

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

September 8, 2006

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

**Energen Resources Corporation
2198 Bloomfield Highway
Farmington, New Mexico 87401**

**Attention: David M. Poage
District Landman**

Re: *Administrative application (Division administrative application reference No. pTDS0-621438122) for an exception to the well location provisions of the Basin-Fruitland Coal (Gas) Pool (71629) for Energen Resources Corporation's ("Energen") Carson Well No. 200-S (API No. 30-039-27589) recently drilled as a horizontal infill coal gas well within the existing 269.01-acre lay-down gas spacing unit/Project Area comprising the N/2 equivalent (Lots 1 and 2, the NE/4, and the E/2 NW/4) of Section 7, Township 30 North, Range 4 West, NMPM, Rio Arriba County, New Mexico.*

Dear Mr. Poage:

This letter acknowledges receipt of the subject administrative application on August 1, 2006.

I have reviewed your request and the Division's records and have determined additional information is needed to complete this application. Please provide me with a copy of the directional survey of this wellbore.

Since the submitted application is insufficient, the application remains incomplete as of September 8, 2006. Please submit the above stated information by Monday, September 18, 2006.

The Division cannot proceed with your application until the required information is submitted. Upon receipt, the Division will continue to process your application. The additional information can be sent to me by telefax at (505) 476-3462, e-mailed to michael.stogner@state.nm.us, or mailed to the Division in Santa Fe. If the necessary information is not submitted, your application will be withdrawn and returned to you.

Sincerely,

Michael E. Stogner
Engineer

cc: New Mexico Oil Conservation Division – Aztec

⚠ Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

Stogner, Michael, EMNRD

From: Doug Thomas [Doug.Thomas@energen.com]

Sent: Tue 9/12/2006 9:44 AM

To: Stogner, Michael, EMNRD

Cc:

Subject: FW:

Attachments:  Carson 200S Final Update.pdf(148KB)

Attached is a copy if the directional survey for the Cason 200S

From: Nathan Smith

Sent: Tuesday, September 12, 2006 10:16 AM

To: Doug Thomas

Subject:

Thanks

Nathan Smith

Drilling Engineer

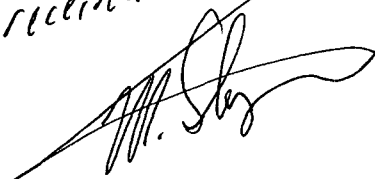
office: 505.566.4681

mobile: 505.793.7604

email to:(nsmith@energen.com)

Mr. Doug Thomas called
on 9-12-06 @ 9:09 AM
to check on the status of this
(PTOSC-621438122) application.
I informed him of my 9-8-06
letter to David Poage.
Will fax me a copy of
the survey.

9:46am Mr. Thomas called
again to see if his
electronic document was
received.



Pathfinder Energy

Survey Report

Company: Energen Resources Corporation		Date: 7/18/2006	Time: 16:43:24	Page: 1
Field: Carson		Co-ordinate(NE) Reference: Well: Carson 200S, True North		
Site: Carson 200S		Vertical (TVD) Reference: SITE 0.0		
Well: Carson 200S		Section (VS) Reference: Well (0.00N,0.00E,269.75Azi)		
Wellpath: Original Hole		Survey Calculation Method: Minimum Curvature Db: Sybase		

Field: Carson Rio Arriba County, NM		Map Zone: New Mexico, Central Zone
Map System: US State Plane Coordinate System 1983		Coordinate System: Well Centre
Geo Datum: GRS 1980		Geomagnetic Model: igrf2005
Sys Datum: Mean Sea Level		

Site: Carson 200S			
Site Position:	Northing:	ft	Latitude:
From: Lease Line	Easting:	ft	Longitude:
Position Uncertainty: 0.00 ft			North Reference: True
Ground Level: 0.00 ft			Grid Convergence: -0.57 deg

Well: Carson 200S		Slot Name:	
Well Position: +N/-S 0.00 ft	Northing: 2123323.65 ft	Latitude: 36 49 53.000 N	
+E/-W 0.00 ft	Easting: 1359864.98 ft	Longitude: 107 12 31.200 W	
Position Uncertainty: 0.00 ft			

Wellpath: Original Hole		Drilled From: Surface
Current Datum: SITE	Height 0.00 ft	Tie-on Depth: 0.00 ft
Magnetic Data: 6/20/2006		Above System Datum: Mean Sea Level
Field Strength: 51426 nT		Declination: 10.27 deg
Vertical Section: Depth From (TVD)	+N/-S	Mag Dip Angle: 63.77 deg
ft	ft	+E/-W
		ft
		Direction
		deg
0.00	0.00	0.00
		269.75

Survey: Pathfinder LWD Surveys	Start Date: 7/18/2006
Company: Pathfinder Energy	Engineer: Midwellplan
Tool:	Tied-to: From Surface

Survey: Pathfinder LWD Surveys										
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
354.00	0.18	4.78	354.00	0.55	0.05	-0.05	0.05	0.05	0.00	
832.00	0.18	15.86	832.00	2.02	0.31	-0.32	0.01	0.00	2.32	
1272.00	0.09	143.92	1272.00	2.41	0.71	-0.72	0.06	-0.02	29.10	
1700.00	0.88	231.28	1699.98	0.08	-1.66	1.66	0.21	0.18	20.41	
2123.00	1.23	226.80	2122.91	-5.06	-7.50	7.53	0.08	0.08	-1.06	
2546.00	2.11	219.24	2545.72	-14.20	-15.74	15.80	0.21	0.21	-1.79	
2667.00	2.11	235.06	2666.64	-17.20	-18.97	19.05	0.48	0.00	13.07	
2697.00	2.64	235.06	2696.62	-17.91	-19.99	20.07	1.77	1.77	0.00	
2726.00	4.22	247.54	2725.56	-18.70	-21.53	21.61	5.99	5.45	43.03	
2758.00	6.24	254.75	2757.43	-19.61	-24.29	24.38	6.63	6.31	22.53	
2788.00	8.62	255.10	2787.18	-20.61	-28.04	28.13	7.93	7.93	1.17	
2820.00	10.99	253.60	2818.71	-22.09	-33.28	33.38	7.45	7.41	-4.69	
2851.00	12.84	255.45	2849.04	-23.79	-39.45	39.56	6.09	5.97	5.97	
2882.00	14.95	258.44	2879.13	-25.46	-46.71	46.82	7.19	6.81	9.65	
2914.00	17.85	262.22	2909.82	-26.95	-55.61	55.73	9.65	9.06	11.81	
2945.00	21.02	263.71	2939.05	-28.20	-65.85	65.97	10.35	10.23	4.81	
2975.00	23.13	266.52	2966.85	-29.15	-77.08	77.20	7.86	7.03	9.37	
3005.00	25.15	269.25	2994.23	-29.59	-89.34	89.46	7.69	6.73	9.10	
3036.00	26.56	269.78	3022.13	-29.70	-102.85	102.98	4.61	4.55	1.71	
3068.00	26.82	268.72	3050.72	-29.89	-117.23	117.35	1.70	0.81	-3.31	
3099.00	27.17	270.65	3078.34	-29.97	-131.29	131.42	3.04	1.13	6.23	
3130.00	28.84	271.45	3105.71	-29.70	-145.85	145.98	5.52	5.39	2.58	
3162.00	29.99	270.92	3133.58	-29.38	-161.56	161.69	3.68	3.59	-1.66	

Pathfinder Energy

Survey Report

Company: Energen Resources Corporation
Field: Carson
Site: Carson 200S
Well: Carson 200S
Wellpath: Original Hole

Date: 7/18/2006 **Time:** 16:43:24 **Page:** 2
Co-ordinate(NE) Reference: Well: Carson 200S, True North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,269.75Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

Survey: Pathfinder LWD Surveys

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
3193.00	30.34	272.32	3160.39	-28.93	-177.13	177.25	2.53	1.13	4.52	
3224.00	30.78	272.23	3187.08	-28.31	-192.88	193.00	1.43	1.42	-0.29	
3255.00	32.62	271.09	3213.45	-27.84	-209.16	209.28	6.24	5.94	-3.68	
3286.00	34.21	271.62	3239.33	-27.44	-226.23	226.34	5.21	5.13	1.71	
3317.00	34.73	272.32	3264.89	-26.83	-243.76	243.88	2.11	1.68	2.26	
3346.00	34.91	272.76	3288.69	-26.10	-260.30	260.42	1.07	0.62	1.52	
3377.00	34.91	272.85	3314.12	-25.23	-278.02	278.13	0.17	0.00	0.29	
3407.00	34.91	273.12	3338.72	-24.34	-295.17	295.27	0.52	0.00	0.90	
3438.00	35.35	274.35	3364.07	-23.17	-312.97	313.07	2.69	1.42	3.97	
3470.00	35.79	274.35	3390.10	-21.76	-331.53	331.62	1.37	1.37	0.00	
3502.00	35.96	273.03	3416.03	-20.55	-350.24	350.33	2.47	0.53	-4.12	
3533.00	36.14	273.64	3441.09	-19.49	-368.45	368.54	1.30	0.58	1.97	
3563.00	36.23	273.91	3465.31	-18.33	-386.13	386.20	0.61	0.30	0.90	
3594.00	36.49	271.80	3490.27	-17.41	-404.48	404.55	4.12	0.84	-6.81	
3625.00	36.75	271.80	3515.15	-16.83	-422.96	423.03	0.84	0.84	0.00	
3654.00	37.72	271.80	3538.24	-16.28	-440.50	440.57	3.34	3.34	0.00	
3684.00	38.34	270.74	3561.87	-15.87	-458.98	459.04	3.00	2.07	-3.53	
3716.00	38.87	269.69	3586.88	-15.80	-478.94	479.01	2.63	1.66	-3.28	
3747.00	40.63	269.60	3610.71	-15.92	-498.77	498.83	5.68	5.68	-0.29	
3778.00	42.65	270.21	3633.88	-15.95	-519.36	519.43	6.65	6.52	1.97	
3809.00	44.76	270.21	3656.29	-15.87	-540.78	540.84	6.81	6.81	0.00	
3841.00	46.52	270.13	3678.66	-15.81	-563.66	563.72	5.50	5.50	-0.25	
3872.00	47.92	269.16	3699.71	-15.95	-586.41	586.47	5.07	4.52	-3.13	
3903.00	50.12	269.95	3720.04	-16.13	-609.81	609.87	7.35	7.10	2.55	
3935.00	52.23	269.60	3740.10	-16.23	-634.74	634.80	6.65	6.59	-1.09	
3966.00	54.17	270.04	3758.67	-16.30	-659.56	659.62	6.36	6.26	1.42	
3998.00	55.84	269.25	3777.02	-16.47	-685.77	685.84	5.60	5.22	-2.47	
4029.00	56.98	269.16	3794.17	-16.83	-711.59	711.66	3.69	3.68	-0.29	
4061.00	57.07	269.16	3811.59	-17.22	-738.44	738.50	0.28	0.28	0.00	
4092.00	58.74	269.67	3828.06	-17.49	-764.70	764.76	5.56	5.39	1.65	
4124.00	60.41	269.58	3844.27	-17.67	-792.29	792.36	5.22	5.22	-0.28	
4155.00	62.08	269.93	3859.18	-17.78	-819.46	819.53	5.48	5.39	1.13	
4186.00	63.75	270.11	3873.29	-17.77	-847.06	847.13	5.41	5.39	0.58	
4217.00	65.60	270.28	3886.55	-17.68	-875.08	875.15	5.99	5.97	0.55	
4249.00	67.53	270.72	3899.28	-17.42	-904.44	904.51	6.16	6.03	1.37	
4281.00	69.73	270.63	3910.94	-17.07	-934.24	934.30	6.88	6.87	-0.28	
4312.00	70.87	270.98	3921.39	-16.66	-963.42	963.48	3.83	3.68	1.13	
4343.00	72.63	270.28	3931.10	-16.34	-992.86	992.92	6.07	5.68	-2.26	
4374.00	73.95	270.11	3940.01	-16.24	-1022.55	1022.61	4.29	4.26	-0.55	
4406.00	75.80	270.19	3948.36	-16.16	-1053.44	1053.50	5.79	5.78	0.25	
4437.00	77.47	270.54	3955.52	-15.96	-1083.59	1083.65	5.50	5.39	1.13	
4468.00	79.80	270.81	3961.63	-15.61	-1113.98	1114.04	7.56	7.52	0.87	
4501.00	83.62	269.93	3966.39	-15.40	-1146.63	1146.69	11.87	11.58	-2.67	
4532.00	85.66	269.31	3969.29	-15.60	-1177.49	1177.55	6.88	6.58	-2.00	
4559.00	85.76	268.96	3971.31	-16.01	-1204.41	1204.47	1.34	0.37	-1.30	
4666.00	88.64	273.18	3976.53	-14.01	-1311.23	1311.28	4.77	2.69	3.94	
4698.00	91.45	273.53	3976.51	-12.13	-1343.17	1343.21	8.85	8.78	1.09	
4730.00	92.42	272.04	3975.43	-10.58	-1375.12	1375.15	5.55	3.03	-4.66	
4762.00	90.92	269.49	3974.50	-10.15	-1407.10	1407.13	9.24	-4.69	-7.97	
4794.00	88.46	267.91	3974.67	-10.88	-1439.08	1439.12	9.14	-7.69	-4.94	
4825.00	87.14	266.85	3975.86	-12.30	-1470.03	1470.07	5.46	-4.26	-3.42	
4857.00	86.61	266.50	3977.60	-14.15	-1501.93	1501.97	1.98	-1.66	-1.09	
4889.00	87.76	267.56	3979.18	-15.80	-1533.84	1533.90	4.88	3.59	3.31	

Pathfinder Energy

Survey Report

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Field: Carson
Site: Carson 200S
Well: Carson 200S
Wellpath: Original Hole

Date: 7/18/2006 **Time:** 16:43:24 **Page:** 3
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Survey: Pathfinder LWD Surveys

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
4921.00	88.37	268.96	3980.26	-16.78	-1565.81	1565.87	4.77	1.91	4.37	
4952.00	90.92	268.97	3980.45	-17.34	-1596.80	1596.86	8.23	8.23	0.03	
4984.00	92.15	267.38	3979.59	-18.35	-1628.77	1628.84	6.28	3.84	-4.97	
5016.00	92.77	265.53	3978.22	-20.33	-1660.68	1660.75	6.09	1.94	-5.78	
5048.00	91.36	265.97	3977.06	-22.70	-1692.57	1692.65	4.62	-4.41	1.37	
5079.00	90.66	266.06	3976.52	-24.85	-1723.49	1723.58	2.28	-2.26	0.29	
5111.00	90.04	266.33	3976.32	-26.98	-1755.42	1755.52	2.11	-1.94	0.84	
5143.00	87.93	269.84	3976.89	-28.05	-1787.39	1787.49	12.80	-6.59	10.97	
5175.00	88.11	271.07	3977.99	-27.79	-1819.37	1819.47	3.88	0.56	3.84	
5207.00	88.37	269.40	3978.98	-27.66	-1851.35	1851.45	5.28	0.81	-5.22	
5238.00	88.64	268.17	3979.79	-28.32	-1882.33	1882.44	4.06	0.87	-3.97	
5270.00	88.11	267.29	3980.69	-29.59	-1914.30	1914.41	3.21	-1.66	-2.75	
5301.00	87.67	266.24	3981.84	-31.33	-1945.22	1945.34	3.67	-1.42	-3.39	
5333.00	87.93	266.41	3983.06	-33.38	-1977.13	1977.26	0.97	0.81	0.53	
5365.00	87.58	268.35	3984.32	-34.85	-2009.08	2009.21	6.16	-1.09	6.06	
5425.00	87.58	268.35	3986.85	-36.57	-2069.00	2069.14	0.00	0.00	0.00	

$$\begin{array}{rcl}
 SL = & 745' FNL & - 1345' FEL \\
 & + 37' south & 2069' west \\
 \hline
 & 782' FNL & 341' FEL
 \end{array}$$