

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-30281	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code	⁵ Property Name Carson	⁶ Well Number # 203s
⁷ OGRID No. 162928	⁸ Operator Name Energen Resources Corporation	⁹ Elevation 7065'

¹⁰ Surface Location

UL or lot no n	Section 06	Township 30N	Range 04W	Lot Idn	Feet from the 753'	North/South line South	Feet from the 1741'	East/West line West	County Rio Arriba
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no C	Section 06	Township 30N	Range 04W	Lot Idn	Feet from the 2349'	North/South line North	Feet from the 1106'	East/West line West	County Rio Arriba
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¹² Dedicated Acres 232.9 W/2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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RCVD OCT 27 '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	3	2	1	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>Vicki Donaghey</u> Date _____ Printed Name Vicki Donaghey Regulatory Analyst
4	5	6	7	
8				
9				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. 04/17/07 Date of Survey Signature and Seal of Professional Surveyer original survey conducted and recorded by: DAVID RUSSELL 10301 Certificate Number
10				



RCVD OCT 27 '08
OIL CONS. DIV.
DIST. 3

Energen Resources

**SJ BR-S6, T30N, R4W
Carson Natl Forest (Carson #203S)
Carson #203S
ST02**

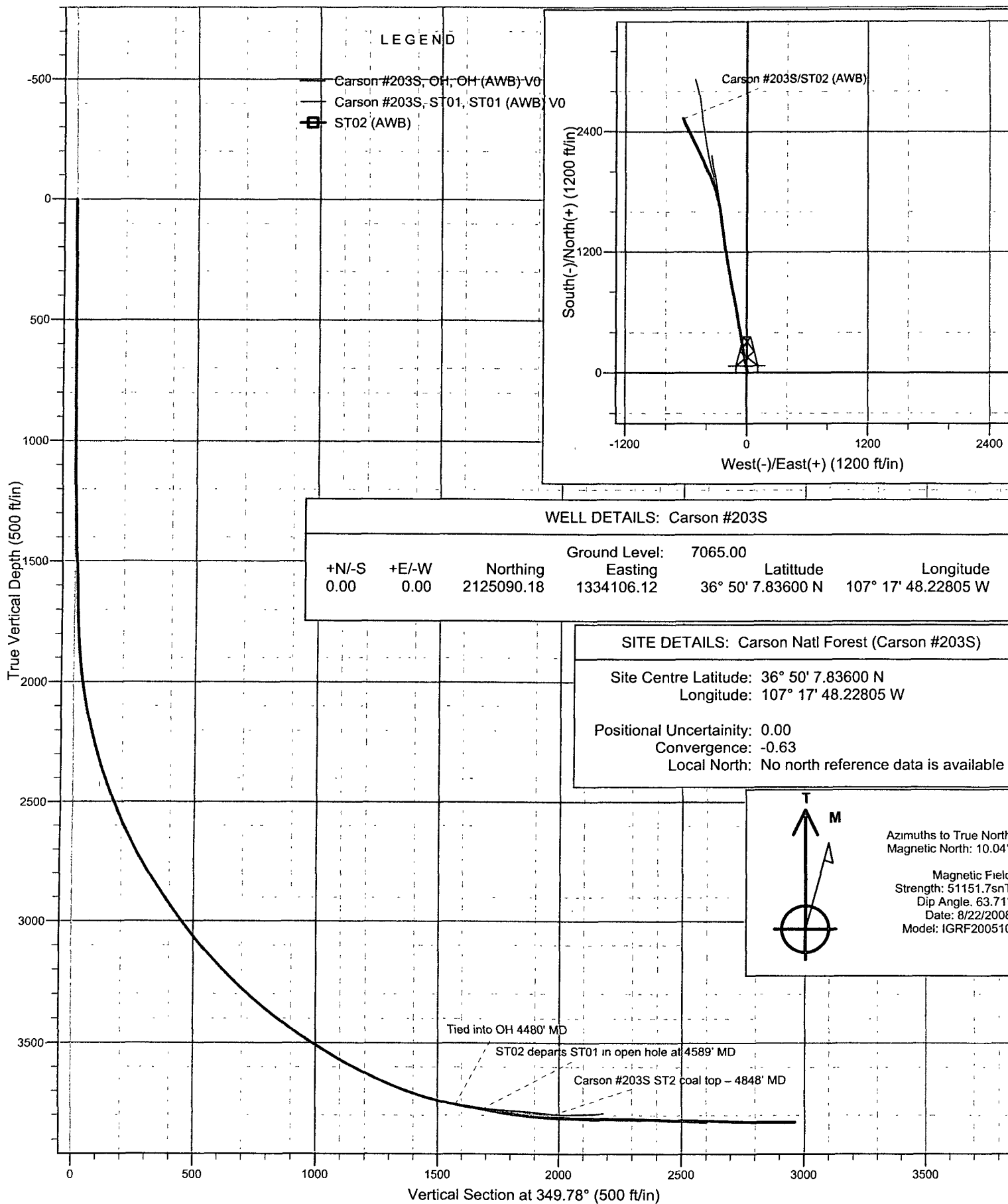
Design: ST02 (AWB)

Energen Report

03 October, 2008



Design: ST02 (AWB) (Carson #203S/ST02)



Company: Energen Resources
Project: SJ BR-S6, T30N, R4W
Site: Carson Natl Forest (Carson #203S)
Well: Carson #203S
Wellbore: ST02
Design: ST02 (AWB)

Local Co-ordinate Reference: Well Carson #203S
TVD Reference: 12" RKB @ 7077.00ft (Original Well Elev)
MD Reference: 12" RKB @ 7077.00ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: 2003.16 NWDB

Project	SJ BR-S6, T30N, R4W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Central Zone		

Site		Carson Natl Forest (Carson #203S)			
Site Position:		Northing:	2,125,090.18 ft	Latitude:	36° 50' 7.83600 N
From:	Map	Easting:	1,334,106.12 ft	Longitude:	107° 17' 48.22805 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	-0.63 °

Well	Carson #203S					
Well Position	+N/-S	0.00 ft	Northing:	2,125,090.18 ft	Latitude:	36° 50' 7.83600 N
	+E/-W	0.00 ft	Easting:	1,334,106.12 ft	Longitude:	107° 17' 48.22805 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	7,065.00 ft

Wellbore	ST02				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	8/22/2008	10.04	63.71	51,152

Design	ST02 (AWB)				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	4,480.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	349.78	

Survey Program	Date 10/3/2008				
From	To	Survey (Wellbore)	Tool Name	Description	
(ft)	(ft)				
440.00	4,480.00	Survey #1 (OH)	MWD	MWD - Standard	
4,555.00	5,534.00	Survey #1 (ST02)	MWD	MWD - Standard	

Survey								
MD	TVD	Inc	Azi	Build	V. Sec	N/S	E/W	
(ft)	(ft)	(°)	(°)	(°/100ft)	(ft)	(ft)	(ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
440.00	439.99	0.53	21.48	0.12	1.73	1.89	0.75	
928.00	927.99	0.09	172.10	-0.09	3.27	3.61	1.62	
1,413.00	1,412.96	1.14	14.77	0.22	7.26	7.90	2.91	
1,691.00	1,690.84	2.11	10.65	0.35	14.55	15.61	4.56	
1,723.00	1,722.82	2.02	7.18	-0.28	15.64	16.74	4.74	
1,755.00	1,754.80	2.37	4.05	1.09	16.82	17.96	4.85	
1,786.00	1,785.76	3.08	356.20	2.29	18.27	19.43	4.84	
1,818.00	1,817.71	3.43	350.44	1.09	20.08	21.24	4.63	
1,850.00	1,849.64	4.04	347.07	1.91	22.16	23.28	4.22	
1,882.00	1,881.55	4.66	343.16	1.94	24.58	25.62	3.59	

Company: Energen Resources
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Wellbore: ST02
Design: ST02 (AWB)

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North Reference: True
Survey Calculation Method: Minimum Curvature
Database: 2003.16 NWDB

Survey

MD (ft)	TVD (ft)	Inc (°)	Azi (°)	Build (°/100ft)	V. Sec (ft)	N/S (ft)	E/W (ft)
1,914.00	1,913.43	5.19	344.38	1.66	27.31	28.26	2.82
1,946.00	1,945.29	5.80	342.17	1.91	30.35	31.19	1.94
1,977.00	1,976.10	6.86	343.38	3.42	33.75	34.46	0.93
2,009.00	2,007.82	8.18	343.36	4.12	37.91	38.47	-0.27
2,041.00	2,039.47	8.79	343.41	1.91	42.60	43.00	-1.62
2,073.00	2,071.05	9.76	343.39	3.03	47.73	47.94	-3.09
2,105.00	2,102.54	10.73	345.29	3.03	53.39	53.42	-4.63
2,136.00	2,132.96	11.52	347.21	2.55	59.36	59.23	-6.04
2,167.00	2,163.28	12.57	347.75	3.39	65.83	65.54	-7.45
2,200.00	2,195.44	13.28	348.45	2.15	73.20	72.77	-8.97
2,230.00	2,224.59	13.98	348.76	2.33	80.27	79.70	-10.36
2,262.00	2,255.60	14.60	349.00	1.94	88.17	87.45	-11.89
2,294.00	2,286.51	15.39	348.71	2.47	96.45	95.57	-13.49
2,326.00	2,317.29	16.44	347.89	3.28	105.22	104.16	-15.27
2,358.00	2,347.92	17.15	347.72	2.22	114.46	113.20	-17.22
2,389.00	2,377.47	18.03	349.06	2.84	123.82	122.38	-19.10
2,421.00	2,407.84	18.73	349.96	2.19	133.91	132.30	-20.94
2,453.00	2,438.05	19.79	349.95	3.31	144.47	142.69	-22.78
2,485.00	2,468.06	20.84	349.77	3.28	155.58	153.63	-24.74
2,517.00	2,497.88	21.63	349.60	2.47	167.17	165.03	-26.81
2,549.00	2,527.57	22.25	349.63	1.94	179.12	176.79	-28.97
2,580.00	2,556.17	23.13	349.30	2.84	191.08	188.55	-31.15
2,612.00	2,585.52	23.83	349.08	2.19	203.83	201.07	-33.55
2,644.00	2,614.69	24.71	348.97	2.75	216.98	213.98	-36.05
2,675.00	2,642.72	25.85	348.97	3.68	230.22	226.98	-38.58
2,707.00	2,671.40	26.82	349.94	3.03	244.42	240.93	-41.18
2,739.00	2,699.87	27.52	350.48	2.19	259.03	255.33	-43.66
2,771.00	2,728.14	28.31	350.69	2.47	274.01	270.11	-46.11
2,803.00	2,756.13	29.72	351.02	4.41	289.52	285.43	-48.58
2,835.00	2,783.74	30.95	351.13	3.84	305.68	301.40	-51.09
2,867.00	2,811.05	31.92	351.81	3.03	322.36	317.90	-53.56
2,899.00	2,838.11	32.62	351.34	2.19	339.44	334.80	-56.06
2,930.00	2,864.14	33.15	351.07	1.71	356.27	351.44	-58.64
2,963.00	2,891.66	33.85	351.49	2.12	374.47	369.44	-61.40
2,994.00	2,917.35	34.21	351.84	1.16	391.81	386.61	-63.91
3,026.00	2,943.76	34.56	351.94	1.09	409.87	404.50	-66.46
3,058.00	2,969.95	35.53	351.78	3.03	428.23	422.69	-69.06
3,090.00	2,995.82	36.58	351.64	3.28	447.06	441.32	-71.78
3,122.00	3,021.39	37.37	351.55	2.47	466.29	460.36	-74.59
3,154.00	3,046.67	38.25	350.59	2.75	485.91	479.74	-77.64
3,186.00	3,071.65	39.13	350.36	2.75	505.91	499.47	-80.95
3,217.00	3,095.50	40.27	350.79	3.68	525.71	519.00	-84.19
3,249.00	3,119.77	41.06	351.00	2.47	546.56	539.59	-87.49
3,281.00	3,143.75	41.86	350.47	2.50	567.74	560.50	-90.90

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Survey

MD (ft)	TVD (ft)	Inc (°)	Azi (°)	Build (°/100ft)	V. Sec (ft)	N/S (ft)	E/W (ft)
3,313.00	3,167.49	42.38	350.42	1.62	589.20	581.67	-94.47
3,345.00	3,190.99	43.09	350.53	2.22	610.91	603.08	-98.06
3,375.00	3,212.65	44.49	349.96	4.67	631.67	623.54	-101.58
3,408.00	3,235.90	45.90	349.67	4.27	655.09	646.59	-105.72
3,439.00	3,257.34	46.60	348.97	2.26	677.48	668.59	-109.87
3,471.00	3,279.25	46.96	348.49	1.12	700.79	691.46	-114.43
3,502.00	3,300.29	47.57	348.71	1.97	723.56	713.78	-118.93
3,534.00	3,321.61	48.89	348.73	4.12	747.42	737.19	-123.60
3,566.00	3,342.44	49.86	348.48	3.03	771.70	761.00	-128.39
3,598.00	3,362.86	50.83	348.58	3.03	796.33	785.14	-133.29
3,630.00	3,382.92	51.53	348.39	2.19	821.26	809.57	-138.27
3,661.00	3,402.08	52.14	349.29	1.97	845.63	833.48	-142.99
3,693.00	3,421.52	53.02	349.34	2.75	871.04	858.46	-147.70
3,724.00	3,440.00	53.82	349.56	2.58	895.93	882.93	-152.26
3,756.00	3,458.69	54.69	349.71	2.72	921.91	908.48	-156.93
3,788.00	3,476.96	55.66	349.04	3.03	948.17	934.29	-161.77
3,818.00	3,493.72	56.45	349.44	2.63	973.06	958.74	-166.42
3,850.00	3,511.26	57.07	349.06	1.94	999.82	985.04	-171.41
3,882.00	3,528.51	57.68	349.56	1.91	1,026.77	1,011.52	-176.41
3,914.00	3,545.39	58.65	349.68	3.03	1,053.96	1,038.26	-181.31
3,945.00	3,561.23	59.88	350.20	3.97	1,080.60	1,064.50	-185.96
3,974.00	3,575.55	60.94	349.92	3.66	1,105.82	1,089.34	-190.32
4,005.00	3,590.55	61.20	349.97	0.84	1,132.95	1,116.05	-195.05
4,037.00	3,605.66	62.43	351.14	3.84	1,161.15	1,143.87	-199.68
4,069.00	3,620.32	63.05	351.10	1.94	1,189.59	1,171.98	-204.07
4,100.00	3,634.28	63.40	351.90	1.13	1,217.25	1,199.35	-208.16
4,132.00	3,648.41	64.21	352.21	2.53	1,245.94	1,227.79	-212.13
4,163.00	3,661.43	66.13	351.95	6.19	1,274.06	1,255.65	-216.01
4,195.00	3,673.97	67.71	351.94	4.94	1,303.47	1,284.80	-220.13
4,227.00	3,685.81	68.85	352.38	3.56	1,333.17	1,314.25	-224.19
4,258.00	3,696.82	69.56	352.71	2.29	1,362.12	1,342.98	-227.95
4,289.00	3,707.38	70.61	352.45	3.39	1,391.23	1,371.89	-231.71
4,321.00	3,717.51	72.46	352.78	5.78	1,421.55	1,401.99	-235.61
4,354.00	3,727.07	73.86	352.70	4.24	1,453.09	1,433.32	-239.60
4,385.00	3,735.46	74.74	352.66	2.84	1,482.89	1,462.92	-243.40
4,416.00	3,743.20	76.33	352.22	5.13	1,512.88	1,492.67	-247.35
4,448.00	3,750.41	77.65	351.98	4.12	1,544.03	1,523.55	-251.64
4,480.00	3,756.82	79.23	352.53	4.94	1,575.35	1,554.62	-255.86
Tied into OH 4480' MD							
4,555.00	3,770.21	80.20	349.85	1.29	1,649.11	1,627.53	-267.17
4,589.00	3,776.13	79.75	348.64	-1.32	1,682.59	1,660.43	-273.41
ST02 departs ST01 in open hole at 4589' MD							
4,616.00	3,781.02	79.40	347.68	-1.30	1,709.14	1,686.41	-278.86
4,676.00	3,791.02	81.40	345.55	3.33	1,768.20	1,743.96	-292.56
4,737.00	3,799.67	82.30	343.40	1.48	1,828.32	1,802.14	-308.72

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Survey

MD (ft)	TVD (ft)	Inc (°)	Azi (°)	Build (°/100ft)	V. Sec (ft)	N/S (ft)	E/W (ft)
4,796.00	3,806.46	84.50	337.70	3.73	1,886.14	1,857.37	-328.23
4,848.00	3,810.62	86.32	338.83	3.50	1,936.93	1,905.52	-347.43
Carson #203S ST2 coal top – 4848' MD							
4,856.00	3,811.11	86.60	339.00	3.50	1,944.77	1,912.97	-350.30
4,916.00	3,813.73	88.40	337.20	3.00	2,003.47	1,968.58	-372.66
4,977.00	3,814.58	90.00	335.60	2.62	2,062.80	2,024.47	-397.07
5,039.00	3,814.47	90.20	336.40	0.32	2,123.02	2,081.11	-422.29
5,099.00	3,814.94	88.90	335.20	-2.17	2,181.23	2,135.83	-446.89
5,152.00	3,816.05	88.70	334.20	-0.38	2,232.40	2,183.74	-469.53
5,239.00	3,817.29	89.67	334.20	1.11	2,316.19	2,262.06	-507.39
5,303.00	3,818.98	87.30	334.20	-3.70	2,377.81	2,319.65	-535.23
5,366.00	3,821.73	87.70	334.40	0.63	2,438.47	2,376.37	-562.53
5,534.00	3,828.47	87.70	334.40	0.00	2,600.32	2,527.75	-635.06
Straight Line Proj. to Bit 5534' MD							

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,480.00	3,756.82	1,554.62	-255.86	Tied into OH 4480' MD
4,589.00	3,776.13	1,660.43	-273.41	ST02 departs ST01 in open hole at 4589' MD
4,848.00	3,810.62	1,905.52	-347.43	Carson #203S ST2 coal top – 4848' MD
5,534.00	3,828.47	2,527.75	-635.06	Straight Line Proj. to Bit 5534' MD

Checked By: _____ Approved By: _____ Date: _____