

SYSDRILL
Closest Approach + Clearance Factor Report
Wellbore: Dittmer KE 20-024HC (PWB)
Wellpath: Dittmer KE 20-024HC (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 20-024HC (PWB)	
Created	4-May-2016	
Last Revised	4-May-2016	
Well		
Name	Dittmer KE 20-024HC	
Government ID		
Last Revised	4-May-2016	
Slot		
Name	Slot S06 - Dittmer KE 20-024HC	
Grid Northing	1247955.297	
Grid Easting	3195248.007	
Latitude	N40 0 42.9012	
Longitude	W104 48 10.5804	
North	-99.090	
East	74.790	
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		586.520	7709.770	7709.770	542.630	7716.200	12.980	7791.790
SRC - Phelps 11-32NHZ	SRC - Phelps 11-32NHZ (AWB)	AA - SRC - Phelps 11-32NHZ	Dittmer		819.390	7451.590	7451.590	775.600	7463.710	18.130	7594.940
SRC - Phelps A-32CHZ	SRC - Phelps A-32CHZ (AWB)	AA - SRC - Phelps A-32CHZ	Dittmer		1190.450	7463.770	7463.770	1148.570	7480.110	26.620	7726.170
SRC - Phelps A-32NHZ	SRC - Phelps A-32NHZ (AWB)	AA - SRC - Phelps A-32NHZ	Dittmer		1474.820	7102.810	7102.810	1433.860	7119.220	33.790	7545.730
SRC - Phelps 12-32CHZ	SRC - Phelps 12-32CHZ (AWB)	AA - SRC - Phelps 12-32CHZ	Dittmer		1868.050	7142.750	7142.750	1827.430	7168.430	41.730	7726.170
SRC - Phelps 12-32NHZ	SRC - Phelps 12-32NHZ (AWB)	AA - SRC - Phelps 12-32NHZ	Dittmer		2097.840	6875.010	6875.010	2058.260	6905.960	48.940	7463.710

Reference Wellbore Survey Tool Program

Survey Name	Planned	
MD[ft]	17865.900	
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	-672.670	2937.360	102.900	3013.400	3012.440	
81.820	81.820		0.000	0.000 SRC - Phelps 11-32CHZ	115.570	78.770	-672.530	2937.460	102.900	3013.470	3012.340	2678.520
116.200	116.200		0.000	0.000 SRC - Phelps 11-32CHZ	143.860	107.060	-672.400	2937.550	102.900	3013.540	3012.380	2597.680
216.200	216.200		0.000	0.000 SRC - Phelps 11-32CHZ	237.770	200.970	-671.650	2938.090	102.900	3013.920	3012.630	2336.330
316.200	316.200		0.000	0.000 SRC - Phelps 11-32CHZ	306.000	269.190	-670.970	2938.770	102.900	3014.760	3013.350	2136.330
416.200	416.200		0.000	0.000 SRC - Phelps 11-32CHZ	368.440	331.610	-670.560	2940.030	102.800	3016.710	3015.170	1955.900
516.200	516.200		0.000	0.000 SRC - Phelps 11-32CHZ	428.000	391.120	-669.690	2942.210	102.800	3020.050	3018.380	1806.160
616.200	616.200		0.000	0.000 SRC - Phelps 11-32CHZ	484.760	447.780	-668.220	2945.440	102.800	3024.980	3023.180	1679.390
716.200	716.200		0.000	0.000 SRC - Phelps 11-32CHZ	522.000	484.900	-667.170	2948.160	102.800	3031.540	3029.630	1583.970
816.200	816.200		0.000	0.000 SRC - Phelps 11-32CHZ	711.940	673.810	-656.180	2963.740	102.500	3038.850	3036.670	1394.390
916.200	916.200		0.000	0.000 SRC - Phelps 11-32CHZ	771.000	732.450	-650.530	2968.010	102.400	3044.020	3041.690	1309.040
1016.200	1016.200		0.000	0.000 SRC - Phelps 11-32CHZ	827.180	788.200	-645.710	2972.960	102.300	3050.810	3048.340	1235.690
1116.200	1116.200		0.000	0.000 SRC - Phelps 11-32CHZ	865.000	825.710	-642.780	2976.820	102.200	3059.250	3056.660	1180.580
1216.200	1216.200		0.000	0.000 SRC - Phelps 11-32CHZ	927.500	887.620	-638.330	2984.160	102.100	3069.310	3066.560	1119.420
1316.200	1316.200		0.000	0.000 SRC - Phelps 11-32CHZ	990.000	949.330	-633.120	2992.520	102.000	3080.680	3077.790	1063.610
1416.200	1416.200		0.000	0.000 SRC - Phelps 11-32CHZ	1136.950	1093.670	-614.520	3012.660	101.500	3091.570	3088.380	970.580
1516.200	1516.200		0.000	0.000 SRC - Phelps 11-32CHZ	1335.210	1288.670	-586.290	3034.530	100.900	3099.010	3095.450	868.460
1616.200	1616.200		0.000	0.000 SRC - Phelps 11-32CHZ	1424.000	1376.180	-574.270	3043.520	100.700	3106.510	3102.730	821.140
1716.200	1716.200		0.000	0.000 SRC - Phelps 11-32CHZ	1844.340	1785.180	-484.950	3073.180	99.000	3111.970	3107.290	665.320
1816.200	1816.200		0.000	0.000 SRC - Phelps 11-32CHZ	1965.920	1901.530	-449.740	3075.320	98.300	3109.200	3104.150	615.330
1916.200	1916.200		0.000	0.000 SRC - Phelps 11-32CHZ	2072.250	2003.150	-418.450	3076.860	97.700	3106.410	3101.390	618.920
2016.200	2016.200		0.000	0.000 SRC - Phelps 11-32CHZ	2167.710	2094.600	-391.100	3077.990	97.200	3103.720	3098.390	582.000
2116.200	2116.200		0.000	0.000 SRC - Phelps 11-32CHZ	2249.600	2173.390	-368.830	3078.940	96.800	3101.480	3095.870	552.900
2216.200	2216.200		0.000	0.000 SRC - Phelps 11-32CHZ	2308.670	2230.230	-352.820	3080.120	96.500	3100.290	3094.460	531.520
2230.230	2230.230		0.000	0.000 SRC - Phelps 11-32CHZ	2308.670	2230.230	-352.820	3080.120	96.500	3100.260	3094.410	530.450
2269.950	2269.950		0.000	0.000 SRC - Phelps 11-32CHZ	2350.000	2269.950	-341.450	3081.370	96.300	3100.230	3094.260	519.090
2316.200	2316.200		0.000	0.000 SRC - Phelps 11-32CHZ	2383.350	2302.010	-332.330	3082.500	96.200	3100.400	3094.310	509.040
2416.200	2416.200		0.000	0.000 SRC - Phelps 11-32CHZ	2494.670	2409.380	-303.130	3085.980	95.600	3100.840	3094.410	482.000
2516.200	2516.200		0.000	0.000 SRC - Phelps 11-32CHZ	2638.000	2547.420	-254.680	3088.440	94.900	3099.920	3093.060	452.090
2616.200	2616.200		0.000	0.000 SRC - Phelps 11-32CHZ	2720.000	2625.870	-240.830	3089.810	94.500	3099.200	3092.060	434.030
2665.370	2665.370		0.000	0.000 SRC - Phelps 11-32CHZ	2761.330	2665.370	-228.700	3090.670	94.200	3099.120	3091.840	425.390
2716.200	2716.200		0.000	0.000 SRC - Phelps 11-32CHZ	2802.670	2705.030	-217.100	3091.600	94.000	3099.240	3091.810	417.230
2816.200	2816.200		0.000	0.000 SRC - Phelps 11-32CHZ	2902.270	2800.950	-190.390	3093.960	93.500	3099.850	3092.100	399.800
2916.200	2916.200		0.000	0.000 SRC - Phelps 11-32CHZ	3074.190	2965.640	-141.130	3096.130	92.600	3099.740	3091.470	375.220
3016.200	3016.200		0.000	0.000 SRC - Phelps 11-32CHZ	3149.810	3037.960	-119.040	3096.030	92.200	3098.400	3089.860	362.860
3067.420	3067.420		0.000	0.000 SRC - Phelps 11-32CHZ	3180.670	3067.420	-109.850	3096.180	92.000	3098.130	3089.470	357.730
3116.200	3116.200		0.000	0.000 SRC - Phelps 11-32CHZ	3223.000	3107.750	-96.980	3096.680	91.800	3098.210	3089.400	351.780
3116.590	3116.590		0.000	0.000 SRC - Phelps 11-32CHZ	3223.000	3107.750	-96.980	3096.680	91.800	3098.210	3089.400	351.770
3216.200	3216.200		0.000	0.000 SRC - Phelps 11-32CHZ	3305.540	3186.440	-72.100	3097.980	91.300	3098.970	3089.860	340.330
3316.200	3316.200		0.000	0.000 SRC - Phelps 11-32CHZ	3404.400	3280.990	-43.280	3099.510	90.800	3100.010	3090.570	328.460
3416.200	3416.200		0.000	0.000 SRC - Phelps 11-32CHZ	3493.460	3366.450	-18.240	3100.690	90.300	3101.140	3091.400	318.410
3516.200	3516.200		0.000	0.000 SRC - Phelps 11-32CHZ	3549.620	3420.320	-2.420	3102.050	90.000	3103.530	3093.570	311.630
3616.200	3616.200		0.000	0.000 SRC - Phelps 11-32CHZ	3603.000	3471.400	12.900	3104.180	89.800	3107.580	3097.410	305.660
3716.200	3716.200		0.000	0.000 SRC - Phelps 11-32CHZ	3781.280	3641.910	64.660	3109.560	88.800	3111.120	3100.420	290.590
3816.200	3816.200		0.000	0.000 SRC - Phelps 11-32CHZ	3881.540	3737.390	95.190	3111.060	88.300	3113.510	3102.460	281.870
3916.200	3916.200		0.000	0.000 SRC - Phelps 11-32CHZ	3963.960	3815.890	120.250	3112.460	87.800	3116.400	3105.060	274.800
4016.200	4016.200		0.000	0.000 SRC - Phelps 11-32CHZ	4046.500	3894.690	144.770	3114.240	87.300	3119.970	3108.340	268.270
4116.200	4116.200		0.000	0.000 SRC - Phelps 11-32CHZ	4139.360	3983.580	171.510	3116.520	86.800	3124.050	3112.120	261.700
4200.000	4200.000		0.000	0.000 SRC - Phelps 11-32CHZ	4224.270	4065.320	194.430	3118.670	86.400	3127.630	3115.430	256.280
4216.200	4216.200		0.050	-0.040 SRC - Phelps 11-32CHZ	4243.410	4083.800	199.370	3119.160	126.100	3128.370	3116.100	255.150
4316.200	4316.130		2.720	-2.260 SRC - Phelps 11-32CHZ	4346.490	4183.610	225.010	3121.670	125.600	3134.640	3122.070	249.450
4416.200	4415.740		9.390	-7.820 SRC - Phelps 11-32CHZ	4395.750	4231.340	237.100	3122.990	125.200	3144.500	3131.740	246.520
4516.200	4514.760		20.060	-16.720 SRC - Phelps 11-32CHZ	4472.560	4280.990	246.580	3125.000	125.200	3152.780	3139.860	196.330
4616.200	4612.910		34.700	-28.910 SRC - Phelps 11-32CHZ	4593.460	4366.450	246.580	3125.000	125.200	3162.590	3150.560	168.750
4716.200	4709.940		53.270	-44.380 SRC - Phelps 11-32CHZ	4731.000	4452.950	246.580	3125.000	125.200	3172.750	3161.610	181.430
4816.200	4805.560		75.710	-63.080 SRC - Phelps 11-32CHZ	4871.070	4542.970	246.580	3125.000	125.200	3183.320	3171.410	174.180
4916.200	4899.530		101.970	-84.950 SRC - Phelps 11-32CHZ	5023.000	4638.000	246.330	3125.000	125.200	3194.400	3181.400	167.030
5016.200	4991.580		131.970	-109.950 SRC - Phelps 11-32CHZ	5183.000	4737.020	246.330	3125.000	125.200	3205.900	3191.400	160.28

5316.200	5255.560	241.230	-200.980 SRC - Phelps 11-32CHZ	10841.010 7578.340	645.750 -159.950	162.400	2358.100	2341.370	140.950
5416.200	5342.160	279.650	-232.990 SRC - Phelps 11-32CHZ	10917.670 7579.170	645.040 -236.600	165.200	2266.660	2249.820	134.620
5516.200	5428.760	318.060	-264.990 SRC - Phelps 11-32CHZ	10981.530 7578.640	644.910 -300.460	167.800	2174.670	2157.940	128.410
5616.200	5515.360	356.480	-297.000 SRC - Phelps 11-32CHZ	11014.000 7578.060	645.110 -332.920	169.100	2083.110	2066.090	122.380
5716.200	5601.960	394.900	-329.010 SRC - Phelps 11-32CHZ	11036.340 7577.660	645.250 -355.260	170.200	1991.680	1974.570	116.460
5816.200	5688.560	433.320	-361.020 SRC - Phelps 11-32CHZ	11066.000 7577.270	645.200 -384.910	171.600	1900.720	1883.530	110.580
5916.200	5775.160	471.740	-393.030 SRC - Phelps 11-32CHZ	11093.100 7577.010	644.940 -412.010	172.900	1810.260	1792.980	104.760
6016.200	5861.760	510.160	-425.030 SRC - Phelps 11-32CHZ	11123.900 7576.720	644.640 -442.800	174.500	1720.320	1702.940	98.970
6116.200	5948.360	548.570	-457.040 SRC - Phelps 11-32CHZ	11152.190 7576.490	644.280 -471.090	176.100	1631.000	1613.500	93.190
6216.200	6034.960	586.980	-489.050 SRC - Phelps 11-32CHZ	11183.010 7576.250	643.870 -501.910	177.900	1541.390	1524.740	87.390
6316.200	6121.560	625.410	-521.060 SRC - Phelps 11-32CHZ	11208.770 7576.100	643.520 -527.670	179.500	1454.670	1438.640	81.590
6416.200	6208.160	663.830	-553.070 SRC - Phelps 11-32CHZ	11232.580 7576.040	643.140 -551.480	179.000	1368.040	1349.980	75.760
6516.200	6294.750	702.250	-585.070 SRC - Phelps 11-32CHZ	11261.470 7576.070	642.570 -580.360	177.100	1282.710	1264.340	69.830
6616.200	6381.350	740.670	-617.080 SRC - Phelps 11-32CHZ	11292.820 7576.150	641.850 -611.700	174.900	1198.890	1180.090	63.750
6716.200	6467.950	779.090	-649.090 SRC - Phelps 11-32CHZ	11320.000 7576.220	641.230 -638.870	173.000	1116.860	1097.480	57.650
6816.200	6554.550	817.500	-681.100 SRC - Phelps 11-32CHZ	11351.140 7576.430	640.460 -670.000	170.600	1037.160	1016.990	51.410
6916.200	6641.150	855.920	-713.110 SRC - Phelps 11-32CHZ	11373.530 7576.790	639.880 -692.380	168.900	960.480	939.310	45.390
7016.200	6727.750	894.340	-745.110 SRC - Phelps 11-32CHZ	11400.010 7577.320	639.140 -718.850	166.800	887.460	864.950	39.430
7116.200	6814.350	932.760	-777.120 SRC - Phelps 11-32CHZ	11429.200 7578.000	638.220 -748.020	164.400	819.000	794.700	33.710
7216.200	6900.950	971.180	-809.130 SRC - Phelps 11-32CHZ	11459.440 7578.800	637.180 -778.220	161.800	756.300	729.720	28.450
7316.200	6987.550	1009.600	-841.140 SRC - Phelps 11-32CHZ	11491.160 7579.760	636.110 -809.920	159.100	700.830	671.440	23.840
7416.200	7074.150	1048.010	-873.150 SRC - Phelps 11-32CHZ	11526.480 7580.910	635.060 -845.200	155.900	654.300	621.530	19.970
7516.200	7160.750	1086.430	-905.150 SRC - Phelps 11-32CHZ	11563.940 7582.260	634.130 -885.330	152.600	612.850	580.000	16.940
7616.200	7247.350	1124.850	-937.160 SRC - Phelps 11-32CHZ	11601.920 7583.010	633.420 -920.590	149.100	595.360	555.040	14.770
7697.510	7317.760	1156.090	-963.190 SRC - Phelps 11-32CHZ	11634.040 7583.690	633.090 -952.700	146.100	586.820	543.640	13.590
7709.770	7328.320	1160.960	-967.090 SRC - Phelps 11-32CHZ	11643.850 7583.870	633.060 -962.510	147.100	586.520	542.750	13.400
7716.200	7333.800	1163.630	-969.120 SRC - Phelps 11-32CHZ	11645.970 7583.910	633.060 -964.630	147.800	586.590	542.630	13.340
7816.200	7413.570	1215.810	-998.660 SRC - Phelps 11-32CHZ	11683.040 7584.480	633.170 -1001.700	154.700	607.190	560.560	13.020
7916.200	7480.250	1285.780	-1023.450 SRC - Phelps 11-32CHZ	11714.760 7584.850	633.570 -1033.410	157.600	660.620	612.380	13.690
8016.200	7530.440	1369.960	-1042.220 SRC - Phelps 11-32CHZ	11739.780 7585.130	634.030 -1058.420	157.900	738.130	689.070	15.050
8116.200	7611.550	1464.030	-1054.010 SRC - Phelps 11-32CHZ	11754.090 7585.300	634.360 -1072.720	156.100	830.220	780.850	16.820
8215.470	7572.000	1562.450	-1058.210 SRC - Phelps 11-32CHZ	11760.660 7585.380	634.510 -1079.290	118.700	928.280	878.760	18.750
8216.200	7572.000	1563.180	-1058.210 SRC - Phelps 11-32CHZ	11760.680 7585.380	634.510 -1079.310	118.700	929.000	879.490	18.760
8316.200	7572.000	1663.180	-1058.570 SRC - Phelps 11-32CHZ	11767.230 7585.440	634.670 -1085.870	113.500	1028.950	979.240	20.700
8416.200	7572.000	1763.180	-1059.930 SRC - Phelps 11-32CHZ	11770.250 7585.460	634.750 -1088.890	111.800	1079.100	1029.100	22.670
8516.200	7572.000	1863.180	-1059.290 SRC - Phelps 11-32CHZ	11773.270 7585.480	634.830 -1093.900	110.000	1228.850	1178.960	24.630
8616.200	7572.000	1963.180	-1059.640 SRC - Phelps 11-32CHZ	11776.290 7585.490	634.920 -1094.920	108.600	1328.800	1278.820	26.590
8716.200	7572.000	2063.180	-1060.000 SRC - Phelps 11-32CHZ	11779.310 7585.510	635.000 -1097.940	107.400	1428.750	1378.680	28.530
8816.200	7572.000	2163.180	-1060.360 SRC - Phelps 11-32CHZ	11782.330 7585.530	635.080 -1100.960	106.400	1528.700	1478.540	30.480
8916.200	7572.000	2263.170	-1060.720 SRC - Phelps 11-32CHZ	11785.350 7585.550	635.160 -1103.980	105.400	1628.650	1578.400	32.410
9016.200	7572.000	2363.170	-1061.080 SRC - Phelps 11-32CHZ	11788.370 7585.570	635.240 -1107.000	104.600	1728.600	1678.260	34.340
9116.200	7572.000	2463.170	-1061.440 SRC - Phelps 11-32CHZ	11791.390 7585.590	635.320 -1110.010	103.800	1828.550	1778.120	36.260
9216.200	7572.000	2563.170	-1061.790 SRC - Phelps 11-32CHZ	11794.410 7585.610	635.400 -1113.030	103.200	1928.500	1877.980	38.170
9316.200	7572.000	2663.170	-1062.150 SRC - Phelps 11-32CHZ	11798.890 7585.600	635.520 -1117.510	102.300	2028.450	1977.810	40.050
9416.200	7572.000	2763.170	-1062.510 SRC - Phelps 11-32CHZ	11801.970 7585.580	635.600 -1120.590	101.700	2128.410	2077.670	41.950
9516.200	7572.000	2863.170	-1062.870 SRC - Phelps 11-32CHZ	11805.050 7585.560	635.690 -1123.670	101.200	2228.360	2177.530	43.840
9616.200	7572.000	2963.170	-1063.230 SRC - Phelps 11-32CHZ	11808.140 7585.540	635.770 -1126.750	100.700	2328.310	2277.390	45.720
9716.200	7572.000	3063.170	-1063.590 SRC - Phelps 11-32CHZ	11811.220 7585.520	635.850 -1129.840	100.200	2428.260	2377.240	47.600
9816.200	7572.000	3163.170	-1063.940 SRC - Phelps 11-32CHZ	11814.300 7585.500	635.940 -1132.920	99.800	2528.210	2477.100	49.470
9916.200	7572.000	3263.170	-1064.300 SRC - Phelps 11-32CHZ	11817.390 7585.480	636.020 -1136.000	99.400	2628.160	2576.960	51.330
10016.200	7572.000	3363.170	-1064.660 SRC - Phelps 11-32CHZ	11820.470 7585.470	636.110 -1139.080	99.100	2728.110	2676.820	53.190
10116.200	7572.000	3463.170	-1065.020 SRC - Phelps 11-32CHZ	11823.550 7585.450	636.190 -1142.160	98.800	2828.060	2776.680	55.040
10216.200	7572.000	3563.170	-1065.380 SRC - Phelps 11-32CHZ	11826.630 7585.430	636.270 -1145.240	98.500	2928.010	2876.540	56.880
10316.200	7572.000	3663.170	-1065.740 SRC - Phelps 11-32CHZ	11831.510 7585.370	636.410 -1150.120	98.000	3027.960	2976.360	58.680
10416.200	7572.000	3763.160	-1066.090 SRC - Phelps 11-32CHZ	11834.650 7585.320	636.500 -1153.260	97.700	3127.910	3076.210	60.500
10516.200	7572.000	3863.160	-1066.450 SRC - Phelps 11-32CHZ	11837.790 7585.270	636.580 -1156.390	97.500	3227.860	3176.070	62.320
10616.200	7572.000	3963.160	-1066.810 SRC - Phelps 11-32CHZ	11840.930 7585.230	636.670 -1159.530	97.200	3327.810	3275.930	64.140
10716.200	7572.000	4063.160	-1067.170 SRC - Phelps 11-32CHZ	11844.070 7585.180	636.760 -1162.670	97.000	3427.760	3375.780	65.950
10816.200	7572.000	4163.160	-1067.530 SRC - Phelps 11-32CHZ	11847.210 7585.130	636.850 -1165.810	96.800	3527.710	3475.640	67.750
10916.200	7572.000	4263.160	-1067.890 SRC - Phelps 11-32CHZ	11850.340 7585.090	636.930 -1168.940	96.500	3627.660	3575.490	69.540
11016.200	7572.000	4363.160	-1068.250 SRC - Phelps 11-32CHZ	11853.480 7585.040	637.020 -1172.080	96.300	3727.610	3675.330	71.330
11116.200	7572.000	4463.160	-1068.600 SRC - Phelps 11-32CHZ	11856.620 7584.990	637.110 -1175.220	96.200	3827.560	3775.200	73.110
11216.200	7572.000	4563.160	-1068.960 SRC - Phelps 11-32CHZ	11859.760 7584.950	637.190 -1178.350	96.000	3927.510	3875.060	74.880
11316.200	7572.000	4663.160	-1069.320 SRC - Phelps 11-32CHZ	11862.900 7584.900	637.280 -1181.490	95.800	4027.460	3974.920	76.650
11416.200	7572.000	4763.160	-1069.680 SRC - Phelps 11-32CHZ	11866.030 7584.860	637.370 -1184.630	95.700	4127.410	4074.770	78.410
11516.200	7572.000	4863.160	-1070.040 SRC - Phelps 11-32CHZ	11869.170 7584.810	637.460 -1187.760	95.500	4227.360	4174.630	80.160
11616.200	7572.000	4963.160	-1070.400 SRC - Phelps 11-32CHZ	11872.310 7584.760	637.540 -1190.900	95.400	4327.310	4274.480	81.910
11716.200	7572.000	5063.160	-1070.750 SRC - Phelps 11-32CHZ	11875.450 7584.720	637.630 -1194.040	95.200	4427.260	4374.340	83.660
11816.200	7572.000	5163.160	-1071.110 SRC - Phelps 11-32CHZ	11878.590 7584.670	637.720 -1197.170	95.100	4527.210	4474.190	85.390
11916.200	7572.000	5263.160	-1071.470 SRC - Phelps 11-32CHZ	11881.730 7584.620	637.810 -1200.310	95.000	4627.160	4574.050	87.120
12016.200	7572.000	5363.150	-1071.830 SRC - Phelps 11-32CHZ	11884.860 7584.580	637.890 -1203.450	94.800	4727.110	4673.900	88.840
12116.200	7572.000	5463.150	-1072.190 SRC - Phelps 11-32CHZ	11888.000 7584.530	637.980 -1206.580	94.700	4827.060	4773.750	90.560
12216.200	7572.000	5563.150	-1072.550 SRC - Phelps 11-32CHZ	11891.000 7584.480	638.060 -1209.720	94.600	4927.010	4873.620	92.280
12316.200	7572.000	5663.150	-1072.900 SRC - Phelps 11-32CHZ	11891.000 7584.480	638.060 -1209.580	94.600	5026.960	4973.530	94.080
12416.200	7572.000	5763.150	-1073.260 SRC - Phelps 11-32CHZ	11891.000 7584.480	638.060 -1209.580	94.600	5126.920	5073.440	95.880
12516.200	7572.000	5863.150	-1073.620 SRC - Phelps 11-32CHZ	11891.000 7584.480	638.060 -1209.580	94.600	5226.870	5173.360	97.670
12616.200	7572.000	5963.150	-1073.980 SRC - Phelps 11-32CHZ	11891.000 7584.480	638.060 -1209.580	94.600	5326.830	5273.270	99.470
12716.200	7572.000	60							

Offset Wellbore Survey Tool Programs

Well	SRC - Phelps 11-32CHZ
Wellbore	SRC - Phelps 11-32CHZ (AWB)
Survey Name	As Drilled Survey - Entered 20160505
MD(ft)	12255.200
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	16.200	0.000	0.000 SRC - Phelps 11-32NHZ	54.430	17.630	-667.930	2959.210	102.700	3033.660	3032.680	3104.610
116.200	116.200	116.200	0.000	0.000 SRC - Phelps 11-32NHZ	154.430	117.630	-667.840	2959.180	102.700	3033.610	3032.450	2618.070
216.200	216.200	216.200	0.000	0.000 SRC - Phelps 11-32NHZ	259.490	222.690	-667.740	2959.140	102.700	3033.550	3032.260	2348.130
316.200	316.200	316.200	0.000	0.000 SRC - Phelps 11-32NHZ	369.570	332.760	-666.870	2958.900	102.700	3033.170	3031.700	2072.630
416.200	416.200	416.200	0.000	0.000 SRC - Phelps 11-32NHZ	466.210	429.370	-664.190	2959.030	102.700	3032.690	3031.070	1871.450
516.200	516.200	516.200	0.000	0.000 SRC - Phelps 11-32NHZ	561.900	524.910	-659.090	2959.820	102.600	3032.300	3030.540	1696.650
616.200	616.200	616.200	0.000	0.000 SRC - Phelps 11-32NHZ	659.450	622.120	-651.170	2961.330	102.400	3032.090	3030.120	1543.860
716.200	716.200	716.200	0.000	0.000 SRC - Phelps 11-32NHZ	754.620	716.670	-640.510	2963.540	102.200	3031.970	3029.820	1410.750
724.310	724.310	724.310	0.000	0.000 SRC - Phelps 11-32NHZ	762.330	724.310	-639.570	2963.750	102.200	3031.970	3029.800	1399.720
770.790	770.790	770.790	0.000	0.000 SRC - Phelps 11-32NHZ	803.330	764.920	-634.110	2965.000	102.100	3032.050	3029.790	1344.530
816.200	816.200	816.200	0.000	0.000 SRC - Phelps 11-32NHZ	842.930	804.090	-628.430	2966.360	102.000	3032.220	3029.880	1298.080
916.200	916.200	916.200	0.000	0.000 SRC - Phelps 11-32NHZ	931.570	891.520	-614.260	2969.890	101.700	3032.850	3030.290	1188.420
1016.200	1016.200	1016.200	0.000	0.000 SRC - Phelps 11-32NHZ	1034.790	992.830	-595.140	2974.640	101.300	3033.680	3030.870	1081.190
1116.200	1116.200	1116.200	0.000	0.000 SRC - Phelps 11-32NHZ	1131.090	1086.890	-575.010	2979.350	100.900	3034.470	3031.410	992.710
1216.200	1216.200	1216.200	0.000	0.000 SRC - Phelps 11-32NHZ	1216.820	1170.390	-556.170	2984.030	100.600	3035.760	3032.450	918.350
1316.200	1316.200	1316.200	0.000	0.000 SRC - Phelps 11-32NHZ	1329.080	1279.810	-531.830	2989.970	100.100	3037.120	3033.500	840.750
1416.200	1416.200	1416.200	0.000	0.000 SRC - Phelps 11-32NHZ	1431.970	1380.370	-510.560	2994.810	99.700	3038.230	3034.340	780.000
1516.200	1516.200	1516.200	0.000	0.000 SRC - Phelps 11-32NHZ	1529.570	1475.790	-490.550	2999.370	99.300	3039.490	3035.320	729.230
1616.200	1616.200	1616.200	0.000	0.000 SRC - Phelps 11-32NHZ	1632.090	1575.810	-468.600	3004.230	98.900	3040.820	3036.370	682.490
1716.200	1716.200	1716.200	0.000	0.000 SRC - Phelps 11-32NHZ	1739.660	1680.450	-444.170	3009.200	98.400	3042.020	3037.250	638.730
1816.200	1816.200	1816.200	0.000	0.000 SRC - Phelps 11-32NHZ	1832.780	1770.800	-422.050	3013.600	98.000	3043.350	3038.310	602.920
1916.200	1916.200	1916.200	0.000	0.000 SRC - Phelps 11-32NHZ	1941.560	1876.230	-395.780	3018.690	97.500	3044.790	3039.790	569.810
2016.200	2016.200	2016.200	0.000	0.000 SRC - Phelps 11-32NHZ	2078.050	2008.780	-363.600	3023.840	96.900	3045.630	3040.260	566.980
2116.200	2116.200	2116.200	0.000	0.000 SRC - Phelps 11-32NHZ	2247.150	2173.980	-327.690	3026.510	96.200	3044.740	3038.950	525.820
2216.200	2216.200	2216.200	0.000	0.000 SRC - Phelps 11-32NHZ	2393.830	2317.890	-299.380	3025.330	95.700	3041.810	3035.670	495.320
2316.200	2316.200	2316.200	0.000	0.000 SRC - Phelps 11-32NHZ	2483.020	2405.470	-282.510	3024.090	95.300	3038.570	3032.190	476.080
2416.200	2416.200	2416.200	0.000	0.000 SRC - Phelps 11-32NHZ	2553.670	2474.870	-269.360	3023.640	95.100	3036.180	3029.590	460.630
2516.200	2516.200	2516.200	0.000	0.000 SRC - Phelps 11-32NHZ	2597.340	2517.810	-261.370	3023.910	94.900	3035.190	3028.440	449.670
2558.850	2558.850	2558.850	0.000	0.000 SRC - Phelps 11-32NHZ	2636.670	2556.460	-254.160	3024.510	94.800	3035.180	3028.320	442.620
2616.200	2616.200	2616.200	0.000	0.000 SRC - Phelps 11-32NHZ	2665.130	2584.420	-248.870	3025.240	94.700	3035.630	3028.670	436.480
2716.200	2716.200	2716.200	0.000	0.000 SRC - Phelps 11-32NHZ	2734.630	2652.640	-235.810	3027.590	94.500	3037.420	3030.260	424.230
2816.200	2816.200	2816.200	0.000	0.000 SRC - Phelps 11-32NHZ	2904.320	2819.510	-205.230	3030.530	93.900	3037.470	3029.930	402.850
2843.840	2843.840	2843.840	0.000	0.000 SRC - Phelps 11-32NHZ	2929.000	2843.840	-201.060	3030.780	93.800	3037.440	3029.840	399.470
2886.930	2886.930	2886.930	0.000	0.000 SRC - Phelps 11-32NHZ	2964.620	2879.980	-195.270	3031.250	93.700	3037.540	3029.840	394.630
2916.200	2916.200	2916.200	0.000	0.000 SRC - Phelps 11-32NHZ	2980.850	2894.990	-192.640	3031.500	93.600	3037.690	3029.940	392.070
3016.200	3016.200	3016.200	0.000	0.000 SRC - Phelps 11-32NHZ	3054.330	2967.450	-180.490	3032.990	93.400	3038.750	3030.800	382.170
3116.200	3116.200	3116.200	0.000	0.000 SRC - Phelps 11-32NHZ	3131.980	3043.840	-166.770	3035.360	93.100	3040.800	3032.630	372.320
3216.200	3216.200	3216.200	0.000	0.000 SRC - Phelps 11-32NHZ	3201.060	3111.580	-153.560	3038.100	92.900	3043.770	3033.400	363.530
3316.200	3316.200	3316.200	0.000	0.000 SRC - Phelps 11-32NHZ	3289.810	3198.480	-136.000	3042.160	92.600	3047.480	3038.860	353.590
3416.200	3416.200	3416.200	0.000	0.000 SRC - Phelps 11-32NHZ	3385.210	3292.100	-118.200	3046.620	92.200	3051.430	3042.560	343.920
3516.200	3516.200	3516.200	0.000	0.000 SRC - Phelps 11-32NHZ	3485.390	3390.570	-100.400	3051.390	91.900	3055.630	3046.500	334.770
3616.200	3616.200	3616.200	0.000	0.000 SRC - Phelps 11-32NHZ	3600.440	3503.800	-80.560	3056.370	91.500	3059.500	3050.090	325.350
3716.200	3716.200	3716.200	0.000	0.000 SRC - Phelps 11-32NHZ	3683.960	3586.020	-66.350	3059.880	91.200	3063.360	3053.740	318.320
3816.200	3816.200	3816.200	0.000	0.000 SRC - Phelps 11-32NHZ	3773.430	3674.130	-51.400	3064.100	91.000	3067.820	3057.970	311.470
3916.200	3916.200	3916.200	0.000	0.000 SRC - Phelps 11-32NHZ	3864.420	3763.840	-36.920	3068.590	90.700	3072.590	3062.510	305.000
4016.200	4016.200	4016.200	0.000	0.000 SRC - Phelps 11-32NHZ	3955.860	3854.090	-22.920	3073.340	90.400	3077.690	3067.400	298.970
4116.200	4116.200	4116.200	0.000	0.000 SRC - Phelps 11-32NHZ	4044.530	3941.570	-9.340	3078.190	90.200	3083.150	3072.640	293.320
4200.000	4200.000	4200.000	0.000	0.000 SRC - Phelps 11-32NHZ	4132.720	4028.500	4.700	3083.110	89.900	3087.880	3077.160	288.170
4216.200	4216.200	4216.200	0.050	-0.040 SRC - Phelps 11-32NHZ	4148.700	4044.250	7.240	3083.980	129.600	3088.820	3078.070	287.240
4316.200	4316.130	4316.130	2.720	-2.260 SRC - Phelps 11-32NHZ	4272.100	4166.070	25.950	3090.060	129.200	3096.050	3085.030	280.850
4416.200	4415.740	4415.740	9.390	-7.820 SRC - Phelps 11-32NHZ	4047.000	7436.730	313.830	-26.770	118.200	3036.350	3021.480	204.240
4516.200	4514.760	4514.760	20.060	-16.720 SRC - Phelps 11-32NHZ	10460.710	7436.700	313.950	-30.480	144.600	2936.710	2921.760	196.450
4616.200	4612.910	4612.910	34.700	-28.910 SRC - Phelps 11-32NHZ	10472.590	7436.600	314.320	-42.350	156.700	2837.530	2822.490	188.640
4716.200	4709.940	4709.940	53.270	-44.380 SRC - Phelps 11-32NHZ	10487.870	7436.480	314.800	-57.620	163.400	2739.090	2723.950	180.950
4816.200	4805.560	4805.560	75.710	-63.080 SRC - Phelps 11-32NHZ	10488.000	7436.480	314.800	-57.750	166.700	2641.760	2626.560	173.720
4916.200	4899.530	4899.530	101.970	-84.950 SRC - Phelps 11-32NHZ	10507.810	7436.500	315.280	-77.550	169.700	2545.930	2530.630	166.350
5016.200	4991.580	4991.580	131.970	-109.950 SRC - Phelps 11-32NHZ	10519.000	7436.510	315.550	-88.740	171.500	2451.900	2436.510	159.30

10616.200	7572.000	3963.160	-1066.810 SRC - Phelps 11-32NHZ	11464.610	7430.460	310.000	-1033.630	8.100	3656.060	3606.630	73.970
10716.200	7572.000	4063.160	-1067.170 SRC - Phelps 11-32NHZ	11464.080	7430.460	310.000	-1033.110	8.300	3755.980	3706.520	75.930
10816.200	7572.000	4163.160	-1067.530 SRC - Phelps 11-32NHZ	11463.560	7430.470	310.010	-1032.580	8.500	3855.910	3806.400	77.880
10916.200	7572.000	4263.160	-1067.890 SRC - Phelps 11-32NHZ	11463.030	7430.470	310.010	-1032.050	8.700	3955.840	3906.290	79.830
11016.200	7572.000	4363.160	-1068.250 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	4055.780	4006.170	81.760
11116.200	7572.000	4463.160	-1068.600 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	4155.720	4106.060	83.680
11216.200	7572.000	4563.160	-1068.960 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	4255.660	4205.950	85.600
11316.200	7572.000	4663.160	-1069.320 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	4355.610	4305.840	87.520
11416.200	7572.000	4763.160	-1069.680 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	4455.550	4405.730	89.430
11516.200	7572.000	4863.160	-1070.040 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	4555.500	4505.630	91.340
11616.200	7572.000	4963.160	-1070.400 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	4655.460	4605.530	93.240
11716.200	7572.000	5063.160	-1070.750 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	4755.410	4705.430	95.140
11816.200	7572.000	5163.160	-1071.110 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	4855.360	4805.330	97.040
11916.200	7572.000	5263.160	-1071.470 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	4955.320	4905.230	98.930
12016.200	7572.000	5363.150	-1071.830 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	5055.280	5005.140	100.820
12116.200	7572.000	5463.150	-1072.190 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	5155.240	5105.040	102.700
12216.200	7572.000	5563.150	-1072.550 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	5255.200	5204.950	104.580
12316.200	7572.000	5663.150	-1072.900 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	5355.170	5304.860	106.450
12416.200	7572.000	5763.150	-1073.260 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	5455.130	5404.770	108.320
12516.200	7572.000	5863.150	-1073.620 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	5555.100	5504.680	110.190
12616.200	7572.000	5963.150	-1073.980 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	5655.070	5604.600	112.050
12716.200	7572.000	6063.150	-1074.340 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	5755.030	5704.510	113.910
12816.200	7572.000	6163.150	-1074.700 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	5855.000	5804.430	115.760
12916.200	7572.000	6263.150	-1075.050 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	5954.970	5904.340	117.610
13016.200	7572.000	6363.150	-1075.410 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	6054.950	6004.260	119.460
13116.200	7572.000	6463.150	-1075.770 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	6154.920	6104.180	121.300
13216.200	7572.000	6563.150	-1076.130 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	6254.890	6204.100	123.140
13316.200	7572.000	6663.150	-1076.490 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	6354.870	6304.020	124.970
13416.200	7572.000	6763.150	-1076.850 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	6454.840	6403.940	126.800
13516.200	7572.000	6863.150	-1077.210 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	6554.820	6503.860	128.620
13616.200	7572.000	6963.140	-1077.560 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	6654.790	6603.780	130.440
13716.200	7572.000	7063.140	-1077.920 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	6754.770	6703.700	132.260
13816.200	7572.000	7163.140	-1078.280 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	6854.750	6803.620	134.070
13916.200	7572.000	7263.140	-1078.640 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	6954.730	6903.540	135.880
14016.200	7572.000	7363.140	-1079.000 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	7054.710	7003.470	137.690
14116.200	7572.000	7463.140	-1079.360 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	7154.690	7103.390	139.490
14216.200	7572.000	7563.140	-1079.710 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	7254.670	7203.320	141.280
14316.200	7572.000	7663.140	-1080.070 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	7354.650	7303.240	143.070
14416.200	7572.000	7763.140	-1080.430 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	7454.630	7403.170	144.860
14516.200	7572.000	7863.140	-1080.790 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	7554.610	7503.090	146.640
14616.200	7572.000	7963.140	-1081.150 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	7654.590	7603.020	148.420
14716.200	7572.000	8063.140	-1081.510 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	7754.570	7702.940	150.190
14816.200	7572.000	8163.140	-1081.860 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	7854.560	7802.870	151.960
14916.200	7572.000	8263.140	-1082.220 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	7954.540	7902.800	153.730
15016.200	7572.000	8363.140	-1082.580 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	8054.530	8002.720	155.490
15116.200	7572.000	8463.130	-1082.940 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	8154.510	8102.650	157.250
15216.200	7572.000	8563.130	-1083.300 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	8254.490	8202.580	159.000
15316.200	7572.000	8663.130	-1083.660 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	8354.480	8302.510	160.750
15416.200	7572.000	8763.130	-1084.010 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	8454.470	8402.440	162.490
15516.200	7572.000	8863.130	-1084.370 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	8554.450	8502.360	164.240
15616.200	7572.000	8963.130	-1084.730 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	8654.440	8602.290	165.970
15716.200	7572.000	9063.130	-1085.090 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	8754.420	8702.220	167.710
15816.200	7572.000	9163.130	-1085.450 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	8854.410	8802.150	169.430
15916.200	7572.000	9263.130	-1085.810 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	8954.400	8902.080	171.160
16016.200	7572.000	9363.130	-1086.170 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	9054.390	9002.010	172.880
16116.200	7572.000	9463.130	-1086.520 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	9154.370	9101.940	174.600
16216.200	7572.000	9563.130	-1086.880 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	9254.360	9201.870	176.310
16316.200	7572.000	9663.130	-1087.240 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	9354.350	9301.800	178.020
16416.200	7572.000	9763.130	-1087.600 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	9454.340	9401.730	179.720
16516.200	7572.000	9863.130	-1087.960 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	9554.330	9501.660	181.420
16616.200	7572.000	9963.130	-1088.320 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	9654.310	9601.590	183.120
16716.200	7572.000	10063.120	-1088.670 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	9754.300	9701.520	184.810
16816.200	7572.000	10163.120	-1089.030 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	9854.290	9801.450	186.500
16916.200	7572.000	10263.120	-1089.390 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	9954.280	9901.390	188.180
17016.200	7572.000	10363.120	-1089.750 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	10054.270	10001.320	189.860
17116.200	7572.000	10463.120	-1090.110 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	10154.260	10101.250	191.540
17216.200	7572.000	10563.120	-1090.470 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	10254.250	10201.180	193.210
17316.200	7572.000	10663.120	-1090.820 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	10354.240	10301.110	194.880
17416.200	7572.000	10763.120	-1091.180 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	10454.230	10401.040	196.540
17516.200	7572.000	10863.120	-1091.540 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	10554.220	10500.970	198.200
17616.200	7572.000	10963.120	-1091.900 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	10654.220	10600.910	199.860
17716.200	7572.000	11063.120	-1092.260 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	10754.210	10700.840	201.510
17816.200	7572.000	11163.120	-1092.620 SRC - Phelps 11-32NHZ	11463.000	7430.470	310.010	-1032.020	8.700	10854.200		

4200.000	4200.000	0.000	0.000 SRC - Phelps 12-32CHZ	4161.260	4114.590	-753.540	3163.660	103.400	3253.290	3245.970	444.340
4216.200	4216.200	0.050	-0.040 SRC - Phelps 12-32CHZ	4177.450	4130.780	-753.590	3164.090	143.200	3253.770	3246.420	442.830
4316.130	4316.130	2.720	-2.260 SRC - Phelps 12-32CHZ	4361.200	4314.490	-755.790	3166.390	143.200	3258.180	3250.600	430.170
4416.200	4415.740	9.390	-7.820 SRC - Phelps 12-32CHZ	4515.190	4468.460	-755.470	3164.790	143.200	3263.940	3256.160	419.770
4516.200	4514.760	20.060	-16.720 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
4616.200	4612.910	34.700	-28.910 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
4716.200	4709.940	53.270	-44.380 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
4816.200	4805.560	75.710	-63.080 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
4916.200	4899.530	101.970	-84.950 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
5016.200	4891.580	131.010	-109.950 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
5116.200	5081.460	165.630	-137.990 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
5200.110	5155.020	196.630	-163.820 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
5216.200	5168.960	202.810	-168.970 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
5316.200	5255.560	241.230	-200.980 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
5416.200	5342.160	279.650	-232.990 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
5516.200	5428.760	318.060	-264.990 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
5616.200	5515.360	356.480	-297.000 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
5716.200	5601.960	394.900	-329.010 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
5816.200	5688.560	433.320	-361.020 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
5916.200	5775.160	471.740	-393.030 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
6016.200	5861.760	510.160	-425.030 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
6116.200	5949.360	548.570	-457.040 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
6216.200	6034.960	586.990	-489.050 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
6316.200	6121.560	625.410	-521.060 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
6416.200	6208.160	663.830	-553.070 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
6516.200	6294.750	702.250	-585.070 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
6616.200	6381.350	740.670	-617.080 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
6716.200	6467.950	779.090	-649.090 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
6816.200	6554.550	817.500	-681.100 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
6916.200	6641.150	855.920	-713.110 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7016.200	6727.750	894.340	-745.110 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7116.200	6814.350	932.760	-777.120 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7142.750	6837.350	942.960	-785.620 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7168.430	6859.590	952.830	-793.840 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7216.200	6900.950	971.180	-809.130 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7316.200	6987.550	1009.600	-841.140 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7416.200	7074.150	1048.010	-873.150 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7516.200	7160.750	1086.430	-905.150 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7616.200	7247.350	1124.850	-937.160 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7697.510	7317.760	1156.090	-963.190 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7716.200	7333.800	1163.630	-969.120 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7726.170	7342.230	1167.950	-972.240 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7816.200	7413.570	1215.810	-998.660 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
7916.200	7480.250	1285.780	-1023.450 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
8016.200	7530.440	1369.960	-1042.220 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
8116.200	7561.550	1464.030	-1054.010 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
8215.470	7572.000	1562.450	-1058.210 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
8216.200	7572.000	1563.180	-1058.210 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
8316.200	7572.000	1653.180	-1058.570 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
8416.200	7572.000	1763.180	-1058.930 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
8516.200	7572.000	1863.180	-1059.290 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
8616.200	7572.000	1963.180	-1059.640 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
8716.200	7572.000	2063.180	-1060.000 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
8816.200	7572.000	2163.180	-1060.360 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
8916.200	7572.000	2263.170	-1060.720 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
9016.200	7572.000	2363.170	-1061.080 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
9116.200	7572.000	2463.170	-1061.440 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
9216.200	7572.000	2563.170	-1061.790 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
9316.200	7572.000	2663.170	-1062.150 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
9416.200	7572.000	2763.170	-1062.510 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
9516.200	7572.000	2863.170	-1062.870 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
9616.200	7572.000	2963.170	-1063.230 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
9716.200	7572.000	3063.170	-1063.590 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
9816.200	7572.000	3163.170	-1063.940 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
9916.200	7572.000	3263.170	-1064.300 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
10016.200	7572.000	3363.170	-1064.660 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
10116.200	7572.000	3463.170	-1065.020 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
10216.200	7572.000	3563.170	-1065.380 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
10316.200	7572.000	3663.170	-1065.740 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
10416.200	7572.000	3763.160	-1066.090 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
10516.200	7572.000	3863.160	-1066.450 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
10616.200	7572.000	3963.160	-1066.810 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
10716.200	7572.000	4063.160	-1067.170 SRC - Phelps 12-32CHZ	4048.000	3988.520	-759.920	3164.790	143.200	3263.940	3256.160	419.770
10816.200	7572.000	4163.160	-1067.530 SRC - Phelps 12-32CHZ	4048.000	39						

16516.200	7572.000	9863.130	-1087.960 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	10622.380	10566.070	188.620
16616.200	7572.000	9963.130	-1088.320 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	10722.350	10665.980	190.210
16716.200	7572.000	10063.120	-1088.670 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	10822.320	10765.890	191.800
16816.200	7572.000	10163.120	-1089.030 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	10922.290	10865.810	193.390
16916.200	7572.000	10263.120	-1089.390 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	11022.260	10965.720	194.970
17016.200	7572.000	10363.120	-1089.750 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	11122.230	11065.640	196.550
17116.200	7572.000	10463.120	-1090.110 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	11222.200	11165.560	198.120
17216.200	7572.000	10563.120	-1090.470 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	11322.170	11265.470	199.690
17316.200	7572.000	10663.120	-1090.820 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	11422.140	11365.390	201.260
17416.200	7572.000	10763.120	-1091.180 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	11522.110	11465.310	202.830
17516.200	7572.000	10863.120	-1091.540 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	11622.090	11565.220	204.390
17616.200	7572.000	10963.120	-1091.900 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	11722.060	11665.140	205.950
17716.200	7572.000	11063.120	-1092.260 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	11822.030	11765.060	207.510
17816.200	7572.000	11163.120	-1092.620 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	11922.010	11864.980	209.060
17865.900	7572.000	11212.810	-1092.790 SRC - Phelps 12-32CHZ	11782.000	7598.680	-756.690	-1319.750	-95.700	11971.690	11914.630	209.800

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	16.200	0.000	0.000 SRC - Phelps 12-32NHZ	54.780	17.980	-682.140	2893.380	103.300	2972.710	2971.740	3063.330
57.200	57.200	57.200	0.000	0.000 SRC - Phelps 12-32NHZ	94.000	57.200	-682.200	2893.350	103.300	2972.680	2971.640	2836.210
116.200	116.200	116.200	0.000	0.000 SRC - Phelps 12-32NHZ	150.720	113.920	-682.360	2893.350	103.300	2972.730	2971.590	2612.810
180.240	180.240	180.240	0.000	0.000 SRC - Phelps 12-32NHZ	214.760	177.960	-682.540	2893.360	103.300	2972.780	2971.540	2410.450
216.200	216.200	216.200	0.000	0.000 SRC - Phelps 12-32NHZ	243.770	206.970	-682.600	2893.470	103.300	2972.870	2971.580	2306.800
316.200	316.200	316.200	0.000	0.000 SRC - Phelps 12-32NHZ	343.770	306.970	-682.760	2893.710	103.300	2973.180	2971.720	2036.560
416.200	416.200	416.200	0.000	0.000 SRC - Phelps 12-32NHZ	443.770	406.960	-682.930	2893.990	103.300	2973.490	2971.880	1851.030
516.200	516.200	516.200	0.000	0.000 SRC - Phelps 12-32NHZ	544.050	503.250	-682.880	2894.390	103.300	2973.890	2972.130	1688.390
616.200	616.200	616.200	0.000	0.000 SRC - Phelps 12-32NHZ	630.060	593.250	-682.840	2894.920	103.300	2974.450	2972.540	1554.620
716.200	716.200	716.200	0.000	0.000 SRC - Phelps 12-32NHZ	715.270	678.460	-683.470	2895.740	103.300	2975.550	2973.490	1443.990
816.200	816.200	816.200	0.000	0.000 SRC - Phelps 12-32NHZ	791.210	754.370	-685.170	2896.760	103.300	2977.330	2975.130	1350.530
916.200	916.200	916.200	0.000	0.000 SRC - Phelps 12-32NHZ	868.320	831.410	-688.160	2898.040	103.400	2979.830	2977.490	1269.380
1016.200	1016.200	1016.200	0.000	0.000 SRC - Phelps 12-32NHZ	943.520	906.480	-692.250	2899.570	103.400	2983.080	2980.590	1197.500
1116.200	1116.200	1116.200	0.000	0.000 SRC - Phelps 12-32NHZ	1032.500	995.230	-698.300	2901.680	103.500	2986.970	2984.320	1127.240
1216.200	1216.200	1216.200	0.000	0.000 SRC - Phelps 12-32NHZ	1115.120	1077.580	-704.650	2903.780	103.600	2991.270	2988.470	1067.390
1316.200	1316.200	1316.200	0.000	0.000 SRC - Phelps 12-32NHZ	1204.880	1167.000	-711.930	2906.490	103.800	2996.130	2993.160	1009.670
1416.200	1416.200	1416.200	0.000	0.000 SRC - Phelps 12-32NHZ	1316.580	1278.370	-719.660	2910.150	103.900	3000.980	2997.830	952.880
1516.200	1516.200	1516.200	0.000	0.000 SRC - Phelps 12-32NHZ	1435.070	1396.650	-725.920	2913.580	104.000	3005.030	3001.690	901.340
1616.200	1616.200	1616.200	0.000	0.000 SRC - Phelps 12-32NHZ	1490.590	1452.080	-728.020	2915.920	104.000	3009.910	3006.440	869.540
1716.200	1716.200	1716.200	0.000	0.000 SRC - Phelps 12-32NHZ	1559.920	1521.210	-731.890	2919.510	104.100	3015.960	3012.360	836.740
1816.200	1816.200	1816.200	0.000	0.000 SRC - Phelps 12-32NHZ	1629.530	1590.500	-737.430	2922.910	104.200	3022.940	3019.190	806.100
1916.200	1916.200	1916.200	0.000	0.000 SRC - Phelps 12-32NHZ	1721.730	1682.130	-746.350	2927.900	104.300	3030.580	3027.040	855.650
2016.200	2016.200	2016.200	0.000	0.000 SRC - Phelps 12-32NHZ	1821.240	1781.030	-755.990	2933.350	104.500	3038.310	3034.590	816.290
2116.200	2116.200	2116.200	0.000	0.000 SRC - Phelps 12-32NHZ	1922.600	1881.780	-765.510	2938.960	104.600	3046.060	3042.150	780.330
2216.200	2216.200	2216.200	0.000	0.000 SRC - Phelps 12-32NHZ	2026.240	1984.870	-774.380	2944.790	104.700	3053.680	3049.600	747.420
2316.200	2316.200	2316.200	0.000	0.000 SRC - Phelps 12-32NHZ	2130.920	2089.100	-781.900	2950.870	104.800	3061.140	3056.880	717.820
2416.200	2416.200	2416.200	0.000	0.000 SRC - Phelps 12-32NHZ	2267.760	2225.490	-790.020	2958.330	105.000	3067.940	3063.470	686.520
2516.200	2516.200	2516.200	0.000	0.000 SRC - Phelps 12-32NHZ	2338.340	2295.860	-794.260	2961.900	105.000	3074.460	3069.840	666.350
2616.200	2616.200	2616.200	0.000	0.000 SRC - Phelps 12-32NHZ	2407.000	2364.220	-799.150	2966.070	105.100	3082.160	3077.400	648.070
2716.200	2716.200	2716.200	0.000	0.000 SRC - Phelps 12-32NHZ	2509.510	2466.240	-806.610	2972.810	105.200	3090.420	3085.490	626.520
2816.200	2816.200	2816.200	0.000	0.000 SRC - Phelps 12-32NHZ	2640.400	2596.620	-814.840	2980.780	105.300	3097.930	3092.800	603.610
2916.200	2916.200	2916.200	0.000	0.000 SRC - Phelps 12-32NHZ	2724.310	2680.240	-819.850	2985.570	105.400	3105.070	3099.790	587.100
3016.200	3016.200	3016.200	0.000	0.000 SRC - Phelps 12-32NHZ	2811.310	2766.870	-825.850	2990.900	105.400	3112.820	3107.370	571.300
3116.200	3116.200	3116.200	0.000	0.000 SRC - Phelps 12-32NHZ	2902.060	2857.170	-832.720	2996.700	105.500	3121.010	3115.400	555.390
3216.200	3216.200	3216.200	0.000	0.000 SRC - Phelps 12-32NHZ	2994.090	2948.690	-840.250	3002.690	105.600	3129.490	3123.710	541.090
3316.200	3316.200	3316.200	0.000	0.000 SRC - Phelps 12-32NHZ	3090.100	3044.150	-848.440	3008.970	105.800	3138.110	3132.150	526.750
3416.200	3416.200	3416.200	0.000	0.000 SRC - Phelps 12-32NHZ	3185.750	3139.240	-856.470	3015.440	105.900	3146.920	3140.790	513.310
3516.200	3516.200	3516.200	0.000	0.000 SRC - Phelps 12-32NHZ	3296.790	3249.650	-865.810	3022.730	106.000	3155.560	3149.240	499.370
3616.200	3616.200	3616.200	0.000	0.000 SRC - Phelps 12-32NHZ	3396.240	3348.560	-874.020	3029.100	106.100	3164.010	3157.520	487.100
3716.200	3716.200	3716.200	0.000	0.000 SRC - Phelps 12-32NHZ	3502.170	3453.990	-882.940	3035.710	106.200	3172.360	3165.680	474.900
3816.200	3816.200	3816.200	0.000	0.000 SRC - Phelps 12-32NHZ	3596.500	3547.670	-891.480	3041.370	106.300	3180.690	3173.840	464.040
3916.200	3916.200	3916.200	0.000	0.000 SRC - Phelps 12-32NHZ	3689.470	3640.050	-900.270	3047.130	106.500	3189.320	3182.300	453.820
4016.200	4016.200	4016.200	0.000	0.000 SRC - Phelps 12-32NHZ	3802.560	3752.450	-910.530	3054.070	106.600	3197.800	3190.580	442.830
4116.200	4116.200	4116.200	0.000	0.000 SRC - Phelps 12-32NHZ	3901.980	3851.310	-919.400	3059.960	106.700	3206.060	3198.660	433.240
4200.000	4200.000	4200.000	0.000	0.000 SRC - Phelps 12-32NHZ	3961.840	3910.790	-924.970	3063.550	106.800	3213.180	3205.650	425.880
4216.200	4216.200	4216.200	0.050	-0.040 SRC - Phelps 12-32NHZ	3977.920	3926.760	-926.540	3064.580	146.600	3214.700	3207.140	425.420
4316.200	4316.130	4316.130	2.720	-2.260 SRC - Phelps 12-32NHZ	4070.460	4018.670	-935.430	3070.740	146.600	3226.750	3219.020	417.530
4416.200	4415.740	4415.740	9.390	-7.820 SRC - Phelps 12-32NHZ	10348.690	7444.760	-1077.680	11.890	-150.100	3218.240	3201.170	188.530
4516.200	4514.760	4514.760	20.060	-16.720 SRC - Phelps 12-32NHZ	10357.050	7444.740	-1077.890	3.530	-152.600	3129.010	3111.640	180.110
4616.200	4612.910	4612.910	34.700	-28.910 SRC - Phelps 12-32NHZ	10365.000	7444.720	-1078.100	-4.420	-154.600	3042.700	3024.990	171.770
4716.200	4709.940	4709.940	53.270	-44.380 SRC - Phelps 12-32NHZ	10369.270	7444.720	-1078.230	-8.690	-156.300	2959.830	2941.740	163.660
4816.200	4805.560	4805.560	75.710	-63.080 SRC - Phelps 12-32NHZ	10387.250	7444.720	-1078.800	-26.660	-157.300	2880.860	2862.310	155.340
4916.200	4899.530	4899.530	101.970	-84.950 SRC - Phelps 12-32NHZ	10410.350	7444.720	-1079.500	-49.750	-157.900	2806.260	2877.180	147.120
5016.200	4991.580	4991.580	131.970	-109.950 SRC - Phelps 12-32NHZ	10436.580	7444.710	-1080.280	-75.970	-158.300	2736.520	2716.850	139.110
5116.200	5081.460	5081.460	165.630	-137.990 SRC - Phelps 12-32NHZ	10462.210	7444.680	-1081.060	-101.590	-158.600	2672.140	2651.820	131.450
5200.110	5155.020	5155.020	196.630	-163.820 SRC - Phelps 12-32NHZ	10486.780	7444.620	-1081.900	-126.140	-158.600	2622.650	2601.700	125.220
5216.200	5168.960	5168.960	202.810	-168.970 SRC - Phelps 12-32NHZ	10490.000	7444.610	-1082.010	-129.360	-158.500	2613.600	2592.530	124.040
5316.200	5255.560	5255.560	241.230	-200.980 SRC - Phelps 12-32NHZ	10506.340	7444.580	-1082.740	-145.680	-158.100	2558.860	2537.060	117.390
5416.200	5342.160	5342.160	279.650	-232.990 SRC - Phelps 12-32NHZ	10523.900	7444.550	-1083.540	-163.220	-157.700	2506.630	2484.050	110.990
5516.200	5428.760	5428.760	318.060	-264.990 SRC - Phelps 12-32NHZ	10559.720	7444.520	-1085.400	-198.990	-156.800	2457.100	2433.600	104.560
5616.200	5515.360	5515.360	356.480	-297.000 SRC - Phelps 12-32NHZ	10644.120	7444.720	-1087.100	-283.360	-154.700	2409.680	2385.000	97.620
5716.200	5601.960	5601.960	394.900	-329.010 SRC - Phelps 12-32NHZ	10672.910	7445.100	-1086.940	-312.150	-154.000	2365.020	2339.360	92.160
5816.200	5688.560	5688.560	433.320	-361.020 SRC - Phelps 12-32NHZ	10714.000	7445.100	-1087.040	-345.370	-153.000	2321.040	2303.000	87.030
5916.200	5775.160	5775.160	471.740	-393.030 SRC - Phelps 12-32NHZ	10741.000	7446.220	-1086.130	-380.230	-152.300	2284.780	2256.980	82.190
6016.200	5861.760	5861.760	510.160	-425.030 SRC - Phelps 12-32NHZ	10769.110	7446.730	-1086.390	-408.330	-151.600	2249.570	2220.680	77.860
6116.200	5948.360	5948.360	548.570	-457.040 SRC - Phelps 12-32NHZ	10798.480	7447.230	-1086.010	-437.700	-150.800	2217.850	2187.830	73.880
6216.200	6034.960	6034.960	586.990	-489.050 SRC - Phelps 12-32NHZ	10846.290	7447.790	-1085.790	-485.510	-149.600	2189.590	2158.300	69.980
6316.200	6121.560	6121.560	625.410	-521.060 SRC - Phelps 12-32NHZ	10940.300	7447.730	-1084.710	-579.500	-147.200	2164.880	2131.990	65.820
6416.200	6208.160	6208.160	663.830	-553.070 SRC - Phelps 12-32NHZ	10965.120	7447.270	-1084.230	-604.310	-146.600	2143.300	2109.240	62.910
6516.200	6294.750	6294.750	702.250	-585.070 SRC - Phelps 12-32NHZ	10995.560	7446.600	-1083.810	-634.740	-145.800	2125.850	2090.5	

9316.200	7572.000	2663.170	-1062.150 SRC - Phelps 12-32NHZ	11288.240	7444.050	-1084.400	-927.320	43.500	3752.170	3705.090	79.690
9416.200	7572.000	2763.170	-1062.510 SRC - Phelps 12-32NHZ	11284.920	7443.970	-1084.270	-924.000	44.300	3852.070	3804.980	81.810
9516.200	7572.000	2863.170	-1062.870 SRC - Phelps 12-32NHZ	11281.610	7443.900	-1084.150	-920.690	45.000	3951.960	3904.880	83.940
9616.200	7572.000	2963.170	-1063.230 SRC - Phelps 12-32NHZ	11278.290	7443.820	-1084.030	-917.370	45.700	4051.860	4004.770	86.060
9716.200	7572.000	3063.170	-1063.590 SRC - Phelps 12-32NHZ	11275.000	7443.790	-1083.980	-916.090	46.000	4151.750	4104.650	88.130
9816.200	7572.000	3163.170	-1063.940 SRC - Phelps 12-32NHZ	11275.030	7443.750	-1083.910	-914.120	46.400	4251.660	4204.530	90.220
9916.200	7572.000	3263.170	-1064.300 SRC - Phelps 12-32NHZ	11271.800	7443.680	-1083.800	-910.890	47.000	4351.560	4304.440	92.340
10016.200	7572.000	3363.170	-1064.660 SRC - Phelps 12-32NHZ	11268.570	7443.610	-1083.680	-907.660	47.700	4451.470	4404.340	94.570
10116.200	7572.000	3463.170	-1065.020 SRC - Phelps 12-32NHZ	11265.340	7443.540	-1083.560	-904.430	48.300	4551.380	4504.250	96.840
10216.200	7572.000	3563.170	-1065.380 SRC - Phelps 12-32NHZ	11262.110	7443.480	-1083.450	-901.210	48.900	4651.290	4604.160	98.880
10316.200	7572.000	3663.170	-1065.740 SRC - Phelps 12-32NHZ	11258.880	7443.410	-1083.330	-897.980	49.500	4751.200	4704.080	100.800
10416.200	7572.000	3763.160	-1066.090 SRC - Phelps 12-32NHZ	11255.650	7443.340	-1083.220	-894.750	50.100	4851.120	4803.970	102.910
10516.200	7572.000	3863.160	-1066.450 SRC - Phelps 12-32NHZ	11252.420	7443.270	-1083.100	-891.530	50.700	4951.030	4903.890	105.020
10616.200	7572.000	3963.160	-1066.810 SRC - Phelps 12-32NHZ	11249.190	7443.200	-1082.980	-888.300	51.200	5050.950	5003.800	107.130
10716.200	7572.000	4063.160	-1067.170 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	5150.860	5103.710	109.240
10816.200	7572.000	4163.160	-1067.530 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	5250.780	5203.580	111.240
10916.200	7572.000	4263.160	-1067.890 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	5350.710	5303.460	113.250
11016.200	7572.000	4363.160	-1068.250 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	5450.630	5403.340	115.250
11116.200	7572.000	4463.160	-1068.600 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	5550.560	5503.220	117.240
11216.200	7572.000	4563.160	-1068.960 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	5650.490	5603.100	119.230
11316.200	7572.000	4663.160	-1069.320 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	5750.430	5702.990	121.210
11416.200	7572.000	4763.160	-1069.680 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	5850.360	5802.870	123.190
11516.200	7572.000	4863.160	-1070.040 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	5950.300	5902.780	125.170
11616.200	7572.000	4963.160	-1070.400 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	6050.240	6002.650	127.140
11716.200	7572.000	5063.160	-1070.750 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	6150.180	6102.540	129.100
11816.200	7572.000	5163.160	-1071.110 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	6250.120	6202.440	131.060
11916.200	7572.000	5263.160	-1071.470 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	6350.070	6302.330	133.020
12016.200	7572.000	5363.150	-1071.830 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	6450.020	6402.230	134.970
12116.200	7572.000	5463.150	-1072.190 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	6549.960	6502.120	136.910
12216.200	7572.000	5563.150	-1072.550 SRC - Phelps 12-32NHZ	11246.000	7443.140	-1082.870	-885.110	51.800	6649.910	6602.020	138.850
12316.200	7572.000	5663.150	-1072.900 SRC - Phelps 12-32NHZ	11245.810	7443.140	-1082.860	-884.920	51.800	6749.870	6701.930	140.790
12416.200	7572.000	5763.150	-1073.260 SRC - Phelps 12-32NHZ	11243.370	7443.110	-1082.800	-882.480	52.200	6849.820	6801.860	142.820
12516.200	7572.000	5863.150	-1073.620 SRC - Phelps 12-32NHZ	11240.920	7443.090	-1082.730	-880.040	52.600	6949.770	6901.790	144.840
12616.200	7572.000	5963.150	-1073.980 SRC - Phelps 12-32NHZ	11238.470	7443.070	-1082.660	-877.590	53.000	7049.730	7001.720	146.860
12716.200	7572.000	6063.150	-1074.340 SRC - Phelps 12-32NHZ	11236.030	7443.040	-1082.580	-875.150	53.400	7149.680	7101.650	148.880
12816.200	7572.000	6163.150	-1074.700 SRC - Phelps 12-32NHZ	11233.580	7443.020	-1082.520	-872.700	53.800	7249.630	7201.590	150.890
12916.200	7572.000	6263.150	-1075.050 SRC - Phelps 12-32NHZ	11231.140	7443.000	-1082.450	-870.260	54.100	7349.590	7301.520	152.900
13016.200	7572.000	6363.150	-1075.410 SRC - Phelps 12-32NHZ	11228.690	7442.970	-1082.390	-867.810	54.500	7449.540	7401.450	154.910
13116.200	7572.000	6463.150	-1075.770 SRC - Phelps 12-32NHZ	11226.250	7442.950	-1082.320	-865.370	54.900	7549.500	7501.390	156.920
13216.200	7572.000	6563.150	-1076.130 SRC - Phelps 12-32NHZ	11223.800	7442.930	-1082.250	-862.930	55.200	7649.460	7601.320	158.920
13316.200	7572.000	6663.150	-1076.490 SRC - Phelps 12-32NHZ	11221.360	7442.900	-1082.180	-860.480	55.600	7749.410	7701.260	160.920
13416.200	7572.000	6763.150	-1076.850 SRC - Phelps 12-32NHZ	11218.910	7442.880	-1082.110	-858.040	55.900	7849.370	7801.190	162.920
13516.200	7572.000	6863.150	-1077.210 SRC - Phelps 12-32NHZ	11216.470	7442.850	-1082.040	-855.590	56.200	7949.330	7901.120	164.910
13616.200	7572.000	6963.140	-1077.560 SRC - Phelps 12-32NHZ	11214.020	7442.830	-1081.970	-853.150	56.600	8049.280	8001.060	166.910
13716.200	7572.000	7063.140	-1077.920 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	8149.240	8100.960	168.790
13816.200	7572.000	7163.140	-1078.280 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	8249.200	8200.860	170.660
13916.200	7572.000	7263.140	-1078.640 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	8349.160	8300.770	172.530
14016.200	7572.000	7363.140	-1079.000 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	8449.120	8400.680	174.400
14116.200	7572.000	7463.140	-1079.360 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	8549.080	8500.580	176.260
14216.200	7572.000	7563.140	-1079.710 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	8649.050	8600.490	178.120
14316.200	7572.000	7663.140	-1080.070 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	8749.010	8700.440	179.970
14416.200	7572.000	7763.140	-1080.430 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	8848.980	8800.300	181.810
14516.200	7572.000	7863.140	-1080.790 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	8948.940	8900.210	183.650
14616.200	7572.000	7963.140	-1081.150 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	9048.910	9000.120	185.490
14716.200	7572.000	8063.140	-1081.510 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	9148.870	9100.030	187.320
14816.200	7572.000	8163.140	-1081.860 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	9248.840	9199.940	189.150
14916.200	7572.000	8263.140	-1082.220 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	9348.810	9299.850	190.970
15016.200	7572.000	8363.140	-1082.580 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	9448.780	9399.770	192.790
15116.200	7572.000	8463.130	-1082.940 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	9548.750	9499.680	194.600
15216.200	7572.000	8563.130	-1083.300 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	9648.720	9599.590	196.410
15316.200	7572.000	8663.130	-1083.660 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	9748.690	9699.500	198.210
15416.200	7572.000	8763.130	-1084.010 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	9848.660	9799.420	200.010
15516.200	7572.000	8863.130	-1084.370 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	9948.630	9899.330	201.800
15616.200	7572.000	8963.130	-1084.730 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	10048.600	9999.250	203.590
15716.200	7572.000	9063.130	-1085.090 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	10148.580	10099.160	205.370
15816.200	7572.000	9163.130	-1085.450 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	10248.550	10199.080	207.150
15916.200	7572.000	9263.130	-1085.810 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	10348.530	10298.990	208.930
16016.200	7572.000	9363.130	-1086.170 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	10448.500	10398.910	210.690
16116.200	7572.000	9463.130	-1086.520 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	10548.470	10498.830	212.460
16216.200	7572.000	9563.130	-1086.880 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	10648.450	10598.740	214.220
16316.200	7572.000	9663.130	-1087.240 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	10748.430	10698.660	215.980
16416.200	7572.000	9763.130	-1087.600 SRC - Phelps 12-32NHZ	11214.000	7442.830	-1081.970	-853.130	56.600	10848.400	10798.580	217.730
16516.200	7572.000	9863.130	-1087.960 SRC - Phelps 12-32NHZ	11214.000	7442						

2716.200	2716.200	0.000	0.000 SRC - Phelps A-32CHZ	2661.520	2618.510	-573.050	2827.630	101.500	2886.770	2881.690	567.960
2816.200	2816.200	0.000	0.000 SRC - Phelps A-32CHZ	2728.000	2684.110	-563.310	2832.250	101.300	2890.740	2885.490	550.500
2916.200	2916.200	0.000	0.000 SRC - Phelps A-32CHZ	2798.330	2753.380	-552.540	2837.860	101.000	2895.730	2890.300	533.590
3016.200	3016.200	0.000	0.000 SRC - Phelps A-32CHZ	2875.350	2829.280	-541.440	2844.720	100.800	2901.820	2896.200	517.070
3116.200	3116.200	0.000	0.000 SRC - Phelps A-32CHZ	3013.110	2965.100	-521.610	2856.480	100.300	2907.640	2901.750	493.890
3216.200	3216.200	0.000	0.000 SRC - Phelps A-32CHZ	3095.900	3046.700	-509.310	2863.180	100.100	2913.060	2906.970	478.540
3316.200	3316.200	0.000	0.000 SRC - Phelps A-32CHZ	3175.080	3124.720	-497.750	2870.130	99.800	2919.260	2912.980	464.750
3416.200	3416.200	0.000	0.000 SRC - Phelps A-32CHZ	3228.410	3177.240	-490.160	2875.440	99.700	2926.690	2920.250	454.720
3516.200	3516.200	0.000	0.000 SRC - Phelps A-32CHZ	3393.560	3339.730	-465.590	2891.700	99.200	2934.250	2927.490	433.680
3616.200	3616.200	0.000	0.000 SRC - Phelps A-32CHZ	3484.510	3428.090	-450.660	2898.640	98.800	2941.410	2933.420	420.630
3716.200	3716.200	0.000	0.000 SRC - Phelps A-32CHZ	3634.180	3576.710	-429.200	2911.450	98.400	2946.220	2938.930	404.100
3816.200	3816.200	0.000	0.000 SRC - Phelps A-32CHZ	3705.550	3647.540	-421.940	2916.180	98.200	2951.370	2943.910	395.680
3916.200	3916.200	0.000	0.000 SRC - Phelps A-32CHZ	3771.020	3712.530	-415.700	2921.200	98.100	2957.650	2950.440	388.320
4016.200	4016.200	0.000	0.000 SRC - Phelps A-32CHZ	3810.310	3820.990	-402.210	2930.500	97.800	2964.410	2956.560	377.640
4116.200	4116.200	0.000	0.000 SRC - Phelps A-32CHZ	3953.410	3892.390	-390.390	2937.120	97.600	2971.390	2963.350	369.350
4200.000	4200.000	0.000	0.000 SRC - Phelps A-32CHZ	4017.460	3955.110	-379.170	2943.610	97.300	2978.020	2969.810	362.520
4216.200	4216.200	0.050	-0.040 SRC - Phelps A-32CHZ	4031.540	3968.890	-376.680	2945.090	137.100	2979.410	2971.160	361.100
4316.200	4316.130	2.720	-2.260 SRC - Phelps A-32CHZ	4155.500	4090.510	-356.070	2957.230	136.500	2989.690	2981.150	350.260
4416.200	4415.740	9.390	-7.820 SRC - Phelps A-32CHZ	4228.720	4162.390	-344.170	2964.460	136.000	3003.940	2995.210	343.850
4516.200	4514.760	20.060	-16.720 SRC - Phelps A-32CHZ	4302.470	4234.490	-331.040	2972.730	135.500	3023.020	3014.070	338.100
4616.200	4612.910	34.700	-28.910 SRC - Phelps A-32CHZ	10458.670	7588.850	-27.020	44.400	178.700	2977.480	2962.830	203.250
4716.200	4709.940	53.270	-44.380 SRC - Phelps A-32CHZ	10466.900	7589.070	-27.280	36.180	179.300	2981.390	2966.630	195.280
4816.200	4805.560	117.140	-63.030 SRC - Phelps A-32CHZ	10480.020	7590.430	-27.710	28.990	180.000	2985.230	2971.950	187.300
4916.200	4899.530	101.970	-84.950 SRC - Phelps A-32CHZ	10486.530	7589.670	-27.850	16.560	179.700	2995.180	2980.180	179.660
5016.200	4991.580	131.970	-109.950 SRC - Phelps A-32CHZ	10514.220	7590.680	-28.460	-11.100	-178.800	2605.920	2590.730	171.570
5116.200	5081.460	165.630	-137.990 SRC - Phelps A-32CHZ	10546.240	7591.860	-29.120	-43.100	-177.800	2519.730	2504.310	163.500
5200.110	5155.020	196.630	-163.820 SRC - Phelps A-32CHZ	10594.590	7593.530	-29.120	-91.410	-176.400	2450.000	2434.320	156.210
5216.200	5168.960	202.810	-168.970 SRC - Phelps A-32CHZ	10600.270	7593.700	-29.030	-97.090	-176.200	2436.860	2421.120	154.750
5316.200	5255.560	241.230	-200.980 SRC - Phelps A-32CHZ	10635.360	7594.800	-28.430	-132.160	-175.100	2355.740	2339.720	147.040
5416.200	5342.160	279.650	-232.990 SRC - Phelps A-32CHZ	10659.590	7595.640	-28.240	-156.370	-174.300	2275.710	2259.380	139.420
5516.200	5428.760	318.060	-264.990 SRC - Phelps A-32CHZ	10692.100	7596.790	-28.070	-188.860	-173.200	2196.810	2180.120	131.600
5616.200	5515.360	356.480	-297.000 SRC - Phelps A-32CHZ	10727.350	7598.050	-27.920	-224.080	-171.900	2119.130	2102.010	123.760
5716.200	5601.960	394.900	-329.010 SRC - Phelps A-32CHZ	10780.960	7599.830	-27.090	-277.660	-170.000	2042.600	2024.920	115.510
5816.200	5688.560	433.320	-361.020 SRC - Phelps A-32CHZ	10815.210	7600.930	-26.120	-311.930	-168.800	1967.400	1949.160	107.860
5916.200	5775.160	471.740	-393.030 SRC - Phelps A-32CHZ	10851.310	7602.130	-24.980	-347.940	-167.400	1881.830	1874.950	100.340
6016.200	5861.760	510.160	-425.030 SRC - Phelps A-32CHZ	10818.030	7603.880	-22.580	-414.580	-164.900	1821.780	1802.020	92.170
6116.200	5948.360	548.570	-457.040 SRC - Phelps A-32CHZ	10963.570	7604.470	-20.720	-460.090	-163.100	1751.230	1730.570	84.740
6216.200	6034.960	586.990	-489.050 SRC - Phelps A-32CHZ	10996.180	7604.860	-19.430	-492.670	-161.800	1682.960	1661.350	77.880
6316.200	6121.560	625.410	-521.060 SRC - Phelps A-32CHZ	11029.020	7605.220	-18.330	-525.490	-160.400	1617.310	1594.630	71.310
6416.200	6208.160	663.830	-553.070 SRC - Phelps A-32CHZ	11065.670	7605.490	-17.370	-562.130	-158.900	1554.560	1530.650	65.020
6516.200	6294.750	702.250	-585.070 SRC - Phelps A-32CHZ	11104.530	7605.470	-16.680	-600.980	-157.200	1495.020	1469.710	59.080
6616.200	6381.350	740.670	-617.080 SRC - Phelps A-32CHZ	11137.340	7605.210	-16.380	-633.790	-155.800	1439.180	1412.380	53.700
6716.200	6467.950	779.090	-649.090 SRC - Phelps A-32CHZ	11164.320	7604.920	-16.350	-660.770	-154.600	1387.640	1359.270	48.910
6816.200	6554.550	817.500	-681.100 SRC - Phelps A-32CHZ	11188.740	7604.660	-16.460	-685.180	-153.500	1340.980	1310.950	44.660
6916.200	6641.150	855.920	-713.110 SRC - Phelps A-32CHZ	11210.630	7604.430	-16.640	-707.070	-152.500	1299.730	1268.000	40.960
7016.200	6727.750	894.340	-745.110 SRC - Phelps A-32CHZ	11241.460	7604.210	-17.090	-737.900	-151.100	1264.500	1230.870	37.610
7116.200	6814.350	932.760	-777.120 SRC - Phelps A-32CHZ	11269.380	7604.140	-17.490	-765.810	-149.900	1235.660	1200.160	34.810
7216.200	6900.950	971.180	-809.130 SRC - Phelps A-32CHZ	11300.620	7604.060	-17.930	-797.050	-148.500	1176.190	1176.190	32.440
7316.200	6987.550	1009.600	-841.140 SRC - Phelps A-32CHZ	11331.790	7603.960	-18.380	-828.220	-147.000	1198.690	1159.420	30.530
7416.200	7074.150	1048.010	-873.150 SRC - Phelps A-32CHZ	11357.590	7603.760	-18.910	-854.010	-145.800	1191.300	1150.380	29.110
7463.770	7115.350	1066.290	-888.370 SRC - Phelps A-32CHZ	11373.980	7603.590	-19.280	-870.390	-145.100	1190.450	1148.720	28.530
7480.110	7129.500	1072.570	-893.600 SRC - Phelps A-32CHZ	11378.890	7603.530	-19.390	-875.300	-144.900	1190.550	1148.570	28.360
7516.200	7160.750	1086.430	-905.150 SRC - Phelps A-32CHZ	11389.730	7603.390	-19.630	-886.140	-144.400	1191.500	1148.970	28.010
7616.200	7247.350	1124.850	-937.160 SRC - Phelps A-32CHZ	11437.540	7602.750	-20.380	-933.940	-142.200	1199.120	1154.860	27.090
7697.510	7317.760	1156.090	-963.190 SRC - Phelps A-32CHZ	11469.700	7602.260	-20.590	-966.090	-140.700	1210.590	1165.200	26.670
7716.200	7333.800	1163.630	-969.120 SRC - Phelps A-32CHZ	11475.350	7602.170	-20.600	-971.750	-143.200	1214.260	1166.670	26.630
7726.170	7342.230	1167.950	-972.240 SRC - Phelps A-32CHZ	11478.320	7602.120	-20.600	-974.720	-144.400	1216.640	1170.940	26.620
7816.200	7413.570	1215.810	-998.660 SRC - Phelps A-32CHZ	11505.900	7601.630	-20.630	-1002.290	-152.200	1250.660	1204.090	26.850
7916.200	7480.250	1285.780	-1023.450 SRC - Phelps A-32CHZ	11529.350	7601.160	-20.640	-1025.730	-156.900	1312.000	1264.770	27.780
8016.200	7560.440	1369.980	-1042.220 SRC - Phelps A-32CHZ	11547.100	7600.800	-20.640	-1043.470	-159.300	1392.370	1344.740	29.230
8116.200	7561.550	1464.030	-1054.010 SRC - Phelps A-32CHZ	11558.250	7600.580	-20.640	-1054.620	-160.500	1485.180	1437.300	31.020
8215.470	7572.000	1562.450	-1058.210 SRC - Phelps A-32CHZ	11559.580	7600.550	-20.640	-1055.960	-173.200	1583.350	1535.410	33.030
8216.200	7572.000	1563.180	-1058.210 SRC - Phelps A-32CHZ	11559.590	7600.550	-20.640	-1055.960	-173.200	1584.080	1536.140	33.040
8316.200	7572.000	1663.180	-1058.570 SRC - Phelps A-32CHZ	11559.760	7600.540	-20.640	-1056.130	-172.800	1684.060	1636.080	35.100
8416.200	7572.000	1763.180	-1058.930 SRC - Phelps A-32CHZ	11559.930	7600.540	-20.640	-1056.310	-172.500	1784.050	1736.020	37.140
8516.200	7572.000	1863.180	-1059.290 SRC - Phelps A-32CHZ	11560.100	7600.540	-20.640	-1056.480	-172.100	1884.040	1835.960	39.190
8616.200	7572.000	1963.180	-1059.640 SRC - Phelps A-32CHZ	11560.270	7600.530	-20.640	-1056.650	-171.800	1984.030	1935.900	41.230
8716.200	7572.000	2063.180	-1060.000 SRC - Phelps A-32CHZ	11560.450	7600.530	-20.640	-1056.820	-171.400	2084.020	2035.840	43.260
8816.200	7572.000	2163.180	-1060.360 SRC - Phelps A-32CHZ	11560.620	7600.520	-20.640	-1057.000	-171.100	2184.010	2135.790	45.290
8916.200	7572.000	2263.170	-1060.720 SRC - Phelps A-32CHZ	11560.790	7600.520	-20.640	-1057.170	-170.800	2284.000	2235.730	47.320
9016.200	7572.000	2363.170	-1061.080 SRC - Phelps A-32CHZ	11560.960	7600.510	-20.640	-1057.340	-170.400	2383.990	2335.680	49.340
9116.200	7572.000	2463.170	-1061.440 SRC - Phelps A-32CHZ	11561.140	7600.510	-20.640	-1057.510	-170.100	2483.980	2435.620	51.360
9216.200	7572.000	2563.170	-1061.790 SRC - Phelps A-32CHZ	11561.310	7600.510	-20.640	-1057.680	-169.800	2583.970	2535.570	53.380
9316.200	7572.000	2663.170	-1062.150 SRC - Phelps A-32CHZ	11561.480	7600.500	-20.640	-1057.860	-169.400	2683.970	2635.510	55.390
9416.200	7572.000	2763.170	-1062.510 SRC - Phelps A-32CHZ	11561.650	7600.500	-20.640	-1058.030	-169.100	2783.960	2735.460	57.390
9516.200	7572.000	2863.170	-1062.870 SRC - Phelps A-32CHZ	11561.830							

15016.200	7572.000	8363.140	-1082.580 SRC - Phelps A-32CHZ	11571.300	7600.260	-20.660	-1067.680	-151.800	8383.860	8332.360	162.790
15116.200	7572.000	8463.130	-1082.940 SRC - Phelps A-32CHZ	11571.480	7600.260	-20.660	-1067.850	-151.500	8463.860	8432.300	164.540
15216.200	7572.000	8563.130	-1083.300 SRC - Phelps A-32CHZ	11571.650	7600.250	-20.660	-1068.020	-151.300	8563.860	8532.240	166.300
15316.200	7572.000	8663.130	-1083.660 SRC - Phelps A-32CHZ	11571.820	7600.250	-20.660	-1068.190	-151.000	8663.860	8632.180	168.050
15416.200	7572.000	8763.130	-1084.010 SRC - Phelps A-32CHZ	11571.990	7600.250	-20.660	-1068.370	-150.700	8763.860	8732.120	169.790
15516.200	7572.000	8863.130	-1084.370 SRC - Phelps A-32CHZ	11572.170	7600.240	-20.660	-1068.540	-150.500	8863.850	8832.060	171.530
15616.200	7572.000	8963.130	-1084.730 SRC - Phelps A-32CHZ	11572.340	7600.240	-20.660	-1068.710	-150.200	8963.850	8932.000	173.270
15716.200	7572.000	9063.130	-1085.090 SRC - Phelps A-32CHZ	11572.510	7600.230	-20.660	-1068.880	-149.900	9063.850	9031.950	175.000
15816.200	7572.000	9163.130	-1085.450 SRC - Phelps A-32CHZ	11572.680	7600.230	-20.660	-1069.060	-149.700	9163.850	9131.890	176.730
15916.200	7572.000	9263.130	-1085.810 SRC - Phelps A-32CHZ	11572.860	7600.220	-20.660	-1069.230	-149.400	9263.850	9231.830	178.450
16016.200	7572.000	9363.130	-1086.170 SRC - Phelps A-32CHZ	11573.030	7600.220	-20.660	-1069.400	-149.100	9363.850	9331.770	180.170
16116.200	7572.000	9463.130	-1086.520 SRC - Phelps A-32CHZ	11573.200	7600.220	-20.670	-1069.570	-148.900	9463.850	9431.710	181.890
16216.200	7572.000	9563.130	-1086.880 SRC - Phelps A-32CHZ	11573.370	7600.210	-20.670	-1069.750	-148.600	9563.850	9531.650	183.600
16316.200	7572.000	9663.130	-1087.240 SRC - Phelps A-32CHZ	11573.550	7600.210	-20.670	-1069.920	-148.300	9663.850	9631.590	185.300
16416.200	7572.000	9763.130	-1087.600 SRC - Phelps A-32CHZ	11573.720	7600.200	-20.670	-1070.090	-148.100	9763.850	9731.530	187.010
16516.200	7572.000	9863.130	-1087.960 SRC - Phelps A-32CHZ	11573.890	7600.200	-20.670	-1070.260	-147.800	9863.850	9831.470	188.700
16616.200	7572.000	9963.130	-1088.320 SRC - Phelps A-32CHZ	11574.060	7600.190	-20.670	-1070.430	-147.600	9963.850	9931.410	190.400
16716.200	7572.000	10063.120	-1088.670 SRC - Phelps A-32CHZ	11574.230	7600.190	-20.670	-1070.610	-147.300	10063.850	10031.350	192.090
16816.200	7572.000	10163.120	-1089.030 SRC - Phelps A-32CHZ	11574.410	7600.190	-20.670	-1070.780	-147.100	10163.850	10131.290	193.770
16916.200	7572.000	10263.120	-1089.390 SRC - Phelps A-32CHZ	11574.580	7600.180	-20.670	-1070.950	-146.800	10263.850	10231.230	195.460
17016.200	7572.000	10363.120	-1089.750 SRC - Phelps A-32CHZ	11574.750	7600.180	-20.670	-1071.120	-146.600	10363.850	10331.170	197.130
17116.200	7572.000	10463.120	-1090.110 SRC - Phelps A-32CHZ	11574.920	7600.170	-20.670	-1071.300	-146.300	10463.850	10431.110	198.810
17216.200	7572.000	10563.120	-1090.470 SRC - Phelps A-32CHZ	11575.100	7600.170	-20.670	-1071.470	-146.100	10563.840	10531.050	200.480
17316.200	7572.000	10663.120	-1090.820 SRC - Phelps A-32CHZ	11575.270	7600.170	-20.670	-1071.640	-145.800	10663.840	10630.990	202.140
17416.200	7572.000	10763.120	-1091.180 SRC - Phelps A-32CHZ	11575.440	7600.160	-20.670	-1071.810	-145.600	10763.840	10730.930	203.800
17516.200	7572.000	10863.120	-1091.540 SRC - Phelps A-32CHZ	11575.610	7600.160	-20.670	-1071.990	-145.400	10863.840	10830.870	205.460
17616.200	7572.000	10963.120	-1091.900 SRC - Phelps A-32CHZ	11575.790	7600.150	-20.670	-1072.160	-145.100	10963.840	10930.810	207.110
17716.200	7572.000	11063.120	-1092.260 SRC - Phelps A-32CHZ	11575.960	7600.150	-20.670	-1072.330	-144.900	11063.840	11030.750	208.760
17816.200	7572.000	11163.120	-1092.620 SRC - Phelps A-32CHZ	11576.130	7600.140	-20.670	-1072.500	-144.600	11163.840	11130.690	210.410
17865.900	7572.000	11212.810	-1092.790 SRC - Phelps A-32CHZ	11576.220	7600.140	-20.670	-1072.590	-144.500	11233.540	11180.350	211.190

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	2870.420	103.500	2951.540	2950.580
32.600	32.600			0.000	0.000 SRC - Phelps A-32NHZ	59.630	22.830	-687.260	2870.440	103.500	2951.580	2950.570
116.200	116.200			0.000	0.000 SRC - Phelps A-32NHZ	129.330	92.530	-687.450	2870.820	103.500	2952.080	2950.960
216.200	216.200			0.000	0.000 SRC - Phelps A-32NHZ	219.580	182.780	-687.700	2871.710	103.500	2953.090	2951.830
316.200	316.200			0.000	0.000 SRC - Phelps A-32NHZ	319.580	282.760	-687.980	2872.800	103.500	2954.220	2952.800
416.200	416.200			0.000	0.000 SRC - Phelps A-32NHZ	422.260	385.440	-688.220	2873.860	103.500	2955.280	2953.690
516.200	516.200			0.000	0.000 SRC - Phelps A-32NHZ	518.510	481.690	-688.430	2874.910	103.500	2956.390	2954.650
616.200	616.200			0.000	0.000 SRC - Phelps A-32NHZ	617.100	580.260	-688.840	2876.180	103.500	2957.740	2955.830
716.200	716.200			0.000	0.000 SRC - Phelps A-32NHZ	770.750	733.900	-687.950	2876.370	103.500	2957.540	2955.440
816.200	816.200			0.000	0.000 SRC - Phelps A-32NHZ	883.410	846.550	-685.740	2875.840	103.400	2956.620	2954.350
916.200	916.200			0.000	0.000 SRC - Phelps A-32NHZ	984.740	947.830	-682.750	2875.390	103.400	2955.500	2953.060
1016.200	1016.200			0.000	0.000 SRC - Phelps A-32NHZ	1075.280	1038.320	-679.680	2875.280	103.300	2954.610	2952.010
1116.200	1116.200			0.000	0.000 SRC - Phelps A-32NHZ	1180.330	1143.290	-675.900	2875.320	103.200	2953.820	2951.050
1216.200	1216.200			0.000	0.000 SRC - Phelps A-32NHZ	1275.000	1237.890	-672.060	2875.350	103.200	2952.920	2950.000
1299.340	1299.340			0.000	0.000 SRC - Phelps A-32NHZ	1336.500	1299.340	-669.520	2875.590	103.100	2952.500	2949.460
1316.200	1316.200			0.000	0.000 SRC - Phelps A-32NHZ	1351.840	1314.660	-668.950	2875.730	103.100	2952.510	2949.440
1361.340	1361.340			0.000	0.000 SRC - Phelps A-32NHZ	1396.950	1359.740	-667.280	2876.140	103.100	2952.530	2949.390
1416.200	1416.200			0.000	0.000 SRC - Phelps A-32NHZ	1425.010	1387.790	-666.410	2876.610	103.000	2952.930	2949.720
1516.200	1516.200			0.000	0.000 SRC - Phelps A-32NHZ	1460.000	1422.750	-665.550	2877.540	103.000	2954.980	2951.660
1616.200	1616.200			0.000	0.000 SRC - Phelps A-32NHZ	1522.000	1484.680	-664.450	2880.230	103.000	2958.800	2955.350
1716.200	1716.200			0.000	0.000 SRC - Phelps A-32NHZ	1584.000	1546.510	-662.020	2884.190	102.900	2964.050	2960.460
1816.200	1816.200			0.000	0.000 SRC - Phelps A-32NHZ	1674.750	1636.910	-657.540	2890.730	102.800	2969.980	2966.230
1916.200	1916.200			0.000	0.000 SRC - Phelps A-32NHZ	1739.960	1701.820	-654.070	2895.930	102.700	2976.610	2973.100
2016.200	2016.200			0.000	0.000 SRC - Phelps A-32NHZ	1810.000	1771.440	-649.820	2902.270	102.600	2984.190	2980.530
2116.200	2116.200			0.000	0.000 SRC - Phelps A-32NHZ	1898.470	1859.200	-643.300	2911.410	102.500	2992.690	2988.860
2216.200	2216.200			0.000	0.000 SRC - Phelps A-32NHZ	2056.300	2015.810	-630.550	2926.110	102.200	2999.970	2995.900
2316.200	2316.200			0.000	0.000 SRC - Phelps A-32NHZ	2148.030	2106.800	-622.370	2934.440	102.000	3007.010	3002.760
2416.200	2416.200			0.000	0.000 SRC - Phelps A-32NHZ	2288.710	2246.340	-609.000	2946.220	101.700	3013.300	3008.800
2516.200	2516.200			0.000	0.000 SRC - Phelps A-32NHZ	2389.800	2346.620	-599.100	2954.200	101.500	3019.100	3014.410
2616.200	2616.200			0.000	0.000 SRC - Phelps A-32NHZ	2574.820	2530.490	-581.930	2965.480	101.100	3026.250	3021.280
2716.200	2716.200			0.000	0.000 SRC - Phelps A-32NHZ	2664.000	2619.380	-575.950	2969.430	101.000	3026.320	3021.170
2816.200	2816.200			0.000	0.000 SRC - Phelps A-32NHZ	2727.000	2682.150	-571.770	2972.840	100.900	3030.290	3025.000
2916.200	2916.200			0.000	0.000 SRC - Phelps A-32NHZ	2804.260	2759.090	-566.640	2977.600	100.800	3035.110	3029.650
3016.200	3016.200			0.000	0.000 SRC - Phelps A-32NHZ	2950.710	2904.930	-556.850	2986.550	100.600	3040.060	3034.370
3116.200	3116.200			0.000	0.000 SRC - Phelps A-32NHZ	3028.650	2982.600	-551.610	2990.460	100.500	3043.840	3038.000
3216.200	3216.200			0.000	0.000 SRC - Phelps A-32NHZ	3106.850	3060.530	-547.060	2995.080	100.300	3048.610	3042.600
3316.200	3316.200			0.000	0.000 SRC - Phelps A-32NHZ	3188.210	3141.540	-542.060	3000.620	100.200	3054.190	3048.020
3416.200	3416.200			0.000	0.000 SRC - Phelps A-32NHZ	3269.560	3222.440	-535.960	3006.710	100.100	3060.240	3053.910
3516.200	3516.200			0.000	0.000 SRC - Phelps A-32NHZ	3326.770	3279.330	-532.260	3011.430	100.000	3067.270	3060.800
3616.200	3616.200			0.000	0.000 SRC - Phelps A-32NHZ	3500.560	3452.370	-523.340	3024.810	99.800	3074.120	3067.400
3716.200	3716.200			0.000	0.000 SRC - Phelps A-32NHZ	3572.670	3524.250	-520.130	3029.490	99.700	3079.800	3072.930
3816.200	3816.200			0.000	0.000 SRC - Phelps A-32NHZ	3650.630	3601.960	-517.620	3035.160	99.700	3086.430	3079.410
3916.200	3916.200			0.000	0.000 SRC - Phelps A-32NHZ	3732.510	3683.550	-515.040	3041.680	99.600	3093.730	3086.560
4016.200	4016.200			0.000	0.000 SRC - Phelps A-32NHZ	3805.740	3756.450	-512.470	3048.000	99.500	3101.680	3094.360
4116.200	4116.200			0.000	0.000 SRC - Phelps A-32NHZ	3983.290	3933.180	-504.250	3062.920	99.300	3109.540	3101.960
4200.000	4200.000			0.000	0.000 SRC - Phelps A-32NHZ	4061.050	4016.620	-499.770	3068.200	99.300	3114.400	3106.680
4216.200	4216.200			0.050	-0.040 SRC - Phelps A-32NHZ	4071.170	4026.670	-498.750	3069.350	139.000	3115.430	3107.680
4316.200	4316.130			2.700	0.000 SRC - Phelps A-32NHZ	4128.270	4048.270	-492.670	3071.210	141.200	3119.990	3110.940
4416.200	4415.740			9.390	-7.620 SRC - Phelps A-32NHZ	10456.010	7392.600	-431.780	-103.540	154.600	3010.890	2995.590
4516.200	4514.760			8.990	-16.720 SRC - Phelps A-32NHZ	10454.290	7392.410	-431.780	-109.220	149.800	2914.380	2898.920
4616.200	4612.910			34.700	-28.910 SRC - Phelps A-32NHZ	10459.000	7392.330	-431.790	-111.930	-158.100	2819.510	2803.870
4716.200	4709.940			53.270	-44.380 SRC - Phelps A-32NHZ	10470.750	7391.970	-431.820	-123.670	-160.100	2726.700	2710.840
4816.200	4805.560			75.710	-63.080 SRC - Phelps A-32NHZ	10486.490	7391.500	-431.870	-139.410	-161.500	2636.380	2620.240
4916.200	4899.530			101.970	-84.950 SRC - Phelps A-32NHZ	10491.000	7391.360	-431.880	-143.910	-162.900	2549.060	2532.640
5016.200	4991.580			131.970	-109.950 SRC - Phelps A-32NHZ	10506.860	7391.040	-431.870	-159.770	-163.600	2465.320	2448.540
5116.200	5001.460			165.630	-137.990 SRC - Phelps A-32NHZ	10523.000	7390.710	-431.850	-175.910	-164.200	2385.590	2368.390
5200.110	5155.020			196.630	-163.820 SRC - Phelps A-32NHZ	10529.870	7390.650	-431.850	-182.780	-164.700	2322.360	2304.790
5216.200	5168.960			202.810	-168.970 SRC - Phelps A-32NHZ	10534.900	7390.600	-431.860	-187.800	-164.600	2310.600	2292.920
5316.200	5255.560			241.230	-200.960 SRC - Phelps A-32NHZ	10555.000	7390.430	-431.870	-207.910	-165.200	2238.480	2220.290
5416.200	5342.160			279.550	-232.990 SRC - Phelps A-32NHZ	10562.360	7390.470	-431.950	-215.260	-163.700	2168.470	2149.700
5516.200	5428.760			318.060	-264.990 SRC - Phelps A-32NHZ	10587.000	7390.590	-432.190	-239.900	-162.800	2100.550	2081.090
5616.200	5515.360			356.480	-297.000 SRC - Phelps A-32NHZ	10606.800	7390.870	-432.470	-259.700	-162.200	2035.040	2014.840
5716.200	5601.960			394.900	-329.010 SRC - Phelps A-32NHZ	10639.470	7391.330	-432.930	-292.370	-161.100	1971.930	1950.840
5816.200	5688.560			433.320	-361.020 SRC - Phelps A-32NHZ	10670.440	7391.820	-433.280	-323.330	-160.100	1911.420	1889.380
5916.200	5775.160			471.740	-393.030 SRC - Phelps A-32NHZ	10706.200	7392.490	-433.460	-359.080	-158.800	1853.730	1830.630
6016.200	5861.760			510.160	-425.030 SRC - Phelps A-32NHZ	10742.440	7393.240	-433.410	-395.310	-157.600	1799.070	1774.810
6116.200	5948.360			548.570	-457.040 SRC - Phelps A-32NHZ	10790.210	7394.160	-433.230	-443.080	-155.900	1747.700	1722.110
6216.200	6034.960			586.990	-489.050 SRC - Phelps A-32NHZ	10869.000	7394.250	-432.050	-521.850	-153.200	1699.180	1671.920
6316.200	6121.560			625.410	-521.060 SRC - Phelps A-32NHZ	10901.150	7394.000	-431.350	-553.990	-152.000	1634.370	1625.700
6416.200	6208.160			663.830	-553.070 SRC - Phelps A-32NHZ	10935.290	7393.700	-430.580	-586.230	-150.800	1569.610	1558.840
6516.200	6294.750			702.250	-585.070 SRC - Phelps A-32NHZ	10967.400	7393.620	-429.860	-620.220	-149.600	1517.960	1506.240
6616.200	6381.350			740.670	-617.080 SRC - Phelps A-32NHZ	11011.990	7392.880	-428.800	-664.790	-148.000	1546.970	1515.550
6716.200	6467.950			779.090	-649.090 SRC - Phelps A-32NHZ	11052.050	7392.050	-427.680	-704.830	-146.600	1520.960	1485.850
6816.200	6554.550			817.500	-681.100 SRC - Phelps A-32NHZ	11086.560	7391.050	-426.740	-739.310	-145.300	1500.420	1463.670
6916.200	6641.150			855.920	-713.110 SRC - Phelps A-32NHZ	11115.860	7390.040	-426.060	-768.590	-144.200	1485.730	1447.440
7016.200	6727.750			894.340	-745.110 SRC - Phelps A-32NHZ	11139.110	7389.190	-425.650	-791.820	-143.300	1477.180	1437.480
7116.200	6814.350			932.760	-777.120 SRC - Phelps A-32NHZ	11161.920	7388.340	-425.320	-814.610	-142.500	1474.880	1433.870
7119.220	6816.970			933.920	-778.090 SRC - Phelps A-32NHZ	11162.800	7388.310	-425.310	-815.490	-142.400	1474.900	1433.860
7216.200	6900.950			971.1								

7916.200	7480.250	1285.780	-1023.450 SRC - Phelps A-32NHZ	11348.360	7381.840	-424.620	-1000.930	-153.600	1713.370	1666.460	36.520
8016.200	7530.440	1369.960	-1042.220 SRC - Phelps A-32NHZ	11364.670	7381.360	-424.810	-1017.230	-154.800	1801.120	1753.980	38.210
8116.200	7561.550	1464.030	-1054.010 SRC - Phelps A-32NHZ	11374.450	7381.070	-424.920	-1027.000	-149.500	1897.750	1850.450	40.130
8215.470	7572.000	1562.450	-1058.210 SRC - Phelps A-32NHZ	11377.210	7380.980	-424.950	-1029.760	6.400	1996.770	1949.390	42.150
8216.200	7572.000	1563.180	-1058.210 SRC - Phelps A-32NHZ	11377.200	7380.980	-424.950	-1029.750	6.400	1997.490	1950.110	42.160
8316.200	7572.000	1663.180	-1058.570 SRC - Phelps A-32NHZ	11376.410	7381.010	-424.940	-1028.970	6.600	2097.050	2049.620	44.220
8416.200	7572.000	1763.180	-1058.930 SRC - Phelps A-32NHZ	11375.620	7381.030	-424.930	-1028.180	6.800	2196.640	2149.170	46.270
8516.200	7572.000	1863.180	-1059.290 SRC - Phelps A-32NHZ	11374.840	7381.050	-424.920	-1027.390	7.100	2296.280	2248.760	48.330
8616.200	7572.000	1963.180	-1059.640 SRC - Phelps A-32NHZ	11374.050	7381.080	-424.900	-1026.610	7.300	2395.940	2348.380	50.380
8716.200	7572.000	2063.180	-1060.000 SRC - Phelps A-32NHZ	11373.260	7381.100	-424.910	-1025.820	7.500	2495.630	2448.030	52.430
8816.200	7572.000	2163.180	-1060.360 SRC - Phelps A-32NHZ	11372.480	7381.120	-424.900	-1025.030	7.800	2595.340	2547.700	54.480
8916.200	7572.000	2263.170	-1060.720 SRC - Phelps A-32NHZ	11371.690	7381.150	-424.890	-1024.250	8.000	2695.080	2647.400	56.530
9016.200	7572.000	2363.170	-1061.080 SRC - Phelps A-32NHZ	11370.900	7381.170	-424.880	-1023.460	8.200	2794.830	2747.110	58.570
9116.200	7572.000	2463.170	-1061.440 SRC - Phelps A-32NHZ	11370.110	7381.190	-424.870	-1022.670	8.500	2894.600	2846.840	60.610
9216.200	7572.000	2563.170	-1061.790 SRC - Phelps A-32NHZ	11369.330	7381.220	-424.860	-1021.890	8.700	2994.380	2946.590	62.650
9316.200	7572.000	2663.170	-1062.150 SRC - Phelps A-32NHZ	11368.540	7381.240	-424.850	-1021.100	8.900	3094.180	3046.350	64.680
9416.200	7572.000	2763.170	-1062.510 SRC - Phelps A-32NHZ	11367.750	7381.270	-424.840	-1020.310	9.200	3193.990	3146.120	66.710
9516.200	7572.000	2863.170	-1062.870 SRC - Phelps A-32NHZ	11366.960	7381.290	-424.830	-1019.520	9.400	3293.820	3245.900	68.740
9616.200	7572.000	2963.170	-1063.230 SRC - Phelps A-32NHZ	11366.180	7381.310	-424.830	-1018.740	9.600	3393.650	3345.700	70.770
9716.200	7572.000	3063.170	-1063.590 SRC - Phelps A-32NHZ	11365.390	7381.340	-424.820	-1017.950	9.900	3493.490	3445.500	72.790
9816.200	7572.000	3163.170	-1063.940 SRC - Phelps A-32NHZ	11364.600	7381.360	-424.810	-1017.160	10.100	3593.340	3545.310	74.810
9916.200	7572.000	3263.170	-1064.300 SRC - Phelps A-32NHZ	11363.820	7381.380	-424.800	-1016.380	10.300	3693.200	3645.130	76.830
10016.200	7572.000	3363.170	-1064.660 SRC - Phelps A-32NHZ	11363.030	7381.410	-424.790	-1015.590	10.600	3793.070	3744.950	78.850
10116.200	7572.000	3463.170	-1065.020 SRC - Phelps A-32NHZ	11362.240	7381.430	-424.780	-1014.800	10.800	3892.940	3844.790	80.860
10216.200	7572.000	3563.170	-1065.380 SRC - Phelps A-32NHZ	11361.450	7381.450	-424.770	-1014.020	11.000	3992.820	3944.630	82.860
10316.200	7572.000	3663.170	-1065.740 SRC - Phelps A-32NHZ	11360.670	7381.480	-424.760	-1013.230	11.200	4092.700	4044.480	84.870
10416.200	7572.000	3763.160	-1066.090 SRC - Phelps A-32NHZ	11359.880	7381.500	-424.750	-1012.440	11.500	4192.590	4144.330	86.870
10516.200	7572.000	3863.160	-1066.450 SRC - Phelps A-32NHZ	11359.090	7381.520	-424.740	-1011.660	11.700	4292.490	4244.180	88.870
10616.200	7572.000	3963.160	-1066.810 SRC - Phelps A-32NHZ	11358.300	7381.550	-424.740	-1010.870	11.900	4392.390	4344.040	90.860
10716.200	7572.000	4063.160	-1067.170 SRC - Phelps A-32NHZ	11357.520	7381.570	-424.730	-1010.080	12.200	4492.290	4443.910	92.850
10816.200	7572.000	4163.160	-1067.530 SRC - Phelps A-32NHZ	11356.730	7381.590	-424.720	-1009.300	12.400	4592.200	4543.780	94.840
10916.200	7572.000	4263.160	-1067.890 SRC - Phelps A-32NHZ	11355.940	7381.620	-424.710	-1008.510	12.600	4692.110	4643.650	96.820
11016.200	7572.000	4363.160	-1068.250 SRC - Phelps A-32NHZ	11355.160	7381.640	-424.700	-1007.720	12.800	4792.030	4743.520	98.800
11116.200	7572.000	4463.160	-1068.600 SRC - Phelps A-32NHZ	11354.370	7381.660	-424.690	-1006.930	13.100	4891.940	4843.400	100.780
11216.200	7572.000	4563.160	-1068.960 SRC - Phelps A-32NHZ	11353.580	7381.690	-424.680	-1006.150	13.300	4991.870	4943.280	102.750
11316.200	7572.000	4663.160	-1069.320 SRC - Phelps A-32NHZ	11352.790	7381.710	-424.670	-1005.360	13.500	5091.790	5043.170	104.720
11416.200	7572.000	4763.160	-1069.680 SRC - Phelps A-32NHZ	11352.010	7381.730	-424.660	-1004.570	13.700	5191.720	5143.060	106.690
11516.200	7572.000	4863.160	-1070.040 SRC - Phelps A-32NHZ	11351.220	7381.760	-424.650	-1003.790	14.000	5291.650	5242.940	108.650
11616.200	7572.000	4963.160	-1070.400 SRC - Phelps A-32NHZ	11350.430	7381.780	-424.650	-1003.000	14.200	5391.580	5342.840	110.610
11716.200	7572.000	5063.160	-1070.750 SRC - Phelps A-32NHZ	11349.640	7381.800	-424.640	-1002.210	14.400	5491.520	5442.730	112.570
11816.200	7572.000	5163.160	-1071.110 SRC - Phelps A-32NHZ	11348.860	7381.830	-424.630	-1001.430	14.600	5591.450	5542.630	114.520
11916.200	7572.000	5263.160	-1071.470 SRC - Phelps A-32NHZ	11348.070	7381.850	-424.620	-1000.640	14.900	5691.390	5642.520	116.470
12016.200	7572.000	5363.150	-1071.830 SRC - Phelps A-32NHZ	11347.280	7381.870	-424.610	-999.850	15.100	5791.330	5742.420	118.410
12116.200	7572.000	5463.150	-1072.190 SRC - Phelps A-32NHZ	11346.500	7381.900	-424.600	-999.070	15.300	5891.280	5842.330	120.350
12216.200	7572.000	5563.150	-1072.550 SRC - Phelps A-32NHZ	11345.710	7381.920	-424.590	-998.280	15.500	5991.220	5942.230	122.290
12316.200	7572.000	5663.150	-1072.900 SRC - Phelps A-32NHZ	11344.920	7381.940	-424.580	-997.490	15.800	6091.170	6042.130	124.220
12416.200	7572.000	5763.150	-1073.260 SRC - Phelps A-32NHZ	11344.130	7381.970	-424.570	-996.710	16.000	6191.120	6142.040	126.150
12516.200	7572.000	5863.150	-1073.620 SRC - Phelps A-32NHZ	11343.350	7381.990	-424.560	-995.920	16.200	6291.070	6241.950	128.080
12616.200	7572.000	5963.150	-1073.980 SRC - Phelps A-32NHZ	11342.560	7382.010	-424.550	-995.130	16.400	6391.020	6341.850	130.000
12716.200	7572.000	6063.150	-1074.340 SRC - Phelps A-32NHZ	11341.770	7382.040	-424.550	-994.340	16.600	6490.970	6441.760	131.920
12816.200	7572.000	6163.150	-1074.700 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	6590.920	6541.680	133.830
12916.200	7572.000	6263.150	-1075.050 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	6690.880	6641.580	135.710
13016.200	7572.000	6363.150	-1075.410 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	6790.840	6741.480	137.590
13116.200	7572.000	6463.150	-1075.770 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	6890.790	6841.380	139.460
13216.200	7572.000	6563.150	-1076.130 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	6990.750	6941.290	141.320
13316.200	7572.000	6663.150	-1076.490 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	7090.710	7041.190	143.180
13416.200	7572.000	6763.150	-1076.850 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	7190.670	7141.100	145.040
13516.200	7572.000	6863.150	-1077.210 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	7290.640	7241.000	146.890
13616.200	7572.000	6963.140	-1077.560 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	7390.600	7340.910	148.740
13716.200	7572.000	7063.140	-1077.920 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	7490.560	7440.820	150.590
13816.200	7572.000	7163.140	-1078.280 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	7590.530	7540.730	152.430
13916.200	7572.000	7263.140	-1078.640 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	7690.500	7640.640	154.260
14016.200	7572.000	7363.140	-1079.000 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	7790.460	7740.550	156.090
14116.200	7572.000	7463.140	-1079.360 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	7890.430	7840.470	157.920
14216.200	7572.000	7563.140	-1079.710 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	7990.400	7940.380	159.740
14316.200	7572.000	7663.140	-1080.070 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	8090.370	8040.290	161.560
14416.200	7572.000	7763.140	-1080.430 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	8190.340	8140.210	163.370
14516.200	7572.000	7863.140	-1080.790 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	8290.310	8240.120	165.180
14616.200	7572.000	7963.140	-1081.150 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	8390.280	8340.040	166.980
14716.200	7572.000	8063.140	-1081.510 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	8490.250	8439.950	168.780
14816.200	7572.000	8163.140	-1081.860 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	8590.230	8539.870	170.580
14916.200	7572.000	8263.140	-1082.220 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	8690.200	8639.780	172.370
15016.200	7572.000	8363.140	-1082.580 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	8790.180	8739.700	174.150
15116.200	7572.000	8463.130	-1082.940 SRC - Phelps A-32NHZ	11341.000	7382.060	-424.540	-993.570	16.900	8890.150	8839.620	175.93