Form 3160-5 (April 2004)

Approved by

UNITED STATES

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

٠.	Lta	المحرية	ıaı	14
	/		_	

SUNDRY	NOTICES	AND	REPORTS	ON	WELLS	

TATATATA YOU)12		
6. If Indian,	Allottee or T	ribe Name	

Do not use this form for proposals to dril abandoned well. Use Form 3160-3 (APD) f		6. It Indian, Allottee or Tribe Name
SUBMIT IN TRIPLICATE - Other instruction	ns on reverse side MHR 20	7. If Unit or CA/Agreement, Name and/or No.
Type of Well Oil Well X Gas Well Other Name of Operator	RECEIV 070 FARMING	[] [] [] [] [] [] [] [] [] []
Energen Resources Corporation		9. API Well No.
a. Address	3b. Phone No. (include area code)	30-039-24411
2198 Bloomfield Highway, Farmington, NM 87401	505.325.6800	10. Field and Pool, or Exploratory Area
Location of Well (Footage, Sec., T., R., M., or Survey Description)		Basin Fruitland Coal
1500' FNL, 1020' FEL NE/4		11. County or Parish, State
(H) S35, T32N, R5W		
12. CHECK APPROPRIATE BOX(ES) TO IN	NDICATE NATURE OF NOTICE RE	
TYPE OF SUBMISSION	TYPE OF ACTION	N
X Notice of Intent Acidize	Deepen Producti	on (Start/Resume) Water Shut-Off
Alter Casing	Fracture Treat Reclama	
Subsequent Report Casing Repair	New Construction X Recomp	H
Casing Repair		
Final Abandonment Notice		arily Abandon
Convert to Inject	ction Plug Back Water D	isposal
3. Describe Proposed or Completed Operation (clearly state all pertinent de If the proposal is to deepen directionally or recomplete horizontally, give Attach the Bond under which the work will be performed or provide the following completion of the involved operations. If the operation result testing has been completed. Final Abandonment Notices shall be filed determined that the final site is ready for final inspection.) Energen Resources proposes a recompletion of the a horizontal lateral off the existing vertical directional wellplan. A whipstock will be set 5 1/2" casing. The lateral will be drilled to completion. 2 3/8" tubing will be landed at 36	e subsurface locations and measured and true versions and measured and true versions and measured and true versions on file with BLM/BIA. Required in a sin a multiple completion or recompletion in a only after all requirements, including reclamations are carracas 35A #8 in the Basin wellbore as indicated on the at 3420' +/- (TVD) and a winds 4688' (MD), 3672' (TVD). This	vertical depths of all pertinent markers and zones. I subsequent reports shall be filed within 30 days a new interval, a Form 3160-4 shall be filed once tion, have been completed, and the operator has in Fruitland Coal by drilling attached C-102 and ow milled in the existing is will be an open hole
CONDITIONS OF APPROVAL Adhere to previously issued stipulations	~ \@	TTACHED FOR NS OF APPROVAL
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)	Title	
Nathan Smith	Drilling Enginee	ar
Note Sel	Date 3/20/06	
THIS SPACE FOR FE	DERAL OR STATE OFFICE USE	-

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. 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. NÍMOCD

Office

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210 District III

1000 Rio Brazos Rd., Azrec, NM 87410

District IV

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

State of New Mexico Energy, Minerals & Natural Resources

Form C-102 Revised June 10, 2003

OIL CONSERVATION DIVISION 1220 South St. Francis DENH 20 Santa Fe, NM 87505

Submit to Appropriate District Office 3 54 State Lease - 4 Copies

Fee Lease - 3 Copies

X AMENDED REPORT

WI	ELL LOCATION AND ACR	EAGE DEDICA	TION PLAT	
¹ API Number	² Pool Code	Ο ,	³ Pool Name	
30-039-24411	71629	Busin	Fruitland Coal	
⁴ Property Code	⁵ Proper	6 Well Number		
	Carra	-8		
⁷ OGRID No.	⁸ Opera	9 Elevation		
162928	Energen Resour	6910		

¹⁰Surface Location

UL or lat no.	Section	Township	Range	Lot. Idn	Feet from the	North/South line	Feet from the	East/West line	County
н	35	32N	-5W		1500	North	1020	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
В	35	32N	5W		760	North	1880	East	Rio Arriba
12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No.									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A

	NUN-STAND	ARD UNIT HAS BEE	N APPROVED BY	THE DIVISION
16				17 OPERATOR CERTIFICATION
		700		hereby certify that the information contained herein is
		760	1500	true and complete to the best of my knowledge and
		1		belief.
		BHL	1880	1 Shansan
				Signature
		1134.54		
				Nathan Smith
			SHL 1020	Printed Name
		1		
				Drilling Engineer
				Title and E-mail Address
				2/22/2006
		_		Date
		1		
				I hereby certify that the well location shown on this
			E/2	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.
		1		Septemeber 1, 1988
				Date of Survey
				Signature and Seat of Professional Surveyer:
	/			Original survey for wellpad done by
				Edgar L. Risenlicover
				NM Surveyor # .5979
	\setminus			
		\		/
				Certificate Number
	1			Certificate Number



Energen Resources Corporation

Rio Arriba, NM Sec.35 T32N-R5W Carracas 35-A #8 Wellbore #1

Plan: Plan #1

Standard Planning Report

01 March, 2006



Pathfinder

Planning Report

Database:

EDM 2003.14 Single User Db

Company:

Energen Resources Corporation

Project: Site:

Rio Arriba, NM

Sec.35 T32N-R5W Carracas 35-A #8 Well: Wellbore #1 Wellbore: Plan #1

Local Co-ordinate Reference:

Well Carracas 35-A #8

TVD Reference: **MD Reference:**

WELL @ 0.0ft (Original Well Elev) WELL @ 0.0ft (Original Well Elev)

North Reference: Survey Calculation Method: True

Minimum Curvature

Project

Design:

Rio Arriba, NM

Map System: Geo Datum:

US State Plane 1927 (Exact solution)

NAD 1927 (NADCON CONUS)

Map Zone:

New Mexico Central 3002

System Datum:

Mean Sea Level

Site

Well

Sec.35 T32N-R5W

Site Position: From:

Мар

Northing: Easting:

ft ft

Latitude:

Longitude:

30° 59' 24.511 N 107° 50' 44.190 W

Position Uncertainty:

0.0 ft

Slot Radius:

Grid Convergence:

-0.82 °

Well Position

Carracas 35-A #8

+N/-S

+E/-W

Plan #1

0.0 ft 0.0 ft

Easting:

Northing:

0.00 ft 0.00 ft

9.78

Latitude: Longitude:

30° 59' 24.511 N 107° 50' 44.190 W

47,833

Position Uncertainty

0.0 ft

Wellhead Elevation:

ft

Ground Level:

0.0ft

Wellbore

Wellbore #1

Magnetics

Model Name

Sample Date

3/1/2006

Declination (°)

Dip Angle (°)

Field Strenath

(nT)

IGRF2005

Design **Audit Notes:**

Version:

Phase:

PROTOTYPE

Tie On Depth:

0.0

58.28

Vertical Section:

Depth From (TVD)

+N/-S (ft)

+E/-W (ft)

Direction

(ft) 0.0 0.0

0.0

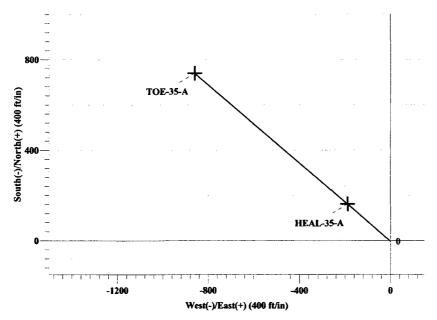
(°) 310.71

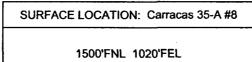
Plan Section	5 :									
Measured Depth (ft)	Inclination (°)	Azimuth	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°) Target	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,412.0	0.00	0.00	3,412.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,803.1	90.00	310.71	3,661.0	162.4	-188.7	23.01	23.01	0.00	310.71 HEAL-35-A	
4 688 7	90.00	310.71	3 661 0	740 0	-860.0	0.00	0.00	0.00	0.00 TOF-35-A	

Energen Resources Corp.

PATH FINDER
ENERGY SERVICES

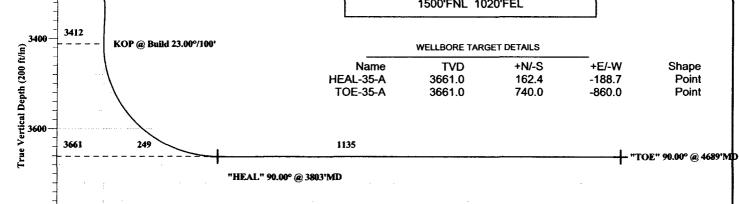
Carracas 35-A #8 Sec.35 T32N-R5W RIO ARRIBA Co., NM





800

1000



Vertical Section at 310.71° (200 ft/in)

600

SECTION DETAILS

400

200

			-							
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	3412.0	0.00	0.00	3412.0	0.0	0.0	0.00	0.00	0.0	
3	3803.1	90.00	310.71	3661.0	162.4	-188.7	23.01	310.71	249.0	HEAL-35-A
4	4688.7	90.00	310.71	3661.0	740.0	-860.0	0.00	0.00	1134.6	TOE-35-A

Plan: Plan #I (Carracas 35-A #8/Wellbore #1)

1200

Created By: Frank C. Scardino Date: 1/5/2006

Pathfinder

Planning Report

Database:

EDM 2003.14 Single User Db

Company: Project:

Design:

Energen Resources Corporation Rio Arriba, NM

Sec.35 T32N-R5W Site: Well: Carracas 35-A #8 Wellbore: Wellbore #1 Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Carracas 35-A #8

WELL @ 0.0ft (Original Well Elev) WELL @ 0.0ft (Original Well Elev)

True

Minimum Curvature

Pla	nned	Survey
-----	------	--------

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Bulld Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
3,412.0	0.00	0.00	3,412.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP @ B	uild 23.00°/100°								
3,420.0		310.71	3,420.0	0.1	-0.1	0.1	23.01	23.01	0.00
3,440.0	6.44	310.71	3,439.9	1.0	-1.2	1.6	23.01	23.01	0.00
3,460.0	11.04	310.71	3,459.7	3.0	-3.5	4.6	23.01	23.01	0.00
3,480.0	15.65	310.71	3,479.2	6.0	-7.0	9.2	23.01	23.01	0.00
3,500.0	20.25	310.71	3,498.2	10.0	-11.7	15.4	23.01	23.01	0.00
3,520.0	24.85	310.71	3,516.6	15.0	-17.5	23.1	23.01	23.01	0.00
3,540.0	29.45	310.71	3,534.4	21.0	-24.4	32.2	23.01	23.01	0.00
3,560.0	34.06	310.71	3,551.4	27.9	-32.4	42.7	23.01	23.01	0.00
3,580.0	38.66	310.71	3,567.5	35.6	-41.4	54.6	23.01	23.01	0.00
3,600.0	43.26	310.71	3,582.6	44.1	-51.3	67.7	23.01	23.01	0.00
3,620.0	47.86	310.71	3,596.6	53.4	-62.1	81.9	23.01	23.01	0.00
3,640.0	52.46	310.71	3,609.4	63.5	-73.8	97.3	23.01	23.01	0.00
3,660.0	57.07	310.71	3,621.0	74.1	-86.1	113.6	23.01	23.01	0.00
3,680.0	61.67	310.71	3,631.2	85.3	-99.2	130.8	23.01	23.01	0.00
3,700.0	66.27	310.71	3,639.9	97.0	-112.8	148.8	23.01	23.01	0.00
3,720.0	70.87	310.71	3,647.3	109.2	-126.9	167.4	23.01	23.01	0.00
3,740.0	75.47	310.71	3,653.0	121.7	-141.4	186.5	23.01	23.01	0.00
3,760.0		310.71	3,657.3	134.4	-156.2	206.1	23.01	23.01	0.00
3,780.0	84.68	310.71	3,659.9	147.3	-171.2	225.9	23.01	23.01	0.00
3,800.0	89.28	310.71	3,661.0	160.4	-186.4	245.9	23.01	23.01	0.00
3,803.1	90.00	310.71	3,661.0	162.4	-188.7	249.0	23.01	23.01	0.00
"HEAL" 9	0.00° @ 3803 'M	D - HEAL-35-	A						
3,900.0	90.00	310.71	3,661.0	225.6	-262.2	345.9	0.00	0.00	0.00
4,000.0		310.71	3,661.0	290.8	-338.0	445.9	0.00	0.00	0.00
4,100.0	90.00	310.71	3,661.0	356.0	-413.8	545.9	0.00	0.00	0.00
4,200.0	90.00	310.71	3,661.0	421.3	-489.6	645.9	0.00	0.00	0.00
4,300.0	90.00	310.71	3,661.0	486.5	-565.4	745.9	0.00	0.00	0.00
4,400.0	90.00	310.71	3,661.0	551.7	-641.2	845.9	0.00	0.00	0.00
4,500.0	90.00	310.71	3,661.0	616.9	-717.0	945.9	0.00	0.00	0.00
4,600.0	90.00	310.71	3,661.0	682.1	-792.8	1,045.9	0.00	0.00	0.00
4,688.7	90.00	310.71	3,661.0	740.0	-860.0	1,134.6	0.00	0.00	0.00
"TOE" 90.	.00° @ 4689'MD	- TOE-35-A							

-			
12	m	er:	8

Target Name			1.3 计 表 " 18 3.4 计						
 hit/miss target 	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting		
- Shape	(°)	(O)	(ft)	(ft) ···	(ft)	(ft)	(ft)	Latitude	Longitude
HEAL-35-A - plan hits target - Point	0.00	0.00	3,661.0	162.4	-188.7	165.10	-186.40	30° 59' 26.118 N	107° 50' 46.357 W
TOE-35-A - plan hits target - Point	0.00	0.00	3,661.0	740.0	-860.0	752.26	-849.30	30° 59′ 31.834 N	107° 50' 54.068 W



Pathfinder

Planning Report

Database:

EDM 2003.14 Single User Db

Company:

Energen Resources Corporation

Project: Site:

Rio Arriba, NM Sec.35 T32N-R5W Carracas 35-A #8

Well: Wellbore: Design:

Wellbore #1 Plan #1

Local Co-ordinate Reference:

Well Carracas 35-A #8

TVD Reference: MD Reference:

WELL @ 0.0ft (Original Well Elev) WELL @ 0.0ft (Original Well Elev)

North Reference:

vv⊏∟ True

Survey Calculation Method:

Minimum Curvature

Plan Annotations

March 1997 To the State of the Control of the Contr	rtical Loc epth +N/-S (ft) (ft)	al Coordinates +E/-W (ft)	Comment	34 - 1
3,803.1	3,661.0 16	0.0 0.0 2.4 -188.7 0.0 -860.0	KOP @ Build 23.00°/100° "HEAL" 90.00° @ 3803'MD "TOE" 90.00° @ 4689'MD	

Bureau of Land Management Conditions of Approval:

- 1) If cement squeeze work is necessary, contact Matt Halbert of the BLM Farmington Field Office @ (505) 599-6350.
- 2) Pits must be lined with an impervious material at least 12 mils thick. The pit must be fenced on three (3) sides during workover operations and on the 4th side after the rig moves off location. Pits must be closed within 90 days of completion of the workover operations. Prior to closing the pit the liner must be cut off at mud level.