

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised October 12, 2005

DISTRICT II
1301 W. Grand Avenue, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-30292		*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code 21185	*Property Name CARSON		*Well Number 204
*OGRID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION		*Elevation 7243'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	5	30N	4W		1108'	SOUTH	63'	WEST	RIO ARRIBA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	6	30N	4W		758'	NORTH	1872'	EAST	RIO ARRIBA
¹² Dedicated Acres E/2 340.96					¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No. RCVD AUG 5 '08 OIL CONS. DIV.

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 **DIST. 3**

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 or a compulsory pooling order heretofore entered by the division.

Nathan Smith
Signature

7-28-08
Date

Nathan Smith
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.

APRIL 17, 2007

Date of Survey

Signature and Seal of Professional Surveyor:

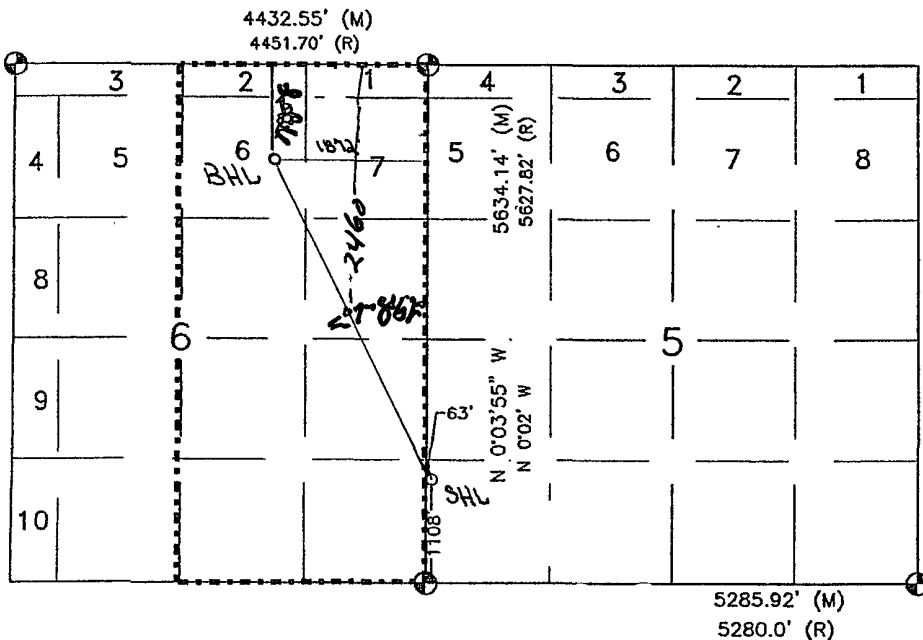
David R. Russell



DAVID RUSSELL

Certificate Number

10201



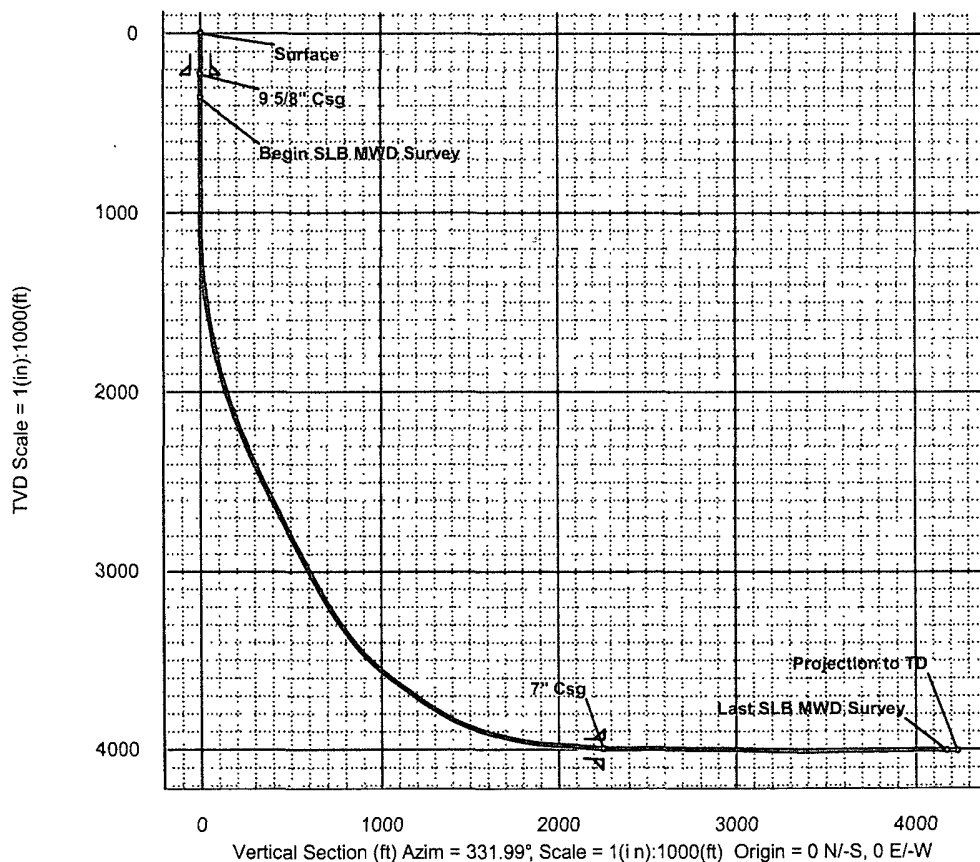


Energen Resources

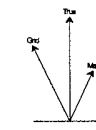
Actual

Schlumberger

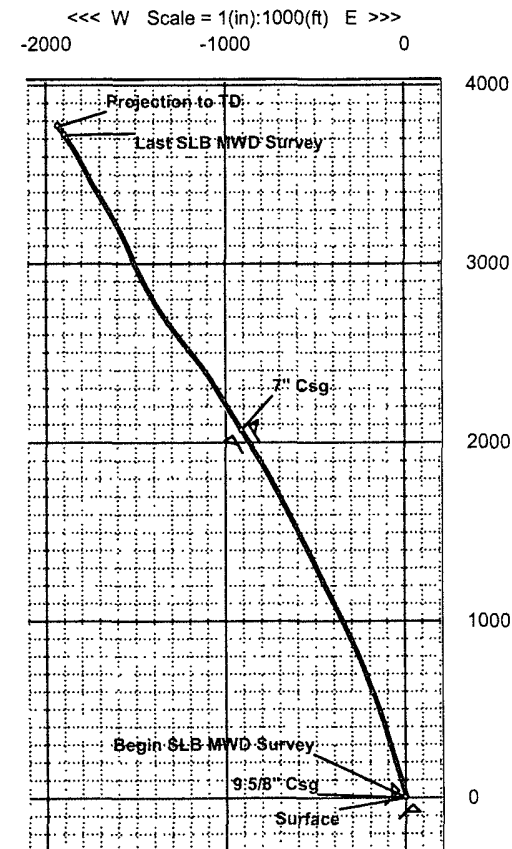
WELL		Carson #204				FIELD		Rio Arriba, NM				STRUCTURE		5-30N-4W	
Magnetic Parameters		Surface Location				NAD83 New Mexico State Planes				Miscellaneous					
Model	BGGM 2007	Dip	63.726°	Date	May 30, 2008	Lat	N36 50 11.328	Northing	2125412.92 NUS	Grid Conv	-0.62188001°	Slot	Carson #204	TVD Ref	RKB (7246.00 ft above MSL)
		Mag Dec	+10.133°	FS	51149.8 nT	Lon	W107 17 13.920	Easting	1336898.86 NUS	Scale Fact	1.0000054041	Plan	Carson #204 0' to 7168' Final	Srvy Date	June 02, 2008



Quality Control
 Data Drawn
 Drawn by Jeff Wilson
 Checked by Oswaldo Salazar
 Client OK



True North
 Tot Corr (M → T +10.1330°)
 Mag Dec (+10.133°)
 Grid Conv (-0.62188001°)



RCVD AUG 5 '08
 OIL CONS. DIV.

DIST. 3

<<< S Scale = 1(in):1000(ft) N >>>

The data submitted in this report conforms to the standards and procedures as set forth by Schlumberger. This report represents a true and correct directional wellbore survey based on original survey data obtained at the well site.

Oswaldo Salazar/DEC Engineer

Critical Point	MD	INCL	AZIM	Critical Points				
				TVD	YSEC	N(+) / S(-)	E(+) / W(-)	DLS
Surface	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
9 5/8" Csg	226 00	0 02	45 26	226 00	0 01	0 03	0 03	0 01
Begin SLB MWD Survey	357 00	0 03	45 26	357 00	0 03	0 07	0 07	0 01
7" Csg	5178 00	87 27	328 24	3999 48	2253 35	2065 72	-914 78	2 18
Last SLB MWD Survey	7108 00	88 42	325 50	4009 50	4176 06	3718 67	-1901 48	1 30
Projection to TD	7168 00	88 42	325 50	4011 15	4235 66	3768 10	-1935 45	0 00



Carson #204 0' to 7168' Final Survey Report

Report Date: July 2, 2008	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: Energen Resources	Vertical Section Azimuth: 331.990°
Field: NM, Rio Amba (NAD83)	Vertical Section Origin: N 0 000 ft, E 0 000 ft
Structure / Slot: Energen 5-30N-4W (Carson #204) / Carson #204	TVD Reference Datum: RKB
Well: Carson #204	TVD Reference Elevation: 7246 0 ft relative to MSL
Borehole: Original Hole (12" RKB)	Sea Bed / Ground Level Elevation: 7234 000 ft relative to MSL
UWI/API#:	Magnetic Declination: 10 133°
Survey Name / Date: Carson #204 0' to 7168' Final / June 2, 2008	Total Field Strength: 51149 754 nT
Tort / AHD / DDI / ERD ratio: 180 195° / 4262 81 ft / 6 137 / 1 061	Magnetic Dip: 63.726°
Grid Coordinate System: NAD83 New Mexico State Planes, Central Zone, US Feet	Declination Date: May 30, 2008
Location Lat/Long: N 36 50 11 328, W 107 17 13 920	Magnetic Declination Model: BGGM 2007
Location Grid N/E Y/X: N 2125412 917 RUS, E 1336898 862 RUS	North Reference: True North
Grid Convergence Angle: -0.62188001°	Total Corr Mag North -> True North: +10 133°
Grid Scale Factor: 1.00000540	Local Coordinates Referenced To: Well Head

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	DLS (deg/100 ft)	Northing (RUS)	Easting (RUS)	Latitude	Longitude
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2125412.92	1336898.86	N 36 50 11 328	W 107 17 13 920
9 5/8" Csg	226.00	0.02	45.26	226.00	0.01	0.03	0.03	0.01	2125412.94	1336898.89	N 36 50 11.328	W 107 17 13 920
Begin SLB MWD	357.00	0.03	45.26	357.00	0.03	0.07	0.07	0.01	2125412.98	1336898.93	N 36 50 11.329	W 107 17 13.919
Survey	535.00	0.33	20.17	535.00	0.38	0.58	0.28	0.17	2125413.49	1336899.14	N 36 50 11.334	W 107 17 13.917
	715.00	0.50	56.28	714.99	0.81	1.50	1.11	0.17	2125414.41	1336899.99	N 36 50 11.343	W 107 17 13.906
	895.00	0.37	114.86	894.99	0.42	1.69	2.29	0.24	2125414.59	1336901.17	N 36 50 11.345	W 107 17 13.892
	1008.00	0.47	132.53	1007.99	-0.31	1.23	2.96	0.14	2125414.11	1336901.84	N 36 50 11.340	W 107 17 13.884
	1040.00	0.59	171.00	1039.99	-0.59	0.98	3.08	1.15	2125413.86	1336901.96	N 36 50 11.338	W 107 17 13.882
	1070.00	0.52	173.65	1069.98	-0.66	0.69	3.12	0.25	2125413.57	1336901.99	N 36 50 11.335	W 107 17 13.882
	1101.00	0.06	96.21	1100.98	-1.00	0.55	3.15	1.65	2125413.43	1336902.02	N 36 50 11.333	W 107 17 13.881
	1131.00	1.10	330.90	1130.98	-0.72	0.80	3.03	3.79	2125413.68	1336901.90	N 36 50 11.336	W 107 17 13.883
	1193.00	2.80	347.26	1192.94	1.34	2.79	2.41	2.86	2125415.68	1336901.30	N 36 50 11.356	W 107 17 13.890
	1254.00	3.98	350.25	1253.84	4.78	6.33	1.72	1.96	2125419.23	1336900.65	N 36 50 11.391	W 107 17 13.899
	1314.00	5.49	347.58	1313.63	9.53	11.19	0.75	2.54	2125424.10	1336899.73	N 36 50 11.439	W 107 17 13.911
	1375.00	6.64	348.26	1374.29	15.72	17.49	-0.60	1.89	2125430.41	1336898.46	N 36 50 11.501	W 107 17 13.927
	1437.00	7.58	346.23	1435.81	23.13	24.97	-2.30	1.57	2125437.91	1336898.84	N 36 50 11.575	W 107 17 13.948
	1497.00	8.36	340.64	1495.23	31.28	32.93	-4.69	1.83	2125445.90	1336894.53	N 36 50 11.654	W 107 17 13.978
	1556.00	9.53	341.15	1553.51	40.34	41.60	-7.69	1.99	2125454.60	1336891.63	N 36 50 11.739	W 107 17 14.015
	1618.00	10.17	342.93	1614.60	50.78	51.69	-10.95	1.14	2125464.72	1336888.47	N 36 50 11.839	W 107 17 14.054
	1679.00	10.30	345.04	1674.63	61.38	62.11	-13.94	0.65	2125475.17	1336885.60	N 36 50 11.942	W 107 17 14.091
	1739.00	11.21	347.75	1733.57	72.22	72.99	-16.56	1.73	2125486.08	1336883.09	N 36 50 12.050	W 107 17 14.124
	1801.00	12.74	344.65	1794.22	84.69	85.47	-19.65	2.68	2125498.60	1336880.14	N 36 50 12.173	W 107 17 14.162
	1863.00	14.54	341.81	1854.47	99.03	99.46	-23.89	3.10	2125512.63	1336876.05	N 36 50 12.311	W 107 17 14.214
	1925.00	15.88	342.29	1914.30	115.04	114.93	-28.90	2.17	2125528.16	1336871.21	N 36 50 12.464	W 107 17 14.276
	1986.00	17.17	343.14	1972.78	132.09	131.50	-34.05	2.15	2125544.78	1336866.24	N 36 50 12.628	W 107 17 14.339
	2048.00	18.33	343.90	2031.83	150.61	149.63	-39.41	1.91	2125562.96	1336861.08	N 36 50 12.807	W 107 17 14.405
	2109.00	19.73	343.92	2089.49	170.07	168.74	-44.92	2.30	2125582.13	1336855.78	N 36 50 12.996	W 107 17 14.473
	2172.00	21.20	343.86	2148.51	191.62	189.90	-51.03	2.33	2125603.36	1336849.89	N 36 50 13.206	W 107 17 14.548
	2234.00	22.90	343.19	2205.98	214.43	212.22	-57.64	2.77	2125625.75	1336843.53	N 36 50 13.426	W 107 17 14.629
	2296.00	23.75	343.79	2262.91	238.48	235.75	-64.61	1.42	2125649.36	1336836.81	N 36 50 13.659	W 107 17 14.715
	2358.00	24.59	342.18	2319.47	263.40	260.02	-72.05	1.72	2125673.71	1336829.64	N 36 50 13.899	W 107 17 14.806
	2419.00	25.19	342.01	2374.81	288.68	284.45	-79.94	0.99	2125698.22	1336822.01	N 36 50 14.141	W 107 17 14.903
	2450.00	25.22	342.76	2402.86	301.66	297.04	-83.93	1.03	2125710.85	1336818.16	N 36 50 14.265	W 107 17 14.952
	2513.00	25.94	342.76	2459.68	328.38	323.02	-92.00	1.14	2125736.91	1336810.38	N 36 50 14.522	W 107 17 15.052
	2575.00	26.24	343.42	2515.36	355.14	349.10	-99.93	0.67	2125763.09	1336802.73	N 36 50 14.780	W 107 17 15.149
	2637.00	26.77	343.76	2570.85	382.24	375.65	-107.74	0.89	2125789.71	1336795.20	N 36 50 15.042	W 107 17 15.245
	2700.00	26.76	342.13	2627.10	410.09	402.77	-116.06	1.17	2125816.92	1336787.18	N 36 50 15.310	W 107 17 15.348
	2761.00	26.74	341.36	2681.57	437.15	428.84	-124.66	0.57	2125843.09	1336778.86	N 36 50 15.568	W 107 17 15.454
	2824.00	26.64	341.35	2737.86	465.07	455.65	-133.71	0.16	2125869.99	1336770.11	N 36 50 15.833	W 107 17 15.565
	2886.00	27.06	342.08	2793.17	492.67	482.24	-142.49	0.86	2125896.68	1336761.61	N 36 50 16.096	W 107 17 15.673
	2949.00	27.77	340.87	2849.10	521.28	509.74	-151.71	1.43	2125924.28	1336752.69	N 36 50 16.368	W 107 17 15.786
	3011.00	28.10	340.82	2903.87	549.98	537.18	-161.24	0.53	2125951.82	1336743.46	N 36 50 16.639	W 107 17 15.903
	3072.00	27.31	338.65	2957.88	578.08	563.78	-171.06	2.10	2125978.52	1336733.93	N 36 50 16.902	W 107 17 16.024
	3134.00	26.64	336.34	3013.14	606.06	589.76	-181.81	2.01	2126004.62	1336723.46	N 36 50 17.159	W 107 17 16.157
	3165.00	26.76	336.93	3040.83	619.95	602.55	-187.34	0.94	2126017.46	1336718.07	N 36 50 17.286	W 107 17 16.225
	3195.00	27.46	338.04	3067.54	633.55	615.18	-192.57	2.88	2126030.15	1336712.98	N 36 50 17.411	W 107 17 16.289
	3226.00	28.24	339.29	3094.95	647.94	628.67	-197.84	3.14	2126043.70	1336707.86	N 36 50 17.544	W 107 17 16.354
	3258.00	28.71	340.06	3123.07	663.06	642.97	-203.14	1.86	2126058.06	1336702.72	N 36 50 17.685	W 107 17 16.419
	3287.00	29.59	340.53	3148.40	677.03	656.27	-207.90	3.14	2126071.41	1336698.10	N 36 50 17.817	W 107 17 16.477
	3318.00	30.67	341.08	3175.21	692.41	670.97	-213.01	3.60	2126086.16	1336693.14	N 36 50 17.962	W 107 17 16.540
	3349.00	31.67	341.28	3201.74	708.25	686.15	-218.19	3.24	2126101.40	1336688.13	N 36 50 18.112	W 107 17 16.604
	3380.00	31.87	341.52	3228.09	724.35	701.62	-223.39	0.76	2126116.93	1336683.09	N 36 50 18.265	W 107 17 16.668
	3411.00	32.88	339.83	3254.27	740.76	717.29	-228.89	4.37	2126132.65	1336677.77	N 36 50 18.420	W 107 17 16.736

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	DLS (deg/100 ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
	3443.00	33.95	338 93	3280.98	758.23	733.78	-235 10	3 68	2126149 21	1336671.74	N 36 50 18 583	W 107 17 16 812
	3474 00	34.40	337 47	3306 63	775.54	749.94	-241 57	3 02	2126165.44	1336665 45	N 36 50 18.743	W 107 17 16.892
	3505 00	35 06	337.15	3332.11	793 13	766 24	-248 38	2 21	2126181.81	1336658.81	N 36 50 18 904	W 107 17 16 975
	3537.00	36.10	337.28	3358.13	811.67	783 40	-255.59	3 26	2126199 05	1336651.79	N 36 50 19 074	W 107 17 17 064
	3568.00	37 01	337.80	3383.04	830 05	800 47	-262.64	3 10	2126216 19	1336644 92	N 36 50 19.243	W 107 17 17.151
	3599 00	38.19	336.80	3407 60	848.88	817.91	-269 94	4.29	2126233 72	1336637.81	N 36 50 19 415	W 107 17 17.241
	3630 00	40.17	335 17	3431.63	868.42	835.80	-277.92	7.20	2126251.69	1336630.03	N 36 50 19 592	W 107 17 17.339
	3662 00	41.84	334 75	3455.77	889 38	854.82	-286 80	5 29	2126270.80	1336621.35	N 36 50 19 780	W 107 17 17 448
	3693.00	43 75	335 26	3478.52	910 41	873 91	-295.70	6 26	2126289.99	1336612 66	N 36 50 19.969	W 107 17 17 558
	3724 00	45.31	336.03	3500.62	932 11	893.71	-304.66	5 33	2126309.89	1336603 91	N 36 50 20 165	W 107 17 17 668
	3754 00	46.58	336 54	3521.48	953 61	913.45	-313 33	4.41	2126329.72	1336595 46	N 36 50 20.360	W 107 17 17.774
	3783 00	47 98	335 84	3541.15	974.85	932.94	-321.94	5.14	2126349 30	1336587.07	N 36 50 20 553	W 107 17 17 880
	3813.00	49 43	335 08	3560 95	997 35	953.45	-331.30	5.19	2126369 91	1336577.93	N 36 50 20 755	W 107 17 17.995
	3845 00	50 72	334.46	3581.49	1021.86	975 64	-341.76	4 30	2126392.22	1336567.71	N 36 50 20.975	W 107 17 18.124
	3876.00	51 87	334 17	3600.87	1046.03	997 44	-352 25	3.78	2126414.13	1336557 46	N 36 50 21.190	W 107 17 18 253
	3906 00	53.21	333.90	3619 12	1069 83	1018 85	-362.67	4.52	2126435 65	1336547 27	N 36 50 21 402	W 107 17 18 381
	3937 00	54 28	333 81	3637.45	1094 82	1041.29	-373 69	3 46	2126458.21	1336536.50	N 36 50 21.624	W 107 17 18.517
	3967.00	54 73	333.20	3654.87	1119.23	1063 15	-384 58	2.23	2126480.18	1336525.84	N 36 50 21 840	W 107 17 18.651
	3999 00	54.56	333 25	3673.39	1145.32	1086.45	-396.34	0.55	2126503 61	1336514 33	N 36 50 22 070	W 107 17 18.796
	4030.00	54 69	333 82	3691.33	1170.59	1109.08	-407 61	1.56	2126526 36	1336503 32	N 36 50 22 294	W 107 17 18.934
	4062.00	54 82	333 54	3709 80	1196 71	1132 51	-419.19	0 82	2126549 91	1336491 98	N 36 50 22 526	W 107 17 19.077
	4093 00	55 22	334 05	3727.57	1222.10	1155 29	-430.41	1.87	2126572 82	1336481 02	N 36 50 22 751	W 107 17 19 215
	4124.00	55.83	334.56	3745 12	1247 64	1178.32	-441.49	2.39	2126595.97	1336470.19	N 36 50 22.979	W 107 17 19 351
	4155 00	56 80	334 68	3762 31	1273 40	1201.63	-452.55	3.15	2126619.39	1336459.38	N 36 50 23 209	W 107 17 19 487
	4186 00	58 23	334 83	3778 96	1299 52	1225 28	-463.70	4 63	2126643 16	1336448.49	N 36 50 23 443	W 107 17 19 624
	4217 00	59.25	334 78	3795 05	1325.99	1249 26	-474 98	3 29	2126667 26	1336437.47	N 36 50 23.680	W 107 17 19 763
	4249 00	60.13	335 60	3811.20	1353 57	1274.33	-486 57	3.53	2126692 46	1336426 15	N 36 50 23.928	W 107 17 19 906
	4281 00	61.39	335.44	3826 83	1381 44	1299 75	-498.14	3.96	2126718.00	1336414 86	N 36 50 24 179	W 107 17 20 048
	4311 00	63.39	334.31	3840.73	1407 99	1323 81	-509.43	7 46	2126742.18	1336403 83	N 36 50 24.417	W 107 17 20 187
	4343 00	65 53	334 04	3854.53	1436 84	1349.80	-522 01	6 73	2126768.31	1336391.54	N 36 50 24.674	W 107 17 20 342
	4374.00	66.95	334 07	3867 02	1465 19	1375.31	-534 42	4 58	2126793 95	1336379.40	N 36 50 24.927	W 107 17 20 494
	4405 00	68 84	333.26	3878 68	1493 90	1401.05	-547 16	6.56	2126819 83	1336366.94	N 36 50 25.181	W 107 17 20 651
	4434 00	71.01	332.86	3888.63	1521.13	1425.33	-559.50	7.59	2126844.24	1336354.86	N 36 50 25 421	W 107 17 20 803
	4464.00	72 54	333.27	3898.02	1549 62	1450 73	-572.41	5 26	2126869 78	1336342 23	N 36 50 25 672	W 107 17 20.962
	4494 00	72 90	333.44	3906 93	1578.26	1476.34	-585 25	1 32	2126895.52	1336329 66	N 36 50 25.925	W 107 17 21.120
	4525 00	74.61	333.20	3915.60	1608 01	1502 93	-598.62	5.57	2126922 26	1336316.59	N 36 50 26.188	W 107 17 21 284
	4554.00	75.83	332.68	3923 00	1636 05	1527 90	-611 37	4.55	2126947 37	1336304 11	N 36 50 26.435	W 107 17 21.441
	4584.00	76 76	332.40	3930.11	1665.19	1553.76	-624.81	3 23	2126973.37	1336290 95	N 36 50 26 691	W 107 17 21 606
	4615 00	76 19	332.57	3937.36	1695 33	1580.49	-638 74	1 91	2127000.25	1336277 31	N 36 50 26.955	W 107 17 21 778
	4647.00	77 38	332.73	3944 67	1726.48	1608.16	-653 05	3.75	2127028 08	1336263.30	N 36 50 27 229	W 107 17 21 954
	4677.00	78.60	332 46	3950 91	1755 82	1634.21	-666 56	4.16	2127054 27	1336250 08	N 36 50 27.486	W 107 17 22 120
	4709.00	79 32	332 41	3957.04	1787.23	1662 05	-681.09	2 26	2127082 27	1336235 85	N 36 50 27 762	W 107 17 22.299
	4739 00	80 37	333.00	3962 33	1816 76	1688 30	-694 63	4 00	2127108 66	1336222 59	N 36 50 28 021	W 107 17 22 465
	4771.00	82.13	333.12	3967 20	1848 38	1716 49	-708.96	5.51	2127137.01	1336208 57	N 36 50 28.300	W 107 17 22.642
	4802.00	82 75	332 27	3971.28	1879.10	1743.80	-723.06	3.37	2127164 46	1336194.77	N 36 50 28 570	W 107 17 22 815
	4833 00	84 52	331 78	3974.71	1909 91	1771 00	-737 51	5 92	2127191 83	1336180 62	N 36 50 28 839	W 107 17 22 993
	4864 00	85.80	331.19	3977 33	1940 80	1798.15	-752.25	4.54	2127219 13	1336166 17	N 36 50 29 107	W 107 17 23.174
	4893.00	86 77	331 60	3979 21	1969.74	1823 55	-766.11	3.63	2127244.68	1336152 59	N 36 50 29.359	W 107 17 23 345
	4924 00	87 63	330 51	3980.72	2000.69	1850 65	-781.09	4.48	2127271.94	1336137.90	N 36 50 29 626	W 107 17 23 529
	4955.00	88.83	328.92	3982 22	2031 63	1877.38	-796 71	5 74	2127298 84	1336122.57	N 36 50 29.891	W 107 17 23.721
	4986 00	85 97	328.84	3984 17	2062 53	1903.87	-812 70	2 79	2127325 50	1336106.87	N 36 50 30 153	W 107 17 23 918
	5016 00	85 11	327.71	3986.50	2092 37	1929 31	-828.42	4 72	2127351.11	1336091 42	N 36 50 30 404	W 107 17 24 111
	5046.00	83 42	327.89	3989 50	2122.14	1954 57	-844.33	5 66	2127376.54	1336075 79	N 36 50 30 654	W 107 17 24 307
	5074 00	84 42	327.35	3992 46	2149 90	1978.08	-859 24	4 05	2127400.21	1336061 14	N 36 50 30 886	W 107 17 24.490
	5105 00	85 59	327.43	3995.16	2180 68	2004.09	-875 88	3 78	2127426.41	1336044.78	N 36 50 31 144	W 107 17 24 695
	5127 00	86 45	327 49	3996.69	2202.56	2022 60	-887.69	3.92	2127445 03	1336033 18	N 36 50 31 327	W 107 17 24 840
7" Csg	5178.00	87.27	328.24	3999.48	2253 35	2065 72	-914 78	2.18	2127488 45	1336006.56	N 36 50 31.753	W 107 17 25.174
	5217.00	87.90	328 81	4001.13	2292 25	2098.95	-935.12	2 18	2127521 90	1335986 57	N 36 50 32 082	W 107 17 25 424
	5249 00	89.38	327 26	4001.88	2324 16	2126 09	-952 06	6 70	2127549 22	1335969.93	N 36 50 32 350	W 107 17 25 632
	5281 00	91.03	327.88	4001.77	2356 06	2153.09	-969 22	5 51	2127576 41	1335953.07	N 36 50 32 617	W 107 17 25.843
	5313.00	91 03	328 96	4001.19	2387.99	2180 35	-985.97	3.37	2127603 85	1335936.61	N 36 50 32.886	W 107 17 26 049
	5344 00	90 21	327.74	4000 86	2418.93	2206 74	-1002.24	4.74	2127630 41	1335920 63	N 36 50 33 147	W 107 17 26.250
	5376.00	90.76	327 95	4000.59	2450 84	2233.83	-1019 27	1 84	2127657.68	1335903.90	N 36 50 33.415	W 107 17 26 459
	5408 00	91.14	329 33	4000 06	2482.78	2261 15	-1035 92	4 47	2127685.18	1335887 54	N 36 50 33 685	W 107 17 26.664
	5439 00	91 03	329 52	3999 47	2513 75	2287 83	-1051.68	0.71	2127712 04	1335872.07	N 36 50 33 949	W 107 17 26.858
	5471.00	89 11	328 06	3999.43	2545.70	2315.20	-1068.26	7 54	2127739.58	1335855.79	N 36 50 34 220	W 107 17 27.062
	5503.00	89.28	327.29	3999.88	2577 60	2342 24	-1085.37	2 46	2127766.81	1335838 97	N 36 50 34.487	W 107 17 27 272
	5535.00	87 94	325 70	4000 66	2609 44	2368.91	-1103.03	6 50	2127793 67	1335821 60	N 36 50 34 751	W 107 17 27 490
	5567.00	89.48	324 58	4001.38	2641.21	2395.16	-1121.32	5 95	2127820 12	1335803.61	N 36 50 35 010	W 107 17 27.715
	5598 00	89.42	323.23	4001 68	2671 89	2420 21	-1139 58	4 36	2127845 36	1335785 62	N 36 50 35 258	W 107 17 27.939
	5630.00	89 72	322 26	4001.92	2703 48	2445 68	-1158 95	3 17	2127871.04	1335766 52	N 36 50 35.510	W 107 17 28 178
	5662.00	89 31	321 63	4002 19	2734.99	2470 88	-1178 67	2 35	2127896 45	1335747.07	N 36 50 35 759	W 107 17 28 420

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	DLS (deg/100 ft)	Northing (ftUS)	Easting (ftUS)	Latitude	Longitude
	5693.00	89.86	322.13	4002.41	2765.50	2495.26	-1197.81	2.40	2127921.04	1335728.20	N 36 50 36.000	W 107 17 28.656
	5725.00	90.31	323.03	4002.36	2797.07	2520.68	-1217.25	3.14	2127946.67	1335709.04	N 36 50 36.251	W 107 17 28.895
	5789.00	88.31	322.84	4003.13	2860.27	2571.74	-1255.82	3.14	2127998.14	1335671.02	N 36 50 36.756	W 107 17 29.369
	5821.00	88.56	322.68	4004.01	2891.84	2597.21	-1275.18	0.93	2128023.82	1335651.94	N 36 50 37.008	W 107 17 29.608
	5853.00	88.90	322.96	4004.72	2923.42	2622.70	-1294.51	1.38	2128049.52	1335632.89	N 36 50 37.260	W 107 17 29.845
	5884.00	89.04	325.03	4005.27	2954.12	2647.77	-1312.73	6.69	2128074.79	1335614.94	N 36 50 37.508	W 107 17 30.070
	5916.00	88.76	325.28	4005.89	2985.88	2674.03	-1331.01	1.17	2128101.24	1335596.95	N 36 50 37.768	W 107 17 30.294
	5948.00	88.80	326.42	4006.57	3017.69	2700.50	-1348.97	3.56	2128127.91	1335579.28	N 36 50 38.029	W 107 17 30.515
	5980.00	88.93	327.35	4007.20	3049.56	2727.30	-1366.45	2.93	2128154.89	1335562.09	N 36 50 38.294	W 107 17 30.730
	6012.00	88.59	328.49	4007.90	3081.47	2754.41	-1383.44	3.72	2128182.18	1335545.39	N 36 50 38.562	W 107 17 30.940
	6044.00	88.35	330.18	4008.75	3113.42	2781.92	-1399.76	5.33	2128209.87	1335529.38	N 36 50 38.834	W 107 17 31.140
	6075.00	87.70	331.55	4009.82	3144.40	2808.98	-1414.84	4.89	2128237.10	1335514.59	N 36 50 39.102	W 107 17 31.326
	6107.00	87.83	331.23	4011.07	3176.37	2837.05	-1430.15	1.08	2128265.33	1335499.58	N 36 50 39.379	W 107 17 31.514
	6138.00	88.42	332.31	4012.08	3207.35	2864.35	-1444.81	3.97	2128292.79	1335485.22	N 36 50 39.649	W 107 17 31.695
	6170.00	88.59	333.69	4012.92	3239.34	2892.85	-1459.33	4.34	2128321.45	1335471.01	N 36 50 39.931	W 107 17 31.873
	6201.00	88.14	333.85	4013.80	3270.31	2920.65	-1473.02	1.54	2128349.39	1335457.62	N 36 50 40.206	W 107 17 32.042
	6233.00	88.73	334.57	4014.68	3302.27	2949.45	-1486.94	2.91	2128378.34	1335444.02	N 36 50 40.491	W 107 17 32.213
	6265.00	89.17	334.88	4015.26	3334.23	2978.38	-1500.60	1.68	2128407.42	1335430.67	N 36 50 40.777	W 107 17 32.381
	6297.00	89.24	336.21	4015.71	3366.17	3007.51	-1513.85	4.16	2128436.69	1335417.74	N 36 50 41.065	W 107 17 32.544
	6329.00	89.72	336.64	4016.00	3398.07	3036.83	-1526.65	2.01	2128466.15	1335405.26	N 36 50 41.355	W 107 17 32.701
	6360.00	90.79	336.14	4015.86	3428.98	3065.24	-1539.06	3.81	2128494.69	1335393.16	N 36 50 41.636	W 107 17 32.854
	6392.00	91.86	336.35	4015.12	3460.88	3094.52	-1551.95	3.41	2128524.11	1335380.59	N 36 50 41.925	W 107 17 33.013
	6423.00	91.96	335.25	4014.09	3491.79	3122.78	-1564.65	3.56	2128552.50	1335368.19	N 36 50 42.205	W 107 17 33.169
	6455.00	91.75	333.66	4013.05	3523.75	3151.63	-1578.44	5.01	2128581.51	1335354.72	N 36 50 42.490	W 107 17 33.339
	6487.00	91.07	332.76	4012.26	3555.73	3180.19	-1592.86	3.52	2128610.22	1335340.61	N 36 50 42.772	W 107 17 33.516
	6519.00	90.55	331.25	4011.81	3587.72	3208.44	-1607.88	4.99	2128638.63	1335325.90	N 36 50 43.052	W 107 17 33.701
	6551.00	90.41	329.83	4011.54	3619.71	3236.30	-1623.61	4.46	2128666.66	1335310.46	N 36 50 43.327	W 107 17 33.895
	6583.00	90.34	330.21	4011.33	3651.69	3264.02	-1639.60	1.21	2128694.55	1335294.78	N 36 50 43.601	W 107 17 34.091
	6615.00	90.45	330.16	4011.11	3683.68	3291.78	-1655.51	0.38	2128722.49	1335279.17	N 36 50 43.876	W 107 17 34.287
	6647.00	90.76	329.79	4010.77	3715.65	3319.49	-1671.52	1.51	2128750.36	1335263.46	N 36 50 44.149	W 107 17 34.484
	6679.00	90.52	329.61	4010.42	3747.63	3347.12	-1687.67	0.94	2128778.16	1335247.62	N 36 50 44.423	W 107 17 34.683
	6711.00	89.83	329.32	4010.32	3779.59	3374.68	-1703.93	2.34	2128805.90	1335231.66	N 36 50 44.695	W 107 17 34.883
	6742.00	89.97	329.32	4010.37	3810.56	3401.34	-1719.74	0.45	2128832.73	1335216.13	N 36 50 44.959	W 107 17 35.077
	6774.00	90.21	331.19	4010.32	3842.54	3429.12	-1735.62	5.89	2128860.69	1335200.56	N 36 50 45.233	W 107 17 35.273
	6805.00	91.00	331.55	4009.99	3873.54	3456.33	-1750.47	2.80	2128888.05	1335186.00	N 36 50 45.502	W 107 17 35.455
	6837.00	90.96	333.42	4009.45	3905.53	3484.70	-1765.25	5.84	2128916.59	1335171.53	N 36 50 45.783	W 107 17 35.637
	6869.00	90.48	332.57	4009.05	3937.53	3513.21	-1779.78	3.05	2128945.25	1335157.31	N 36 50 46.065	W 107 17 35.816
	6901.00	90.65	331.98	4008.73	3969.52	3541.54	-1794.67	1.92	2128973.74	1335142.73	N 36 50 46.345	W 107 17 35.999
	6932.00	91.10	331.67	4008.26	4000.52	3568.86	-1809.30	1.76	2129001.22	1335128.39	N 36 50 46.615	W 107 17 36.179
	6964.00	90.65	330.23	4007.77	4032.51	3596.83	-1824.84	4.71	2129029.35	1335113.16	N 36 50 46.892	W 107 17 36.370
	6995.00	89.52	329.11	4007.72	4063.48	3623.59	-1840.49	5.13	2129056.28	1335097.80	N 36 50 47.156	W 107 17 36.563
	7027.00	89.42	328.63	4008.02	4095.43	3650.98	-1857.04	1.53	2129083.85	1335081.56	N 36 50 47.427	W 107 17 36.767
	7059.00	89.14	326.90	4008.42	4127.34	3678.04	-1874.10	5.48	2129111.10	1335064.78	N 36 50 47.695	W 107 17 36.977
	7091.00	88.59	325.64	4009.05	4159.18	3704.65	-1891.87	4.30	2129137.89	1335047.31	N 36 50 47.958	W 107 17 37.195
Last SLB MWD Survey	7108.00	88.42	325.50	4009.50	4176.06	3718.67	-1901.48	1.30	2129152.02	1335037.85	N 36 50 48.096	W 107 17 37.313
Projection to TD	7168.00	88.42	325.50	4011.15	4235.66	3768.10	-1935.45	0.00	2129201.81	1335004.42	N 36 50 48.585	W 107 17 37.731

Survey Type: Definitive Survey

Survey Error Model: SLB ISCWSA version 24 *** 3-D 95.00% Confidence 2.7955 sigma

Surveying Prog:

MD From (ft)

0.00

12.00

3937.00

5105.00

7108.00

7168.00

MD To (ft)

12.00

3937.00

5105.00

7108.00

7168.00

EOU Freq Survey Tool Type

Act-Stns SLB_MWD+DMAG-Depth Only

Act-Stns SLB_MWD+DMAG

Act-Stns SLB_MWD-STD

Act-Stns SLB_MWD+DMAG

Act-Stns SLB_BLIND+TREND

Borehole -> Survey

Original Hole (12' RKB) -> Carson #204 0' to 7168' Final

Original Hole (12' RKB) -> Carson #204 0' to 7168' Final

Original Hole (12' RKB) -> Carson #204 0' to 7168' Final

Original Hole (12' RKB) -> Carson #204 0' to 7168' Final

Original Hole (12' RKB) -> Carson #204 0' to 7168' Final

**Italicized stations are NOT used in position calculations*