

"As Drilled"**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 Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised July 16, 2010

Submit one copy to appropriate

District Office

☒ AMENDED REPORT**WELL LOCATION AND ACREAGE DEDICATION PLAT**

¹ API Number 30-039-24328	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 22045	⁵ Property Name San Juan 32-5 Unit NP	⁶ Well Number 107
⁷ OGRID No. 162928	⁸ Operator Name Energen Resources Corporation	⁹ Elevation 6353'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot 1 dn	Feet from the	North/South line	Feet from the	East/West line	County
H	26	32N	6W		2045'	North	645'	East	Rio Arriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 1 dn	Feet from the	North/South line	Feet from the	East/West line	County
	26	32N	6W		112'	North	2399'	East	Rio Arriba

¹² Dedicated Acres 320 E/2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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RCVD OCT 18 '10
OIL CONS. DIV.

DIST. 3

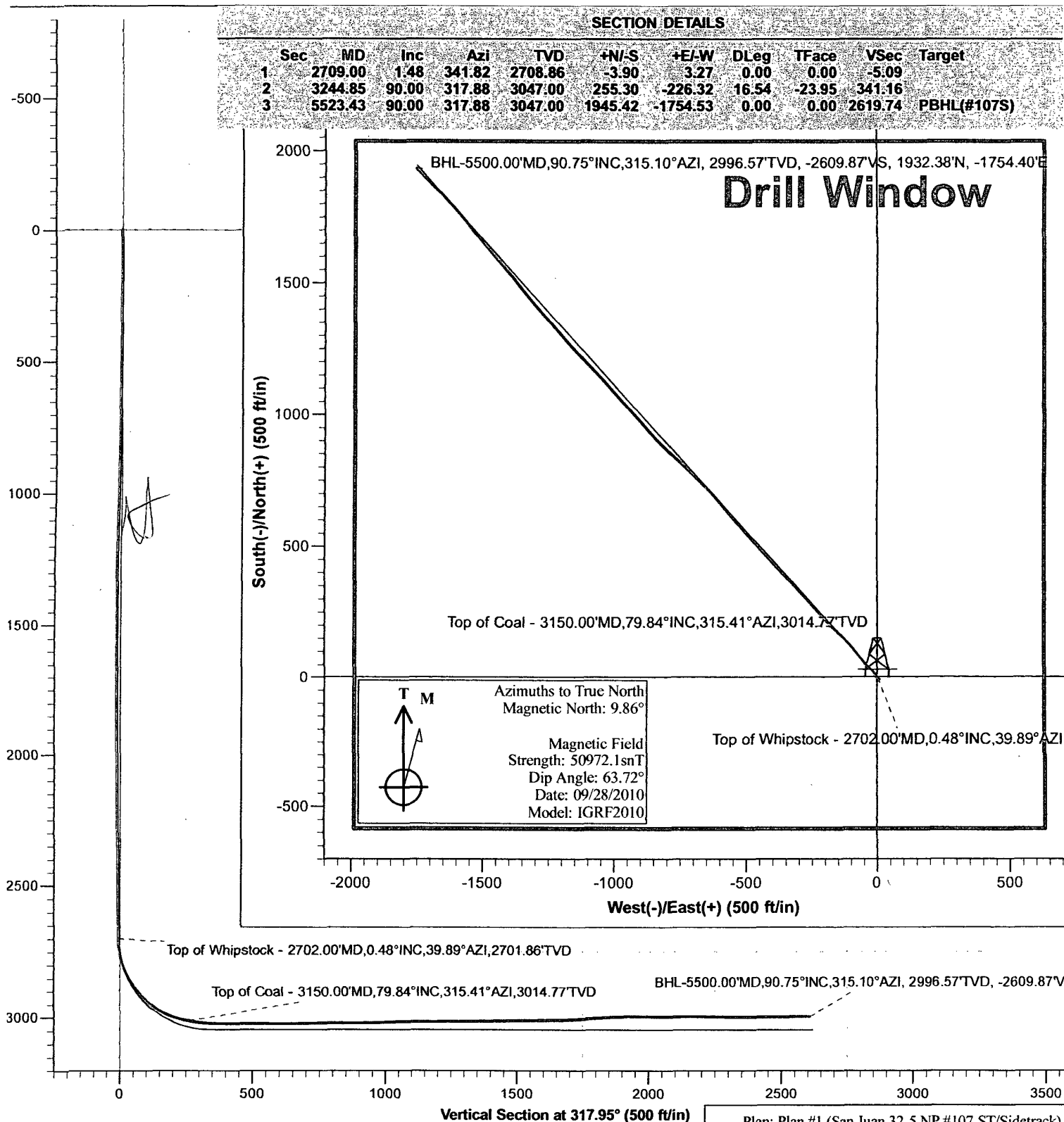
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16 Producing Interval: From existing 7" casing, 2702'TVD @ 2049'FNL, 642'FEL To TD of Sidetrack @ 112'FNL, 2399'FEL (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. Signature: <u>Stephen Byers</u> Date: <u>10/12/2010</u> Printed Name: <u>Stephen Byers</u> E-mail Address: <u>sbyers@energen.com</u>
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. Date of Survey: <u>June 2, 1988</u> Signature and Seal of Professional Surveyor: <u>R. Howard Daggett</u> Certificate Number: <u>9679</u>	

WELL DETAILS: San Juan 32-5 NP #107 ST

Ground Elevation: 6353.00
 RKB Elevation: WELL @ 6368.00ft (Original Well Elev)
 Rig Name: Original Well Elev

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	2167148.425	1298816.818	36° 56' 59.604 N	107° 25' 8.616 W



Company: Energen Resources
Project: Rio Arriba County
Site: Eul Canyon
Well: San Juan 32-5 NP #107 ST
Wellbore: Sidetrack
Design: Sidetrack

Local Co-ordinate Reference: Well San Juan 32-5 NP #107 ST
TVD Reference: WELL @ 6368.00ft (Original Well Elev)
MD Reference: WELL @ 6368.00ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Project	Rio Arriba County		
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:	2,173,184.728 ft
From:	Lat/Long	Easting:	1,296,505.935 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	36° 57' 59.000 N
		Longitude:	107° 25' 38.000 W
		Grid Convergence:	-0.71 °

Well	San Juan 32-5 NP #107 ST		
Well Position	+N-S	0.00 ft	Northing: 2,167,148.425 ft
	+E-W	0.00 ft	Easting: 1,298,816.818 ft
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	36° 56' 59.604 N
		Longitude:	107° 25' 8.616 W
		Ground Level:	6,353.00 ft

Wellbore	Sidetrack		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	09/28/10	9.86
			Dip Angle (°) 63.72
			Field Strength (nT) 50,972

Design	Sidetrack		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(ft)	(ft)	(ft)
	0.00	0.00	0.00
			Direction (°) 137.24

Survey Program	Date	10/12/10		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
200.00	5,500.00	MWD #1 (Sidetrack)	MWD	MWD - Standard

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	DLeg (°/100ft)	V. Sec (ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.34	132.49	200.00	-0.40	0.44	0.17	0.59
400.00	0.60	141.44	399.99	-1.62	1.53	0.13	2.23
600.00	0.68	164.99	599.98	-3.59	2.49	0.14	4.32
800.00	0.66	152.50	799.97	-5.75	3.33	0.07	6.48
1,000.00	0.85	120.52	999.95	-7.53	5.14	0.23	9.02
1,200.00	0.78	116.91	1,199.93	-8.90	7.63	0.04	11.71
1,400.00	0.37	91.28	1,399.92	-9.53	9.49	0.24	13.44
1,600.00	0.21	35.87	1,599.92	-9.25	10.35	0.15	13.81
1,800.00	0.48	293.66	1,799.91	-8.61	9.80	0.28	12.97
2,000.00	0.37	273.06	1,999.91	-8.24	8.38	0.09	11.74
2,200.00	0.91	285.25	2,199.90	-7.79	6.21	0.28	9.93

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MD Reference: WELL @ 6368.00ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	DLeg (°/100ft)	V. Sec (ft)
2,400.00	0.80	311.31	2,399.87	-6.45	3.63	0.20	7.20
2,600.00	0.48	19.71	2,599.86	-4.74	2.86	0.38	5.42
2,702.00	0.48	39.89	2,701.86	-4.01	3.28	0.16	5.17
Top of Whipstock - 2702.00°MD,0.48°INC,39.89°AZI,2701.86°TVD							
2,800.90	18.38	324.86	2,799.06	9.17	-5.51	18.46	-10.47
2,831.70	24.89	323.19	2,827.68	18.34	-12.19	21.23	-21.74
2,862.70	30.25	316.33	2,855.15	29.22	-21.50	20.07	-36.05
2,893.50	35.96	315.72	2,880.94	41.32	-33.18	18.57	-52.86
2,924.00	39.75	318.88	2,905.02	55.08	-45.85	13.95	-71.57
2,953.90	43.35	320.29	2,927.39	70.18	-58.70	12.44	-91.38
2,984.70	49.24	321.17	2,948.67	87.42	-72.78	19.23	-113.60
3,014.90	55.84	320.38	2,967.02	105.97	-87.94	21.95	-137.51
3,045.40	62.08	317.74	2,982.75	125.69	-105.07	21.76	-163.61
3,076.00	68.24	315.63	2,995.60	145.87	-124.11	21.08	-191.37
3,107.00	74.66	313.79	3,005.45	166.53	-144.99	21.46	-220.71
3,136.00	78.61	314.67	3,012.16	186.21	-165.21	13.94	-248.88
3,150.00	79.84	315.41	3,014.77	195.94	-174.92	10.21	-262.62
Top of Coal - 3150.00°MD,79.84°INC,315.41°AZI,3014.77°TVD							
3,166.00	81.25	316.25	3,017.40	207.26	-185.92	10.22	-278.40
3,197.00	83.89	318.36	3,021.41	229.85	-206.76	10.87	-309.13
3,228.00	87.49	318.27	3,023.74	252.93	-227.31	11.62	-340.04
3,259.00	89.78	317.57	3,024.48	275.93	-248.08	7.72	-371.02
3,289.00	89.69	317.21	3,024.62	298.01	-268.39	1.24	-401.02
3,320.00	89.87	316.86	3,024.74	320.70	-289.52	1.27	-432.02
3,349.00	89.34	316.86	3,024.94	341.86	-309.35	1.83	-461.02
3,380.00	89.87	317.04	3,025.15	364.51	-330.51	1.81	-492.02
3,410.00	89.96	317.04	3,025.19	386.47	-350.96	0.30	-522.02
3,441.00	89.52	317.04	3,025.33	409.15	-372.08	1.42	-553.02
3,472.00	90.22	317.57	3,025.40	431.94	-393.10	2.83	-584.02
3,503.00	90.31	318.01	3,025.26	454.90	-413.93	1.45	-615.02
3,534.00	90.48	318.44	3,025.05	478.01	-434.58	1.49	-646.01
3,564.00	91.98	318.53	3,024.40	500.47	-454.46	5.01	-676.00
3,595.00	92.24	318.44	3,023.26	523.67	-474.99	0.89	-706.97
3,626.00	91.10	318.88	3,022.36	546.93	-495.46	3.94	-737.94
3,656.00	89.69	318.53	3,022.15	569.47	-515.26	4.84	-767.93
3,687.00	89.78	319.32	3,022.30	592.84	-535.63	2.56	-798.92
3,718.00	90.48	319.06	3,022.23	616.30	-555.89	2.41	-829.90
3,747.00	90.22	319.59	3,022.05	638.30	-574.79	2.04	-858.88
3,778.00	90.66	319.67	3,021.81	661.92	-594.87	1.44	-889.85
3,809.00	89.96	318.71	3,021.64	685.38	-615.12	3.83	-920.83
3,840.00	91.80	317.30	3,021.17	708.41	-635.86	7.48	-951.82
3,870.00	92.42	315.89	3,020.06	730.19	-656.46	5.13	-981.80
3,901.00	93.12	314.31	3,018.56	752.13	-678.32	5.57	-1,012.74
3,931.00	91.36	313.70	3,017.39	772.95	-699.88	6.21	-1,042.67
3,962.00	90.66	313.08	3,016.84	794.24	-722.40	3.02	-1,073.60

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Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	DLeg (°/100ft)	V. Sec (ft)
3,994.00	89.96	312.91	3,016.67	816.06	-745.81	2.25	-1,105.51
4,026.00	89.87	313.43	3,016.72	837.96	-769.15	1.65	-1,137.43
4,057.00	90.04	313.17	3,016.74	859.22	-791.71	1.00	-1,168.35
4,089.00	90.48	315.10	3,016.60	881.50	-814.67	6.19	-1,200.30
4,121.00	90.40	316.77	3,016.35	904.49	-836.92	5.22	-1,232.29
4,152.00	90.40	318.27	3,016.14	927.35	-857.86	4.84	-1,263.29
4,184.00	90.48	318.44	3,015.89	951.26	-879.12	0.59	-1,295.28
4,216.00	90.22	318.36	3,015.69	975.19	-900.37	0.85	-1,327.28
4,248.00	90.84	318.36	3,015.40	999.11	-921.63	1.94	-1,359.27
4,280.00	91.19	317.57	3,014.83	1,022.87	-943.05	2.70	-1,391.26
4,312.00	91.28	317.57	3,014.14	1,046.48	-964.64	0.28	-1,423.25
4,343.00	91.28	318.44	3,013.45	1,069.52	-985.37	2.81	-1,454.24
4,375.00	91.36	318.09	3,012.71	1,093.39	-1,006.67	1.12	-1,486.23
4,407.00	90.75	317.48	3,012.12	1,117.09	-1,028.17	2.70	-1,518.22
4,438.00	89.96	316.25	3,011.93	1,139.71	-1,049.36	4.72	-1,549.22
4,470.00	90.66	315.63	3,011.76	1,162.70	-1,071.61	2.92	-1,581.21
4,502.00	90.40	315.72	3,011.46	1,185.59	-1,093.97	0.86	-1,613.20
4,533.00	91.10	316.77	3,011.06	1,207.98	-1,115.41	4.07	-1,644.19
4,565.00	92.33	316.86	3,010.10	1,231.31	-1,137.30	3.85	-1,676.17
4,597.00	93.12	317.04	3,008.58	1,254.66	-1,159.12	2.53	-1,708.14
4,628.00	92.51	318.80	3,007.05	1,277.64	-1,179.87	6.00	-1,739.10
4,660.00	93.12	319.24	3,005.48	1,301.77	-1,200.83	2.35	-1,771.04
4,692.00	93.03	319.06	3,003.77	1,325.94	-1,221.73	0.63	-1,802.98
4,724.00	93.74	319.06	3,001.88	1,350.07	-1,242.66	2.22	-1,834.91
4,756.00	93.03	317.92	2,999.99	1,373.99	-1,263.83	4.19	-1,866.84
4,788.00	93.30	318.36	2,998.22	1,397.79	-1,285.15	1.61	-1,898.79
4,820.00	90.92	319.85	2,997.04	1,421.96	-1,306.08	8.77	-1,930.75
4,851.00	89.69	320.73	2,996.88	1,445.81	-1,325.89	4.88	-1,961.70
4,883.00	89.16	321.78	2,997.20	1,470.76	-1,345.91	3.68	-1,993.62
4,915.00	88.81	321.26	2,997.77	1,495.81	-1,365.82	1.96	-2,025.53
4,946.00	89.60	320.46	2,998.20	1,519.85	-1,385.39	3.63	-2,056.46
4,978.00	90.66	319.50	2,998.12	1,544.36	-1,405.97	4.47	-2,088.42
5,010.00	91.28	319.24	2,997.58	1,568.64	-1,426.80	2.10	-2,120.40
5,041.00	90.40	318.36	2,997.13	1,591.96	-1,447.22	4.01	-2,151.38
5,073.00	89.52	319.32	2,997.15	1,616.05	-1,468.28	4.07	-2,183.37
5,105.00	88.90	319.94	2,997.59	1,640.43	-1,489.00	2.74	-2,215.34
5,137.00	88.55	320.82	2,998.30	1,665.07	-1,509.40	2.96	-2,247.28
5,169.00	88.90	320.99	2,999.01	1,689.90	-1,529.58	1.22	-2,279.21
5,201.00	90.40	321.43	2,999.21	1,714.84	-1,549.62	4.88	-2,311.13
5,232.00	90.31	321.17	2,999.02	1,739.04	-1,569.01	0.89	-2,342.05
5,264.00	90.57	318.62	2,998.77	1,763.51	-1,589.62	8.01	-2,374.01
5,295.00	89.87	317.13	2,998.65	1,786.50	-1,610.41	5.31	-2,405.01
5,327.00	89.52	316.16	2,998.82	1,809.77	-1,632.38	3.22	-2,437.01
5,358.00	90.75	315.54	2,998.75	1,832.01	-1,653.97	4.44	-2,468.00

Company: Energen Resources
Project: Rio Arriba County
Site: Eul Canyon
Well: San Juan 32-5 NP #107 ST
Wellbore: Sidetrack
Design: Sidetrack

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TVD Reference: WELL @ 6368.00ft (Original Well Elev)
MD Reference: WELL @ 6368.00ft (Original Well Elev)
North Reference: True
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Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	DLeg (°/100ft)	V. Sec (ft)
5,390.00	91.19	314.58	2,998.21	1,854.66	-1,676.57	3.30	-2,499.97
5,422.00	90.92	314.84	2,997.62	1,877.17	-1,699.31	1.17	-2,531.93
5,443.00	90.75	315.10	2,997.31	1,892.00	-1,714.16	1.48	-2,552.91
5,500.00	90.75	315.10	2,996.57	1,932.38	-1,754.40	0.00	-2,609.87

BHL-5500.00°MD,90.75°INC,315.10°AZI, 2996.57°TVD, -2609.87°VS, 1932.38°N, -1754.40°E - PBHL(#107S)

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(#107S)	0.00	0.00	3,047.00	1,945.00	-1,755.00	2,169,114.807	1,297,085.809	36° 57' 18.834 N	107° 25' 30.237 W
- survey misses target center by 51.99ft at 5500.00ft MD (2996.57 TVD, 1932.38 N, -1754.40 E)									
- Point									

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,702.00	2,701.86	-4.01	3.28	Top of Whipstock - 2702.00°MD,0.48°INC,39.89°AZI,2701.86°TVD
3,150.00	3,014.77	195.94	-174.92	Top of Coal - 3150.00°MD,79.84°INC,315.41°AZI,3014.77°TVD
5,500.00	2,996.57	1,932.38	-1,754.40	BHL-5500.00°MD,90.75°INC,315.10°AZI, 2996.57°TVD, -2609.87°VS, 1932.38°N, -1754.40°E

Checked By: _____ Approved By: _____ Date: _____