Point



WELL DETAILS: San Juan 30-4 Unit #106H

Northing	Easting	Latitude	Longitude
2118050.16	1340993.60	36° 48' 58.968 N	107° 16' 22.584 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
1406.0	0.00	0.00	1406.0	0.0	0.0	0.00	0.00	0.0	
2013.4	48.59	268.91	1943.2	-4.6	-242.4	8.00	268.91	242.5	
4601.3	48.59	268.91	3654.8	-41.6	-2183.0	0.00	0.00	2183.4	
5208.6	0.00	0.00	4192.0	-46.3	-2425.4	8.00	180.00	2425.9	TD-106

Plan: Design #3 (San Juan 30-4 Unit #106H/Wellbore #1)

Created By: Frank C. Scardino

Date: 6/27/2011

Planning Report

Database: EDM 5000.1 Single User Db
 Company: Energen Resources
 Project: Rio Arriba County
 Site: Sec17 T30N-R04W
 Well: San Juan 30-4 Unit #106H
 Wellbore: Wellbore #1
 Design: Design #3

Local Co-ordinate Reference: Well San Juan 30-4 Unit #106H
 TVD Reference: WELL @ 7334.0usft (Original Well Elev)
 MD Reference: WELL @ 7334.0usft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Project	Rio Arriba County		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Central Zone		

Site	Sec17 T30N-R04W		
Site Position:	Northing:	2,118,050 16 usft	Latitude: 36° 48' 58 968 N
From: Map	Easting:	1,340,993 60 usft	Longitude: 107° 16' 22.584 W
Position Uncertainty:	0 0 usft	Slot Radius: 13-3/16 "	Grid Convergence: -0 61 °

Well	San Juan 30-4 Unit #106H		
Well Position	+N/-S	0 0 usft	Northing: 2,118,050 16 usft
	+E/-W	0 0 usft	Easting: 1,340,993 60 usft
Position Uncertainty	0 0 usft	Wellhead Elevation:	Ground Level: 7,321 0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	06/27/11	9 69
			Dip Angle (°)
			63 62
			Field Strength (nT)
			50,834

Design	Design #3		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0 0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
			Direction (°)
			268.91

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0 0	0 00	0 00	0 0	0 0	0 0	0 00	0 00	0 00	0 00	
1,406 0	0 00	0 00	1,406 0	0 0	0 0	0 00	0 00	0 00	0 00	
2,013 4	48.59	268.91	1,943 2	-4.6	-242 4	8 00	8 00	0 00	268.91	
4,601 3	48 59	268 91	3,654 8	-41 6	-2,183 0	0 00	0 00	0 00	0 00	
5,208.6	0 00	0 00	4,192.0	-46.3	-2,425 4	8 00	-8 00	0 00	180.00	TD-106

Planning Report

Database: EDM 5000.1 Single User Db
Company: Energen Resources
Project: Rio Arriba County
Site: Sec17 T30N-R04W
Well: San Juan 30-4 Unit #106H
Wellbore: Wellbore #1
Design: Design #3

Local Co-ordinate Reference: Well San Juan 30-4 Unit #106H
TVD Reference: WELL @ 7334.0usft (Original Well Elev)
MD Reference: WELL @ 7334.0usft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,406.0	0.00	0.00	1,406.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP @ 1406'MD Build 8.00°/100'									
1,450.0	3.52	268.91	1,450.0	0.0	-1.4	1.4	8.00	8.00	0.00
1,500.0	7.52	268.91	1,499.7	-0.1	-6.2	6.2	8.00	8.00	0.00
1,550.0	11.52	268.91	1,549.0	-0.3	-14.4	14.4	8.00	8.00	0.00
1,600.0	15.52	268.91	1,597.6	-0.5	-26.1	26.1	8.00	8.00	0.00
1,650.0	19.52	268.91	1,645.3	-0.8	-41.2	41.2	8.00	8.00	0.00
1,700.0	23.52	268.91	1,691.8	-1.1	-59.5	59.5	8.00	8.00	0.00
1,750.0	27.52	268.91	1,736.9	-1.5	-81.0	81.0	8.00	8.00	0.00
1,800.0	31.52	268.91	1,780.4	-2.0	-105.7	105.7	8.00	8.00	0.00
1,850.0	35.52	268.91	1,822.1	-2.5	-133.3	133.3	8.00	8.00	0.00
1,900.0	39.52	268.91	1,861.8	-3.1	-163.7	163.7	8.00	8.00	0.00
1,950.0	43.52	268.91	1,899.2	-3.8	-196.8	196.9	8.00	8.00	0.00
2,000.0	47.52	268.91	1,934.2	-4.4	-232.5	232.5	8.00	8.00	0.00
2,013.4	48.59	268.91	1,943.2	-4.6	-242.4	242.5	8.00	8.00	0.00
"EOB" 48.59° @ 2013'MD									
2,100.0	48.59	268.91	2,000.4	-5.9	-307.4	307.4	0.00	0.00	0.00
2,200.0	48.59	268.91	2,066.6	-7.3	-382.4	382.4	0.00	0.00	0.00
2,300.0	48.59	268.91	2,132.7	-8.7	-457.4	457.4	0.00	0.00	0.00
2,400.0	48.59	268.91	2,198.9	-10.2	-532.3	532.4	0.00	0.00	0.00
2,500.0	48.59	268.91	2,265.0	-11.6	-607.3	607.4	0.00	0.00	0.00
2,600.0	48.59	268.91	2,331.2	-13.0	-682.3	682.4	0.00	0.00	0.00
2,700.0	48.59	268.91	2,397.3	-14.4	-757.3	757.4	0.00	0.00	0.00
2,800.0	48.59	268.91	2,463.4	-15.9	-832.3	832.4	0.00	0.00	0.00
2,900.0	48.59	268.91	2,529.6	-17.3	-907.3	907.4	0.00	0.00	0.00
3,000.0	48.59	268.91	2,595.7	-18.7	-982.3	982.4	0.00	0.00	0.00
3,100.0	48.59	268.91	2,661.9	-20.2	-1,057.3	1,057.4	0.00	0.00	0.00
3,200.0	48.59	268.91	2,728.0	-21.6	-1,132.2	1,132.4	0.00	0.00	0.00
3,300.0	48.59	268.91	2,794.2	-23.0	-1,207.2	1,207.4	0.00	0.00	0.00
3,400.0	48.59	268.91	2,860.3	-24.5	-1,282.2	1,282.4	0.00	0.00	0.00
3,500.0	48.59	268.91	2,926.4	-25.9	-1,357.2	1,357.5	0.00	0.00	0.00
3,600.0	48.59	268.91	2,992.6	-27.3	-1,432.2	1,432.5	0.00	0.00	0.00
3,700.0	48.59	268.91	3,058.7	-28.7	-1,507.2	1,507.5	0.00	0.00	0.00
3,800.0	48.59	268.91	3,124.9	-30.2	-1,582.2	1,582.5	0.00	0.00	0.00
3,900.0	48.59	268.91	3,191.0	-31.6	-1,657.2	1,657.5	0.00	0.00	0.00
4,000.0	48.59	268.91	3,257.2	-33.0	-1,732.1	1,732.5	0.00	0.00	0.00
4,100.0	48.59	268.91	3,323.3	-34.5	-1,807.1	1,807.5	0.00	0.00	0.00
4,200.0	48.59	268.91	3,389.4	-35.9	-1,882.1	1,882.5	0.00	0.00	0.00
4,300.0	48.59	268.91	3,455.6	-37.3	-1,957.1	1,957.5	0.00	0.00	0.00
4,400.0	48.59	268.91	3,521.7	-38.8	-2,032.1	2,032.5	0.00	0.00	0.00
4,500.0	48.59	268.91	3,587.9	-40.2	-2,107.1	2,107.5	0.00	0.00	0.00
4,601.3	48.59	268.91	3,654.8	-41.6	-2,183.0	2,183.4	0.00	0.00	0.00
Start Drop -8.00°/100'									
4,650.0	44.69	268.91	3,688.3	-42.3	-2,218.4	2,218.8	8.00	-8.00	0.00
4,700.0	40.69	268.91	3,725.1	-43.0	-2,252.3	2,252.7	8.00	-8.00	0.00
4,750.0	36.69	268.91	3,764.1	-43.6	-2,283.6	2,284.0	8.00	-8.00	0.00
4,800.0	32.69	268.91	3,805.2	-44.1	-2,312.0	2,312.4	8.00	-8.00	0.00
4,850.0	28.69	268.91	3,848.2	-44.6	-2,337.5	2,337.9	8.00	-8.00	0.00
4,900.0	24.69	268.91	3,892.8	-45.0	-2,360.0	2,360.4	8.00	-8.00	0.00
4,950.0	20.69	268.91	3,938.9	-45.4	-2,379.2	2,379.7	8.00	-8.00	0.00
5,000.0	16.69	268.91	3,986.3	-45.7	-2,395.3	2,395.7	8.00	-8.00	0.00
5,041.1	13.40	268.91	4,026.0	-45.9	-2,405.9	2,406.4	8.00	-8.00	0.00
"Top Coal" 13.40° @ 5041'MD									

Planning Report

Database: EDM 5000.1 Single User Db
Company: Energen Resources
Project: Rio Arriba County
Site: Sec17 T30N-R04W
Well: San Juan 30-4 Unit #106H
Wellbore: Wellbore #1
Design: Design #3

Local Co-ordinate Reference: Well San Juan 30-4 Unit #106H
TVD Reference: WELL @ 7334.0usft (Original Well Elev)
MD Reference: WELL @ 7334 0usft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,050.0	12.69	268.91	4,034.7	-45.9	-2,407.9	2,408.4	8.00	-8.00	0.00
5,100.0	8.69	268.91	4,083.8	-46.1	-2,417.2	2,417.7	8.00	-8.00	0.00
5,150.0	4.69	268.91	4,133.4	-46.2	-2,423.0	2,423.5	8.00	-8.00	0.00
5,200.0	0.69	268.91	4,183.4	-46.3	-2,425.4	2,425.8	8.00	-8.00	0.00
5,208.6	0.00	268.91	4,192.0	-46.3	-2,425.4	2,425.9	8.00	-8.00	0.00
"TD" 0.00° @ 5209'MD									

Design Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N-S (usft)	+E-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
Top Coal	0.00	0.00	4,026.0	-45.9	-2,405.9	2,118,030.01	1,338,587.31	36° 48' 58.513 N	107° 16' 52.172 W
- plan hits target center									
- Point									
TD-106	0.00	0.00	4,192.0	-46.3	-2,425.4	2,118,029.85	1,338,567.81	36° 48' 58.510 N	107° 16' 52.412 W
- plan hits target center									
- Point									

Plan Annotations

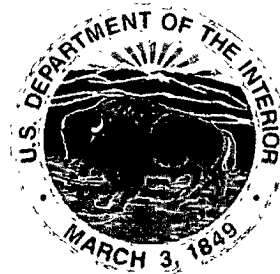
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
1,406.0	1,406.0	0.0	0.0	KOP @ 1406'MD Build 8.00°/100'
2,013.4	1,943.2	-4.6	-242.4	"EOB" 48.59° @ 2013'MD
4,601.3	3,654.8	-41.6	-2,183.0	Start Drop -8.00°/100'
5,041.1	4,026.0	-45.9	-2,405.9	"Top Coal" 13.40° @ 5041'MD
5,208.6	4,192.0	-46.3	-2,425.4	"TD" 0.00° @ 5209'MD

DRILLING CONDITIONS OF APPROVAL

Operator: Energen Resources
Lease No.: NMSF-079485-B
Well Name: San Juan 30-4 Unit #106H
Well Location: Sec.17, T30N, R4W; 931' FNL & 1055' FEL

Refer to Onshore Order 2 III.B.1.h

Pressure test the 7" production casing to a minimum of 1500 psi for 30 minutes.



After hour contact: Troy Salyers 505-360-9815