

SYSDRILL
Closest Approach + Clearance Factor Report
Wellbore: Dittmer KE 20-023HN (PWB)
Wellpath: Dittmer KE 20-023HN (PWP#1)

Ellipse separations are reported ONLY if BOTH wells have uncertainty data
Only Depth and Magnetic Reference Field error terms are correlated across tie points
Scan limit is calculated on CENTRE to CENTRE distance

Summary data uses Closest Approach clearance calculation for all minima
Hole size/Casings ARE included
Hole size/Casings are NOT subtracted from Centre-Centre distance
Confidence limit of 95.00% / 2.80 SD.

Wellbore

Name	Dittmer KE 20-023HN (PWB)
Created	4-May-2016
Last Revised	4-May-2016

Well

Name	Dittmer KE 20-023HN
Government ID	
Last Revised	4-May-2016

Slot

Name	Slot S04 - Dittmer KE 20-023HN
Grid Northing	1247955.066
Grid Easting	3195218.597
Latitude	N40 0 42.9012
Longitude	W104 48 10.9584
North	-99.090
East	45.380

Installation

Name	Dittmer
Easting	3195172.443
Northing	1248053.789
Map Name	<unknown>
North Alignment	True

Field

Name	Wattenburg
Easting	41136929.757
Northing	12284170.646
Map Name	<unknown>
North Alignment	Grid

Clearance Summary

Offset WellName	Offset Wellbore	Offset Slot	Offset Structure	Separation [ft]	MD[ft]	Offset From[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
SRC - Phelps 11-32CHZ	SRC - Phelps 11-32CHZ (AWB)	AA - SRC - Phelps 11-32CHZ	Dittmer		658.980	7669.820	7669.820	611.930	7676.960	13.480	7775.390
SRC - Phelps 11-32NHZ	SRC - Phelps 11-32NHZ (AWB)	AA - SRC - Phelps 11-32NHZ	Dittmer		890.510	7533.880	7533.880	841.290	7573.430	17.460	7660.560
SRC - Phelps A-32CHZ	SRC - Phelps A-32CHZ (AWB)	AA - SRC - Phelps A-32CHZ	Dittmer		1256.780	7569.950	7569.950	1208.550	7578.540	25.580	7676.960
SRC - Phelps A-32NHZ	SRC - Phelps A-32NHZ (AWB)	AA - SRC - Phelps A-32NHZ	Dittmer		1554.970	7196.780	7196.780	1508.660	7216.200	31.580	7594.940
SRC - Phelps 12-32CHZ	SRC - Phelps 12-32CHZ (AWB)	AA - SRC - Phelps 12-32CHZ	Dittmer		1944.490	7316.200	7316.200	1896.250	7348.880	38.200	7644.150
SRC - Phelps 12-32NHZ	SRC - Phelps 12-32NHZ (AWB)	AA - SRC - Phelps 12-32NHZ	Dittmer		2196.900	6971.610	6971.610	2152.880	7004.390	43.910	7627.750

Reference Wellbore Survey Tool Program

Survey Name	Planned
MD[ft]	17762.030
Survey Tool	WdW Rate Gyro
Error Model	Standard

Clearance Data

Reference MD[ft]	Reference TVD[ft]	Reference North[ft]	Reference East[ft]	Offset Well	Offset MD[ft]	Offset TVD[ft]	Offset North[ft]	Offset East[ft]	Angle From Highside [deg]	Closest Approach Distance [ft]	Ellipse Separation [ft]	Clearance Factor
16.200	16.200		0.000	0.000 SRC - Phelps 11-32CHZ	53.000	16.200	-672.660	2966.780	102.800	3042.080	3041.110	
81.820	81.820		0.000	0.000 SRC - Phelps 11-32CHZ	115.530	78.730	-672.530	2966.870	102.800	3042.140	3041.020	2704.100
116.200	116.200		0.000	0.000 SRC - Phelps 11-32CHZ	143.730	106.930	-672.400	2966.970	102.800	3042.220	3041.060	2622.600
216.200	216.200		0.000	0.000 SRC - Phelps 11-32CHZ	237.550	200.740	-671.650	2967.500	102.800	3042.600	3041.310	2358.750
316.200	316.200		0.000	0.000 SRC - Phelps 11-32CHZ	306.000	269.190	-670.960	2968.180	102.700	3043.440	3042.030	2156.660
416.200	416.200		0.000	0.000 SRC - Phelps 11-32CHZ	367.520	330.690	-670.570	2969.410	102.700	3045.390	3043.840	1975.500
516.200	516.200		0.000	0.000 SRC - Phelps 11-32CHZ	428.000	391.120	-669.690	2971.620	102.700	3048.720	3047.040	1823.320
616.200	616.200		0.000	0.000 SRC - Phelps 11-32CHZ	482.910	445.920	-668.270	2974.730	102.700	3053.620	3051.820	1696.790
716.200	716.200		0.000	0.000 SRC - Phelps 11-32CHZ	522.000	484.900	-667.170	2977.570	102.600	3060.150	3058.240	1598.940
816.200	816.200		0.000	0.000 SRC - Phelps 11-32CHZ	705.300	667.220	-656.820	2992.690	102.400	3067.540	3065.360	1412.450
916.200	916.200		0.000	0.000 SRC - Phelps 11-32CHZ	771.000	732.450	-650.520	2997.430	102.200	3072.700	3070.380	1321.470
1016.200	1016.200		0.000	0.000 SRC - Phelps 11-32CHZ	824.420	785.460	-645.940	3002.110	102.100	3079.470	3077.010	1248.920
1116.200	1116.200		0.000	0.000 SRC - Phelps 11-32CHZ	865.000	825.710	-642.780	3006.230	102.100	3087.880	3085.290	1191.730
1216.200	1216.200		0.000	0.000 SRC - Phelps 11-32CHZ	927.500	887.620	-638.330	3013.570	102.000	3097.910	3095.170	1129.960
1316.200	1316.200		0.000	0.000 SRC - Phelps 11-32CHZ	990.000	949.330	-633.120	3021.930	101.800	3109.260	3106.370	1073.590
1416.200	1416.200		0.000	0.000 SRC - Phelps 11-32CHZ	1132.970	1089.770	-615.110	3041.530	101.400	3120.230	3117.050	981.590
1516.200	1516.200		0.000	0.000 SRC - Phelps 11-32CHZ	1332.280	1285.780	-596.680	3063.650	100.800	3127.820	3124.260	877.770
1616.200	1616.200		0.000	0.000 SRC - Phelps 11-32CHZ	1424.000	1376.180	-574.270	3072.930	100.600	3135.330	3131.550	828.930
1716.200	1716.200		0.000	0.000 SRC - Phelps 11-32CHZ	1843.670	1784.540	-485.140	3102.570	98.900	3141.020	3136.340	671.870
1816.200	1816.200		0.000	0.000 SRC - Phelps 11-32CHZ	1965.430	1901.070	-449.880	3104.720	98.200	3138.300	3133.250	621.340
1916.200	1916.200		0.000	0.000 SRC - Phelps 11-32CHZ	2071.880	2002.790	-418.560	3106.270	97.700	3135.540	3130.520	624.940
2016.200	2016.200		0.000	0.000 SRC - Phelps 11-32CHZ	2167.390	2094.290	-391.190	3107.390	97.200	3132.890	3127.560	587.640
2116.200	2116.200		0.000	0.000 SRC - Phelps 11-32CHZ	2249.180	2172.980	-368.940	3108.350	96.800	3130.680	3125.070	558.280
2216.200	2216.200		0.000	0.000 SRC - Phelps 11-32CHZ	2308.670	2230.230	-352.820	3109.530	96.500	3129.510	3123.680	536.600
2230.230	2230.230		0.000	0.000 SRC - Phelps 11-32CHZ	2308.670	2230.230	-352.820	3109.530	96.500	3129.480	3123.640	535.530
2264.510	2264.510		0.000	0.000 SRC - Phelps 11-32CHZ	2344.340	2264.510	-343.000	3110.610	96.300	3129.470	3123.510	525.570
2316.200	2316.200		0.000	0.000 SRC - Phelps 11-32CHZ	2382.350	2301.050	-332.600	3111.880	96.100	3129.640	3123.550	514.110
2416.200	2416.200		0.000	0.000 SRC - Phelps 11-32CHZ	2493.860	2408.600	-303.330	3115.370	95.600	3130.120	3123.690	486.750
2516.200	2516.200		0.000	0.000 SRC - Phelps 11-32CHZ	2638.000	2547.420	-264.670	3117.850	94.800	3129.220	3122.370	456.410
2616.200	2616.200		0.000	0.000 SRC - Phelps 11-32CHZ	2720.000	2625.870	-240.830	3119.220	94.400	3128.520	3121.380	438.170
2665.370	2665.370		0.000	0.000 SRC - Phelps 11-32CHZ	2761.330	2665.370	-228.700	3120.080	94.200	3128.450	3121.170	429.460
2716.200	2716.200		0.000	0.000 SRC - Phelps 11-32CHZ	2802.670	2705.030	-217.100	3121.020	94.000	3128.580	3121.150	421.210
2816.200	2816.200		0.000	0.000 SRC - Phelps 11-32CHZ	2901.630	2800.340	-190.560	3123.360	93.500	3129.210	3121.460	403.690
2916.200	2916.200		0.000	0.000 SRC - Phelps 11-32CHZ	3074.250	2965.700	-141.110	3125.540	92.600	3129.110	3120.850	378.790
3016.200	3016.200		0.000	0.000 SRC - Phelps 11-32CHZ	3149.660	3037.830	-119.080	3125.440	92.200	3127.790	3119.250	366.340
3067.420	3067.420		0.000	0.000 SRC - Phelps 11-32CHZ	3180.670	3067.420	-109.840	3125.590	92.000	3127.520	3118.860	361.130
3116.200	3116.200		0.000	0.000 SRC - Phelps 11-32CHZ	3223.000	3107.750	-96.970	3126.090	91.800	3127.610	3118.800	355.130
3116.590	3116.590		0.000	0.000 SRC - Phelps 11-32CHZ	3223.000	3107.750	-96.970	3126.090	91.800	3127.610	3118.800	355.120
3216.200	3216.200		0.000	0.000 SRC - Phelps 11-32CHZ	3305.070	3185.990	-72.230	3127.390	91.300	3128.370	3119.270	343.620
3316.200	3316.200		0.000	0.000 SRC - Phelps 11-32CHZ	3403.960	3280.570	-43.400	3128.910	90.800	3129.420	3119.980	331.620
3416.200	3416.200		0.000	0.000 SRC - Phelps 11-32CHZ	3492.960	3365.970	-18.370	3130.090	90.300	3130.550	3120.610	321.480
3516.200	3516.200		0.000	0.000 SRC - Phelps 11-32CHZ	3548.750	3419.470	-2.660	3131.430	90.000	3132.930	3122.670	314.650
3616.200	3616.200		0.000	0.000 SRC - Phelps 11-32CHZ	3603.000	3471.400	12.900	3133.590	89.800	3136.960	3126.790	308.550
3660.000	3660.000		0.000	0.000 SRC - Phelps 11-32CHZ	3670.470	3535.930	32.430	3136.340	89.400	3138.960	3128.590	302.520
3716.200	3716.190		0.550	-0.610 SRC - Phelps 11-32CHZ	3780.940	3641.580	64.560	3138.970	136.700	3141.120	3130.420	293.400
3816.200	3816.030		4.280	-4.740 SRC - Phelps 11-32CHZ	3882.190	3738.010	95.390	3140.480	136.100	3147.500	3136.450	284.830
3916.200	3915.430		11.500	-12.730 SRC - Phelps 11-32CHZ	3965.890	3817.730	120.840	3141.910	135.500	3158.050	3146.700	278.150
4016.200	4014.140		22.200	-24.580 SRC - Phelps 11-32CHZ	4048.580	3896.680	145.380	3143.710	134.900	3172.860	3161.200	272.240
4116.200	4111.870		36.340	-40.240 SRC - Phelps 11-32CHZ	4143.720	3987.770	172.750	3146.040	134.300	3191.620	3179.630	266.250
4216.200	4208.370		53.900	-59.680 SRC - Phelps 11-32CHZ	4247.190	4087.460	200.330	3148.660	133.600	3213.960	3201.620	260.440
4316.200	4303.370		74.820	-82.840 SRC - Phelps 11-32CHZ	4349.140	4186.180	225.660	3151.150	133.000	3239.630	3226.940	255.310
4416.200	4396.600		99.030	-109.660 SRC - Phelps 11-32CHZ	10780.090	7577.250	646.240	-69.630	154.700	3227.630	3211.760	203.320
4516.200	4487.810		126.490	-140.060 SRC - Phelps 11-32CHZ	10795.790	7577.470	646.150	-65.330	156.300	3133.540	3117.550	195.980
4616.200	4576.750		157.110	-173.970 SRC - Phelps 11-32CHZ	10831.130	7578.150	645.840	-120.660	161.500	3041.390	3025.270	188.650
4659.990	4614.920		171.490	-189.890 SRC - Phelps 11-32CHZ	10847.660	7578.460	645.690	-137.180	162.700	3001.700	2985.500	185.320
4716.200	4663.600		190.330	-210.750 SRC - Phelps 11-32CHZ	10952.360	7579.020	644.870	-241.880	164.900	2950.800	2934.450	180.450
4816.200	4750.200		223.840	-247.860 SRC - Phelps 11-32CHZ	11007.430	7578.180	645.070	-296.940	166.200	2859.600	2843.110	173.450
4916.200	4836.810		257.350	-284.970 SRC - Phelps 11-32CHZ	11034.500	7577.690	645.250	-324.000	166.800	2768.470	2751.870	16

5316.200	5183.220	391.400	-433.400 SRC - Phelps 11-32CHZ	11166.040	7576.380	644.100	-455.530	170.500	2406.570	2389.480	140.820
5416.200	5269.820	424.910	-470.500 SRC - Phelps 11-32CHZ	11194.230	7576.160	643.720	-483.720	171.400	2316.740	2299.530	134.620
5516.200	5356.420	458.420	-507.610 SRC - Phelps 11-32CHZ	11224.500	7576.030	643.290	-513.980	172.400	2227.300	2209.970	128.490
5616.200	5443.020	491.930	-544.720 SRC - Phelps 11-32CHZ	11256.000	7576.060	642.690	-545.480	173.500	2138.350	2120.890	122.430
5716.200	5529.630	525.440	-581.830 SRC - Phelps 11-32CHZ	11289.650	7576.150	641.920	-579.120	174.700	2049.830	2032.230	116.420
5816.200	5616.230	558.950	-618.930 SRC - Phelps 11-32CHZ	11320.000	7576.220	641.230	-609.460	175.900	1961.740	1943.990	110.480
5916.200	5702.830	592.460	-656.040 SRC - Phelps 11-32CHZ	11351.500	7576.430	640.450	-640.950	177.200	1874.270	1856.350	104.580
6016.200	5789.440	625.970	-693.150 SRC - Phelps 11-32CHZ	11375.200	7576.810	639.830	-664.640	178.100	1787.660	1769.560	98.780
6116.200	5876.040	659.490	-730.250 SRC - Phelps 11-32CHZ	11402.360	7577.370	639.070	-691.780	179.300	1701.890	1683.580	92.960
6216.200	5962.640	693.000	-767.360 SRC - Phelps 11-32CHZ	11435.870	7578.170	637.990	-725.260	179.200	1617.010	1598.450	87.110
6316.200	6049.240	726.510	-804.470 SRC - Phelps 11-32CHZ	11468.550	7578.060	636.860	-757.610	177.600	1517.150	1514.270	81.240
6416.200	6136.850	760.020	-841.580 SRC - Phelps 11-32CHZ	11501.010	7580.080	635.800	-790.340	176.000	1450.470	1431.220	75.340
6516.200	6222.450	793.530	-878.680 SRC - Phelps 11-32CHZ	11547.110	7581.560	634.520	-836.400	173.600	1369.040	1349.250	69.190
6616.200	6309.050	827.040	-915.790 SRC - Phelps 11-32CHZ	11592.100	7582.770	633.580	-881.370	171.100	1288.780	1268.320	62.970
6716.200	6395.650	860.550	-952.900 SRC - Phelps 11-32CHZ	11643.330	7583.860	633.060	-932.580	168.100	1209.960	1188.580	56.590
6816.200	6482.260	894.070	-990.010 SRC - Phelps 11-32CHZ	11689.140	7584.550	633.220	-978.380	165.300	1132.800	1110.300	50.350
6916.200	6568.860	927.580	-1027.110 SRC - Phelps 11-32CHZ	11731.790	7585.040	633.850	-1021.030	162.600	1057.800	1033.920	44.300
7016.200	6655.460	961.090	-1064.220 SRC - Phelps 11-32CHZ	11778.000	7585.500	634.960	-1067.220	159.500	985.570	959.920	38.430
7116.200	6742.070	994.600	-1101.330 SRC - Phelps 11-32CHZ	11834.610	7585.320	636.490	-1123.800	155.500	916.420	888.410	32.720
7216.200	6828.670	1028.110	-1138.440 SRC - Phelps 11-32CHZ	11871.350	7584.780	637.520	-1160.520	152.700	851.320	820.760	27.860
7316.200	6915.270	1061.620	-1175.550 SRC - Phelps 11-32CHZ	11906.970	7584.250	638.460	-1196.130	150.000	791.840	758.280	23.590
7416.200	7001.870	1095.130	-1212.650 SRC - Phelps 11-32CHZ	11943.620	7583.700	639.390	-1232.770	147.000	739.350	702.320	19.970
7516.200	7088.480	1128.640	-1249.760 SRC - Phelps 11-32CHZ	11977.260	7583.150	640.210	-1269.390	144.300	694.340	658.750	17.070
7573.430	7138.040	1147.820	-1270.890 SRC - Phelps 11-32CHZ	11998.480	7583.120	640.730	-1287.600	142.600	674.920	631.920	15.690
7616.200	7174.380	1164.090	-1286.570 SRC - Phelps 11-32CHZ	12014.100	7582.970	641.110	-1303.220	147.600	663.870	619.160	14.850
7669.820	7217.570	1189.820	-1305.110 SRC - Phelps 11-32CHZ	12032.840	7582.790	641.570	-1321.950	151.400	658.980	612.170	14.080
7676.960	7223.130	1193.600	-1307.500 SRC - Phelps 11-32CHZ	12035.270	7582.760	641.620	-1324.380	152.800	659.020	611.930	14.000
7716.200	7252.440	1216.430	-1320.100 SRC - Phelps 11-32CHZ	12048.130	7582.640	641.940	-1337.240	155.300	662.850	614.360	13.670
7775.390	7292.820	1256.000	-1337.480 SRC - Phelps 11-32CHZ	12066.090	7582.470	642.370	-1355.190	158.000	678.780	628.440	13.480
7816.200	7317.640	1286.550	-1348.190 SRC - Phelps 11-32CHZ	12077.300	7582.360	642.650	-1366.400	159.400	696.430	645.030	13.550
7916.200	7366.650	1370.840	-1369.420 SRC - Phelps 11-32CHZ	12098.830	7582.150	643.140	-1387.920	162.000	759.160	706.000	14.280
8016.200	7396.960	1464.980	-1382.690 SRC - Phelps 11-32CHZ	12113.930	7582.010	643.480	-1403.010	164.600	842.330	788.210	15.560
8114.520	7407.000	1562.470	-1387.320 SRC - Phelps 11-32CHZ	12120.660	7581.950	643.630	-1409.740	171.700	935.610	881.080	17.160
8116.200	7407.000	1564.150	-1387.330 SRC - Phelps 11-32CHZ	12120.700	7581.940	643.630	-1409.790	171.700	937.260	882.720	17.190
8216.200	7407.000	1564.150	-1387.680 SRC - Phelps 11-32CHZ	12123.310	7581.920	643.690	-1412.380	170.800	935.640	880.880	18.920
8316.200	7407.000	1564.150	-1388.020 SRC - Phelps 11-32CHZ	12125.910	7581.900	643.750	-1415.000	170.000	934.290	879.380	20.660
8416.200	7407.000	1564.150	-1388.370 SRC - Phelps 11-32CHZ	12128.520	7581.870	643.810	-1417.600	169.200	933.150	878.090	22.400
8516.200	7407.000	1564.150	-1388.720 SRC - Phelps 11-32CHZ	12131.120	7581.840	643.870	-1420.200	168.300	932.180	876.990	24.140
8616.200	7407.000	2064.150	-1389.070 SRC - Phelps 11-32CHZ	12133.730	7581.820	643.930	-1422.810	167.500	931.340	876.030	25.880
8716.200	7407.000	2164.150	-1389.420 SRC - Phelps 11-32CHZ	12136.330	7581.790	643.990	-1425.410	166.700	930.600	875.180	27.620
8816.200	7407.000	2264.140	-1389.770 SRC - Phelps 11-32CHZ	12138.940	7581.770	644.040	-1428.020	165.900	929.950	874.420	29.350
8916.200	7407.000	2364.140	-1390.120 SRC - Phelps 11-32CHZ	12141.540	7581.740	644.100	-1430.620	165.100	929.370	873.740	31.090
9016.200	7407.000	2464.140	-1390.460 SRC - Phelps 11-32CHZ	12144.150	7581.720	644.160	-1433.230	164.300	928.850	873.120	32.820
9116.200	7407.000	2564.140	-1390.810 SRC - Phelps 11-32CHZ	12145.000	7581.710	644.180	-1434.080	164.000	928.380	872.600	34.570
9216.200	7407.000	2664.140	-1391.160 SRC - Phelps 11-32CHZ	12145.000	7581.710	644.180	-1434.080	164.000	927.960	872.150	36.340
9316.200	7407.000	2764.140	-1391.510 SRC - Phelps 11-32CHZ	12145.000	7581.710	644.180	-1434.080	164.000	927.570	871.730	38.100
9416.200	7407.000	2864.140	-1391.860 SRC - Phelps 11-32CHZ	12146.040	7581.700	644.200	-1435.120	163.700	927.220	871.330	39.850
9516.200	7407.000	2964.140	-1392.210 SRC - Phelps 11-32CHZ	12148.260	7581.680	644.240	-1437.340	163.100	926.910	870.940	41.570
9616.200	7407.000	3064.150	-1392.550 SRC - Phelps 11-32CHZ	12150.490	7581.660	644.280	-1439.560	162.400	926.610	870.550	43.290
9716.200	7407.000	3164.140	-1392.900 SRC - Phelps 11-32CHZ	12152.710	7581.640	644.330	-1441.790	161.700	926.330	870.190	45.000
9816.200	7407.000	3264.140	-1393.250 SRC - Phelps 11-32CHZ	12154.940	7581.620	644.370	-1444.010	161.100	926.080	869.860	46.710
9916.200	7407.000	3364.140	-1393.600 SRC - Phelps 11-32CHZ	12157.160	7581.600	644.410	-1446.240	160.400	925.840	869.540	48.420
10016.200	7407.000	3464.140	-1393.950 SRC - Phelps 11-32CHZ	12159.390	7581.580	644.450	-1448.460	159.800	925.610	869.240	50.120
10116.200	7407.000	3564.140	-1394.300 SRC - Phelps 11-32CHZ	12161.610	7581.560	644.490	-1450.680	159.100	925.400	868.950	51.820
10216.200	7407.000	3664.140	-1394.650 SRC - Phelps 11-32CHZ	12163.830	7581.540	644.530	-1452.910	158.500	925.200	868.680	53.520
10316.200	7407.000	3764.140	-1394.990 SRC - Phelps 11-32CHZ	12166.060	7581.520	644.580	-1455.130	157.900	925.020	868.410	55.210
10416.200	7407.000	3864.140	-1395.340 SRC - Phelps 11-32CHZ	12168.280	7581.500	644.620	-1457.360	157.200	924.840	868.160	56.900
10516.200	7407.000	3964.130	-1395.690 SRC - Phelps 11-32CHZ	12170.510	7581.480	644.660	-1459.580	156.600	924.670	867.910	58.580
10616.200	7407.000	4064.130	-1396.040 SRC - Phelps 11-32CHZ	12172.730	7581.460	644.700	-1461.800	156.000	924.510	867.660	60.250
10716.200	7407.000	4164.130	-1396.390 SRC - Phelps 11-32CHZ	12174.960	7581.440	644.740	-1464.030	155.400	924.360	867.450	61.930
10816.200	7407.000	4264.130	-1396.740 SRC - Phelps 11-32CHZ	12177.180	7581.420	644.780	-1466.250	154.800	924.220	867.230	63.600
10916.200	7407.000	4364.130	-1397.080 SRC - Phelps 11-32CHZ	12179.410	7581.400	644.830	-1468.480	154.200	924.080	867.010	65.260
11016.200	7407.000	4464.130	-1397.430 SRC - Phelps 11-32CHZ	12181.630	7581.380	644.870	-1470.700	153.600	923.940	866.800	66.920
11116.200	7407.000	4564.130	-1397.780 SRC - Phelps 11-32CHZ	12183.860	7581.360	644.910	-1472.920	153.000	923.820	866.600	68.580
11216.200	7407.000	4664.130	-1398.130 SRC - Phelps 11-32CHZ	12186.080	7581.340	644.950	-1475.150	152.400	923.700	866.400	70.230
11316.200	7407.000	4764.130	-1398.480 SRC - Phelps 11-32CHZ	12188.300	7581.310	644.990	-1477.370	151.900	923.580	866.210	71.880
11416.200	7407.000	4864.130	-1398.830 SRC - Phelps 11-32CHZ	12190.530	7581.290	645.030	-1479.600	151.300	923.470	866.020	73.520
11516.200	7407.000	4964.130	-1399.180 SRC - Phelps 11-32CHZ	12191.000	7581.290	645.040	-1480.070	151.200	923.360	865.870	75.200
11616.200	7407.000	5064.130	-1399.520 SRC - Phelps 11-32CHZ	12191.000	7581.290	645.040	-1480.070	151.200	923.250	865.730	76.900
11716.200	7407.000	5164.130	-1399.870 SRC - Phelps 11-32CHZ	12191.000	7581.290	645.040	-1480.070	151.200	923.150	865.600	78.580
11816.200	7407.000	5264.130	-1400.220 SRC - Phelps 11-32CHZ	12191.000	7581.290	645.040	-1480.070	151.200	923.060	865.470	80.270
11916.200	7407.000	5364.130	-1400.570 SRC - Phelps 11-32CHZ	12191.000	7581.290	645.040	-1480.070	151.200	922.970	865.340	81.950
12016.200	7407.000	5464.130	-1400.920 SRC - Phelps 11-32CHZ	12191.000	7581.290	645.040	-1480.070	151.200	922.880	865.220	83.640
12116.200	7407.000	5564.120	-1401.270 SRC - Phelps 11-32CHZ	12191.000	7581.290	645.040	-1480.070	151			

17762.030

7407.000

11209.920

-1420.940 SRC - Phelps

11-32CHZ

12237.000 7580.670

645.530 -1526.060

-140.700

10566.330 10505.390

173.390

Offset Wellbore Survey Tool Programs

Well
Wellbore
Survey Name
MD[ft]
Survey Tool
Error Model

SRC - Phelps 11-32CHZ
SRC - Phelps 11-32CHZ (AWB)
As Drilled Survey - Entered 20160505
12255.200
WdW Rate Gyro
Standard

Clearance Data

Reference MD[ft]	Reference TVD[ft]	Reference North[ft]	Reference East[ft]	Offset Well	Offset MD[ft]	Offset TVD[ft]	Offset North[ft]	Offset East[ft]	Angle From Highside [deg]	Closest Approach Distance [ft]	Ellipse Separation [ft]	Clearance Factor
16.200	16.200		0.000	0.000 SRC - Phelps 11-32NHZ	54.440	17.640	-667.920	2988.630	102.600	3062.350	3061.380	3133.850
116.200	116.200		0.000	0.000 SRC - Phelps 11-32NHZ	154.440	117.640	-667.840	2988.600	102.600	3062.310	3061.150	2642.820
216.200	216.200		0.000	0.000 SRC - Phelps 11-32NHZ	259.530	222.730	-667.740	2988.560	102.600	3062.250	3060.960	2370.270
316.200	316.200		0.000	0.000 SRC - Phelps 11-32NHZ	369.630	332.830	-666.870	2988.320	102.600	3061.870	3060.400	2092.160
416.200	416.200		0.000	0.000 SRC - Phelps 11-32NHZ	466.110	429.260	-664.190	2988.440	102.500	3061.390	3059.770	1889.250
516.200	516.200		0.000	0.000 SRC - Phelps 11-32NHZ	561.530	524.540	-659.110	2989.230	102.400	3061.050	3059.260	1713.000
616.200	616.200		0.000	0.000 SRC - Phelps 11-32NHZ	658.880	621.550	-651.220	2990.730	102.300	3060.820	3058.860	1558.940
716.200	716.200		0.000	0.000 SRC - Phelps 11-32NHZ	753.850	715.900	-640.600	2992.940	102.100	3060.730	3058.580	1424.790
721.580	721.580		0.000	0.000 SRC - Phelps 11-32NHZ	759.190	721.190	-639.950	2993.980	102.100	3060.730	3058.570	1417.170
770.790	770.790		0.000	0.000 SRC - Phelps 11-32NHZ	802.430	764.040	-634.220	2994.380	102.000	3060.820	3058.560	1357.920
816.200	816.200		0.000	0.000 SRC - Phelps 11-32NHZ	841.910	803.090	-628.570	2995.740	101.800	3061.000	3058.660	1311.030
916.200	916.200		0.000	0.000 SRC - Phelps 11-32NHZ	930.260	890.230	-614.490	2999.240	101.600	3061.650	3059.100	1200.580
1016.200	1016.200		0.000	0.000 SRC - Phelps 11-32NHZ	1033.400	991.470	-595.410	3003.980	101.200	3062.520	3059.720	1092.420
1116.200	1116.200		0.000	0.000 SRC - Phelps 11-32NHZ	1129.580	1085.420	-575.330	3008.680	100.800	3063.350	3060.300	1003.130
1216.200	1216.200		0.000	0.000 SRC - Phelps 11-32NHZ	1215.170	1168.780	-556.540	3013.350	100.500	3064.680	3061.370	928.000
1316.200	1316.200		0.000	0.000 SRC - Phelps 11-32NHZ	1327.620	1278.390	-532.140	3019.310	100.000	3066.070	3062.460	849.420
1416.200	1416.200		0.000	0.000 SRC - Phelps 11-32NHZ	1430.600	1379.030	-510.830	3024.160	99.600	3067.230	3063.340	787.990
1516.200	1516.200		0.000	0.000 SRC - Phelps 11-32NHZ	1528.200	1474.440	-490.830	3028.720	99.200	3068.520	3064.350	736.700
1616.200	1616.200		0.000	0.000 SRC - Phelps 11-32NHZ	1630.700	1574.460	-468.900	3033.580	98.800	3069.890	3065.430	689.490
1716.200	1716.200		0.000	0.000 SRC - Phelps 11-32NHZ	1738.300	1679.130	-444.480	3038.550	98.300	3071.110	3066.350	645.280
1816.200	1816.200		0.000	0.000 SRC - Phelps 11-32NHZ	1831.360	1789.420	-422.390	3042.950	97.800	3072.480	3067.440	609.080
1916.200	1916.200		0.000	0.000 SRC - Phelps 11-32NHZ	1940.250	1874.960	-396.090	3048.040	97.400	3073.950	3068.960	616.030
2016.200	2016.200		0.000	0.000 SRC - Phelps 11-32NHZ	2077.180	2007.930	-363.800	3053.230	96.800	3074.830	3069.460	572.640
2116.200	2116.200		0.000	0.000 SRC - Phelps 11-32NHZ	2247.060	2173.900	-327.710	3055.920	96.100	3073.980	3068.190	530.900
2216.200	2216.200		0.000	0.000 SRC - Phelps 11-32NHZ	2394.250	2318.300	-299.300	3054.740	95.600	3071.060	3064.920	500.030
2316.200	2316.200		0.000	0.000 SRC - Phelps 11-32NHZ	2483.360	2405.800	-282.440	3053.500	95.300	3067.840	3061.460	480.630
2416.200	2416.200		0.000	0.000 SRC - Phelps 11-32NHZ	2553.670	2474.870	-269.360	3053.050	95.000	3065.470	3058.880	465.080
2516.200	2516.200		0.000	0.000 SRC - Phelps 11-32NHZ	2596.890	2517.360	-261.450	3053.320	94.900	3064.490	3057.740	454.080
2558.850	2558.850		0.000	0.000 SRC - Phelps 11-32NHZ	2636.670	2556.460	-254.160	3053.930	94.800	3064.490	3057.630	446.900
2616.200	2616.200		0.000	0.000 SRC - Phelps 11-32NHZ	2664.380	2583.680	-249.010	3054.640	94.700	3064.940	3057.990	440.790
2716.200	2716.200		0.000	0.000 SRC - Phelps 11-32NHZ	2733.590	2651.620	-236.000	3056.970	94.400	3066.740	3059.580	428.450
2816.200	2816.200		0.000	0.000 SRC - Phelps 11-32NHZ	2904.010	2819.210	-205.280	3059.940	93.800	3066.820	3059.280	406.780
2843.840	2843.840		0.000	0.000 SRC - Phelps 11-32NHZ	2929.000	2843.840	-201.050	3060.200	93.800	3066.790	3059.190	403.340
2916.200	2916.200		0.000	0.000 SRC - Phelps 11-32NHZ	2980.340	2894.490	-192.720	3060.900	93.600	3067.480	3059.300	395.910
3016.200	3016.200		0.000	0.000 SRC - Phelps 11-32NHZ	3054.330	2967.450	-180.490	3062.400	93.400	3068.100	3060.150	385.870
3116.200	3116.200		0.000	0.000 SRC - Phelps 11-32NHZ	3139.990	3042.870	-166.950	3064.740	93.100	3070.160	3061.990	376.010
3216.200	3216.200		0.000	0.000 SRC - Phelps 11-32NHZ	3199.770	3110.330	-153.810	3067.450	92.900	3073.130	3064.760	367.140
3316.200	3316.200		0.000	0.000 SRC - Phelps 11-32NHZ	3288.440	3197.150	-136.260	3071.510	92.500	3076.840	3068.220	357.110
3416.200	3416.200		0.000	0.000 SRC - Phelps 11-32NHZ	3383.820	3290.740	-118.440	3075.960	92.200	3080.800	3071.930	347.330
3516.200	3516.200		0.000	0.000 SRC - Phelps 11-32NHZ	3484.030	3389.230	-100.630	3080.740	91.900	3085.000	3075.870	338.080
3616.200	3616.200		0.000	0.000 SRC - Phelps 11-32NHZ	3599.250	3502.620	-80.760	3085.730	91.500	3088.880	3079.480	328.550
3660.000	3660.000		0.000	0.000 SRC - Phelps 11-32NHZ	3642.370	3545.070	-73.410	3087.490	91.400	3090.500	3080.990	324.980
3716.200	3716.190		0.550	-0.610 SRC - Phelps 11-32NHZ	3682.680	3584.760	-66.560	3089.230	91.100	3093.370	3083.740	321.510
3816.200	3816.030		4.280	-4.740 SRC - Phelps 11-32NHZ	3772.310	3673.020	-51.580	3093.450	138.700	3101.990	3092.140	314.960
3916.200	3915.430		11.500	-12.730 SRC - Phelps 11-32NHZ	3863.290	3762.730	-37.090	3097.940	138.300	3114.800	3104.720	309.110
4016.200	4014.140		22.200	-24.580 SRC - Phelps 11-32NHZ	3954.330	3852.570	-23.150	3102.970	137.900	3131.750	3121.440	303.950
4116.200	4111.870		36.340	-40.240 SRC - Phelps 11-32NHZ	4042.120	3939.200	-9.720	3107.460	137.400	3152.780	3142.240	299.320
4216.200	4208.370		53.900	-59.680 SRC - Phelps 11-32NHZ	4144.670	4040.280	6.600	3113.170	136.900	3177.660	3166.860	294.320
4316.200	4303.370		74.820	-82.840 SRC - Phelps 11-32NHZ	4259.000	4146.510	31.550	3119.300	136.100	3202.470	3192.570	289.820
4416.200	4399.600		99.030	-109.660 SRC - Phelps 11-32NHZ	4383.850	4266.680	71.920	3126.100	135.000	3232.970	3223.060	285.080
4516.200	4487.810		126.490	-140.060 SRC - Phelps 11-32NHZ	4520.290	4396.780	116.120	3132.610	133.700	3263.470	3253.560	280.330
4616.200	4576.750		157.110	-173.970 SRC - Phelps 11-32NHZ	4674.250	4546.670	191.280	3138.840	132.200	3293.970	3284.060	275.580
4659.990	4641.920		171.490	-189.890 SRC - Phelps 11-32NHZ	4758.630	4634.120	319.210	3144.810	130.700	3324.470	3314.560	270.830
4716.200	4663.600		190.330	-210.750 SRC - Phelps 11-32NHZ	4874.400	4733.110	448.900	3150.510	129.100	3354.970	3345.060	266.080
4816.200	4750.200		223.840	-247.860 SRC - Phelps 11-32NHZ	5025.010	4831.440	617.640	3156.160	127.600	3385.470	3375.560	261.330
4916.200	4836.810		257.350	-284.970 SRC - Phelps 11-32NHZ	5186.930	4930.950	817.010	3161.410	126.100	3415.970	3406.060	256.580
5016.200	4923.410		290.860	-322.070 SRC - Phelps 11-32NHZ	5363.000	5029.960	1015.260	3166.260	124.600	3446.470	3436.560	251.830
5116.200	5010.010		324.370	-359.180 SRC - Phelps 11-32NHZ	5554.000	5129.960	1215.260	3170.710	123.100	3476.970	3467.060	247.080
5216.200	5096.610		357.890	-396.290 SRC - Phelps 11-32NHZ	5759.000	5230.960	1425.260	3175.160	121.600	3507.470	3497.560	242.330
5316.200	5183.220		391.400	-433.400 SRC - Phelps 11-32NHZ	5978.000	5331.960	1635.260	3179.610	120.100	3537.970	3528.060	237.580
5416.200	5269.820		424.910	-470.500 SRC - Phelps 11-32NHZ	6210.000	5432.960	1845.260	3184.060	118.600	3568.470	3558.560	232.830
5516.200	5356.420		458.420	-507.610 SRC - Phelps 11-32NHZ	6455.000	5533.960	2055.260	3188.510	117.100	3598.970	3588.660	228.080
5616.200	5443.020		491.930	-544.720 SRC - Phelps 11-32NHZ	6714.000	5634.960	2265.260	3192.960	115.600	3629.470	3619.160	223.330
5716.200	5529.630		525.440	-581.830 SRC - Phelps 11-32NHZ	6987.000	5735.960	2475.260	3197.410	114.100	3659.970	3649.660	218.580
5816.200	5616.230		558.950	-618.930 SRC - Phelps 11-32NHZ	7274.000	5836.960	2685.260	3201.860	112.600	3690.470	3679.760	213.830
5916.200	5702.830		592.460	-656.040 SRC - Phelps 11-32NHZ	7574.000	5937.960	2895.260	3206.310	111.100	3720.970	3710.260	209.080
6016.200	5789.440		625.970	-693.150 SRC - Phelps 11-32NHZ	7884.000	6038.960	3105.260	3210.760	109.600	3751.470	3740.760	204.330
6116.200	5876.040		659.490	-730.250 SRC - Phelps 11-32NHZ	8204.000	6139.960	3315.260	3214.610	108.100	3781.970	3771.260	199.580
6216.200	5962.640		693.000	-767.360 SRC - Phelps 11-32NHZ	8534.000	6240.960	3525.260	3218.460	106.600	3812.470	3801.760	194.830

10516.200	7407.000	3964.130	-1395.690	SRC - Phelps 11-32NHZ	11855.870	7432.240	307.340	-1395.430	-153.700	3656.880	3601.410	65.920
10616.200	7407.000	4064.130	-1396.040	SRC - Phelps 11-32NHZ	11856.210	7432.240	307.340	-1395.760	-153.100	3756.880	3701.360	67.670
10716.200	7407.000	4164.130	-1396.390	SRC - Phelps 11-32NHZ	11856.540	7432.240	307.340	-1396.100	-152.500	3856.870	3801.310	69.410
10816.200	7407.000	4264.130	-1396.740	SRC - Phelps 11-32NHZ	11888.130	7431.910	307.460	-1427.680	-119.100	3956.870	3900.680	70.430
10916.200	7407.000	4364.130	-1397.080	SRC - Phelps 11-32NHZ	11889.250	7431.890	307.470	-1428.810	-118.500	4056.860	4000.620	72.130
11016.200	7407.000	4464.130	-1397.430	SRC - Phelps 11-32NHZ	11890.370	7431.870	307.480	-1429.930	-117.900	4156.850	4100.550	73.830
11116.200	7407.000	4564.130	-1397.780	SRC - Phelps 11-32NHZ	11891.500	7431.860	307.490	-1431.050	-117.300	4256.840	4200.480	75.530
11216.200	7407.000	4664.130	-1398.130	SRC - Phelps 11-32NHZ	11892.620	7431.840	307.500	-1432.170	-116.800	4356.830	4300.420	77.220
11316.200	7407.000	4764.130	-1398.480	SRC - Phelps 11-32NHZ	11893.740	7431.830	307.510	-1433.290	-116.300	4456.830	4400.350	78.910
11416.200	7407.000	4864.130	-1398.830	SRC - Phelps 11-32NHZ	11894.860	7431.810	307.520	-1434.410	-115.700	4556.820	4500.280	80.600
11516.200	7407.000	4964.130	-1399.180	SRC - Phelps 11-32NHZ	11910.640	7431.630	307.660	-1450.190	-110.100	4656.810	4599.950	81.900
11616.200	7407.000	5064.130	-1399.520	SRC - Phelps 11-32NHZ	11912.080	7431.620	307.680	-1451.620	-109.700	4756.800	4699.880	83.570
11716.200	7407.000	5164.130	-1399.870	SRC - Phelps 11-32NHZ	11913.510	7431.610	307.690	-1453.060	-109.300	4856.790	4799.800	85.220
11816.200	7407.000	5264.130	-1400.220	SRC - Phelps 11-32NHZ	11914.950	7431.590	307.710	-1454.500	-109.000	4956.780	4899.720	86.880
11916.200	7407.000	5364.130	-1400.570	SRC - Phelps 11-32NHZ	11916.390	7431.580	307.730	-1455.940	-108.600	5056.760	4999.650	88.530
12016.200	7407.000	5464.130	-1400.920	SRC - Phelps 11-32NHZ	11917.830	7431.570	307.740	-1457.380	-108.300	5156.750	5099.570	90.180
12116.200	7407.000	5564.120	-1401.270	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	5256.740	5199.500	91.830
12216.200	7407.000	5664.120	-1401.620	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	5356.730	5299.450	93.510
12316.200	7407.000	5764.120	-1401.960	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	5456.720	5399.390	95.190
12416.200	7407.000	5864.120	-1402.310	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	5556.710	5499.340	96.870
12516.200	7407.000	5964.120	-1402.660	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	5656.700	5599.290	98.540
12616.200	7407.000	6064.120	-1403.010	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	5756.690	5699.240	100.210
12716.200	7407.000	6164.120	-1403.360	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	5856.680	5799.190	101.870
12816.200	7407.000	6264.120	-1403.710	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	5956.670	5899.140	103.540
12916.200	7407.000	6364.120	-1404.050	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	6056.660	5999.090	105.200
13016.200	7407.000	6464.120	-1404.400	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	6156.650	6099.040	106.860
13116.200	7407.000	6564.120	-1404.750	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	6256.640	6199.990	108.510
13216.200	7407.000	6664.120	-1405.100	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	6356.640	6299.930	110.160
13316.200	7407.000	6764.120	-1405.450	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	6456.630	6399.880	111.810
13416.200	7407.000	6864.120	-1405.800	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	6556.620	6499.830	113.460
13516.200	7407.000	6964.120	-1406.150	SRC - Phelps 11-32NHZ	11919.000	7431.560	307.750	-1458.550	-108.000	6656.610	6599.780	115.100
13615.280	7407.000	7063.200	-1406.490	SRC - Phelps 11-32NHZ	12018.740	7433.440	309.270	-1558.250	-98.600	6755.680	6696.120	113.430
13616.200	7407.000	7064.120	-1406.490	SRC - Phelps 11-32NHZ	12018.760	7433.440	309.270	-1558.280	-98.600	6756.600	6697.040	113.440
13716.200	7407.000	7164.120	-1406.840	SRC - Phelps 11-32NHZ	12021.370	7433.510	309.330	-1560.880	-98.500	6856.570	6796.920	114.960
13816.200	7407.000	7264.110	-1407.190	SRC - Phelps 11-32NHZ	12023.970	7433.580	309.390	-1563.480	-98.400	6956.530	6896.800	116.470
13916.200	7407.000	7364.110	-1407.540	SRC - Phelps 11-32NHZ	12026.580	7433.650	309.450	-1566.090	-98.300	7056.500	6996.690	117.970
14016.200	7407.000	7464.110	-1407.890	SRC - Phelps 11-32NHZ	12029.180	7433.720	309.510	-1568.690	-98.200	7156.460	7096.570	119.480
14116.200	7407.000	7564.110	-1408.240	SRC - Phelps 11-32NHZ	12031.780	7433.780	309.560	-1571.290	-98.100	7256.430	7196.450	120.970
14216.200	7407.000	7664.110	-1408.580	SRC - Phelps 11-32NHZ	12034.390	7433.850	309.620	-1573.890	-98.000	7356.400	7296.330	122.470
14316.200	7407.000	7764.110	-1408.930	SRC - Phelps 11-32NHZ	12036.990	7433.920	309.680	-1576.500	-97.900	7456.360	7396.210	123.960
14416.200	7407.000	7864.110	-1409.280	SRC - Phelps 11-32NHZ	12039.600	7433.990	309.740	-1579.100	-97.800	7556.330	7496.090	125.440
14516.200	7407.000	7964.110	-1409.630	SRC - Phelps 11-32NHZ	12042.200	7434.060	309.800	-1581.700	-97.800	7656.290	7595.970	126.920
14616.200	7407.000	8064.110	-1409.980	SRC - Phelps 11-32NHZ	12044.800	7434.130	309.860	-1584.300	-97.700	7756.260	7695.850	128.400
14716.200	7407.000	8164.110	-1410.330	SRC - Phelps 11-32NHZ	12047.410	7434.190	309.920	-1586.910	-97.600	7856.220	7795.730	129.870
14816.200	7407.000	8264.110	-1410.680	SRC - Phelps 11-32NHZ	12050.010	7434.260	309.980	-1589.510	-97.500	7956.190	7895.610	131.340
14916.200	7407.000	8364.110	-1411.020	SRC - Phelps 11-32NHZ	12052.620	7434.330	310.030	-1592.110	-97.400	8056.160	7995.490	132.800
15016.200	7407.000	8464.110	-1411.370	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	8156.120	8095.390	134.300
15116.200	7407.000	8564.110	-1411.720	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	8256.090	8195.320	135.850
15216.200	7407.000	8664.110	-1412.070	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	8356.060	8295.240	137.400
15316.200	7407.000	8764.110	-1412.420	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	8456.020	8395.170	138.950
15416.200	7407.000	8864.100	-1412.770	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	8555.990	8495.090	140.490
15516.200	7407.000	8964.100	-1413.120	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	8655.960	8595.020	142.030
15616.200	7407.000	9064.100	-1413.460	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	8755.930	8694.940	143.570
15716.200	7407.000	9164.100	-1413.810	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	8855.900	8794.870	145.100
15816.200	7407.000	9264.100	-1414.160	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	8955.870	8894.800	146.640
15916.200	7407.000	9364.100	-1414.510	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	9055.850	8994.730	148.170
16016.200	7407.000	9464.100	-1414.860	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	9155.820	9094.660	149.690
16116.200	7407.000	9564.100	-1415.210	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	9255.790	9194.580	151.220
16216.200	7407.000	9664.100	-1415.550	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	9355.770	9294.510	152.740
16316.200	7407.000	9764.100	-1415.900	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	9455.740	9394.440	154.260
16416.200	7407.000	9864.100	-1416.250	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	9555.720	9494.370	155.770
16516.200	7407.000	9964.100	-1416.600	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	9655.690	9594.300	157.290
16616.200	7407.000	10064.100	-1416.950	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	9755.670	9694.230	158.800
16716.200	7407.000	10164.100	-1417.300	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	9855.650	9794.160	160.300
16816.200	7407.000	10264.100	-1417.650	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	9955.620	9894.100	161.810
16916.200	7407.000	10364.100	-1417.990	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	10055.600	9994.030	163.310
17016.200	7407.000	10464.100	-1418.340	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	10155.580	10093.960	164.810
17116.200	7407.000	10564.090	-1418.690	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	10255.560	10193.890	166.310
17216.200	7407.000	10664.090	-1419.040	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	10355.530	10293.820	167.800
17316.200	7407.000	10764.090	-1419.390	SRC - Phelps 11-32NHZ	12054.000	7434.370	310.060	-1593.490	-97.400	10455.510	10393.760	169.300
17416.200	7407.000	10864.090	-141									

4016.200	4014.140	22.200	-24.580 SRC - Phelps 12-32CHZ	3872.950	3826.550	-753.080	3180.890	150.800	3303.230	3296.280	475.690
4116.200	4111.870	36.340	-40.240 SRC - Phelps 12-32CHZ	4038.150	3991.550	-753.550	3189.020	150.700	3326.640	3319.480	464.340
4216.200	4208.370	53.900	-59.680 SRC - Phelps 12-32CHZ	4167.120	4120.450	-753.550	3193.230	150.600	3352.780	3345.430	455.620
4316.200	4303.370	74.820	-82.840 SRC - Phelps 12-32CHZ	4323.980	4277.280	-755.120	3195.830	150.600	3382.190	3374.600	446.120
4416.200	4396.600	99.030	-109.660 SRC - Phelps 12-32CHZ	40576.730	7599.170	-759.290	-85.160	-160.800	3315.690	3299.100	199.830
4516.200	4487.810	126.490	-140.060 SRC - Phelps 12-32CHZ	10615.550	7599.440	-759.310	-123.980	-161.200	3235.300	3218.300	190.270
4616.200	4576.750	157.110	-173.970 SRC - Phelps 12-32CHZ	10652.570	7599.550	-759.550	-160.990	-161.400	3158.760	3141.300	180.970
4659.990	4614.920	171.490	-189.890 SRC - Phelps 12-32CHZ	10668.400	7599.570	-759.700	-176.830	-161.500	3126.570	3108.890	176.850
4716.200	4663.600	190.330	-210.750 SRC - Phelps 12-32CHZ	10690.610	7599.600	-759.890	-199.030	-161.000	3085.960	3067.990	171.760
4816.200	4750.280	223.840	-247.860 SRC - Phelps 12-32CHZ	10727.580	7599.720	-759.000	-236.910	-160.200	3014.600	2996.100	162.990
4916.200	4837.810	257.350	-284.970 SRC - Phelps 12-32CHZ	10767.920	7599.890	-759.890	-276.340	-159.300	2959.400	2925.310	154.260
5016.200	4923.410	290.860	-322.070 SRC - Phelps 12-32CHZ	10806.890	7600.040	-759.800	-315.320	-158.300	2875.460	2855.740	145.810
5116.200	5010.010	324.370	-359.180 SRC - Phelps 12-32CHZ	10841.220	7600.090	-759.930	-349.640	-157.500	2807.900	2787.510	137.730
5216.200	5096.610	357.880	-396.290 SRC - Phelps 12-32CHZ	10902.580	7599.790	-760.710	-410.990	-156.100	2741.780	2720.560	129.220
5316.200	5183.220	391.400	-433.400 SRC - Phelps 12-32CHZ	10934.600	7599.420	-761.140	-443.010	-155.300	2677.030	2655.040	121.740
5416.200	5269.820	424.910	-470.500 SRC - Phelps 12-32CHZ	10956.000	7599.220	-761.390	-464.410	-154.700	2614.090	2591.320	114.830
5516.200	5356.420	458.420	-507.610 SRC - Phelps 12-32CHZ	10983.990	7599.290	-761.610	-492.400	-154.100	2553.260	2529.640	108.090
5616.200	5443.020	491.930	-544.720 SRC - Phelps 12-32CHZ	11017.830	7599.510	-761.720	-526.230	-153.200	2494.480	2469.910	101.550
5716.200	5529.630	525.440	-581.830 SRC - Phelps 12-32CHZ	11066.040	7599.800	-761.810	-574.450	-152.000	2437.760	2412.120	95.070
5816.200	5616.230	558.950	-618.930 SRC - Phelps 12-32CHZ	11103.450	7599.930	-761.820	-611.850	-151.000	2383.180	2356.450	89.170
5916.200	5702.830	592.460	-656.040 SRC - Phelps 12-32CHZ	11144.640	7599.990	-761.850	-653.040	-150.000	2330.960	2303.060	83.550
6016.200	5789.440	625.970	-693.150 SRC - Phelps 12-32CHZ	11178.690	7600.020	-761.880	-687.090	-149.100	2281.320	2252.230	78.430
6116.200	5876.040	659.480	-730.260 SRC - Phelps 12-32CHZ	11210.900	7600.020	-761.880	-720.020	-148.300	2234.170	2204.170	73.700
6216.200	5962.640	693.000	-767.360 SRC - Phelps 12-32CHZ	11248.170	7600.020	-762.380	-756.570	-147.300	2190.720	2159.070	69.220
6316.200	6049.240	726.510	-804.470 SRC - Phelps 12-32CHZ	11298.960	7600.020	-762.520	-807.370	-145.900	2149.910	2116.790	64.910
6416.200	6135.850	760.020	-841.580 SRC - Phelps 12-32CHZ	11342.250	7599.990	-762.320	-850.650	-144.800	2112.180	2077.590	61.070
6516.200	6222.450	793.530	-878.680 SRC - Phelps 12-32CHZ	11380.970	7599.910	-762.150	-889.370	-143.800	2077.890	2041.840	57.630
6616.200	6309.050	827.040	-915.790 SRC - Phelps 12-32CHZ	11422.480	7599.580	-762.080	-930.880	-142.600	2047.190	2009.610	54.470
6716.200	6395.650	860.550	-952.900 SRC - Phelps 12-32CHZ	11463.630	7599.120	-761.970	-972.020	-141.500	2020.220	1981.090	51.640
6816.200	6482.260	894.070	-990.010 SRC - Phelps 12-32CHZ	11507.060	7598.650	-761.760	-1015.450	-140.300	1997.180	1956.490	49.080
6916.200	6568.860	927.580	-1027.110 SRC - Phelps 12-32CHZ	11543.720	7598.330	-761.410	-1052.110	-139.300	1978.160	1935.970	46.890
7016.200	6655.460	961.090	-1064.220 SRC - Phelps 12-32CHZ	11583.320	7598.070	-760.950	-1091.700	-138.300	1963.330	1919.640	44.930
7116.200	6742.070	994.600	-1101.330 SRC - Phelps 12-32CHZ	11617.080	7598.070	-760.470	-1125.460	-137.300	1952.840	1907.740	43.300
7216.200	6828.670	1028.110	-1138.440 SRC - Phelps 12-32CHZ	11670.430	7598.160	-759.470	-1178.810	-135.900	1946.580	1899.910	41.700
7316.200	6915.270	1061.620	-1175.540 SRC - Phelps 12-32CHZ	11713.550	7598.120	-758.430	-1221.910	-134.700	1940.490	1896.400	40.440
7348.880	6943.570	1072.570	-1187.670 SRC - Phelps 12-32CHZ	11724.700	7598.160	-758.140	-1233.060	-134.400	1944.750	1896.250	40.100
7416.200	7001.870	1095.130	-1212.650 SRC - Phelps 12-32CHZ	11750.000	7598.300	-757.460	-1258.350	-133.700	1946.770	1897.420	39.440
7516.200	7088.480	1128.640	-1249.760 SRC - Phelps 12-32CHZ	11780.670	7598.660	-756.730	-1289.000	-132.900	1953.580	1903.100	38.700
7573.430	7138.040	1147.820	-1270.990 SRC - Phelps 12-32CHZ	11784.720	7598.730	-756.650	-1293.050	-132.800	1959.530	1908.600	38.480
7616.200	7174.380	1164.090	-1286.570 SRC - Phelps 12-32CHZ	11801.200	7599.020	-756.390	-1309.530	-139.100	1967.000	1915.600	38.270
7644.150	7197.270	1176.760	-1296.400 SRC - Phelps 12-32CHZ	11811.630	7599.210	-756.230	-1319.960	-142.400	1974.470	1922.780	38.200
7716.200	7252.440	1216.430	-1320.100 SRC - Phelps 12-32CHZ	11823.040	7599.430	-756.100	-1331.360	-149.300	2002.860	1950.650	38.360
7816.200	7317.640	1286.550	-1348.190 SRC - Phelps 12-32CHZ	11845.500	7599.870	-755.900	-1353.820	-155.100	2001.860	2008.960	38.980
7916.200	7396.650	1370.840	-1369.420 SRC - Phelps 12-32CHZ	11863.120	7600.170	-755.850	-1371.440	-158.900	2139.470	2086.070	40.070
8016.200	7396.960	1464.980	-1382.690 SRC - Phelps 12-32CHZ	11877.000	7600.400	-755.810	-1385.310	-162.300	2230.090	2176.340	41.490
8114.520	7407.000	1562.470	-1387.320 SRC - Phelps 12-32CHZ	11877.000	7600.400	-755.810	-1385.310	-178.200	2326.330	2272.550	43.220
8116.200	7407.000	1564.150	-1387.330 SRC - Phelps 12-32CHZ	11877.000	7600.400	-755.810	-1385.310	-178.200	2328.010	2274.170	43.240
8216.200	7407.000	1664.150	-1387.680 SRC - Phelps 12-32CHZ	11877.000	7600.400	-755.810	-1385.310	-178.200	2374.980	2321.980	45.050
8316.200	7407.000	1764.150	-1388.020 SRC - Phelps 12-32CHZ	11877.000	7600.400	-755.810	-1385.310	-178.200	2527.370	2473.440	46.860
8416.200	7407.000	1864.150	-1388.370 SRC - Phelps 12-32CHZ	11877.220	7600.410	-755.810	-1385.530	-178.100	2627.090	2573.100	48.660
8516.200	7407.000	1964.150	-1388.720 SRC - Phelps 12-32CHZ	11877.550	7600.410	-755.810	-1385.870	-178.000	2726.830	2672.790	50.460
8616.200	7407.000	2064.150	-1389.070 SRC - Phelps 12-32CHZ	11877.890	7600.420	-755.810	-1386.200	-177.900	2826.580	2772.490	52.260
8716.200	7407.000	2164.150	-1389.420 SRC - Phelps 12-32CHZ	11878.230	7600.420	-755.810	-1386.540	-177.800	2926.360	2872.220	54.050
8816.200	7407.000	2264.140	-1389.770 SRC - Phelps 12-32CHZ	11878.560	7600.420	-755.810	-1386.880	-177.700	3026.140	2971.950	55.840
8916.200	7407.000	2364.140	-1390.120 SRC - Phelps 12-32CHZ	11878.900	7600.430	-755.810	-1387.210	-177.600	3125.950	3071.710	57.630
9016.200	7407.000	2464.140	-1390.460 SRC - Phelps 12-32CHZ	11879.240	7600.430	-755.810	-1387.550	-177.500	3225.760	3171.470	59.420
9116.200	7407.000	2564.140	-1390.810 SRC - Phelps 12-32CHZ	11879.570	7600.440	-755.810	-1387.890	-177.400	3325.590	3271.250	61.200
9216.200	7407.000	2664.140	-1391.160 SRC - Phelps 12-32CHZ	11879.910	7600.440	-755.810	-1388.220	-177.300	3425.420	3371.030	62.980
9316.200	7407.000	2764.140	-1391.510 SRC - Phelps 12-32CHZ	11880.250	7600.450	-755.810	-1388.560	-177.200	3525.270	3470.830	64.760
9416.200	7407.000	2864.140	-1391.860 SRC - Phelps 12-32CHZ	11880.590	7600.450	-755.810	-1388.900	-177.100	3625.120	3570.680	66.540
9516.200	7407.000	2964.140	-1392.210 SRC - Phelps 12-32CHZ	11880.920	7600.460	-755.810	-1389.230	-177.000	3724.980	3670.490	68.310
9616.200	7407.000	3064.140	-1392.550 SRC - Phelps 12-32CHZ	11881.260	7600.460	-755.810	-1389.570	-176.900	3824.850	3770.270	70.080
9716.200	7407.000	3164.140	-1392.900 SRC - Phelps 12-32CHZ	11881.590	7600.460	-755.810	-1389.910	-176.800	3924.720	3870.090	71.840
9816.200	7407.000	3264.140	-1393.250 SRC - Phelps 12-32CHZ	11881.930	7600.470	-755.810	-1390.240	-176.800	4024.600	3969.930	73.610
9916.200	7407.000	3364.140	-1393.600 SRC - Phelps 12-32CHZ	11882.270	7600.470	-755.810	-1390.580	-176.700	4124.490	4069.770	75.370
10016.200	7407.000	3464.140	-1393.950 SRC - Phelps 12-32CHZ	11882.600	7600.480	-755.810	-1390.920	-176.600	4224.380	4169.610	77.130
10116.200	7407.000	3564.140	-1394.300 SRC - Phelps 12-32CHZ	11882.940	7600.480	-755.810	-1391.250	-176.400	4324.280	4269.460	78.880
10216.200	7407.000	3664.140	-1394.650 SRC - Phelps 12-32CHZ	11883.280	7600.490	-755.810	-1391.590	-176.300	4424.180	4369.310	80.630
10316.200	7407.000	3764.140	-1394.990 SRC - Phelps 12-32CHZ	11883.610	7600.490	-755.810	-1391.930	-176.300	4524.090	4469.170	82.380
10416.200	7407.000	3864.140	-1395.340 SRC - Phelps 12-32CHZ	11883.950	7600.500	-755.810	-1392.260	-176.200	4624.000	4569.030	84.130
10516.200	7407.000	3964.130	-1395.690 SRC - Phelps 12-32CHZ	11884.290	7600.500	-755.810	-1392.600	-176.100	4723.910	4668.900	85.870
10616.200	7407.000	4064.130	-1396.040 SRC - Phelps 12-32CHZ	11884.620	7600.500	-755.810	-1392.940	-175.900	4823.830	4768.770	87.610
10716.200	7407.000	4164.130	-1396.390 SRC - Phelps 12-32CHZ	11884.960	7600.510	-755.810	-1393.270	-175.800	4923.750	4868.640	89.340
10816.200	7407.000	4264.130	-1396.740 SRC - Phelps 12-32CHZ</								

16516.200	7407.000	9964.100	-1416.600	SRC - Phelps 12-32CHZ	11904.480	7600.760	-755.810	-1412.790	-170.200	10721.660	10663.540	184.460
16616.200	7407.000	10064.100	-1416.950	SRC - Phelps 12-32CHZ	11904.820	7600.770	-755.810	-1413.130	-170.100	10821.650	10763.470	186.010
16716.200	7407.000	10164.100	-1417.300	SRC - Phelps 12-32CHZ	11905.160	7600.770	-755.810	-1413.470	-170.000	10921.630	10863.400	187.540
16816.200	7407.000	10264.100	-1417.650	SRC - Phelps 12-32CHZ	11905.490	7600.780	-755.810	-1413.800	-169.900	11021.610	10963.320	189.080
16916.200	7407.000	10364.100	-1417.990	SRC - Phelps 12-32CHZ	11905.830	7600.780	-755.810	-1414.140	-169.800	11121.600	11063.250	190.610
17016.200	7407.000	10464.100	-1418.340	SRC - Phelps 12-32CHZ	11906.170	7600.790	-755.810	-1414.480	-169.700	11221.580	11163.180	192.140
17116.200	7407.000	10564.090	-1418.690	SRC - Phelps 12-32CHZ	11906.500	7600.790	-755.810	-1414.810	-169.600	11321.570	11263.110	193.670
17216.200	7407.000	10664.090	-1419.040	SRC - Phelps 12-32CHZ	11906.840	7600.800	-755.810	-1415.150	-169.500	11421.550	11363.040	195.190
17316.200	7407.000	10764.090	-1419.390	SRC - Phelps 12-32CHZ	11907.180	7600.800	-755.810	-1415.490	-169.400	11521.540	11462.970	196.710
17416.200	7407.000	10864.090	-1419.740	SRC - Phelps 12-32CHZ	11907.510	7600.800	-755.810	-1415.820	-169.300	11621.520	11562.890	198.230
17516.200	7407.000	10964.090	-1420.080	SRC - Phelps 12-32CHZ	11907.850	7600.810	-755.810	-1416.160	-169.200	11721.510	11662.820	199.740
17616.200	7407.000	11064.090	-1420.430	SRC - Phelps 12-32CHZ	11908.190	7600.810	-755.810	-1416.490	-169.100	11821.490	11762.750	201.250
17716.200	7407.000	11164.090	-1420.780	SRC - Phelps 12-32CHZ	12057.030	7601.540	-754.910	-1565.330	-136.300	11921.470	11860.550	195.710
17762.030	7407.000	11209.920	-1420.940	SRC - Phelps 12-32CHZ	12057.750	7601.540	-754.910	-1566.050	-136.200	11967.280	11906.330	196.330

Offset Wellbore Survey Tool Programs

Well	SRC - Phelps 12-32CHZ
Wellbore	SRC - Phelps 12-32CHZ (AWB)
Survey Name	As Drilled Survey - Entered 20160505
MD[ft]	12041.200
Survey Tool	WdW Rate Gyro
Error Model	Standard

Clearance Data

Reference MD[ft]	Reference TVD[ft]	Reference North[ft]	Reference East[ft]	Offset Well	Offset MD[ft]	Offset TVD[ft]	Offset North[ft]	Offset East[ft]	Angle From Highside [deg]	Closest Approach Distance [ft]	Ellipse Separation [ft]	Clearance Factor
16.200	16.200		0.000	0.000 SRC - Phelps 12-32NHZ	54.810	18.010	-682.140	2922.800	103.100	3001.340	3000.370	3092.660
57.200	57.200		0.000	0.000 SRC - Phelps 12-32NHZ	94.000	57.200	-682.200	2922.760	103.100	3001.320	3000.270	2863.530
116.200	116.200		0.000	0.000 SRC - Phelps 12-32NHZ	150.710	113.910	-682.360	2922.770	103.100	3001.360	3000.230	2637.990
180.240	180.240		0.000	0.000 SRC - Phelps 12-32NHZ	214.760	177.960	-682.540	2922.770	103.100	3001.410	3000.180	2433.670
216.200	216.200		0.000	0.000 SRC - Phelps 12-32NHZ	243.690	206.880	-682.600	2922.840	103.200	3001.500	3000.210	2329.190
316.200	316.200		0.000	0.000 SRC - Phelps 12-32NHZ	343.680	306.880	-682.760	2923.120	103.200	3001.810	3000.350	2056.260
416.200	416.200		0.000	0.000 SRC - Phelps 12-32NHZ	443.680	406.880	-682.920	2923.400	103.200	3002.120	3000.520	1868.920
516.200	516.200		0.000	0.000 SRC - Phelps 12-32NHZ	538.910	503.110	-682.870	2923.810	103.200	3002.520	3000.760	1704.750
616.200	616.200		0.000	0.000 SRC - Phelps 12-32NHZ	629.830	593.030	-682.840	2924.330	103.100	3003.090	3001.170	1569.740
716.200	716.200		0.000	0.000 SRC - Phelps 12-32NHZ	714.960	678.150	-683.470	2925.150	103.200	3004.180	3002.120	1458.050
816.200	816.200		0.000	0.000 SRC - Phelps 12-32NHZ	790.780	753.940	-685.160	2926.170	103.200	3005.960	3003.750	1363.730
916.200	916.200		0.000	0.000 SRC - Phelps 12-32NHZ	867.780	830.870	-688.130	2927.450	103.200	3008.450	3006.100	1281.820
1016.200	1016.200		0.000	0.000 SRC - Phelps 12-32NHZ	942.850	905.820	-692.200	2928.970	103.300	3011.680	3009.190	1209.230
1116.200	1116.200		0.000	0.000 SRC - Phelps 12-32NHZ	1032.500	995.230	-698.300	2931.090	103.400	3015.550	3012.900	1138.010
1216.200	1216.200		0.000	0.000 SRC - Phelps 12-32NHZ	1114.300	1076.770	-704.580	2933.170	103.500	3019.830	3017.030	1077.850
1316.200	1316.200		0.000	0.000 SRC - Phelps 12-32NHZ	1203.960	1166.080	-711.850	2935.870	103.600	3024.670	3021.700	1019.550
1416.200	1416.200		0.000	0.000 SRC - Phelps 12-32NHZ	1315.640	1277.430	-719.590	2939.530	103.800	3029.510	3026.360	962.160
1516.200	1516.200		0.000	0.000 SRC - Phelps 12-32NHZ	1434.190	1395.770	-725.880	2942.960	103.900	3033.550	3030.220	910.060
1616.200	1616.200		0.000	0.000 SRC - Phelps 12-32NHZ	1489.230	1450.710	-727.960	2945.270	103.900	3038.410	3034.950	878.020
1716.200	1716.200		0.000	0.000 SRC - Phelps 12-32NHZ	1558.450	1519.740	-731.790	2948.640	103.900	3044.440	3040.840	844.920
1816.200	1816.200		0.000	0.000 SRC - Phelps 12-32NHZ	1627.950	1588.930	-737.280	2952.240	104.000	3051.380	3047.640	813.940
1916.200	1916.200		0.000	0.000 SRC - Phelps 12-32NHZ	1720.130	1680.540	-746.180	2957.230	104.200	3059.010	3055.470	863.990
2016.200	2016.200		0.000	0.000 SRC - Phelps 12-32NHZ	1819.620	1779.410	-755.830	2962.670	104.300	3066.720	3063.000	824.200
2116.200	2116.200		0.000	0.000 SRC - Phelps 12-32NHZ	1920.950	1880.140	-765.360	2968.280	104.500	3074.440	3070.540	787.840
2216.200	2216.200		0.000	0.000 SRC - Phelps 12-32NHZ	2024.580	1983.220	-774.240	2974.110	104.600	3082.060	3077.970	754.550
2316.200	2316.200		0.000	0.000 SRC - Phelps 12-32NHZ	2129.170	2087.360	-781.780	2980.180	104.700	3089.500	3085.240	724.640
2416.200	2416.200		0.000	0.000 SRC - Phelps 12-32NHZ	2266.310	2224.050	-789.940	2987.680	104.800	3096.310	3091.840	692.950
2516.200	2516.200		0.000	0.000 SRC - Phelps 12-32NHZ	2336.680	2294.210	-794.150	2991.220	104.900	3102.800	3098.190	672.610
2616.200	2616.200		0.000	0.000 SRC - Phelps 12-32NHZ	2407.000	2364.220	-799.140	2995.480	104.900	3110.470	3105.710	653.910
2716.200	2716.200		0.000	0.000 SRC - Phelps 12-32NHZ	2507.610	2464.330	-806.470	3002.100	105.000	3118.720	3113.790	632.370
2816.200	2816.200		0.000	0.000 SRC - Phelps 12-32NHZ	2638.710	2594.930	-814.730	3010.090	105.200	3126.240	3121.110	609.190
2916.200	2916.200		0.000	0.000 SRC - Phelps 12-32NHZ	2722.530	2673.470	-819.730	3014.880	105.200	3133.360	3128.080	592.520
3016.200	3016.200		0.000	0.000 SRC - Phelps 12-32NHZ	2809.460	2765.030	-825.720	3020.190	105.300	3141.090	3135.640	576.560
3116.200	3116.200		0.000	0.000 SRC - Phelps 12-32NHZ	2900.160	2855.280	-832.570	3026.990	105.400	3149.260	3143.650	561.020
3216.200	3216.200		0.000	0.000 SRC - Phelps 12-32NHZ	2992.180	2946.800	-840.090	3031.980	105.500	3157.720	3151.940	546.020
3316.200	3316.200		0.000	0.000 SRC - Phelps 12-32NHZ	3088.160	3042.230	-848.270	3038.250	105.600	3166.320	3160.370	531.540
3416.200	3416.200		0.000	0.000 SRC - Phelps 12-32NHZ	3183.760	3137.270	-856.300	3044.720	105.700	3175.120	3168.990	517.960
3516.200	3516.200		0.000	0.000 SRC - Phelps 12-32NHZ	3294.910	3247.780	-865.650	3052.020	105.800	3183.740	3177.420	503.860
3616.200	3616.200		0.000	0.000 SRC - Phelps 12-32NHZ	3394.360	3346.680	-873.860	3058.390	106.000	3192.180	3185.690	491.440
3660.000	3660.000		0.000	0.000 SRC - Phelps 12-32NHZ	3440.870	3392.940	-877.710	3061.340	106.000	3195.850	3189.280	485.950
3716.200	3716.190		0.550	-0.610 SRC - Phelps 12-32NHZ	3500.300	3452.040	-882.770	3065.010	153.900	3201.260	3194.580	479.230
3816.200	3816.030		4.280	-4.740 SRC - Phelps 12-32NHZ	3596.500	3547.670	-891.480	3070.780	153.900	3214.540	3207.680	468.880
3916.200	3915.430		11.500	-12.730 SRC - Phelps 12-32NHZ	3685.000	3635.610	-899.850	3076.270	153.800	3222.770	3225.750	460.250
4016.200	4014.140		22.200	-24.580 SRC - Phelps 12-32NHZ	3795.330	3745.260	-909.880	3083.050	153.800	3235.530	3248.310	451.200
4116.200	4111.870		36.340	-40.240 SRC - Phelps 12-32NHZ	3890.310	3859.700	-918.360	3088.680	153.700	3242.640	3257.240	444.060
4216.200	4208.370		53.900	-59.680 SRC - Phelps 12-32NHZ	3959.150	3908.130	-924.700	3092.790	153.500	3314.500	3306.950	439.210
4316.200	4303.370		74.820	-82.840 SRC - Phelps 12-32NHZ	10441.190	7444.700	-1080.420	-51.160	-155.200	3347.170	3329.700	191.580
4416.200	4396.600		99.030	-109.660 SRC - Phelps 12-32NHZ	10467.360	7444.670	-1081.230	-77.320	-156.100	3268.760	3250.850	182.500
4516.200	4487.810		126.490	-140.060 SRC - Phelps 12-32NHZ	10490.000	7444.610	-1082.010	-99.950	-156.900	3194.490	3176.100	173.740
4616.200	4576.750		157.110	-173.970 SRC - Phelps 12-32NHZ	10513.680	7444.570	-1083.060	-123.600	-157.500	3124.890	3105.970	165.200
4659.990	4614.920		171.490	-189.890 SRC - Phelps 12-32NHZ	10521.000	7444.550	-1083.390	-130.910	-157.800	3095.970	3076.800	161.550
4716.200	4663.600		190.330	-210.750 SRC - Phelps 12-32NHZ	10536.340	7444.540	-1084.200	-146.240	-157.400	3059.770	3040.270	156.910
4816.200	4750.200		223.840	-247.860 SRC - Phelps 12-32NHZ	10619.060	7444.550	-1087.090	-228.890	-155.600	2996.400	2976.070	147.420
4916.200	4836.810		257.350	-284.970 SRC - Phelps 12-32NHZ	10647.000	7444.740	-1087.100	-256.830	-155.000	2934.220	2913.210	139.680
5016.200	4923.410		290.860	-322.070 SRC - Phelps 12-32NHZ	10681.090	7445.230	-1086.890	-290.910	-154.300	2873.800	2852.050	132.110
5116.200	5010.010		324.370	-359.180 SRC - Phelps 12-32NHZ	10723.580	7445.930	-1086.520	-333.400	-153.400	2815.140	2792.560	124.680
5216.200	5096.810		358.890	-396.290 SRC - Phelps 12-32NHZ	10759.590	7446.470	-1086.150	-376.470	-152.700	2750.370	2731.110	117.210
5316.200	5183.220		391.400	-433.400 SRC - Phelps 12-32NHZ	10793.030	7447.100	-1086.040	-400.840	-151.900	2703.520	2702.210	111.210
5416.200	5269.820		424.910	-470.500 SRC - Phelps 12-32NHZ	10848.840	7447.810	-1085.780	-458.650	-150.600	2650.650	2625.290	104.520
5516.200	5356.420		458.420	-507.610 SRC - Phelps 12-32NHZ	10964.820	7447.280	-1084.230	-574.600	-147.900	2599.220	2572.470	97.180
5616.200	5443.020		491.930	-544.720 SRC - Phelps 12-32NHZ	11005.480	7446.330	-1083.710	-615.240	-147.000	2549.680	2521.830	91.540
5716.200	5529.630		525.440	-581.830 SRC - Phelps 12-32NHZ	11044.250	7445.320	-1083.230	-654.000	-146.100	2502.580	2473.580	86.300
5816.200	5616.230		558.950	-618.930 SRC - Phelps 12-32NHZ	11073.260	7444.640	-1082.800	-683.000	-145.400	2458.160	2428.020	81.550
5916.200	5702.830		592.460	-656.040 SRC - Phelps 12-32NHZ	11098.490	7444.120	-1082.460	-708.220	-144.800	2416.640	2385.340	77.210
6016.200	5789.440		625.970	-693.150 SRC - Phelps 12-32NHZ	11125.650	7443.640	-1082.140	-735.380	-144.100	2378.200	2345.700	73.190
6116.200	5876.490		659.490	-730.250 SRC - Phelps 12-32NHZ	11151.000	7443.270	-1081.880	-760.720	-143.500	2342.960	2309.240	69.490
6216.200	5962.640		693.000	-767.360 SRC - Phelps 12-32NHZ	11182.000	7442.910	-1081.690	-791.720	-142.800	2311.130	2276.140	66.040
6316.200	6049.240		726.510	-804.470 SRC - Phelps 12-32NHZ	11198.000	7442.840	-1081.720	-807.720	-142.400	2282.940	2246.760	63.100
6416.200	6135.850		760.020	-841.580 SRC - Phelps 12-32NHZ	11203.060	7442.840	-1081.800	-812.780	-142.300	2258.620	2221.340	60.000
6516.200	6222.530		795.490	-878.690 SRC - Phelps 12-32NHZ	11214.580	7442.830	-1081.940	-823.890	-142.200	2235.180	2198.680	56.800
6616.200	6309.050		827.040	-915.790 SRC - Phelps 12-32NHZ	11241.630	7443.100	-1082.750	-851.330	-141.300	2222.050	2182.410	56.060
6716.200	6395.650		860.550	-952.900 SRC - Phelps 12-32NHZ	11251.450	7443.250	-1083.070	-861.140	-141.100	2209.870	2169.180	54.300
6816.200	6482.260		894.070	-990.010 SRC - Phelps 12-32NHZ	11284.890	7443.970	-1084.270	-894.550	-140.300	2201.780	2159.840	52.500
6916.200	6568.860		927.580	-1027.110 SRC - Phelps 1								

9516.200	7407.000	2964.140	-1392.210	SRC - Phelps 12-32NHZ	11795.000	7445.030	-1095.490	-1404.380	-145.300	4059.830	4005.280	74.430
9616.200	7407.000	3064.140	-1392.550	SRC - Phelps 12-32NHZ	11795.000	7445.030	-1095.490	-1404.380	-145.300	4159.820	4105.230	76.210
9716.200	7407.000	3164.140	-1392.900	SRC - Phelps 12-32NHZ	11795.090	7445.030	-1095.490	-1404.460	-145.200	4259.810	4205.190	77.980
9816.200	7407.000	3264.140	-1393.250	SRC - Phelps 12-32NHZ	11795.720	7445.040	-1095.490	-1405.090	-144.600	4359.810	4305.130	79.740
9916.200	7407.000	3364.140	-1393.600	SRC - Phelps 12-32NHZ	11796.350	7445.040	-1095.480	-1405.730	-144.000	4459.800	4405.080	81.490
10016.200	7407.000	3464.140	-1393.950	SRC - Phelps 12-32NHZ	11797.980	7445.050	-1095.480	-1406.360	-143.400	4559.800	4505.020	83.240
10116.200	7407.000	3564.140	-1394.300	SRC - Phelps 12-32NHZ	11797.610	7445.060	-1095.480	-1406.990	-142.800	4659.790	4604.960	84.990
10216.200	7407.000	3664.140	-1394.650	SRC - Phelps 12-32NHZ	11798.240	7445.070	-1095.480	-1407.620	-142.200	4759.790	4704.910	86.740
10316.200	7407.000	3764.140	-1394.990	SRC - Phelps 12-32NHZ	11798.870	7445.070	-1095.480	-1408.250	-141.600	4859.780	4804.850	88.480
10416.200	7407.000	3864.140	-1395.340	SRC - Phelps 12-32NHZ	11799.500	7445.080	-1095.480	-1408.880	-141.000	4959.780	4904.800	90.220
10516.200	7407.000	3964.130	-1395.690	SRC - Phelps 12-32NHZ	11800.130	7445.090	-1095.470	-1409.510	-140.500	5059.770	5004.740	91.950
10616.200	7407.000	4064.130	-1396.040	SRC - Phelps 12-32NHZ	11800.760	7445.100	-1095.470	-1410.140	-139.900	5159.770	5104.690	93.680
10716.200	7407.000	4164.130	-1396.390	SRC - Phelps 12-32NHZ	11801.390	7445.100	-1095.470	-1410.770	-139.400	5259.760	5204.630	95.410
10816.200	7407.000	4264.130	-1396.740	SRC - Phelps 12-32NHZ	11802.020	7445.110	-1095.470	-1411.400	-138.800	5359.760	5304.580	97.130
10916.200	7407.000	4364.130	-1397.080	SRC - Phelps 12-32NHZ	11802.650	7445.120	-1095.470	-1412.030	-138.300	5459.750	5404.520	98.850
11016.200	7407.000	4464.130	-1397.430	SRC - Phelps 12-32NHZ	11803.280	7445.130	-1095.470	-1412.660	-137.800	5559.750	5504.460	100.570
11116.200	7407.000	4564.130	-1397.780	SRC - Phelps 12-32NHZ	11803.910	7445.130	-1095.460	-1413.290	-137.300	5659.740	5604.410	102.280
11216.200	7407.000	4664.130	-1398.130	SRC - Phelps 12-32NHZ	11804.540	7445.140	-1095.460	-1413.920	-136.800	5759.740	5704.350	103.990
11316.200	7407.000	4764.130	-1398.480	SRC - Phelps 12-32NHZ	11805.170	7445.150	-1095.460	-1414.550	-136.300	5859.740	5804.300	105.690
11416.200	7407.000	4864.130	-1398.830	SRC - Phelps 12-32NHZ	11805.800	7445.160	-1095.460	-1415.180	-135.800	5959.730	5904.240	107.400
11516.200	7407.000	4964.130	-1399.180	SRC - Phelps 12-32NHZ	11806.430	7445.160	-1095.460	-1415.810	-135.300	6059.730	6004.180	109.100
11616.200	7407.000	5064.130	-1399.520	SRC - Phelps 12-32NHZ	11807.060	7445.170	-1095.450	-1416.440	-134.800	6159.720	6104.130	110.790
11716.200	7407.000	5164.120	-1399.870	SRC - Phelps 12-32NHZ	11807.690	7445.180	-1095.450	-1417.070	-134.400	6259.720	6204.070	112.480
11745.200	7407.000	5193.130	-1399.970	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	6288.720	6231.710	110.310
11816.200	7407.000	5264.130	-1400.220	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	6359.700	6302.660	111.500
11916.200	7407.000	5364.130	-1400.570	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	6459.680	6402.590	113.160
12016.200	7407.000	5464.130	-1400.920	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	6559.650	6502.520	114.820
12116.200	7407.000	5564.120	-1401.270	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	6659.630	6602.450	116.470
12216.200	7407.000	5664.120	-1401.620	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	6759.610	6702.380	118.130
12316.200	7407.000	5764.120	-1401.960	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	6859.580	6802.310	119.780
12416.200	7407.000	5864.120	-1402.310	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	6959.560	6902.250	121.420
12516.200	7407.000	5964.120	-1402.660	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	7059.540	7002.180	123.070
12616.200	7407.000	6064.120	-1403.010	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	7159.520	7102.110	124.710
12716.200	7407.000	6164.120	-1403.360	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	7259.500	7202.050	126.350
12816.200	7407.000	6264.120	-1403.710	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	7359.480	7301.980	127.990
12916.200	7407.000	6364.120	-1404.050	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	7459.470	7401.920	129.620
13016.200	7407.000	6464.120	-1404.400	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	7559.450	7501.850	131.250
13116.200	7407.000	6564.120	-1404.750	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	7659.430	7601.790	132.880
13216.200	7407.000	6664.120	-1405.100	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	7759.410	7701.730	134.500
13316.200	7407.000	6764.120	-1405.450	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	7859.400	7801.660	136.120
13416.200	7407.000	6864.120	-1405.800	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	7959.380	7901.600	137.740
13516.200	7407.000	6964.120	-1406.150	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	8059.370	8001.540	139.360
13616.200	7407.000	7064.120	-1406.490	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	8159.350	8101.470	140.970
13716.200	7407.000	7164.120	-1406.840	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	8259.340	8201.410	142.590
13816.200	7407.000	7264.110	-1407.190	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	8359.320	8301.350	144.190
13916.200	7407.000	7364.110	-1407.540	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	8459.310	8401.290	145.800
14016.200	7407.000	7464.110	-1407.890	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	8559.290	8501.230	147.400
14116.200	7407.000	7564.110	-1408.240	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	8659.280	8601.160	149.000
14216.200	7407.000	7664.110	-1408.580	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	8759.270	8701.100	150.600
14316.200	7407.000	7764.110	-1408.930	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	8859.250	8801.040	152.190
14416.200	7407.000	7864.110	-1409.280	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	8959.240	8900.980	153.780
14516.200	7407.000	7964.110	-1409.630	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	9059.230	9000.920	155.370
14616.200	7407.000	8064.110	-1409.980	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	9159.220	9100.860	156.950
14716.200	7407.000	8164.110	-1410.330	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	9259.210	9200.800	158.540
14816.200	7407.000	8264.110	-1410.680	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	9359.190	9300.740	160.110
14916.200	7407.000	8364.110	-1411.020	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	9459.180	9400.680	161.690
15016.200	7407.000	8464.110	-1411.370	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	9559.170	9500.620	163.260
15116.200	7407.000	8564.110	-1411.720	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	9659.160	9600.560	164.830
15216.200	7407.000	8664.110	-1412.070	SRC - Phelps 12-32NHZ	11905.000	7445.690	-1094.430	-1514.360	-105.800	9759.150	9700.500	166.400
15316.200	7407.000	8764.110	-1412.420	SRC - Phelps 12-32NHZ	11905.140	7445.690	-1094.430	-1514.500	-105.800	9859.140	9800.440	167.960
15416.200	7407.000	8864.100	-1412.770	SRC - Phelps 12-32NHZ	11906.530	7445.690	-1094.420	-1515.880	-105.700	9959.130	9900.360	169.470
15516.200	7407.000	8964.100	-1413.120	SRC - Phelps 12-32NHZ	11907.910	7445.690	-1094.400	-1517.270	-105.500	10059.120	10000.280	170.970
15616.200	7407.000	9064.100	-1413.460	SRC - Phelps 12-32NHZ	11909.290	7445.690	-1094.390	-1518.650	-105.400	10159.110	10100.200	172.470
15716.200	7407.000	9164.100	-1413.810	SRC - Phelps 12-32NHZ	11910.680	7445.690	-1094.370	-1520.040	-105.200	10259.100	10200.120	173.960
15816.200	7407.000	9264.100	-1414.160	SRC - Phelps 12-32NHZ	11912.060	7445.690	-1094.360	-1521.420	-105.100	10359.090	10300.040	175.450
15916.200	7407.000	9364.100	-1414.510	SRC - Phelps 12-32NHZ	11913.450	7445.690	-1094.340	-1522.800	-105.000	10459.080	10399.970	176.940
16016.200	7407.000	9464.100	-1414.860	SRC - Phelps 12-32NHZ	11914.830	7445.690	-1094.330	-1524.190	-104.800	10559.070	10499.890	178.420
16116.200	7407.000	9564.100	-1415.210	SRC - Phelps 12-32NHZ	11916.210	7445.690	-1094.310	-1525.570	-104.700	10659.060	10599.810	179.900
16216.200	7407.000	9664.100	-1415.550	SRC - Phelps 12-32NHZ	11917.600	7445.690	-1094.300	-1526.950	-104.600	10759.050	10699.730	181.370
16316.200	7407.000	9764.100	-1415.900	SRC - Phelps 12-32NHZ	11918.980	7445.690	-1094.290	-152				

2916.200	2916.200	0.000	0.000 SRC - Phelps A-32CHZ	2798.330	2753.380	-552.540	2867.270	100.900	2924.560	2919.130	538.870
3016.200	3016.200	0.000	0.000 SRC - Phelps A-32CHZ	2872.660	2826.630	-541.820	2873.890	100.700	2930.560	2925.040	522.520
3116.200	3116.200	0.000	0.000 SRC - Phelps A-32CHZ	3010.770	2962.800	-521.950	2885.710	100.300	2936.540	2930.650	499.080
3216.200	3216.200	0.000	0.000 SRC - Phelps A-32CHZ	3093.420	3044.250	-509.680	2892.380	100.000	2941.970	2935.890	483.560
3316.200	3316.200	0.000	0.000 SRC - Phelps A-32CHZ	3172.400	3122.080	-498.130	2899.300	99.800	2948.180	2941.900	469.640
3416.200	3416.200	0.000	0.000 SRC - Phelps A-32CHZ	3225.300	3174.180	-490.590	2904.520	99.600	2955.590	2949.160	459.530
3516.200	3516.200	0.000	0.000 SRC - Phelps A-32CHZ	3381.150	3327.520	-467.570	2920.020	99.100	2963.230	2956.490	439.240
3616.200	3616.200	0.000	0.000 SRC - Phelps A-32CHZ	3481.890	3426.520	-441.090	2928.820	98.800	2969.420	2962.430	425.030
3660.000	3660.000	0.000	0.000 SRC - Phelps A-32CHZ	3528.900	3472.700	-443.370	2932.980	98.600	2972.210	2965.110	419.020
3716.200	3716.190	0.550	0.510 SRC - Phelps A-32CHZ	3632.320	3574.860	-429.410	2940.740	146.200	2975.970	2968.680	408.330
3816.200	3816.030	4.280	4.740 SRC - Phelps A-32CHZ	3703.350	3645.360	-422.150	2945.430	145.900	2982.710	2975.240	400.420
3916.200	3915.430	11.500	-12.730 SRC - Phelps A-32CHZ	3769.000	3710.520	-415.990	2950.450	145.600	3000.850	2993.240	394.060
4016.200	4014.140	22.200	-24.580 SRC - Phelps A-32CHZ	3877.400	3817.710	-402.720	2959.630	145.200	3020.700	3012.850	384.760
4116.200	4111.870	36.340	-40.240 SRC - Phelps A-32CHZ	3948.590	3887.660	-391.210	2966.060	144.700	3044.820	3036.770	378.190
4216.200	4208.370	53.900	-59.680 SRC - Phelps A-32CHZ	4024.070	3961.580	-377.990	2973.720	144.100	3073.920	3065.650	371.780
4316.200	4303.370	74.820	-82.840 SRC - Phelps A-32CHZ	4149.160	4084.280	-357.070	2986.050	143.500	3106.870	3098.290	362.070
4416.200	4396.600	99.030	-109.660 SRC - Phelps A-32CHZ	4211.370	4145.380	-347.070	2992.080	142.800	3143.710	3134.910	357.300
4516.200	4487.810	126.490	-140.060 SRC - Phelps A-32CHZ	4255.200	4159.220	-29.230	-23.630	-178.600	3110.500	3095.600	208.790
4616.200	4576.750	157.110	-173.970 SRC - Phelps A-32CHZ	4264.970	4159.160	-28.790	-82.370	-177.300	3024.520	3009.360	199.520
4659.990	4614.920	171.490	-189.890 SRC - Phelps A-32CHZ	4063.340	3984.710	-28.490	-99.720	-177.000	2987.850	2972.570	195.600
4716.200	4663.600	190.330	-210.750 SRC - Phelps A-32CHZ	4064.470	3985.040	-28.350	-109.450	-176.700	2941.320	2925.940	191.310
4816.200	4750.200	223.840	-247.860 SRC - Phelps A-32CHZ	4078.700	3995.350	-28.130	-147.050	-175.800	2859.060	2843.450	183.180
4916.200	4836.810	257.350	-284.870 SRC - Phelps A-32CHZ	4072.020	3977.740	-27.350	-174.800	-174.800	2761.520	2741.520	174.860
5016.200	4923.410	290.860	-322.070 SRC - Phelps A-32CHZ	4077.790	3959.790	-27.120	-247.080	-173.300	2696.250	2680.010	166.040
5116.200	5010.010	324.370	-359.180 SRC - Phelps A-32CHZ	4086.910	3900.990	-26.070	-284.160	-172.300	2615.640	2599.090	157.980
5216.200	5096.610	357.880	-396.290 SRC - Phelps A-32CHZ	4085.660	3802.590	-24.530	-332.860	-170.900	2535.780	2518.840	149.670
5316.200	5183.220	391.400	-433.400 SRC - Phelps A-32CHZ	4093.560	3704.350	-21.130	-420.670	-168.500	2456.060	2438.560	140.350
5416.200	5269.820	424.910	-470.500 SRC - Phelps A-32CHZ	4092.630	3604.820	-19.560	-459.710	-167.300	2376.950	2359.000	132.440
5516.200	5356.420	458.420	-507.610 SRC - Phelps A-32CHZ	41032.790	3605.250	-18.220	-499.840	-166.100	2298.800	2280.350	124.590
5616.200	5443.020	491.930	-544.720 SRC - Phelps A-32CHZ	41094.330	3605.520	-16.820	-561.360	-164.100	2221.590	2202.490	116.260
5716.200	5529.630	525.440	-581.830 SRC - Phelps A-32CHZ	41138.260	3605.210	-16.380	-605.300	-162.700	2145.260	2125.490	108.490
5816.200	5616.230	558.950	-618.930 SRC - Phelps A-32CHZ	41173.580	3604.820	-16.360	-640.610	-161.400	2070.250	2049.770	101.090
5916.200	5702.830	592.460	-656.040 SRC - Phelps A-32CHZ	41203.880	3604.500	-16.580	-670.910	-160.400	1996.870	1975.630	94.000
6016.200	5789.440	625.970	-693.150 SRC - Phelps A-32CHZ	41229.390	3604.300	-16.920	-696.410	-159.400	1925.370	1903.300	87.260
6116.200	5876.040	659.480	-730.250 SRC - Phelps A-32CHZ	41258.230	3604.170	-17.330	-725.250	-158.400	1855.950	1832.940	80.680
6216.200	5962.640	693.000	-767.360 SRC - Phelps A-32CHZ	41294.630	3604.070	-17.840	-761.650	-157.100	1798.750	1784.650	74.220
6316.200	6049.240	726.510	-804.470 SRC - Phelps A-32CHZ	41331.480	3603.960	-18.370	-798.490	-155.700	1723.960	1698.640	68.090
6416.200	6135.850	760.020	-841.580 SRC - Phelps A-32CHZ	41375.810	3603.570	-19.320	-842.810	-154.000	1661.800	1635.060	62.140
6516.200	6222.450	793.530	-878.680 SRC - Phelps A-32CHZ	41418.470	3603.010	-20.140	-885.460	-152.300	1602.520	1574.230	56.650
6616.200	6309.050	827.040	-915.790 SRC - Phelps A-32CHZ	41468.950	3602.280	-20.590	-935.930	-150.300	1546.390	1516.330	51.450
6716.200	6395.650	860.550	-952.900 SRC - Phelps A-32CHZ	41510.030	3601.550	-20.630	-977.000	-148.600	1493.740	1461.870	46.880
6816.200	6482.260	894.070	-990.010 SRC - Phelps A-32CHZ	41545.390	3600.840	-20.640	-1012.360	-147.200	1445.130	1411.400	42.840
6916.200	6568.860	927.580	-1027.110 SRC - Phelps A-32CHZ	41583.590	3599.960	-20.690	-1050.550	-145.600	1401.040	1365.300	39.200
7016.200	6655.460	961.090	-1064.220 SRC - Phelps A-32CHZ	41618.510	3599.110	-20.750	-1085.460	-144.200	1361.960	1324.170	36.050
7116.200	6742.070	994.600	-1101.330 SRC - Phelps A-32CHZ	41649.140	3598.380	-20.900	-1116.070	-142.900	1328.430	1288.620	33.370
7216.200	6828.670	1028.110	-1138.440 SRC - Phelps A-32CHZ	41684.010	3597.560	-21.090	-1150.940	-141.400	1300.830	1258.930	31.040
7316.200	6915.270	1061.620	-1175.540 SRC - Phelps A-32CHZ	41710.600	3597.090	-21.320	-1177.520	-140.300	1279.700	1235.890	29.200
7416.200	7001.870	1095.130	-1212.650 SRC - Phelps A-32CHZ	41740.500	3596.720	-21.620	-1207.410	-139.000	1249.600	1219.620	27.690
7516.200	7088.480	1128.640	-1249.760 SRC - Phelps A-32CHZ	41769.380	3596.500	-22.000	-1236.290	-137.800	1257.870	1210.460	26.530
7569.950	7135.020	1146.660	-1269.700 SRC - Phelps A-32CHZ	41781.500	3596.430	-22.170	-1248.410	-137.300	1256.780	1208.580	26.070
7573.430	7138.040	1147.820	-1270.990 SRC - Phelps A-32CHZ	41781.500	3596.430	-22.170	-1248.410	-137.300	1256.790	1208.550	26.050
7578.540	7142.450	1149.560	-1272.890 SRC - Phelps A-32CHZ	41781.600	3596.430	-22.170	-1248.520	-138.100	1256.840	1208.550	26.030
7616.200	7174.380	1164.090	-1286.570 SRC - Phelps A-32CHZ	41794.820	3596.370	-22.470	-1261.730	-143.400	1259.610	1210.710	25.760
7676.960	7223.130	1193.600	-1307.500 SRC - Phelps A-32CHZ	41813.000	3596.290	-22.880	-1279.900	-149.900	1272.730	1222.980	25.580
7716.200	7252.440	1216.430	-1320.100 SRC - Phelps A-32CHZ	41817.470	3596.280	-23.010	-1284.370	-153.400	1286.750	1236.630	25.680
7816.200	7317.640	1286.550	-1348.190 SRC - Phelps A-32CHZ	41843.230	3596.190	-23.780	-1310.120	-159.200	1340.150	1288.990	26.200
7916.200	7366.650	1370.840	-1369.420 SRC - Phelps A-32CHZ	41861.770	3596.120	-24.330	-1328.650	-163.600	1414.500	1362.660	27.290
8016.200	7396.960	1464.980	-1382.690 SRC - Phelps A-32CHZ	41872.130	3596.090	-24.640	-1339.000	-169.300	1503.500	1451.280	28.790
8114.520	7407.000	1562.470	-1387.320 SRC - Phelps A-32CHZ	41873.810	3596.080	-24.690	-1340.690	-167.700	1599.060	1546.700	30.540
8116.200	7407.000	1564.150	-1387.330 SRC - Phelps A-32CHZ	41873.770	3596.080	-24.690	-1340.650	-167.700	1600.730	1546.700	30.570
8216.200	7407.000	1564.150	-1387.680 SRC - Phelps A-32CHZ	41871.140	3596.090	-24.610	-1338.020	-167.000	1700.040	1647.650	32.450
8316.200	7407.000	1764.150	-1388.020 SRC - Phelps A-32CHZ	41868.510	3596.100	-24.610	-1335.390	-166.200	1799.420	1747.000	34.330
8416.200	7407.000	1864.150	-1388.370 SRC - Phelps A-32CHZ	41865.880	3596.110	-24.450	-1332.760	-165.500	1898.860	1846.430	36.220
8516.200	7407.000	1964.150	-1388.720 SRC - Phelps A-32CHZ	41863.250	3596.120	-24.380	-1330.130	-164.700	1998.350	1945.910	38.100
8616.200	7407.000	2064.150	-1389.070 SRC - Phelps A-32CHZ	41860.620	3596.130	-24.300	-1327.500	-164.000	2097.890	2045.430	39.990
8716.200	7407.000	2164.150	-1389.420 SRC - Phelps A-32CHZ	41857.990	3596.130	-24.220	-1324.880	-163.300	2197.470	2145.000	41.880
8816.200	7407.000	2264.140	-1389.770 SRC - Phelps A-32CHZ	41855.360	3596.140	-24.140	-1322.250	-162.500	2297.080	2244.600	43.770
8916.200	7407.000	2364.140	-1390.120 SRC - Phelps A-32CHZ	41852.730	3596.150	-24.060	-1319.620	-161.800	2396.720	2344.240	45.660
9016.200	7407.000	2464.140	-1390.460 SRC - Phelps A-32CHZ	41850.100	3596.160	-23.980	-1316.990	-161.100	2496.390	2443.900	47.560
9116.200	7407.000	2564.140	-1390.810 SRC - Phelps A-32CHZ	41847.470	3596.170	-23.910	-1314.360	-160.400	2596.080	2543.580	49.450
9216.200	7407.000	2664.140	-1391.160 SRC - Phelps A-32CHZ	41844.840	3596.180	-23.830	-1311.730	-159.700	2695.790	2643.290	51.340
9316.200	7407.000	2764.140	-1391.510 SRC - Phelps A-32CHZ	41842.210	3596.190	-23.750	-1309.100	-159.000	2795.520	2743.010	53.240
9416.200	7407.000	2864.150	-1391.860 SRC - Phelps A-32CHZ	41839.580	3596.200	-23.670	-1306.480	-158.300	2895.250	2842.750	55.130
9516.200	7407.000	2964.140	-1392.210 SRC - Phelps A-32CHZ	41836.950	3596.210	-23.590	-1303.850	-157.600	2995.020	2942.510	57.030
9616.200	7407.000	3064.140	-1392.550 SRC - Phelps A-32CHZ	41834.320	3596.220	-23.510	-1301.220	-156.900	3094.800	3042.270	58.930
9716.200	7407.000										

15216.200	7407.000	8664.110	-1412.070 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	8689.880	8635.440	159.620
15316.200	7407.000	8764.110	-1412.420 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	8789.850	8735.350	161.300
15416.200	7407.000	8864.100	-1412.770 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	8889.810	8835.270	162.980
15516.200	7407.000	8964.100	-1413.120 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	8989.780	8935.180	164.650
15616.200	7407.000	9064.100	-1413.460 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	9089.750	9035.100	166.320
15716.200	7407.000	9164.100	-1413.810 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	9189.720	9135.010	167.980
15816.200	7407.000	9264.100	-1414.160 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	9289.680	9234.930	169.650
15916.200	7407.000	9364.100	-1414.510 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	9389.650	9334.840	171.300
16016.200	7407.000	9464.100	-1414.860 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	9489.620	9434.760	172.960
16116.200	7407.000	9564.100	-1415.210 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	9589.590	9534.670	174.610
16216.200	7407.000	9664.100	-1415.550 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	9689.570	9634.590	176.260
16316.200	7407.000	9764.100	-1415.900 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	9789.540	9734.510	177.900
16416.200	7407.000	9864.100	-1416.250 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	9889.510	9834.430	179.540
16516.200	7407.000	9964.100	-1416.600 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	9989.480	9934.350	181.180
16616.200	7407.000	10064.100	-1416.950 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	10089.460	10034.270	182.820
16716.200	7407.000	10164.100	-1417.300 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	10189.430	10134.190	184.450
16816.200	7407.000	10264.100	-1417.650 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	10289.400	10234.110	186.070
16916.200	7407.000	10364.100	-1417.990 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	10389.380	10334.030	187.700
17016.200	7407.000	10464.100	-1418.340 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	10489.350	10433.950	189.320
17116.200	7407.000	10564.090	-1418.690 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	10589.330	10533.870	190.930
17216.200	7407.000	10664.090	-1419.040 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	10689.310	10633.790	192.550
17316.200	7407.000	10764.090	-1419.390 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	10789.280	10733.710	194.150
17416.200	7407.000	10864.090	-1419.740 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	10889.260	10833.650	195.760
17516.200	7407.000	10964.090	-1420.080 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	10989.240	10933.560	197.360
17616.200	7407.000	11064.090	-1420.430 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	11089.220	11033.480	198.960
17716.200	7407.000	11164.090	-1420.780 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	11189.190	11133.400	200.560
17762.030	7407.000	11209.920	-1420.940 SRC - Phelps A-32CHZ	11781.500	7596.430	-22.170	-1248.410	144.800	11235.010	11179.190	201.260

Offset Wellbore Survey Tool Programs

Well	SRC - Phelps A-32CHZ
Wellbore	SRC - Phelps A-32CHZ (AWB)
Survey Name	As Drilled Survey - Entered 20160505
MD[ft]	12081.200
Survey Tool	WdW Rate Gyro
Error Model	Standard

Clearance Data

Reference MD[ft]	Reference TVD[ft]	Reference North[ft]	Reference East[ft]	Offset Well	Offset MD[ft]	Offset TVD[ft]	Offset North[ft]	Offset East[ft]	Angle From Highside [deg]	Closest Approach Distance [ft]	Ellipse Separation [ft]	Clearance Factor
16.200	16.200		0.000	0.000 SRC - Phelps A-32NHZ	53.000	16.200	-687.240	2899.830	103.300	2980.150	2979.190	
32.600	32.600		0.000	0.000 SRC - Phelps A-32NHZ	59.540	22.740	-687.250	2899.850	103.300	2980.190	2979.180	2955.050
116.200	116.200		0.000	0.000 SRC - Phelps A-32NHZ	129.110	92.310	-687.440	2900.230	103.300	2980.690	2979.570	2658.670
216.200	216.200		0.000	0.000 SRC - Phelps A-32NHZ	219.260	182.450	-687.700	2901.120	103.300	2981.700	2980.440	2365.980
316.200	316.200		0.000	0.000 SRC - Phelps A-32NHZ	319.250	282.440	-687.980	2902.210	103.300	2982.830	2981.410	2096.910
416.200	416.200		0.000	0.000 SRC - Phelps A-32NHZ	421.960	385.140	-688.210	2903.270	103.300	2983.890	2982.300	1880.850
516.200	516.200		0.000	0.000 SRC - Phelps A-32NHZ	518.180	481.350	-688.430	2904.320	103.300	2985.000	2983.260	1711.530
616.200	616.200		0.000	0.000 SRC - Phelps A-32NHZ	616.750	579.920	-688.840	2905.590	103.300	2986.340	2984.440	1569.610
716.200	716.200		0.000	0.000 SRC - Phelps A-32NHZ	770.850	734.010	-687.940	2905.780	103.300	2986.160	2984.050	1417.010
816.200	816.200		0.000	0.000 SRC - Phelps A-32NHZ	883.560	846.690	-685.730	2905.250	103.300	2985.240	2982.960	1310.100
916.200	916.200		0.000	0.000 SRC - Phelps A-32NHZ	984.830	947.920	-682.740	2904.800	103.200	2984.120	2981.680	1222.510
1016.200	1016.200		0.000	0.000 SRC - Phelps A-32NHZ	1075.270	1038.310	-679.680	2904.690	103.200	2983.240	2980.640	1149.320
1116.200	1116.200		0.000	0.000 SRC - Phelps A-32NHZ	1180.340	1143.310	-675.890	2904.730	103.100	2982.460	2979.690	1079.150
1216.200	1216.200		0.000	0.000 SRC - Phelps A-32NHZ	1275.000	1237.890	-672.060	2904.760	103.000	2981.570	2978.650	1019.970
1299.340	1299.340		0.000	0.000 SRC - Phelps A-32NHZ	1336.500	1299.340	-669.510	2905.000	103.000	2981.150	2978.110	979.330
1316.200	1316.200		0.000	0.000 SRC - Phelps A-32NHZ	1351.570	1314.390	-668.960	2905.140	103.000	2981.160	2978.090	971.090
1361.340	1361.340		0.000	0.000 SRC - Phelps A-32NHZ	1396.680	1359.470	-667.290	2905.550	102.900	2981.190	2978.050	948.170
1416.200	1416.200		0.000	0.000 SRC - Phelps A-32NHZ	1424.510	1387.290	-666.420	2906.010	102.900	2981.590	2978.380	928.450
1516.200	1516.200		0.000	0.000 SRC - Phelps A-32NHZ	1460.000	1422.750	-665.550	2906.950	102.900	2983.630	2980.310	898.320
1616.200	1616.200		0.000	0.000 SRC - Phelps A-32NHZ	1522.000	1484.680	-664.450	2909.640	102.800	2987.440	2983.980	864.840
1716.200	1716.200		0.000	0.000 SRC - Phelps A-32NHZ	1582.950	1545.460	-662.060	2913.530	102.800	2992.680	2989.090	834.430
1816.200	1816.200		0.000	0.000 SRC - Phelps A-32NHZ	1672.600	1634.770	-657.640	2919.980	102.700	2998.620	2994.870	799.760
1916.200	1916.200		0.000	0.000 SRC - Phelps A-32NHZ	1737.420	1699.290	-654.210	2925.120	102.600	3005.230	3001.720	856.390
2016.200	2016.200		0.000	0.000 SRC - Phelps A-32NHZ	1810.000	1771.440	-649.820	2931.690	102.500	3012.800	3009.140	823.330
2116.200	2116.200		0.000	0.000 SRC - Phelps A-32NHZ	1895.380	1856.130	-643.540	2940.500	102.300	3021.310	3017.490	790.240
2216.200	2216.200		0.000	0.000 SRC - Phelps A-32NHZ	2053.770	2013.300	-630.750	2955.300	102.100	3028.670	3024.600	743.760
2316.200	2316.200		0.000	0.000 SRC - Phelps A-32NHZ	2145.360	2104.150	-622.620	2963.610	101.900	3035.720	3031.470	714.240
2416.200	2416.200		0.000	0.000 SRC - Phelps A-32NHZ	2286.440	2244.090	-609.220	2975.460	101.600	3042.060	3037.570	677.470
2516.200	2516.200		0.000	0.000 SRC - Phelps A-32NHZ	2378.150	2335.080	-600.250	2982.690	101.400	3047.880	3043.210	652.010
2616.200	2616.200		0.000	0.000 SRC - Phelps A-32NHZ	2565.370	2521.070	-582.640	2994.470	101.000	3052.110	3047.140	614.560
2716.200	2716.200		0.000	0.000 SRC - Phelps A-32NHZ	2663.560	2618.940	-575.980	2998.820	100.900	3055.180	3050.030	593.400
2816.200	2816.200		0.000	0.000 SRC - Phelps A-32NHZ	2727.000	2682.150	-571.770	3002.250	100.800	3059.150	3053.860	578.070
2916.200	2916.200		0.000	0.000 SRC - Phelps A-32NHZ	2802.340	2757.180	-566.770	3006.890	100.700	3063.870	3058.520	562.160
3016.200	3016.200		0.000	0.000 SRC - Phelps A-32NHZ	2927.640	2881.950	-558.420	3014.730	100.500	3068.950	3063.290	542.200
3116.200	3116.200		0.000	0.000 SRC - Phelps A-32NHZ	3027.010	2980.960	-551.710	3019.780	100.300	3072.740	3066.900	526.020
3216.200	3216.200		0.000	0.000 SRC - Phelps A-32NHZ	3105.030	3058.720	-547.160	3024.380	100.300	3077.510	3071.510	513.000
3316.200	3316.200		0.000	0.000 SRC - Phelps A-32NHZ	3186.150	3139.500	-542.190	3029.890	100.200	3083.090	3076.920	500.200
3416.200	3416.200		0.000	0.000 SRC - Phelps A-32NHZ	3267.280	3220.170	-536.130	3035.940	100.000	3089.140	3082.820	488.210
3516.200	3516.200		0.000	0.000 SRC - Phelps A-32NHZ	3324.190	3276.760	-532.400	3040.620	99.900	3096.150	3089.680	478.870
3616.200	3616.200		0.000	0.000 SRC - Phelps A-32NHZ	3498.730	3450.540	-523.420	3054.110	99.700	3103.060	3096.340	461.740
3660.000	3660.000		0.000	0.000 SRC - Phelps A-32NHZ	3530.330	3482.040	-521.880	3056.080	99.700	3105.430	3098.640	457.700
3716.200	3716.190		0.550	-0.610 SRC - Phelps A-32NHZ	3572.670	3524.250	-520.130	3058.900	147.500	3109.430	3102.560	452.690
3816.200	3816.030		4.280	-7.470 SRC - Phelps A-32NHZ	3648.010	3599.350	-517.690	3064.380	147.300	3120.720	3113.700	444.700
3916.200	3915.430		11.550	-12.730 SRC - Phelps A-32NHZ	3728.680	3679.720	-515.160	3070.780	147.100	3137.030	3129.860	437.450
4016.200	4014.140		22.220	-24.580 SRC - Phelps A-32NHZ	3805.500	3756.210	-512.470	307				

8216.200	7407.000	1664.150	-1387.680 SRC - Phelps A-32NHZ	11726.800	7372.320	-432.920 -1349.740	41.500	2097.700	2044.710	39.580
8316.200	7407.000	1764.150	-1388.020 SRC - Phelps A-32NHZ	11716.680	7372.620	-432.720 -1339.620	49.800	2197.670	2144.800	41.570
8416.200	7407.000	1864.150	-1388.370 SRC - Phelps A-32NHZ	11714.870	7372.660	-432.680 -1337.810	51.100	2297.640	2244.770	43.450
8516.200	7407.000	1964.150	-1388.720 SRC - Phelps A-32NHZ	11713.050	7372.710	-432.650 -1336.000	52.300	2397.620	2344.730	45.340
8616.200	7407.000	2064.150	-1389.070 SRC - Phelps A-32NHZ	11711.240	7372.760	-432.610 -1334.180	53.500	2497.590	2444.700	47.220
8716.200	7407.000	2164.150	-1389.420 SRC - Phelps A-32NHZ	11709.430	7372.810	-432.570 -1332.370	54.500	2597.560	2544.660	49.100
8816.200	7407.000	2264.140	-1389.770 SRC - Phelps A-32NHZ	11707.620	7372.860	-432.530 -1330.560	55.600	2697.540	2644.630	50.980
8916.200	7407.000	2364.140	-1390.120 SRC - Phelps A-32NHZ	11705.800	7372.910	-432.490 -1328.750	56.500	2797.510	2744.590	52.860
9016.200	7407.000	2464.140	-1390.460 SRC - Phelps A-32NHZ	11703.990	7372.950	-432.450 -1326.940	57.500	2897.490	2844.560	54.740
9116.200	7407.000	2564.140	-1390.810 SRC - Phelps A-32NHZ	11702.180	7373.000	-432.410 -1325.130	58.400	2997.470	2944.530	56.620
9216.200	7407.000	2664.140	-1391.160 SRC - Phelps A-32NHZ	11676.860	7373.640	-431.760 -1299.830	67.500	3097.430	3044.850	58.910
9316.200	7407.000	2764.140	-1391.510 SRC - Phelps A-32NHZ	11674.290	7373.700	-431.690 -1297.250	68.200	3197.390	3144.820	60.810
9416.200	7407.000	2864.140	-1391.860 SRC - Phelps A-32NHZ	11671.710	7373.760	-431.610 -1294.680	68.800	3297.350	3244.780	62.720
9516.200	7407.000	2964.140	-1392.210 SRC - Phelps A-32NHZ	11669.140	7373.830	-431.540 -1292.110	69.400	3397.310	3344.740	64.620
9616.200	7407.000	3064.140	-1392.550 SRC - Phelps A-32NHZ	11666.560	7373.890	-431.460 -1289.540	70.000	3497.280	3444.700	66.520
9716.200	7407.000	3164.140	-1392.900 SRC - Phelps A-32NHZ	11663.990	7373.950	-431.390 -1286.970	70.500	3597.240	3544.660	68.420
9816.200	7407.000	3264.140	-1393.250 SRC - Phelps A-32NHZ	11661.420	7374.010	-431.310 -1284.390	71.000	3697.200	3644.630	70.320
9916.200	7407.000	3364.140	-1393.600 SRC - Phelps A-32NHZ	11658.850	7374.070	-431.240 -1281.820	71.500	3797.160	3744.600	72.220
10016.200	7407.000	3464.140	-1393.950 SRC - Phelps A-32NHZ	11656.270	7374.130	-431.170 -1279.250	72.000	3897.120	3844.560	74.120
10116.200	7407.000	3564.140	-1394.300 SRC - Phelps A-32NHZ	11653.700	7374.190	-431.100 -1276.680	72.500	3997.080	3944.530	76.020
10216.200	7407.000	3664.140	-1394.650 SRC - Phelps A-32NHZ	11651.130	7374.250	-431.030 -1274.110	73.000	4097.040	4044.500	77.920
10316.200	7407.000	3764.140	-1395.000 SRC - Phelps A-32NHZ	11648.560	7374.310	-430.960 -1271.540	73.500	4197.000	4144.470	79.820
10416.200	7407.000	3864.140	-1395.340 SRC - Phelps A-32NHZ	11645.990	7374.370	-430.890 -1268.970	74.000	4296.960	4244.440	81.720
10516.200	7407.000	3964.130	-1395.690 SRC - Phelps A-32NHZ	11643.420	7374.430	-430.820 -1266.400	74.500	4396.920	4344.410	83.620
10616.200	7407.000	4064.130	-1396.040 SRC - Phelps A-32NHZ	11640.850	7374.490	-430.750 -1263.830	75.000	4496.880	4444.380	85.520
10716.200	7407.000	4164.130	-1396.390 SRC - Phelps A-32NHZ	11638.280	7374.550	-430.680 -1261.260	75.500	4596.840	4544.350	87.420
10816.200	7407.000	4264.130	-1396.740 SRC - Phelps A-32NHZ	11635.710	7374.610	-430.610 -1258.690	76.000	4696.800	4644.320	89.320
10916.200	7407.000	4364.130	-1397.080 SRC - Phelps A-32NHZ	11633.140	7374.670	-430.540 -1256.120	76.500	4796.760	4744.290	91.220
11016.200	7407.000	4464.130	-1397.430 SRC - Phelps A-32NHZ	11630.570	7374.730	-430.470 -1253.550	77.000	4896.720	4844.260	93.120
11116.200	7407.000	4564.130	-1397.780 SRC - Phelps A-32NHZ	11628.000	7374.790	-430.400 -1250.980	77.500	4996.680	4944.230	95.020
11216.200	7407.000	4664.130	-1398.130 SRC - Phelps A-32NHZ	11625.430	7374.850	-430.330 -1248.410	78.000	5096.640	5044.200	96.920
11316.200	7407.000	4764.130	-1398.480 SRC - Phelps A-32NHZ	11622.860	7374.910	-430.260 -1245.840	78.500	5196.600	5144.170	98.820
11416.200	7407.000	4864.130	-1398.830 SRC - Phelps A-32NHZ	11620.290	7374.970	-430.190 -1243.270	79.000	5296.560	5244.140	100.720
11516.200	7407.000	4964.130	-1399.180 SRC - Phelps A-32NHZ	11617.720	7375.030	-430.120 -1240.700	79.500	5396.520	5344.110	102.620
11616.200	7407.000	5064.130	-1399.530 SRC - Phelps A-32NHZ	11615.150	7375.090	-430.050 -1238.130	80.000	5496.480	5444.080	104.520
11716.200	7407.000	5164.130	-1399.870 SRC - Phelps A-32NHZ	11612.580	7375.150	-430.000 -1235.560	80.500	5596.440	5544.050	106.420
11816.200	7407.000	5264.130	-1400.220 SRC - Phelps A-32NHZ	11610.010	7375.210	-429.930 -1232.990	81.000	5696.400	5644.020	108.320
11916.200	7407.000	5364.130	-1400.570 SRC - Phelps A-32NHZ	11607.440	7375.270	-429.860 -1230.420	81.500	5796.360	5744.000	110.220
12016.200	7407.000	5464.130	-1400.920 SRC - Phelps A-32NHZ	11604.870	7375.330	-429.790 -1227.850	82.000	5896.320	5844.000	112.120
12116.200	7407.000	5564.120	-1401.270 SRC - Phelps A-32NHZ	11602.300	7375.390	-429.720 -1225.280	82.500	5996.280	5944.000	114.020
12216.200	7407.000	5664.120	-1401.620 SRC - Phelps A-32NHZ	11600.000	7375.450	-429.650 -1222.710	83.000	6096.240	6044.000	115.920
12316.200	7407.000	5764.120	-1401.960 SRC - Phelps A-32NHZ	11597.430	7375.510	-429.580 -1220.140	83.500	6196.200	6144.000	117.820
12416.200	7407.000	5864.120	-1402.310 SRC - Phelps A-32NHZ	11594.860	7375.570	-429.510 -1217.570	84.000	6296.160	6244.000	119.720
12516.200	7407.000	5964.120	-1402.660 SRC - Phelps A-32NHZ	11592.290	7375.630	-429.440 -1215.000	84.500	6396.120	6344.000	121.620
12616.200	7407.000	6064.120	-1403.010 SRC - Phelps A-32NHZ	11589.720	7375.690	-429.370 -1212.430	85.000	6496.080	6444.000	123.520
12716.200	7407.000	6164.120	-1403.360 SRC - Phelps A-32NHZ	11587.150	7375.750	-429.300 -1209.860	85.500	6596.040	6544.000	125.420
12816.200	7407.000	6264.120	-1403.710 SRC - Phelps A-32NHZ	11584.580	7375.810	-429.230 -1207.290	86.000	6696.000	6644.000	127.320
12916.200	7407.000	6364.120	-1404.050 SRC - Phelps A-32NHZ	11582.010	7375.870	-429.160 -1204.720	86.500	6795.960	6744.000	129.220
13016.200	7407.000	6464.120	-1404.400 SRC - Phelps A-32NHZ	11579.440	7375.930	-429.090 -1202.150	87.000	6895.920	6844.000	131.120
13116.200	7407.000	6564.120	-1404.750 SRC - Phelps A-32NHZ	11576.870	7375.990	-429.020 -1199.580	87.500	6995.880	6944.000	133.020
13216.200	7407.000	6664.120	-1405.100 SRC - Phelps A-32NHZ	11574.300	7376.050	-428.950 -1197.010	88.000	7095.840	7044.000	134.920
13316.200	7407.000	6764.120	-1405.450 SRC - Phelps A-32NHZ	11571.730	7376.110	-428.880 -1194.440	88.500	7195.800	7144.000	136.820
13416.200	7407.000	6864.120	-1405.800 SRC - Phelps A-32NHZ	11569.160	7376.170	-428.810 -1191.870	89.000	7295.760	7244.000	138.720
13516.200	7407.000	6964.120	-1406.150 SRC - Phelps A-32NHZ	11566.590	7376.230	-428.740 -1189.300	89.500	7395.720	7344.000	140.620
13616.200	7407.000	7064.120	-1406.500 SRC - Phelps A-32NHZ	11564.020	7376.290	-428.670 -1186.730	90.000	7495.680	7444.000	142.520
13716.200	7407.000	7164.120	-1406.840 SRC - Phelps A-32NHZ	11561.450	7376.350	-428.600 -1184.160	90.500	7595.640	7544.000	144.420
13816.200	7407.000	7264.110	-1407.190 SRC - Phelps A-32NHZ	11558.880	7376.410	-428.530 -1181.590	91.000	7695.600	7644.000	146.320
13916.200	7407.000	7364.110	-1407.540 SRC - Phelps A-32NHZ	11556.310	7376.470	-428.460 -1179.020	91.500	7795.560	7744.000	148.220
14016.200	7407.000	7464.110	-1407.890 SRC - Phelps A-32NHZ	11553.740	7376.530	-428.390 -1176.450	92.000	7895.520	7844.000	150.120
14116.200	7407.000	7564.110	-1408.240 SRC - Phelps A-32NHZ	11551.170	7376.590	-428.320 -1173.880	92.500	7995.480	7944.000	152.020
14216.200	7407.000	7664.110	-1408.580 SRC - Phelps A-32NHZ	11548.600	7376.650	-428.250 -1171.310	93.000	8095.440	8044.000	153.920
14316.200	7407.000	7764.110	-1408.930 SRC - Phelps A-32NHZ	11546.030	7376.710	-428.180 -1168.740	93.500	8195.400	8144.000	155.820
14416.200	7407.000	7864.110	-1409.280 SRC - Phelps A-32NHZ	11543.460	7376.770	-428.110 -1166.170	94.000	8295.360	8244.000	157.720
14516.200	7407.000	7964.110	-1409.630 SRC - Phelps A-32NHZ	11540.890	7376.830	-428.040 -1163.600	94.500	8395.320	8344.000	159.620
14616.200	7407.000	8064.110	-1409.980 SRC - Phelps A-32NHZ	11538.320	7376.890	-427.970 -1161.030	95.000	8495.280	8444.000	161.520
14716.200	7407.000	8164.110	-1410.330 SRC - Phelps A-32NHZ	11535.750	7376.950	-427.900 -1158.460	95.500	8595.240	8544.000	163.420
14816.200	7407.000	8264.110	-1410.680 SRC - Phelps A-32NHZ	11533.180	7377.010	-427.830 -1155.890	96.000	8695.200	8644.000	165.320
14916.200	7407.000	8364.110	-1411.020 SRC - Phelps A-32NHZ	11530.610	7377.070	-427.760 -1153.320	96.500	8795.160	8744.000	167.220
15016.200	7407.000	8464.110	-1411.370 SRC - Phelps A-32NHZ	11528.040	7377.130	-427.690 -1150.750	97.000	8895.120	8844.000	169.120
15116.200	7407.000	8564.110	-1411.720 SRC - Phelps A-32NHZ	11525.470	7377.190	-427.620 -1148.180	97.500	8995.080	8944.000	171.020
15216.200	7407.000	8664.110	-1412.070 SRC - Phelps A-32NHZ	11522.900	7377.250	-427.550 -1145.610	98.000	9095.040	9044.000	172.920
15316.200	7407.000	8764.110	-1412.420 SRC - Phelps A-32NHZ	11520.330	7377.310	-427.480 -1143.040	98.500	9195.000	9144.000	174.820
15416.200	7407.000	8864.100	-1412.770 SRC - Phelps A-32NHZ	11517.760	7377.370	-427.410 -1140.470	99.000	9294.960	9244.000	176.720
15516.200	7407.000	8964.100	-1413.120 SRC - Phelps A-32NHZ	11515.190	7377.430	-427.340 -1137.900	99.500	9394.920	9344.000	178.620
15616.200	7407.000	9064.100	-1413.460 SRC - Phelps A-32NHZ	11512.620	7377.490	-427.270 -1135.330	100.000	9494.880	9444.000	180.520
15716.200	7407.000	9164.100	-1413.810 SRC - Phelps A-32NHZ	11510.05						