

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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 reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Energen Resources Corporation

3a. Address

2198 Bloomfield Highway, Farmington, NM 87401

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

1830' FSL, 880' FEL SE/4

(I) S22, T32N, R4W

3b. Phone No. (include area code)

505-325-6800

5. Lease Serial No.

NM 59696

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

Carracas FR #105

9. API Well No.

30-039-24725

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 recompleate 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 recompleation 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 proposes a recompleation of the Carracas FR #105 in the Basin Fruitland Coal by drilling a horizontal lateral off the existing vertical wellbore as indicated on the attached C-102 and directional wellplan. A whipstock will be set at 3147' +/- (TVD) and a window milled in the existing 5 1/2" casing. The lateral will be drilled to 5430' (MD), 3625' (TVD). This will be an open hole completion. 2 3/8" tubing will be landed at 3622' (TVD) in the 5 1/2" casing.

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

Nathan Smith

Title

Drilling Engineer

Date 5/23/06

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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.

NRMOCD

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

Form C-102
Revised June 10, 2003

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

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

2003 MAY 23 10 24 AM AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-24725	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code	⁵ Property Name Carracas FR	⁶ Well Number #105
⁷ OGRID No. 162928	⁸ Operator Name Energen Resources	⁹ Elevation 6715'

¹⁰ Surface Location

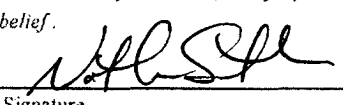
UL or lot no. I	Section 22	Township 32N	Range 4W	Lot. Idn	Feet from the 1830	North/South line South	Feet from the 880	East/West line East	County Rio Arriba
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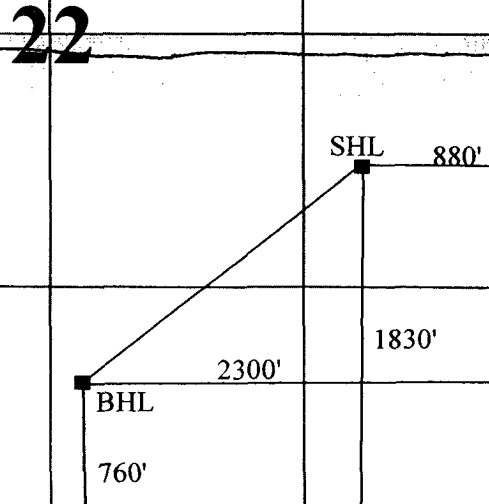
¹¹ Bottom Hole Location If Different From Surface

UL or lot no. O	Section 22	Township 32N	Range 4W	Lot. Idn	Feet from the 760	North/South line South	Feet from the 2300	East/West line East	County Rio Arriba
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¹² Dedicated Acres S/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				¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>  Signature Nathan Smith Printed Name Drilling Engineer Title and E-mail Address 5/18/06 Date
				¹⁸ SURVEYOR CERTIFICATION <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> April 27, 1989 Date of Survey Signature and Seal of Professional Surveyor: Original survey conducted and recorded by Edgar L. Risenhover NM Surveyor # 5979 Certificate Number



Energen Resources Corporation

Field: Carracas Canyon

Site: Carracas FR #105

Well: Carracas FR #105

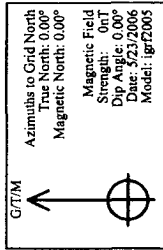
Wellpath: Original Hole

Plan: Plan #1 5-23-06

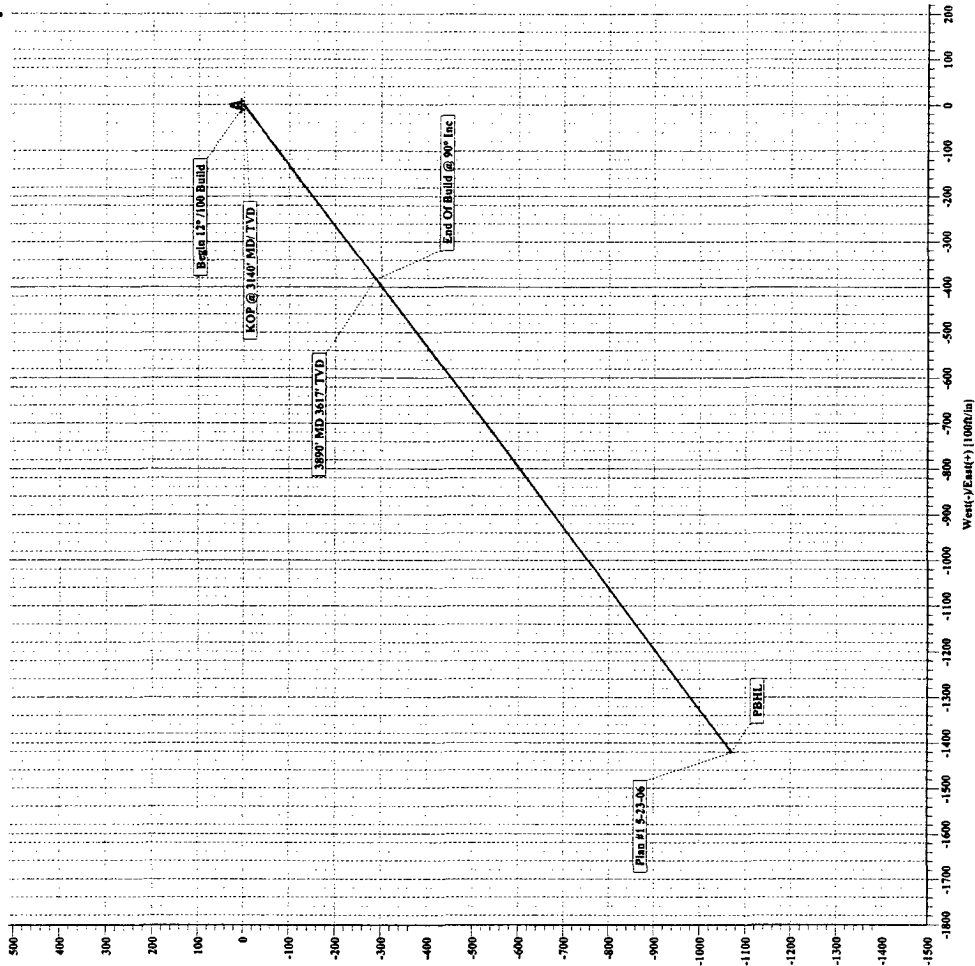
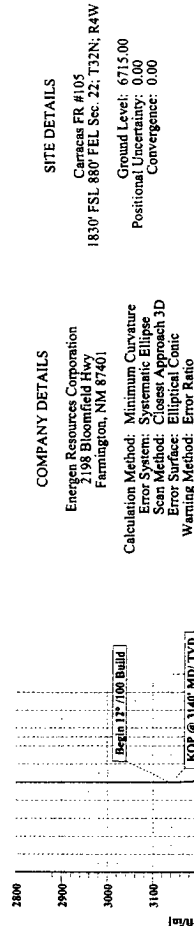
PATHFINDER

WELL DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Carracas FR #105	0.00	0.00	0.00	0.00	30°59'24.512N	109°25'44.094W
						N/A

SECTION DETAILS						
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W
1	0.00	0.00	233.00	0.00	0.00	0.00
2	3139.54	0.00	233.00	3139.54	0.00	0.00
3	3889.54	90.00	233.00	3617.00	-287.34	-381.33
4	5190.07	90.00	233.00	3617.00	-1070.00	-1420.00



ANNOTATIONS			
No.	TVD	MD	Annotation
1	3140.00	3140.00	KOP @ 3140' MD/ TVD
2	3140.00	3140.00	Bottom 12" /100 Build
3	3617.00	3890.00	End Of Build @ 90° Inc
4	3617.00	3890.00	3890' MD 3617' TVD



WELLPATH DETAILS			
Original Hole			
Rig:	Ref. Datum:	Mean Sea Level	0.00ft
V. Section Angle	Origin	Origin	Starting From TVD
233.00°	+N/-S	+E/-W	0.00

WELLPATH DETAILS			
Original Hole			
Rig:	Ref. Datum:	Mean Sea Level	0.00ft
V. Section Angle	Origin	Origin	Starting From TVD
233.00°	+N/-S	+E/-W	0.00

Pathfinder Energy

Planning Report - Geographic

Company: Energen Resources Corporation Field: Carracas Canyon Site: Carracas FR #105 Well: Carracas FR #105 Wellpath: Original Hole	Date: 5/23/2006 Co-ordinate(NE) Reference: Well: Carracas FR #105, Grid North Vertical (TVD) Reference: System: Mean Sea Level Section (VS) Reference: Well (0.00N,0.00E,233.00Azi) Plan: Plan #1 5-23-06	Time: 14:33:33 Page: 1
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Field: Carracas Canyon
Rio Arriba County, NM

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Western Zone
Coordinate System: Well Centre
Geomagnetic Model: igrf2005

Site: Carracas FR #105

1830' FSL 880' FEL Sec. 22; T32N; R4W

Site Position:	Northing:	Latitude:
From: Lease Line	Easting:	Longitude:
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 6715.00 ft		Grid Convergence: 0.00 deg

Well: Carracas FR #105

Slot Name:

Well Position:	Northing:	Latitude:
+N/-S 0.00 ft	0.00 ft	30 59 24.512 N
+E/-W 0.00 ft	0.00 ft	109 25 44.094 W
Position Uncertainty: 0.00 ft		

Wellpath: Original Hole

Drilled From: Surface

Current Datum: Mean Sea Level	Height 0.00 ft	Tie-on Depth: 0.00 ft
Magnetic Data: 5/23/2006		Above System Datum: Mean Sea Level
Field Strength: 0 nT		Declination: 0.00 deg
Vertical Section: Depth From (TVD)	+N/-S	Mag Dip Angle: 0.00 deg
ft	ft	Direction
		deg
0.00	0.00	233.00

Plan: Plan #1 5-23-06

Date Composed: 5/23/2006
Version: 1
Tied-to: From Surface

Principal: Yes

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	233.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3139.54	0.00	233.00	3139.54	0.00	0.00	0.00	0.00	0.00	0.00	
3889.54	90.00	233.00	3617.00	-287.34	-381.33	12.00	12.00	0.00	233.00	
5190.07	90.00	233.00	3617.00	-1070.00	-1420.00	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec			← Longitude → Deg Min Sec		
0.00	0.00	233.00	0.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
100.00	0.00	233.00	100.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
200.00	0.00	233.00	200.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
300.00	0.00	233.00	300.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
400.00	0.00	233.00	400.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
500.00	0.00	233.00	500.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
600.00	0.00	233.00	600.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
700.00	0.00	233.00	700.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
800.00	0.00	233.00	800.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
900.00	0.00	233.00	900.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
1000.00	0.00	233.00	1000.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
1100.00	0.00	233.00	1100.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
1200.00	0.00	233.00	1200.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
1300.00	0.00	233.00	1300.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
1400.00	0.00	233.00	1400.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W
1500.00	0.00	233.00	1500.00	0.00	0.00	0.00	0.00	30	59	24.512 N	109	25	44.094 W

Pathfinder Energy

Planning Report - Geographic

Company: Energen Resources Corporation
Field: Carracas Canyon
Site: Carracas FR #105
Well: Carracas FR #105
Wellpath: Original Hole

Date: 5/23/2006 **Time:** 14:33:33 **Page:** 2
Co-ordinate(NE) Reference: Well: Carracas FR #105, Grid North
Vertical (TVD) Reference: System: Mean Sea Level
Section (VS) Reference: Well (0.00N,0.00E,233.00Azi)
Plan: Plan #1 5-23-06

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N-S ft	+E-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec		← Longitude → Deg Min Sec	
1600.00	0.00	233.00	1600.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
1700.00	0.00	233.00	1700.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
1800.00	0.00	233.00	1800.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
1900.00	0.00	233.00	1900.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
2000.00	0.00	233.00	2000.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
2100.00	0.00	233.00	2100.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
2200.00	0.00	233.00	2200.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
2300.00	0.00	233.00	2300.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
2400.00	0.00	233.00	2400.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
2500.00	0.00	233.00	2500.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
2600.00	0.00	233.00	2600.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
2700.00	0.00	233.00	2700.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
2800.00	0.00	233.00	2800.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
2900.00	0.00	233.00	2900.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
3000.00	0.00	233.00	3000.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
3100.00	0.00	233.00	3100.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
3139.54	0.00	233.00	3139.54	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
3140.00	0.06	233.00	3140.00	0.00	0.00	0.00	0.00	30 59	24.512 N	109 25	44.094 W
3150.00	1.26	233.00	3150.00	-0.07	-0.09	-0.07	-0.09	30 59	24.511 N	109 25	44.095 W
3175.00	4.26	233.00	3174.97	-0.79	-1.05	-0.79	-1.05	30 59	24.504 N	109 25	44.106 W
3200.00	7.26	233.00	3199.84	-2.30	-3.05	-2.30	-3.05	30 59	24.489 N	109 25	44.129 W
3225.00	10.26	233.00	3224.54	-4.59	-6.09	-4.59	-6.09	30 59	24.466 N	109 25	44.163 W
3250.00	13.26	233.00	3249.02	-7.66	-10.16	-7.66	-10.16	30 59	24.435 N	109 25	44.209 W
3275.00	16.26	233.00	3273.19	-11.49	-15.24	-11.49	-15.24	30 59	24.396 N	109 25	44.267 W
3300.00	19.26	233.00	3297.00	-16.07	-21.33	-16.07	-21.33	30 59	24.350 N	109 25	44.336 W
3325.00	22.26	233.00	3320.37	-21.41	-28.41	-21.41	-28.41	30 59	24.296 N	109 25	44.417 W
3350.00	25.26	233.00	3343.25	-27.47	-36.45	-27.47	-36.45	30 59	24.235 N	109 25	44.508 W
3375.00	28.26	233.00	3365.57	-34.24	-45.44	-34.24	-45.44	30 59	24.167 N	109 25	44.610 W
3400.00	31.26	233.00	3387.27	-41.70	-55.35	-41.70	-55.35	30 59	24.092 N	109 25	44.723 W
3425.00	34.26	233.00	3408.29	-49.84	-66.15	-49.84	-66.15	30 59	24.010 N	109 25	44.845 W
3450.00	37.26	233.00	3428.58	-58.63	-77.81	-58.63	-77.81	30 59	23.921 N	109 25	44.978 W
3475.00	40.26	233.00	3448.07	-68.05	-90.31	-68.05	-90.31	30 59	23.826 N	109 25	45.120 W
3500.00	43.26	233.00	3466.72	-78.07	-103.61	-78.07	-103.61	30 59	23.725 N	109 25	45.271 W
3525.00	46.26	233.00	3484.47	-88.66	-117.66	-88.66	-117.66	30 59	23.618 N	109 25	45.430 W
3550.00	49.26	233.00	3501.28	-99.80	-132.44	-99.80	-132.44	30 59	23.506 N	109 25	45.598 W
3575.00	52.26	233.00	3517.09	-111.45	-147.90	-111.45	-147.90	30 59	23.388 N	109 25	45.774 W
3600.00	55.26	233.00	3531.87	-123.58	-164.00	-123.58	-164.00	30 59	23.266 N	109 25	45.957 W
3625.00	58.26	233.00	3545.57	-136.16	-180.70	-136.16	-180.70	30 59	23.139 N	109 25	46.147 W
3650.00	61.26	233.00	3558.16	-149.16	-197.95	-149.16	-197.95	30 59	23.008 N	109 25	46.343 W
3675.00	64.26	233.00	3569.61	-162.53	-215.70	-162.53	-215.70	30 59	22.873 N	109 25	46.544 W
3700.00	67.26	233.00	3579.87	-176.25	-233.90	-176.25	-233.90	30 59	22.735 N	109 25	46.751 W
3725.00	70.26	233.00	3588.93	-190.27	-252.51	-190.27	-252.51	30 59	22.594 N	109 25	46.962 W
3750.00	73.26	233.00	3596.76	-204.56	-271.47	-204.56	-271.47	30 59	22.450 N	109 25	47.178 W
3775.00	76.26	233.00	3603.33	-219.07	-290.73	-219.07	-290.73	30 59	22.303 N	109 25	47.397 W
3800.00	79.26	233.00	3608.63	-233.77	-310.24	-233.77	-310.24	30 59	22.155 N	109 25	47.618 W
3825.00	82.26	233.00	3612.65	-248.62	-329.94	-248.62	-329.94	30 59	22.005 N	109 25	47.842 W
3850.00	85.26	233.00	3615.36	-263.57	-349.79	-263.57	-349.79	30 59	21.855 N	109 25	48.067 W
3875.00	88.26	233.00	3616.78	-278.59	-369.72	-278.59	-369.72	30 59	21.703 N	109 25	48.294 W
3889.54	90.00	233.00	3617.00	-287.34	-381.33	-287.34	-381.33	30 59	21.615 N	109 25	48.426 W
3890.00	90.00	233.00	3617.00	-287.62	-381.70	-287.62	-381.70	30 59	21.612 N	109 25	48.430 W
3900.00	90.00	233.00	3617.00	-293.64	-389.68	-293.64	-389.68	30 59	21.552 N	109 25	48.521 W
4000.00	90.00	233.00	3617.00	-353.82	-469.55	-353.82	-469.55	30 59	20.945 N	109 25	49.428 W
4100.00	90.00	233.00	3617.00	-413.99	-549.41	-413.99	-549.41	30 59	20.338 N	109 25	50.335 W

Pathfinder Energy

Planning Report - Geographic

Company: Energen Resources Corporation
Field: Carracas Canyon
Site: Carracas FR #105
Well: Carracas FR #105
Wellpath: Original Hole

Date: 5/23/2006 **Time:** 14:33:33 **Page:** 3
Co-ordinate(NE) Reference: Well: Carracas FR #105, Grid North
Vertical (TVD) Reference: System: Mean Sea Level
Section (VS) Reference: Well (0.00N,0.00E,233.00Azi)
Plan: Plan #1 5-23-06

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec		← Longitude → Deg Min Sec	
4200.00	90.00	233.00	3617.00	-474.17	-629.28	-474.17	-629.28	30 59	19.731 N	109 25	51.243 W
4300.00	90.00	233.00	3617.00	-534.35	-709.14	-534.35	-709.14	30 59	19.124 N	109 25	52.150 W
4400.00	90.00	233.00	3617.00	-594.53	-789.01	-594.53	-789.01	30 59	18.518 N	109 25	53.057 W
4500.00	90.00	233.00	3617.00	-654.71	-868.87	-654.71	-868.87	30 59	17.911 N	109 25	53.964 W
4600.00	90.00	233.00	3617.00	-714.89	-948.74	-714.89	-948.74	30 59	17.304 N	109 25	54.872 W
4700.00	90.00	233.00	3617.00	-775.07	-1028.60	-775.07	-1028.60	30 59	16.697 N	109 25	55.779 W
4800.00	90.00	233.00	3617.00	-835.25	-1108.47	-835.25	-1108.47	30 59	16.090 N	109 25	56.686 W
4900.00	90.00	233.00	3617.00	-895.43	-1188.33	-895.43	-1188.33	30 59	15.484 N	109 25	57.593 W
5000.00	90.00	233.00	3617.00	-955.61	-1268.20	-955.61	-1268.20	30 59	14.877 N	109 25	58.501 W
5100.00	90.00	233.00	3617.00	-1015.79	-1348.06	-1015.79	-1348.06	30 59	14.270 N	109 25	59.408 W
5190.07	90.00	233.00	3617.00	-1070.00	-1420.00	-1070.00	-1420.00	30 59	13.723 N	109 26	0.225 W

Targets

Name	Description Dip. Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec		← Longitude → Deg Min Sec	
PBHL		3617.00	-1070.00	-1420.00	-1070.00	-1420.00	30 59	13.723 N	109 26	0.225 W

Annotation

MD ft	TVD ft	
3140.00	3140.00	KOP @ 3140' MD/ TVD
3140.00	3140.00	Begin 12° /100 Build
3890.00	3617.00	End Of Build @ 90° Inc
3890.00	3617.00	3890' MD 3617' TVD