Form 3160-5 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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.

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

5. Lease Serial No.

NMMM	3001	.5
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6. If Indian, Allottee or Tribe Name

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			-		F 31 1	U·	2

SUBMIT IN TRIPLICATE -	Other instructions on reverse s	ide RE	7. If Unit or CA/Agreement, Name and/or No
1. Type of Well Oil Well X Gas Well Other		210 July	8. Well Name and No. Carracas 19 B #4
2. Name of Operator Energen Resources Corporation			
3a. Address	3b. Phone No.	(include area code)	9. API Well No.
2198 Bloomfield Hwy, Farmington, NM	1	•	30-039-26475 10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey I			Basin Fruitland Coal
At bottom: 660' fnl, 669' fwl	17 3-10 110		11. County or Parish, State Rio Arriba NM
	BOX(ES) TO INDICATE NATU	IRE OF NOTICE, REP	
TYPE OF SUBMISSION		TYPE OF ACTION	
X Notice of Intent Subsequent Report Final Abandonment Notice		Treat Reclamati	
	Convert to Injection Plug Bac	k Water Dis	posal
testing has been completed. Final Abandonment N determined that the final site is ready for final inspec Energen Resources would like to d -Set a bridge plug and retri -Mill a 4 3/4" window in the -Drill a 4 3/4" wellbore wit -Land curve at 90 deg in the -Drill remaining lateral to -Rum a 3 1/2" FJ 9.3 ppf, J- No below grade drilling pit will system.	evable mechanical set whips existing 5 1/2" 17 ppf pm h a build up rate of 24.9 c Fruitland Coal at 4120' T TD of 5131' MD, 4120' TVD a 55 pre-drilled uncemented	eracas 19 B #4 as stockat 3890' TVD. oduction casing. deg/100 ft. JD. according to the a liner from 3892'-5	RCVD APR6'07 OIL CONS. DIV. DIST. 3 ttached directional plan.
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)	Title	BH	purusi f
Nathan Smith		Drilling Engineer	
Math	Date	2/5/07	
THIS	SPACE FOR FEDERAL OR ST	ATE OFFICE USE	
Approved by Original Signed: St	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Date APR 0 & 2007
Conditions of approval, if any, are attached. Approval o certify that the applicant holds legal or equitable title to which would entitle the applicant to conduct operations the	those rights in the subject lease		

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

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

District IV

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 October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

MENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	API Number 039-264			Pool Code 71629		°PoolName Basin Fruitland Coal					
Property 9			'Property Name Carracas 19 B						'Well Number #4		
'OGRID 1 162928	1			Energe		'Elevation 7401'					
					10 Surface I	Location					
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
D	19	32N	04W		1170'	North	830'	West	Rio Arriba		
			11 Bo	ttom Ho	le Location If	Different Fron	Surface				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
С	19	32N	04W		660' North 660' West Rio Ar						
" Dedicated Acres	" Joint or	Infill "C	Consolidation C	ode "Or	der No.						
300.52 W/2	2	Ì									

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.

1156 98 1320.00 2640.00

1150.50				
830 ' 1816	0 9 BHL			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.
				1/9/2007 Signature Date
				Nathan Smith
				Printed Name
		10		Times (valie
		19		
				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.
				June 9, 2000
			7.7	Date of Survey
				Signature and Seal of Professional Surveyor:
				Original survey conducted and
				recorded by Edgar L. Risenhoover
				5979
				Certificate Number

Energen Resources

Carson Nat'l Forest: S19, T32N, R4W Carracas Mesa Carracas 19 B #4 Carracas 19 B #4 ST API No.: 30-039-26475

Plan: Preliminary Design

Energen Resources - Survey

01 February, 2007



Project: Carson Nat'l Forest: S19, T32N, R4

Site: Carracas Mesa Well: Carracas 19 B #4

Wellbore: Carracas 19 B #4 ST

Plan: Preliminary Design (Carracas 19 B #4/Carracas 19 B #4 ST)

PROJECT DETAILS: Carson Nat'l Forest: \$19, T32N, R4W

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

System Datum: Mean Sea Level



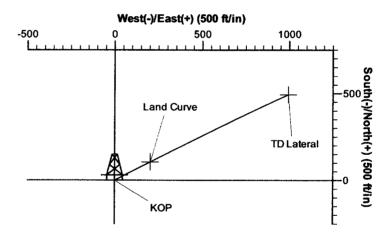
Azimuths to Grid North True North: 4.40° Magnetic North: 4.40°

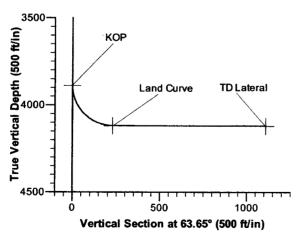
Magnetic Field Strength: 0.0snT Dip Angle: 0.00° Date: 2/1/2007 Model: USER DEFINED

SURFACE LOC	ATION
Easting:	0.00
Northing:	0.00

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	3890.0	0.00	0.00	3890.0	0.0	0.0	0.00	0.00	0.0	KOP
3	4251.3	90.00	62.65	4120.0	105.7	204.3	24.91	62.65	230.0	Land Curve
4	5131.4	90.00	65.17	4120.0	492.7	994.7	0.29	90.00	1110.0	TD Lateral





Energen

Energen Resources - Survey



Company:

Energen Resources

Project: Site:

Carson Nat'l Forest: S19, T32N, R4W

Well: Wellbore: Carraças Mesa Carracas 19 B #4

Design:

Carracas 19 B #4 ST Preliminary Design

Database:

TVD Reference: MD Reference:

North Reference: **Survey Calculation Method:**

Local Co-ordinate Reference:

KB @ 7416.0ft (Drilling Rig) KB @ 7416.0ft (Drilling Rig)

Grid

Minimum Curvature

Well Carracas 19 B #4

EDM 2003.16 Single User Db

Project

Carson Nat'l Forest: S19, T32N, R4W

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983 New Mexico Western Zone

System Datum:

Mean Sea Level

Site

Carracas Mesa

Site Position:

Map Zone:

None

Northing:

ft

Latitude:

From: **Position Uncertainty:**

0.0 ft

Easting: Slot Radius: ft Longitude:

Grid Convergence:

0.00°

Well **Well Position** Carracas 19 B #4

0.0 ft +E/-W

0.0 ft

Northing:

0.00 ft

Latitude:

30° 42' 36.034 N

Position Uncertainty

0.0 ft

Easting: Wellhead Elevation:

0.00 ft 7.401.0 ft

0.00

Longitude: **Ground Level:** 116° 28' 58.264 W

0

7.401.0 ft

Wellbore

Carracas 19 B #4 ST

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle (°)

Field Strength (nT)

Preliminary Design

User Defined 2/1/2007

Design **Audit Notes:**

Version:

Phase:

PROTOTYPE

Tie On Depth:

0.0

0.00

Vertical Section:

Depth From (TVD)

0.00

+E/-W

Direction

(ft) 0.0 +N/-S (ft) 0.0

(ft) 0.0

(°) 63.65

Survey Tool Program Date 2/1/2007 To From (ft) (ft) **Tool Name** Survey (Wellbore) Description 0.0 5,131.4 Preliminary Design (Carracas 19 B #4 ST) MWD MWD - Standard

ourvey						
		Azi	V. Se (ft)	c N/S (ft)	E/W (ft)	
0 0	.0 0.0	0.00	0.0	0.0	0.0	
).0 10	0.0 0.0	0.00	0.0	0.0	0.0	
0.0 20	0.0 0.0	0.00	0.0	0.0	0.0	
0.0 30	0.0 0.0	0.00	0.0	0.0	0.0	
0.0 40	0.0	0.00	0.0	0.0	0.0	
0.0 50	0.0	0.00	0.0	0.0	0.0	
0.0 60	0.0	0.00	0.0	0.0	0.0	
).0 70	0.0	0.00	0.0	0.0	0.0	
0.0	0.0	0.00	0.0	0.0	0.0	
0.0 90	0.0	0.00	0.0	0.0	0.0	
0.0 1,00	0.0	0.00	0.0	0.0	0.0	
	D (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	D TVD (nt) (ft) (°) 0 0.0 0.0 0.0 100.0 0.0 0.0 200.0 0.0 0.0 300.0 0.0 0.0 400.0 0.0 0.0 500.0 0.0 0.0 600.0 0.0 0.0 700.0 0.0 0.0 800.0 0.0	D TVD inc Azi (ft) (°) (°) (°) 0 0.0 0.00 0.00 0.00 0.0 100.0 0.00 0.0	D TVD inc Azi V. Se (ft) (°) (°) (°) (ft) (00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	D TVD inc Azi V. Sec N/S (ft) (°) (°) (ft) (ft) (ft) 0 0.0 0.0 0.00 0.00 0.00 0.0 0.0 100.0 0.00 0.0	D TVD inc Azi V. Sec N/S E/W (ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft)

0.00

1,100.0

1,100.0

0.0

0.0

0.0

Energen

Energen Resources - Survey



Company:

Energen Resources

Project:

Carson Nat'l Forest: S19, T32N, R4W

Site: Well: Wellbore: Carracas Mesa Carracas 19 B #4

Preliminary Design Design:

Carracas 19 B #4 ST

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method: Database:

Well Carracas 19 B #4

KB @ 7416.0ft (Drilling Rig) KB @ 7416.0ft (Drilling Rig)

Grid

Minimum Curvature

EDM 2003.16 Single User Db

Design:	Prenminary Design		Databas	ie:	EDM 2003.	To Single User DD	1
Planned Surve	y .	:					
MD (ft)	TVD (ft)	Inc (°)	Azi (°)	V. Sec (ft)	N/S (ft)	E/W (ft)	
1,200.0	1,200.0	0.00	0.00	0.0	0.0	0.0	
1,300.0	1,300.0	0.00	0.00	0.0	0.0	0.0	
1,400.0	1,400.0	0.00	0.00	0.0	0.0	0.0	
1,500.0	1,500.0	0.00	0.00	0.0	0.0	0.0	
1,600.0	1,600.0	0.00	0.00	0.0	0.0	0.0	
1,700.0	1,700.0	0.00	0.00	0.0	0.0	0.0	
1,800.0	1,800.0	0.00	0.00	0.0	0.0	0.0	
1,900.0	1,900.0	0.00	0.00	0.0	0.0	0.0	
2,000.0	2,000.0	0.00	0.00	0.0	0.0	0.0	
2,100.0	2,100.0	0.00	0.00	0.0	0.0	0.0	
2,200.0	2,200.0	0.00	0.00	0.0	0.0	0.0	
2,300.0	2,300.0	0.00	0.00	0.0	0.0	0.0	
2,400.0	2,400.0	0.00	0.00	0.0	0.0	0.0	
2,500.0	2,500.0	0.00	0.00	0.0	0.0	0.0	
2,600.0	2,600.0	0.00	0.00	0.0	0.0	0.0	
2,700.0	2,700.0	0.00	0.00	0.0	0.0	0.0	
2,800.0	2,800.0	0.00	0.00	0.0	0.0	0.0	
2,900.0	2,900.0	0.00	0.00	0.0	0.0	0.0	
3,000.0	3,000.0	0.00	0.00	0.0	0.0	0.0	
3,100.0	3,100.0	0.00	0.00	0.0	0.0	0.0	
3,200.0	3,200.0	0.00	0.00	0.0	0.0	0.0	
3,300.0	3,300.0	0.00	0.00	0.0	0.0	0.0	
3,400.0	3,400.0	0.00	0.00	0.0	0.0	0.0	
3,500.0	3,500.0	0.00	0.00	0.0	0.0	0.0	
3,600.0	3,600.0	0.00	0.00	0.0	0.0	0.0	
3,700.0	3,700.0	0.00	0.00	0.0	0.0	0.0	
3,800.0	3,800.0	0.00	0.00	0.0	0.0	0.0	
3,890.0	3,890.0	0.00	0.00	0.0	0.0	0.0	
KOP							
3,900.0	3,900.0	2.49	62.65	0.2	0.1	0.2	
3,920.0	3,919.9	7.47	62.65	2.0	0.9	1.7	
3,940.0	3,939.6	12.46	62.65	5.4	2.5	4.8	
3,960.0	3,958.9	17.44	62.65	10.6	4.9	9.4	
3,980.0	3,977.7	22.42	62.65	17.4	8.0	15.4	
4,000.0	3,995.9	27.40	62.65	25.8	11.9	22.9	
4,020.0	4,013.2	32.38	62.65	35.8	16.4	31.8	
4,040.0	4,029.6	37.37	62.65	47.2	21.7	41.9	
4,060.0	4,044.9	42.35	62.65	60.0	27.6	53.3	
4,080.0	4,059.1	47.33	62.65	74.1	34.1	65.8	
4,100.0	4,072.0	52.31	62.65	89.4	41.1	79.4	
4,120.0	4,083.5	57.30	62.65	105.7	48.6	93.9	
4,140.0	4,093.6	62.28	62.65	123.0	56.5	109.3	
4,160.0	4,102.1	67.26	62.65	141.1	64.8	125.3	
4,180.0	4,109.0	72.24	62.65	159.8	73.4	142.0	

Energen

Energen Resources - Survey



Company: Project:

Energen Resources

Carson Nat'l Forest: S19, T32N, R4W

Site: Well: Wellbore: Design:

Targets

Carracas Mesa Carracas 19 B #4 Carracas 19 B #4 ST **Preliminary Design**

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method: Database:

Well Carracas 19 B #4

KB @ 7416.0ft (Drilling Rig) KB @ 7416.0ft (Drilling Rig)

Grid

Minimum Curvature

EDM 2003.16 Single User Db

ned Survey	ing and the second of the seco	erinera in Linguis.	e de la servició de la composición de La composición de la	n englis	ing sa kalangan dan kalangan Kabupat Bangan Bang		
MD (ft)	TVD (ft)	Inc (°)	Azi (°)	V. Sec (ft)	N/S (ft)	E/W (ft)	
4,200.0	4,114.3	77.22	62.65	179.1	82.3	159.1	
4,220.0	4,117.9	82.21	62.65	198.8	91.3	176.6	
4,240.0	4,119.7	87.19	62.65	218.7	100.5	194.3	
4,251.3	4,120.0	90.00	62.65	230.0	105.7	204.3	
Land Curve 4,300.0	4,120.0	90.00	62.79	278.7	128.0	247.6	
4,400.0	4,120.0	90.00	63.08	378.7	173.5	336.6	
4,500.0	4,120.0	90.00	63.36	478.7	218.6	425.9	
4,600.0	4,120.0	90.00	63.65	578.7	263.2	515.4	
4,700.0	4,120.0	90.00	63.94	678.7	307.3	605.1	
4,800.0	4,120.0	90.00	64.22	778.7	351.0	695.1	
4,900.0	4,120.0	90.00	64.51	878.7	394.3	785.2	
5,000.0	4,120.0	90.00	64.80	978.6	437.1	875.6	
5,100.0	4,120.0	90.00	65.08	1,078.6	479.5	966.2	
5,131.4	4,120.0	90.00	65.17	1,110.0	492.7	994.7	
TD Lateral							

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	360.00	4,120.0	492.7	994.7	492.68	994.67	30° 42' 41.611 N	116° 28' 47.432 W
Land Curve - plan hits target - Point	0.00	360.00	4,120.0	105.7	204.3	105.67	204.29	30° 42' 37.224 N	116° 28' 56.043 W
KOP - plan hits target - Point	0.00	360.00	3,890.0	0.0	0.0	0.00	0.00	30° 42' 36.034 N	116° 28' 58.264 W

	Checked By:	Approved By:	wal 5th	_ Date:	2/5/07
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