

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 October 12, 2005

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

As Drilled ☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-27407	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 21996	⁵ Property Name San Juan 32-5 Unit	⁶ Well Number 107S
⁷ OGRID No 162928	⁸ Operator Name Energen Resources Corporation	⁹ Elevation 6348'

¹⁰ Surface Location

UL or lot no P	Section 26	Township 32N	Range 06W	Lot 1dn	Feet from the 875	North/South line South	Feet from the 780	East/West line East	County Rio Arriba
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¹¹ Bottom Hole Location If Different From Surface

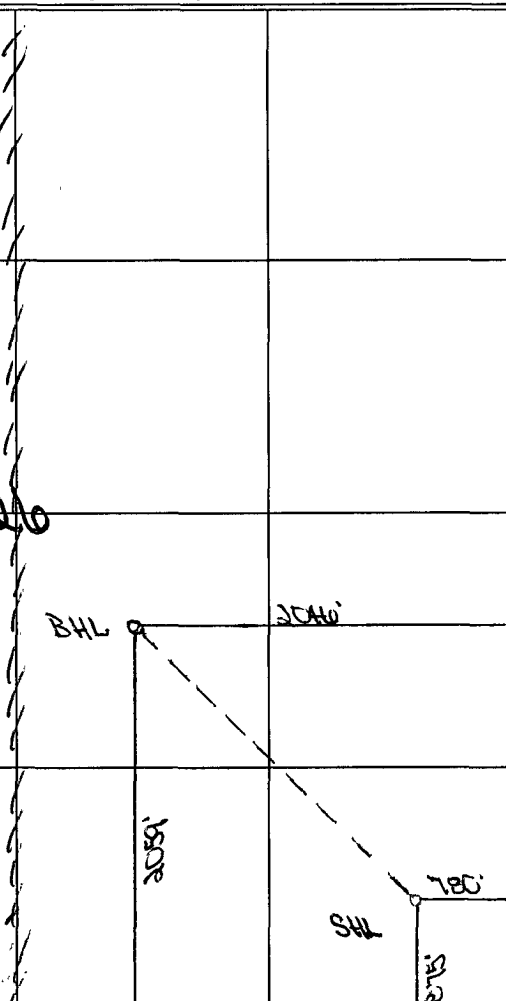
UL or lot no J	Section 26	Township 32N	Range 06W	Lot 1dn	Feet from the 2059	North/South line South	Feet from the 2046	East/West line East	County Rio Arriba
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¹² Dedicated Acres 320 E/2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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RCVD NOV 12 '08
OIL CONS. DIV.

DIST. 3

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 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 <i>Vicki Donaghey</i> 11/07/08 Signature Date Vicki Donaghey Printed Name
			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 October 3, 2002 Date of Survey Signature and Seal of Professional Surveyer Original survey conducted and recorded by: Jason C. Edwards 15269 Certificate Number

11-1808
11/20



Energen Resources

SJBR-SE SEC26, T32N, R6W

Eul Canyon

San Juan 32-5 Unit #107S

OH

Survey: MWD #1

RCVD NOV 12 '08
OIL CONS. DIV.

DIST. 3

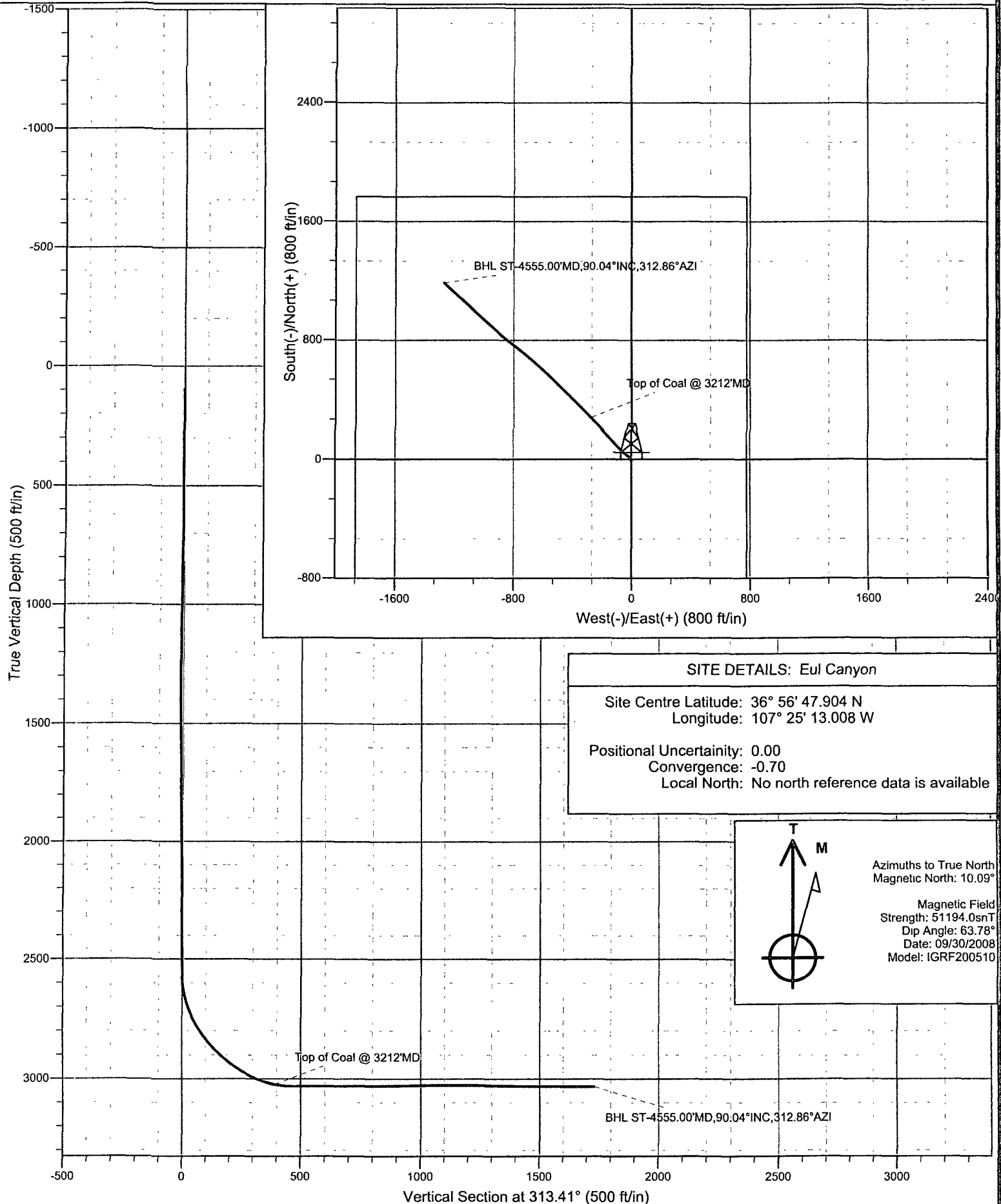
EOW Survey

06 November, 2008

PATHFINDER
ENERGY SERVICES

Survey: MWD #1 (San Juan 32-5 Unit #107S/OH)

EOW



Company: Energen Resources
Project: SJBR-SE SEC26, T32N, R6W
Site: Eul Canyon
Well: San Juan 32-5 Unit #107S
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well San Juan 32-5 Unit #107S
TVD Reference: WELL @ 6360.00ft (Bear Cat 3 RKB 12')
MD Reference: WELL @ 6360.00ft (Bear Cat 3 RKB 12')
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Midland DB

Project	SJBR-SE SEC26, T32N, R6W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Central Zone		

Site	Eul Canyon		
Site Position:		Northing:	2,165,969.538 ft
From:	Lat/Long	Easting:	1,298,445.790 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	36° 56' 47.904 N
		Longitude:	107° 25' 13.008 W
		Grid Convergence:	-0.70 °

Well	San Juan 32-5 Unit #107S		
Well Position	+N/-S	0.00 ft	Northing: 2,165,969.538 ft
	+E/-W	0.00 ft	Easting: 1,298,445.790 ft
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	36° 56' 47.904 N
		Longitude:	107° 25' 13.008 W
		Ground Level:	6,348.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	09/30/2008	10.09	63.78	51,194

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	313.41	

Survey Program	Date 11/06/2008				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
97.00	2,567.00	GYRO (OH)	CB-GYRO-MS	Camera based gyro multishot	

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	DLeg (°/100ft)	V. Sec (ft)
97.00	0.11	51.35	97.00	0.06	0.07	0.00	-0.01
197.00	0.21	93.51	197.00	0.11	0.33	0.15	-0.17
297.00	0.28	145.90	297.00	-0.11	0.65	0.23	-0.55
397.00	0.33	144.07	397.00	-0.54	0.96	0.05	-1.07
497.00	0.30	125.02	497.00	-0.93	1.34	0.11	-1.61
597.00	0.41	127.63	596.99	-1.29	1.84	0.11	-2.22
697.00	0.41	107.20	696.99	-1.62	2.46	0.15	-2.90
797.00	0.32	147.40	796.99	-1.96	2.96	0.26	-3.49
897.00	0.53	179.00	896.99	-2.66	3.11	0.31	-4.09
997.00	0.50	173.37	996.98	-3.55	3.17	0.06	-4.75
1,097.00	0.34	150.75	1,096.98	-4.25	3.37	0.23	-5.36
1,197.00	0.27	132.41	1,196.98	-4.66	3.69	0.12	-5.88

Company: Energen Resources
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Survey Calculation Method: Minimum Curvature
Database: Midland DB

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	DLeg (°/100ft)	V. Sec (ft)
1,297.00	0.22	142.31	1,296.98	-4.97	3.98	0.07	-6.31
1,397.00	0.33	350.79	1,396.98	-4.84	4.05	0.53	-6.27
1,497.00	0.51	352.52	1,496.97	-4.12	3.94	0.18	-5.69
1,597.00	0.53	355.52	1,596.97	-3.21	3.85	0.03	-5.01
1,697.00	0.48	339.65	1,696.97	-2.36	3.67	0.15	-4.29
1,797.00	0.54	352.23	1,796.96	-1.50	3.46	0.13	-3.54
1,897.00	0.45	334.50	1,896.96	-0.68	3.23	0.18	-2.81
1,997.00	0.36	329.07	1,996.96	-0.06	2.90	0.10	-2.14
2,097.00	0.55	319.79	2,096.95	0.58	2.43	0.20	-1.36
2,197.00	0.76	14.12	2,196.95	1.59	2.28	0.63	-0.56
2,297.00	0.89	22.72	2,296.94	2.95	2.74	0.18	0.04
2,397.00	1.04	21.91	2,396.92	4.51	3.38	0.15	0.64
2,497.00	0.81	3.51	2,496.91	6.06	3.76	0.37	1.43
2,559.00	1.07	352.84	2,558.90	7.07	3.71	0.50	2.16
2,635.36	10.02	297.17	2,634.85	10.82	-2.30	12.39	9.10
2,666.11	14.25	306.51	2,664.90	14.29	-7.72	15.12	15.43
2,696.86	18.73	308.48	2,694.38	19.62	-14.63	14.68	24.11
2,727.66	22.69	310.99	2,723.19	26.60	-22.99	13.17	34.98
2,758.46	27.00	310.59	2,751.13	35.04	-32.79	14.00	47.90
2,789.26	31.22	311.01	2,778.03	44.84	-44.13	13.72	62.87
2,820.06	34.73	312.80	2,803.87	56.04	-56.59	11.83	79.62
2,850.82	37.64	313.77	2,828.69	68.49	-69.81	9.64	97.78
2,881.60	40.36	315.23	2,852.61	82.07	-83.62	9.33	117.14
2,912.38	43.70	315.21	2,875.47	96.70	-98.13	10.85	137.74
2,943.10	47.04	316.21	2,897.05	112.35	-113.39	11.12	159.58
2,973.88	50.56	316.99	2,917.32	129.18	-129.30	11.59	182.70
3,004.67	53.38	317.81	2,936.29	147.03	-145.71	9.40	206.89
3,035.43	56.45	317.91	2,953.97	165.69	-162.59	9.98	231.98
3,066.21	59.36	317.58	2,970.32	184.99	-180.13	9.50	257.98
3,097.00	62.17	317.51	2,985.36	204.81	-198.26	9.13	284.78
3,127.78	66.13	317.31	2,998.77	225.20	-217.00	12.88	312.40
3,158.62	70.00	315.62	3,010.29	245.93	-236.71	13.54	340.96
3,189.35	75.27	314.98	3,019.46	266.77	-257.33	17.26	370.27
3,212.00	78.23	314.85	3,024.65	282.33	-272.94	13.07	392.30
Top of Coal @ 3212'MD							
3,217.00	78.88	314.82	3,025.64	285.79	-276.42	13.07	397.20
3,247.00	84.33	315.29	3,030.02	306.78	-297.38	18.23	426.86
3,278.00	88.72	315.05	3,031.90	328.72	-319.19	14.18	457.78
3,309.00	90.92	313.84	3,032.00	350.43	-341.32	8.10	488.77
3,340.00	90.66	313.81	3,031.57	371.89	-363.68	0.84	519.77
3,370.00	90.13	313.57	3,031.36	392.62	-385.37	1.94	549.77
3,401.00	89.69	314.22	3,031.41	414.11	-407.71	2.53	580.76
3,432.00	90.31	314.44	3,031.41	435.77	-429.89	2.12	611.76
3,463.00	89.96	314.55	3,031.34	457.50	-452.00	1.18	642.75

Company: Energen Resources
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Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	DLeg (°/100ft)	V. Sec (ft)
3,494.00	89.60	314.75	3,031.46	479.28	-474.05	1.33	673.75
3,524.00	90.31	315.00	3,031.48	500.45	-495.31	2.51	703.74
3,555.00	90.92	314.38	3,031.15	522.25	-517.35	2.81	734.73
3,586.00	90.75	313.74	3,030.70	543.80	-539.62	2.14	765.72
3,617.00	89.87	312.45	3,030.53	564.98	-562.26	5.04	796.72
3,648.00	89.87	312.31	3,030.60	585.88	-585.16	0.45	827.71
3,678.00	89.96	312.14	3,030.65	606.04	-607.37	0.64	857.71
3,709.00	90.22	312.61	3,030.60	626.93	-630.27	1.73	888.70
3,740.00	91.45	312.10	3,030.15	647.82	-653.18	4.30	919.69
3,771.00	91.54	310.80	3,029.34	668.33	-676.41	4.20	950.66
3,802.00	91.45	310.02	3,028.53	688.42	-700.00	2.53	981.61
3,832.00	91.19	309.25	3,027.84	707.55	-723.10	2.71	1,011.54
3,863.00	89.96	309.26	3,027.53	727.16	-747.10	3.97	1,042.45
3,895.00	89.52	309.16	3,027.67	747.39	-771.90	1.41	1,074.37
3,927.00	89.78	307.50	3,027.87	767.24	-797.00	5.25	1,106.24
3,958.00	89.34	308.39	3,028.10	786.30	-821.44	3.20	1,137.10
3,989.00	89.87	309.71	3,028.32	805.83	-845.52	4.59	1,168.01
4,021.00	91.71	310.24	3,027.88	826.38	-870.04	5.98	1,199.95
4,051.00	88.90	310.34	3,027.72	845.78	-892.92	9.37	1,229.90
4,083.00	88.81	311.84	3,028.36	866.81	-917.03	4.69	1,261.86
4,114.00	88.37	312.66	3,029.12	887.65	-939.97	3.00	1,292.85
4,145.00	88.20	312.37	3,030.05	908.59	-962.81	1.08	1,323.83
4,177.00	88.99	312.39	3,030.83	930.15	-986.44	2.47	1,355.81
4,208.00	89.87	312.54	3,031.14	951.08	-1,009.31	2.88	1,386.81
4,239.00	89.52	312.22	3,031.31	971.97	-1,032.21	1.53	1,417.80
4,270.00	89.34	311.95	3,031.61	992.75	-1,055.21	1.05	1,448.79
4,301.00	89.87	312.35	3,031.83	1,013.55	-1,078.19	2.14	1,479.78
4,333.00	90.04	311.72	3,031.85	1,034.98	-1,101.96	2.04	1,511.78
4,364.00	89.78	311.24	3,031.90	1,055.51	-1,125.19	1.76	1,542.76
4,396.00	89.08	310.89	3,032.22	1,076.53	-1,149.31	2.45	1,574.73
4,427.00	89.43	312.23	3,032.62	1,097.09	-1,172.50	4.47	1,605.71
4,459.00	89.96	312.86	3,032.79	1,118.73	-1,196.08	2.57	1,637.71
4,490.00	90.04	312.86	3,032.79	1,139.82	-1,218.80	0.26	1,668.70
4,555.00	90.04	312.86	3,032.75	1,184.03	-1,266.45	0.00	1,733.70

BHL ST-4555.00°MD,90.04°INC,312.86°AZI

Company: Energen Resources
Project: SJBR-SE SEC26, T32N, R6W
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Wellbore: OH
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Targets
Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
PBHL(San Juan 32-5	0.00	0.00	3,035.00	1,665.00	-1,760.00	2,167,656.022	1,296,706.367	36° 57' 4.366 N	107° 25' 34.690 W
- survey misses by 689.15ft at 4555.00ft MD (3032.75 TVD, 1184.03 N, -1266.45 E)									
- Point									

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
3,212.00	3,024.65	282.33	-272.94	Top of Coal @ 3212'MD
4,555.00	3,032.75	1,184.03	-1,266.45	BHL ST-4555.00'MD,90.04°INC,312.86°AZI

Checked By: _____ Approved By: _____ Date: _____