

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised July 10, 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

*API Number		*Pool Code	*Pool Name
			BASIN FRUITLAND COAL
*Property Code	*Property Name		*Well Number
	CARRACAS 8B		16H
*CGRID No.	*Operator Name		*Elevation
162928	ENERGEN RESOURCES CORPORATION		6183'

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
L	9	32N	4W	8	2095'	SOUTH	119'	WEST	RIO ARriba

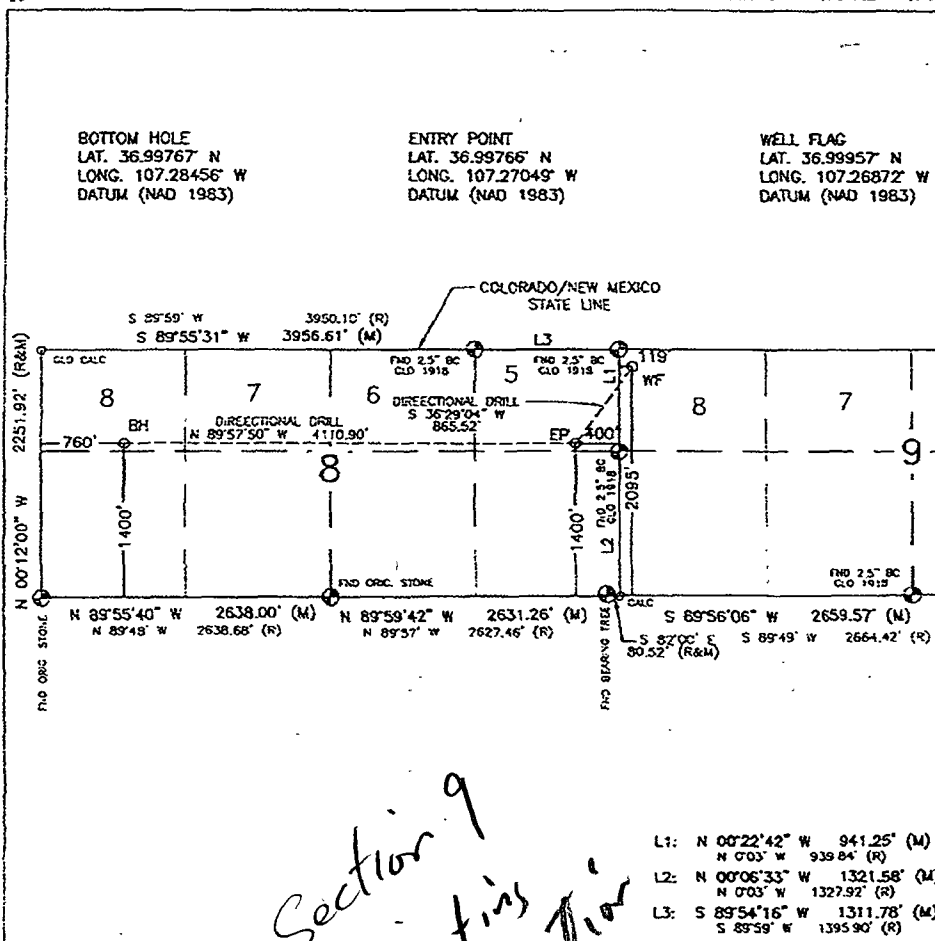
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	8	32N	4W	8	1400'	SOUTH	760'	WEST	RIO ARriba

*Dedicated Acres	*Joint or Infill	*Consolidation Code	*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

18



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.

Signature _____ Date _____

Printed Name _____

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.

FEBRUARY 7, 2011

Date of Survey

Signature and Seal of Professional Surveyor:

David Russell
DAVID RUSSELL
Certificate Number 10201

ENERGEN EX. NO. 1
NMOCD CASE # 14653
MAY 26, 2011

Energen Resources

Carson National Forest

8B; Sec 8 T 32N R4W

Carracas 8B #16H

Wellbore #1

Plan: Design #1

APD Report

31 March, 2011

Project: Carson National Forest

Location: 8B; Sec 8; T1N R4W

Well: Carracas 8B #16H

Wellbore: Wellbore #1

Design #1 (Carracas 8B #16H/Wellbore #1)

PROJECT DETAILS: Carson National Forest

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

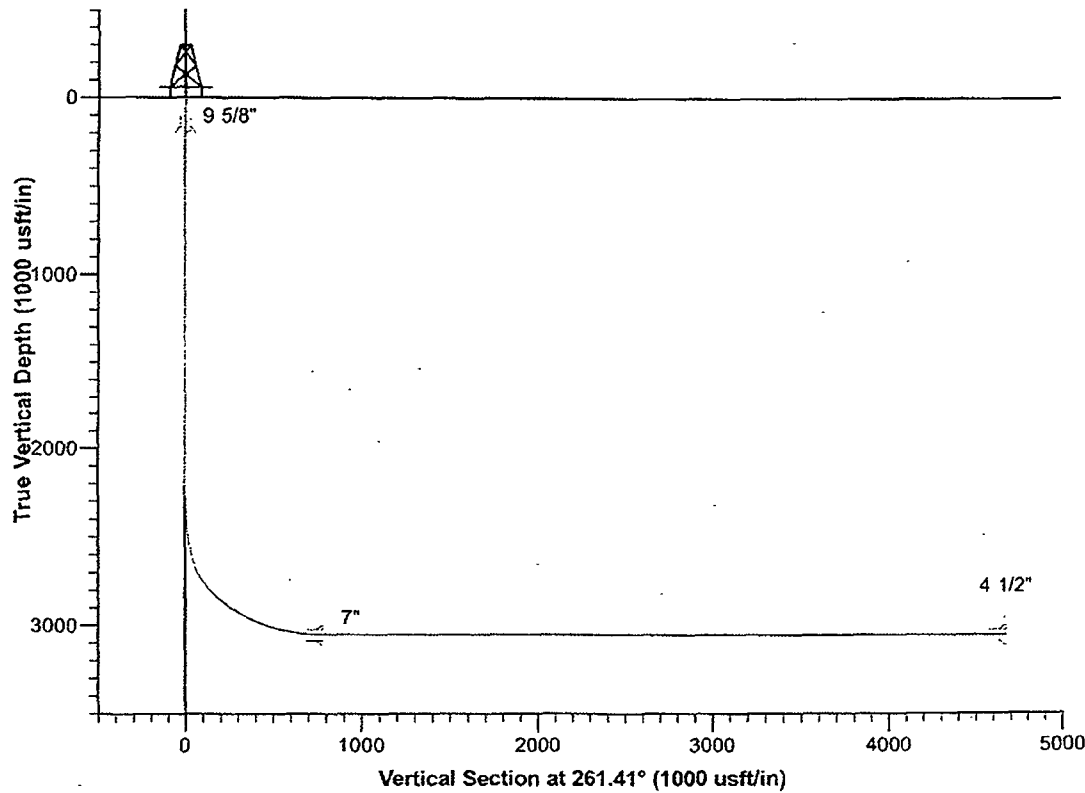
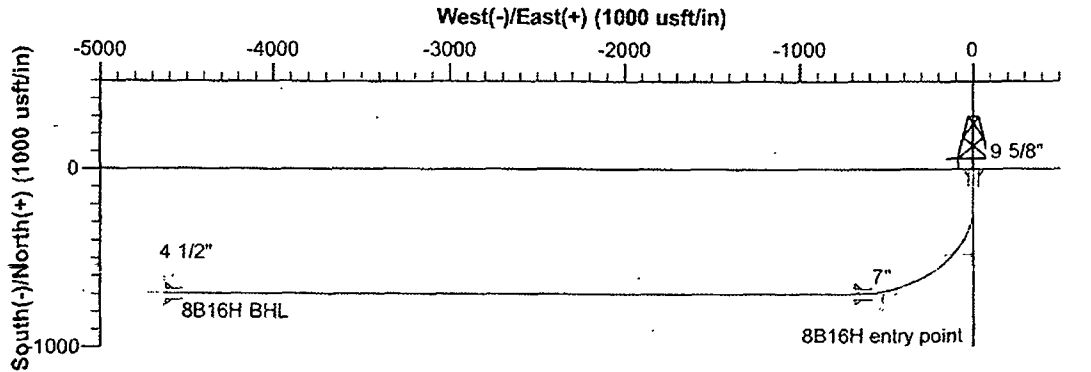


Azimuths to True North
Magnetic North: 9.72°

Magnetic Field
Strength: 51006.6snT
Dip Angle: 63.80°
Date: 3/29/2011
Model: IGRF200510

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2100.0	0.00	0.00	2100.0	0.0	0.0	0.00	0.00	0.0	
3	2633.5	46.00	180.00	2578.0	-202.9	0.0	8.62	180.00	30.3	
4	3716.6	90.00	270.00	3057.0	-698.9	-689.5	8.31	90.00	786.2	
5	7654.3	90.00	270.00	3057.0	-698.9	-4627.2	0.00	0.00	4679.7	8B16H BHL



Energen APD Report

Company: Energen Resources
Project: Carson National Forest
Site: 8B; Sec 8 T 32N R4W
Well: Carracas 8B #16H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Site 8B; Sec 8 T 32N R4W
TVD Reference: WELL @ 6197.0usft (Original Well Elev)
MD Reference: WELL @ 6197.0usft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Project	Carson National Forest		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Central Zone		

Site 8B; Sec 8 T 32N R4W

Site Position:	Northing:	2,184,731.55 usft	Latitude:	36° 59' 58.452 N
From: Lat/Long	Easting:	1,342,941.07 usft	Longitude:	107° 16' 7.392 W
Position Uncertainty: 0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.61 °

Well Carracas 8B #16H

Well Position	+N/-S	0.0 usft	Northing:	2,184,731.55 usft	Latitude:	36° 59' 58.452 N
	+E/-W	0.0 usft	Easting:	1,342,941.07 usft	Longitude:	107° 16' 7.392 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	6,183.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	3/29/2011	9.72	63.80	51,007

Design Design #1

Audit Notes:

Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	261.41

Survey Tool Program Date 3/31/2011

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	7,654.3	Design #1 (Wellbore #1)	MWD	MWD - Standard

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Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.00
200.0	0.00	0.00	0.0	0.0	0.0	0.00
9 5/8"						
1,104.0	0.00	0.00	0.0	0.0	0.0	0.00
Nacimiento						
2,100.0	0.00	0.00	0.0	0.0	0.0	0.00
2,200.0	8.62	180.00	1.1	-7.5	0.0	8.62
2,300.0	17.24	180.00	4.5	-29.9	0.0	8.62
2,360.6	22.47	180.00	7.5	-50.5	0.0	8.62
Ojo Alamo						
2,400.0	25.87	180.00	9.9	-66.6	0.0	8.62
2,500.0	34.49	180.00	17.4	-116.8	0.0	8.62
2,535.5	37.55	180.00	20.6	-137.7	0.0	8.62
Kirtland						
2,600.0	43.11	180.00	26.8	-179.4	0.0	8.62
2,633.5	46.00	180.00	30.3	-202.9	0.0	8.62
2,700.0	46.26	187.66	40.6	-250.7	-3.2	8.31
2,800.0	47.58	198.90	67.8	-321.5	-20.0	8.31
2,900.0	49.95	209.50	108.5	-389.9	-50.9	8.31
3,000.0	53.21	219.26	161.9	-454.3	-95.1	8.31
3,049.9	55.12	223.80	193.0	-484.6	-122.0	8.31
Fruitland						
3,100.0	57.20	228.14	226.9	-513.5	-151.9	8.31
3,200.0	61.76	236.21	302.0	-566.1	-219.9	8.31
3,300.0	66.76	243.59	385.7	-611.1	-297.8	8.31
3,400.0	72.07	250.42	476.3	-647.5	-383.9	8.31
3,484.0	76.71	255.84	556.3	-671.0	-461.3	8.31
Fruitland Coal						

Energen APD Report

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MD (usft)	Inc (°)	Azi (azimuth) (°)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)
3,500.0	77.60	256.84	571.9	-674.6	-476.5	8.31
3,548.7	80.36	259.87	619.6	-684.3	-523.3	8.31
8B16H entry point						
3,600.0	83.28	263.00	670.4	-691.8	-573.5	8.31
3,700.0	89.04	269.01	769.7	-698.8	-672.9	8.31
3,715.0	89.91	269.90	784.6	-698.9	-687.9	8.31
7"						
3,716.6	90.00	270.00	786.2	-698.9	-689.5	8.31
3,800.0	90.00	270.00	858.6	-698.9	-772.9	0.00
3,900.0	90.00	270.00	967.5	-698.9	-872.9	0.00
4,000.0	90.00	270.00	1,066.4	-698.9	-972.9	0.00
4,100.0	90.00	270.00	1,165.3	-698.9	-1,072.9	0.00
4,200.0	90.00	270.00	1,264.1	-698.9	-1,172.9	0.00
4,300.0	90.00	270.00	1,363.0	-698.9	-1,272.9	0.00
4,400.0	90.00	270.00	1,461.9	-698.9	-1,372.9	0.00
4,500.0	90.00	270.00	1,560.8	-698.9	-1,472.9	0.00
4,600.0	90.00	270.00	1,659.7	-698.9	-1,572.9	0.00
4,700.0	90.00	270.00	1,758.5	-698.9	-1,672.9	0.00
4,800.0	90.00	270.00	1,857.4	-698.9	-1,772.9	0.00
4,900.0	90.00	270.00	1,956.3	-698.9	-1,872.9	0.00
5,000.0	90.00	270.00	2,055.2	-698.9	-1,972.9	0.00
5,100.0	90.00	270.00	2,154.1	-698.9	-2,072.9	0.00
5,200.0	90.00	270.00	2,252.9	-698.9	-2,172.9	0.00
5,300.0	90.00	270.00	2,351.8	-698.9	-2,272.9	0.00
5,400.0	90.00	270.00	2,450.7	-698.9	-2,372.9	0.00
5,500.0	90.00	270.00	2,549.6	-698.9	-2,472.9	0.00
5,600.0	90.00	270.00	2,648.4	-698.9	-2,572.9	0.00

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5,700.0	90.00	270.00	2,747.3	-698.9	-2,672.9	0.00
5,800.0	90.00	270.00	2,846.2	-698.9	-2,772.9	0.00
5,900.0	90.00	270.00	2,945.1	-698.9	-2,872.9	0.00
6,000.0	90.00	270.00	3,044.0	-698.9	-2,972.9	0.00
6,100.0	90.00	270.00	3,142.8	-698.9	-3,072.9	0.00
6,200.0	90.00	270.00	3,241.7	-698.9	-3,172.9	0.00
6,300.0	90.00	270.00	3,340.6	-698.9	-3,272.9	0.00
6,400.0	90.00	270.00	3,439.5	-698.9	-3,372.9	0.00
6,500.0	90.00	270.00	3,538.3	-698.9	-3,472.9	0.00
6,600.0	90.00	270.00	3,637.2	-698.9	-3,572.9	0.00
6,700.0	90.00	270.00	3,736.1	-698.9	-3,672.9	0.00
6,800.0	90.00	270.00	3,835.0	-698.9	-3,772.9	0.00
6,900.0	90.00	270.00	3,933.9	-698.9	-3,872.9	0.00
7,000.0	90.00	270.00	4,032.7	-698.9	-3,972.9	0.00
7,100.0	90.00	270.00	4,131.6	-698.9	-4,072.9	0.00
7,200.0	90.00	270.00	4,230.5	-698.9	-4,172.9	0.00
7,300.0	90.00	270.00	4,329.4	-698.9	-4,272.9	0.00
7,400.0	90.00	270.00	4,428.3	-698.9	-4,372.9	0.00
7,500.0	90.00	270.00	4,527.1	-698.9	-4,472.9	0.00
7,600.0	90.00	270.00	4,626.0	-698.9	-4,572.9	0.00
7,650.0	90.00	270.00	4,675.5	-698.9	-4,622.9	0.00
4 1/2"						
7,654.3	90.00	270.00	4,679.7	-698.9	-4,627.2	0.00
8B16H BHL						

Energen APD Report

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Casing Points

Measured Depth (usft)	Vertical Depth (usft)		Name	Casing Diameter (")	Hole Diameter (")
7,650.0	3,057.0	4 1/2"		4-1/2	6-1/4
3,715.0	3,057.0	7"		7	8-3/4
200.0	200.0	9 5/8"		9-5/8	12-1/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,104.0	1,104.0	Nacimiento		0.00	
2,360.6	2,354.0	Ojo Alamo		0.00	
3,049.9	2,850.0	Fruitland		0.00	
2,535.5	2,505.0	Kirtland		0.00	
3,484.0	3,030.0	Fruitland Coal		0.00	

Checked By: _____	Approved By: _____	Date: _____
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