

Results of Directional Survey

API number:	30-025-41532		
OGRID:		Operator:	MEWBOURNE OIL CO
		Property:	SCHARB 10 PA STATE # 1H

surface	ULSTR:	P	10	T 19S	R 34E
				185 FSL	990 FEL

BH Loc	ULSTR:	A	10	T 19S	R 34E
15300	MD	10705.5	TVD	334 FNL	733 FEL
				4946 FSL	

Top Perf/OH	ULSTR:	P	10	T 19S	R 34E
10960	MD	10786.8	TVD	613 FSL	874 FEL

Bot Perf/OH	ULSTR:	A	10	T 19S	R 34E
15136	MD	10711.7	TVD	498 FNL	737 FEL
				4782 FSL	

	MD	N/S	E/W	VD
	10930	399.38	114.55	10776.95
TOP PERFS/OH	10960	427.69	115.85	10786.77
	10962	429.58	115.94	10787.42
	15106	4567.39	252.09	10712.78
BOT PERFS/OH	15136	4597.37	252.72	10711.73
	15169	4630.34	253.41	10710.58

NEXT TO LAST	15247	4708.26	255.38	10707.72
LAST READING	15300	4761.19	256.86	10705.50
TD	15300	4761.19	256.86	10705.50

Surface Location	185	FS	990	FE
Projected BHL	4946	FS	733	FE
Location of				
Top Perfs/OH	613	FS	874	FE
Bottom Perfs/OH	4782	FS	737	FE

SUMMARY of Subsurface Locations

Surface Location	P-10-19S-34E	185	FS	990	FE	Vert. Depth
Top Perfs/OH	P-10-19S-34E	613	FS	874	FE	10786.77
Bottom Perfs/OH	A-10-19S-34E	4782	FS	737	FE	10711.73
Projected TD	A-10-19S-34E	4946	FS	733	FE	10705.50

MAR 25 2014

MAR 21 2014



RECEIVED

COMPANY: Mewbourne Oil Company
 WELL: Scharb 10 PA State #1H
 COUNTY: Lea County N.M.
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Patterson #45



GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 6.87°

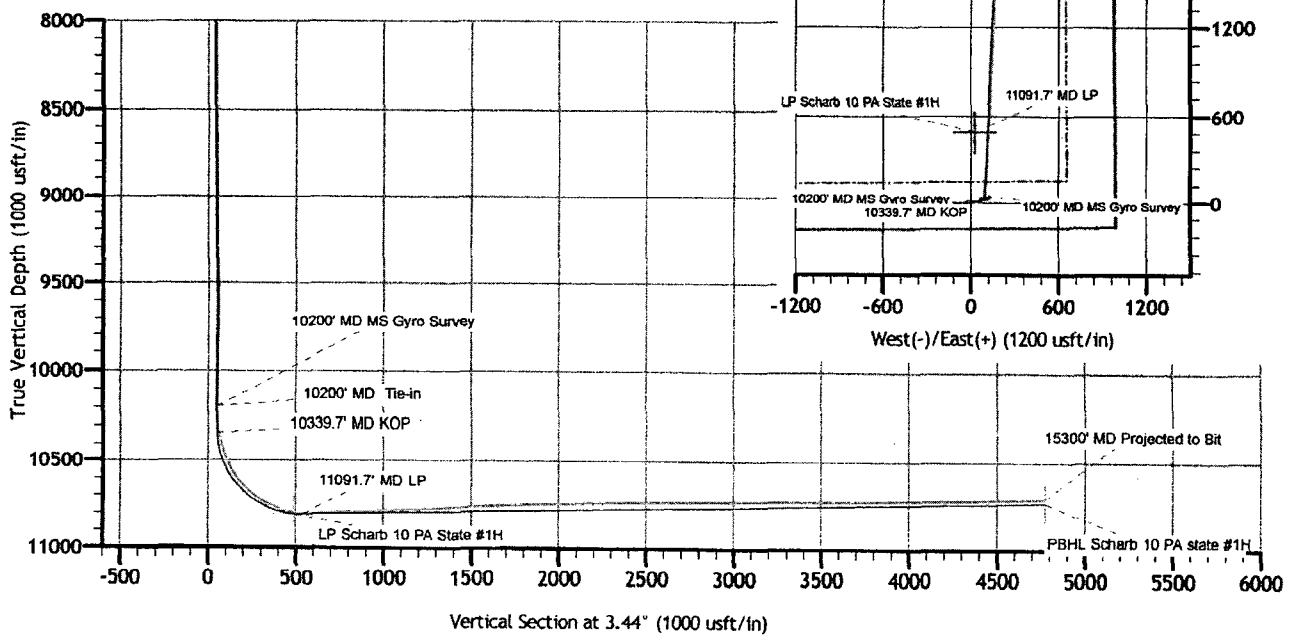
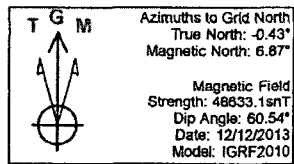
OFFICE: 936.582.7296

GEODETTIC ZONE: New Mexico East 3001
 GL 3922 + 20 @ 3942.0usft (Patterson #45)
 GROUND ELEVATION: 3922.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	607616.69	743431.57	32° 40' 4.603 N	103° 32' 32.205 W	

PLAN SECTIONS

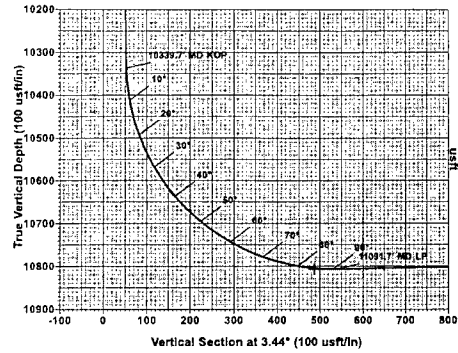
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	10200.0	0.78	353.75	10196.4	45.3	96.9	0.00	0.00	51.0	
2	10339.7	0.78	353.75	10336.0	47.2	96.7	0.00	0.00	52.9	
3	11091.7	91.01	2.32	10807.0	532.7	115.4	12.00	8.57	538.7	
4	15328.1	91.01	2.32	10732.0	4765.0	285.7	0.00	0.00	4773.6	PBHL Scharb 10 PA state #1H





Project: Lea County N.M.
Site: Section 10-19S-34E Scharb 10 PA State #1H
Well: Scharb 10 PA State #1H
Wellbore: Original Hole
Plan: Plan#2
Rig: Patterson #45

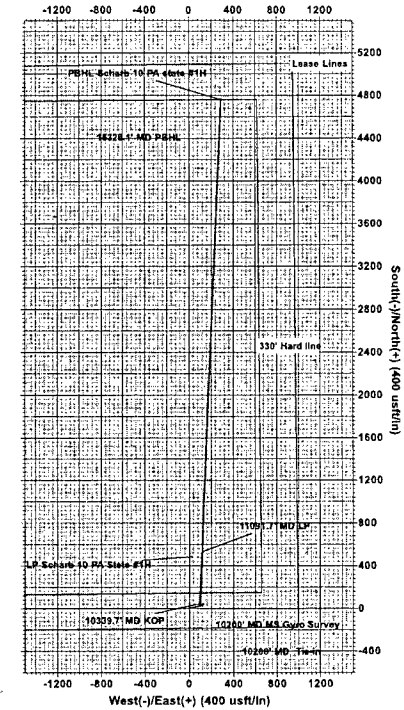
To convert a Magnetic Direction to a Grid Direction, Add 6.87°



SURFACE LOCATION:

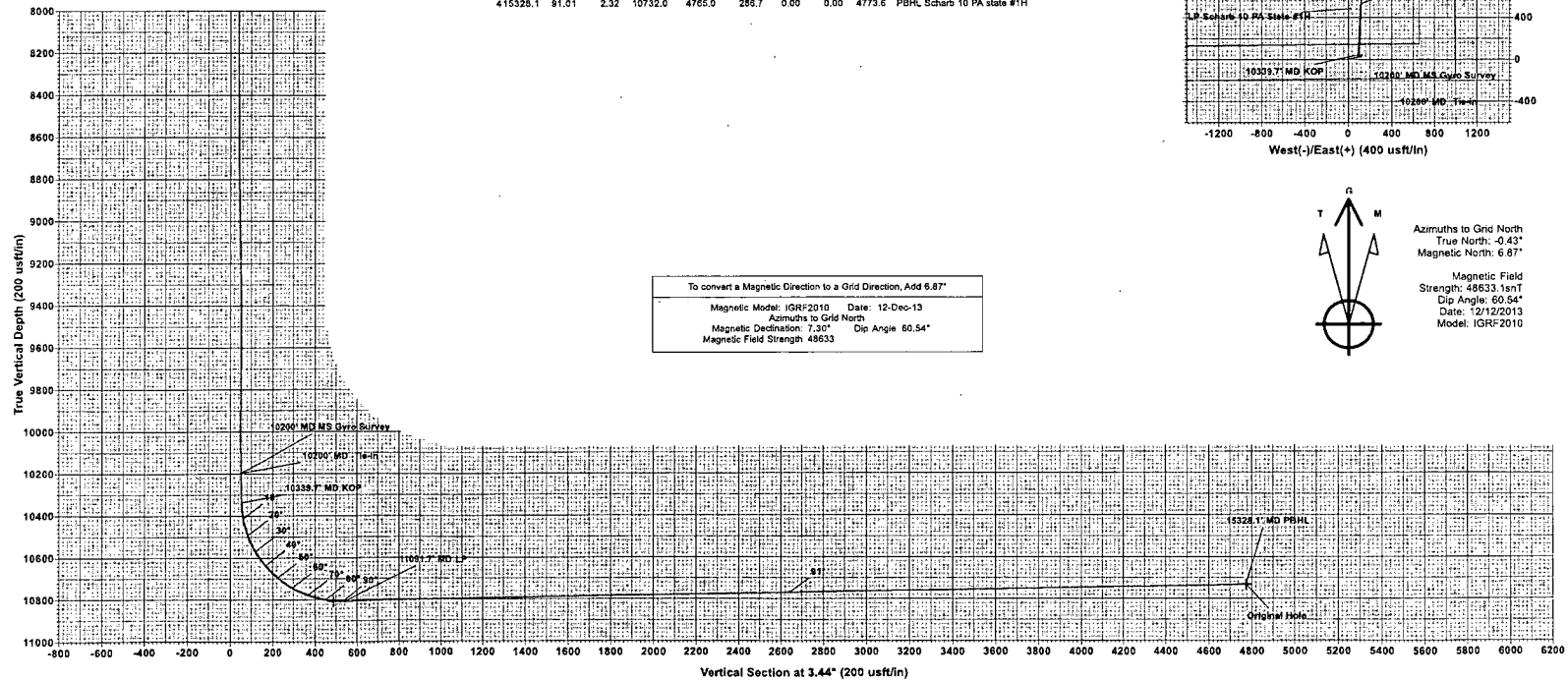
Datum: GL 3922 + 20 @ 3942 Offset (Patterson #45)
US State Plane 1927 (Exact solution)
New Mexico East 3001

Northing	Easting	Latitude	Longitude
807618.69	743431.57	32° 40' 4.603 N	103° 32' 32.205 W



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dip	TFace	VFace	Target
1	10200.0	0.78	353.75	10198.4	45.3	88.9	0.00	0.00	51.0	
2	10339.7	0.78	353.75	10336.0	47.2	86.7	0.00	0.00	52.9	
3	11091.7	91.01	2.32	10807.0	532.7	115.4	12.00	8.57	536.7	PSHL Scharb 10 PA state #1H
4	115328.1	91.01	2.32	10732.0	4765.0	285.7	0.00	0.00	4773.6	



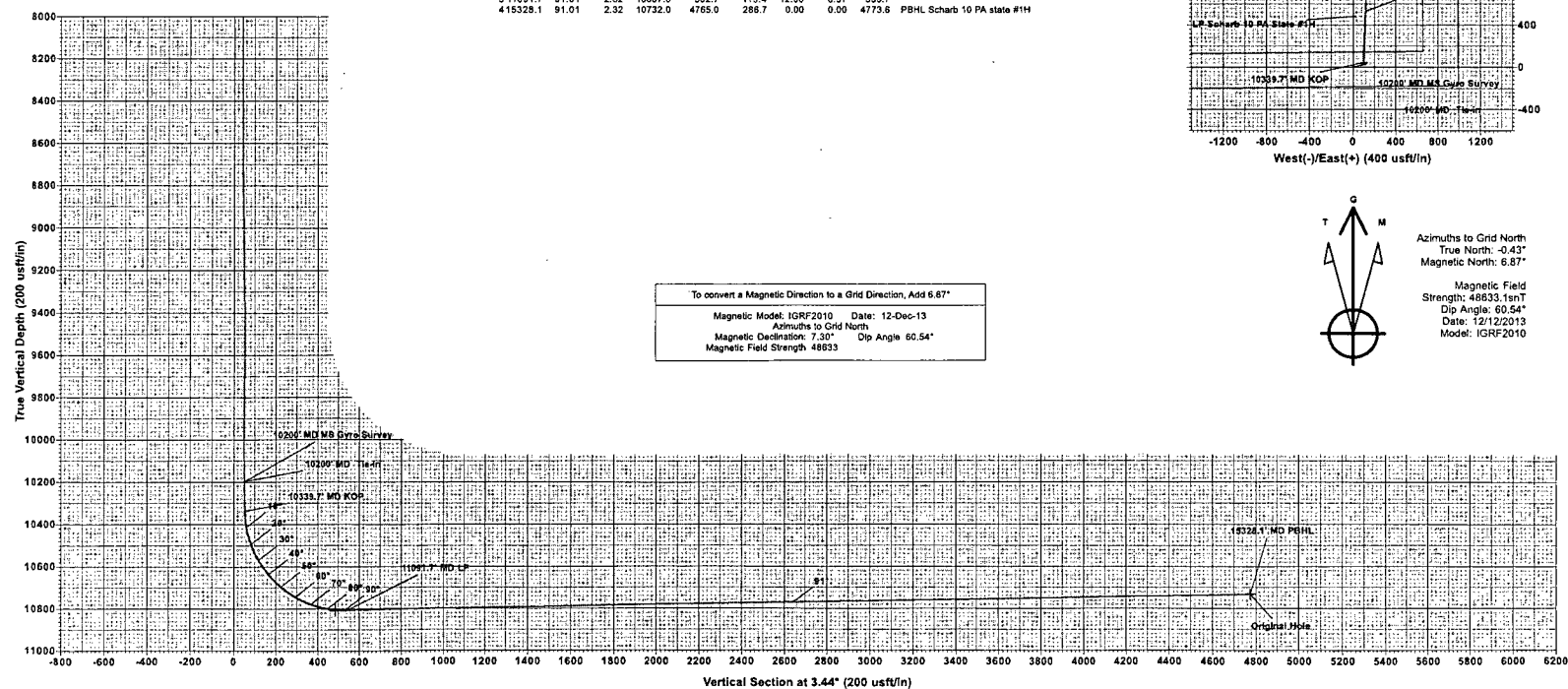
To convert a Magnetic Direction to a Grid Direction, Add 6.87°

Magnetic Model: IGRF2010 Date: 12-Dec-13
Azimuths to Grid North
Magnetic Declination: 7.30° Dip Angle: 60.54°
Magnetic Field Strength: 48633



Azimuths to Grid North
True North: -0.43°
Magnetic North: 6.87°

Magnetic Field
Strength: 48633.1 nT
Dip Angle: 60.54°
Date: 12/12/2013
Model: IGRF2010





Job Number: C141003
 Company: Mewbourne Oil Company
 Lease/Well: Scharb 10 PA State # 1 H.
 Location: Lea County
 Rig Name: Patterson UTI Rig # 45
 RKB: N/A
 G.L. or M.S.L.: N/A

State/Country: New Mexico / USA
 Declination: 6.87° Corrected to Grid
 Grid: 6.87°
 File name: C:\WINSERVE\DOCS\C141003.SVY
 Date/Time: 14-Feb-14 / 15:38
 Curve Name: SES MWD SURVEY RAN ON 1-16-14

Stryker Energy Directional Services, LLC.

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 3.44
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
Distance FT									
Direction Deg									
Tie-In Data Provided by MS Survey									
10200.00	.78	353.75	10196.35	45.28	96.94	51.02	106.99	64.96	.00
10233.00	1.90	.20	10229.34	46.05	96.92	51.78	107.30	64.59	3.42
10265.00	3.60	357.60	10261.30	47.58	96.88	53.31	107.93	63.84	5.33
10296.00	5.30	356.10	10292.21	49.99	96.74	55.70	108.89	62.67	5.50
10328.00	7.70	358.30	10324.00	53.60	96.57	59.30	110.45	60.97	7.54
10360.00	10.40	2.00	10355.60	58.63	96.61	64.33	113.01	58.75	8.63
10392.00	13.40	3.70	10386.91	65.22	96.95	70.92	116.85	56.07	9.44
10423.00	16.10	4.20	10416.88	73.10	97.50	78.81	121.86	53.14	8.72
10455.00	18.80	4.70	10447.41	82.66	98.25	88.41	128.39	49.92	8.45
10487.00	21.30	3.90	10477.47	93.60	99.06	99.38	136.29	46.62	7.86
10519.00	23.50	3.90	10507.05	105.77	99.89	111.57	145.48	43.36	6.87
10551.00	26.20	3.10	10536.08	119.19	100.71	125.02	156.04	40.20	8.50
10581.00	29.50	2.90	10562.61	133.18	101.44	139.03	167.41	37.30	11.00
10612.00	34.70	2.70	10588.86	149.63	102.24	155.49	181.23	34.35	16.78
10644.00	39.60	2.50	10614.36	168.93	103.12	174.81	197.91	31.40	15.32
10676.00	42.80	2.30	10638.43	189.98	104.00	195.88	216.59	28.70	10.01
10707.00	45.50	2.10	10660.67	211.56	104.83	217.47	236.11	26.36	8.72
10739.00	48.40	2.50	10682.51	234.92	105.77	240.85	257.63	24.24	9.11
10771.00	52.40	3.30	10702.91	259.54	107.02	265.50	280.74	22.41	12.65
10803.00	56.60	3.30	10721.48	285.54	108.52	291.54	305.47	20.81	13.12
10834.00	61.50	3.20	10737.42	312.08	110.03	318.12	330.91	19.42	15.81
10866.00	64.90	3.00	10751.85	340.60	111.57	346.68	358.40	18.14	10.64
10898.00	66.90	2.90	10764.92	369.77	113.07	375.89	386.67	17.00	6.26
10930.00	68.90	2.80	10776.95	399.38	114.55	405.53	415.48	16.00	6.26

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
10962.00	72.90	2.50	10787.42	429.58	115.94	435.76	444.95	15.10	12.53
10993.00	76.70	2.70	10795.55	459.46	117.30	465.67	474.19	14.32	12.27
11025.00	81.30	2.80	10801.65	490.82	118.81	497.07	505.00	13.61	14.38
11052.00	85.50	3.30	10804.76	517.60	120.23	523.88	531.38	13.08	15.66
11081.00	90.50	3.40	10805.77	546.52	121.93	552.86	559.96	12.58	17.24
11113.00	93.30	3.60	10804.71	578.44	123.88	584.84	591.56	12.09	8.77
11145.00	93.90	3.20	10802.70	610.32	125.77	616.77	623.15	11.64	2.25
11176.00	94.50	3.30	10800.43	641.19	127.53	647.69	653.75	11.25	1.96
11208.00	92.60	3.40	10798.45	673.07	129.39	679.63	685.40	10.88	5.95
11240.00	91.80	3.20	10797.22	705.00	131.23	711.60	717.11	10.54	2.58
11304.00	92.60	3.30	10794.76	768.85	134.86	775.55	780.58	9.95	1.26
11367.00	91.20	2.80	10792.67	831.72	138.21	838.52	843.13	9.43	2.36
11431.00	91.60	2.60	10791.11	895.63	141.22	902.49	906.70	8.96	.70
11494.00	92.50	2.40	10788.85	958.53	143.97	965.44	969.28	8.54	1.46
11558.00	91.70	2.20	10786.51	1022.43	146.54	1029.39	1032.88	8.16	1.29
11621.00	92.40	2.30	10784.26	1085.35	149.01	1092.33	1095.53	7.82	1.12
11685.00	92.80	2.70	10781.35	1149.22	151.80	1156.26	1159.20	7.52	.88
11748.00	91.90	1.80	10778.77	1212.12	154.27	1219.19	1221.89	7.25	2.02
11812.00	92.30	1.50	10776.42	1276.05	156.11	1283.11	1285.56	6.97	.78
11875.00	93.10	2.00	10773.46	1338.95	158.03	1346.02	1348.24	6.73	1.50
11907.00	93.60	1.50	10771.59	1370.88	159.01	1377.95	1380.07	6.62	2.21
11971.00	92.70	1.60	10768.07	1434.76	160.74	1441.82	1443.73	6.39	1.41
12034.00	93.30	1.00	10764.77	1497.65	162.16	1504.68	1506.41	6.18	1.35
12066.00	93.80	.70	10762.79	1529.59	162.64	1536.59	1538.21	6.07	1.82
12130.00	92.80	.30	10759.11	1593.48	163.19	1600.40	1601.81	5.85	1.68
12193.00	92.80	359.80	10756.03	1656.40	163.25	1663.21	1664.43	5.63	.79
12257.00	92.90	1.00	10752.85	1720.32	163.70	1727.04	1728.09	5.44	1.88
12320.00	92.10	2.10	10750.10	1783.24	165.40	1789.95	1790.89	5.30	2.16
12381.00	92.00	1.90	10747.92	1844.16	167.53	1850.89	1851.75	5.19	.37
12445.00	92.30	2.00	10745.52	1908.08	169.70	1914.82	1915.61	5.08	.49
12508.00	90.70	2.50	10743.87	1971.01	172.17	1977.78	1978.51	4.99	2.66
12572.00	90.90	2.50	10742.97	2034.94	174.97	2041.77	2042.45	4.91	.31
12635.00	91.20	2.70	10741.82	2097.86	177.82	2104.75	2105.39	4.85	.57
12699.00	90.60	2.70	10740.81	2161.78	180.84	2168.74	2169.33	4.78	.94
12762.00	91.10	2.30	10739.88	2224.72	183.59	2231.72	2232.28	4.72	1.02
12826.00	91.60	2.10	10738.37	2288.65	186.04	2295.69	2296.20	4.65	.84
12890.00	90.30	2.60	10737.31	2352.59	188.67	2359.67	2360.14	4.59	2.18
12953.00	90.30	2.40	10736.98	2415.53	191.41	2422.66	2423.10	4.53	.32
13017.00	90.70	1.70	10736.42	2479.48	193.70	2486.64	2487.04	4.47	1.26
13080.00	90.90	1.90	10735.54	2542.44	195.68	2549.61	2549.96	4.40	.45
13144.00	91.10	1.50	10734.42	2606.41	197.58	2613.57	2613.88	4.34	.70
13208.00	90.50	1.70	10733.53	2670.38	199.37	2677.53	2677.81	4.27	.99
13269.00	90.60	1.90	10732.95	2731.34	201.28	2738.50	2738.75	4.21	.37
13334.00	90.90	1.20	10732.10	2796.31	203.04	2803.46	2803.67	4.15	1.17
13397.00	91.20	1.50	10730.94	2859.28	204.52	2866.40	2866.59	4.09	.67

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
13461.00	90.30	1.70	10730.10	2923.25	206.31	2930.37	2930.52	4.04	1.44
13524.00	90.60	1.50	10729.61	2986.23	208.07	2993.33	2993.47	3.99	.57
13588.00	90.80	.70	10728.83	3050.21	209.30	3057.27	3057.38	3.93	1.29
13651.00	90.10	2.10	10728.33	3113.19	210.84	3120.23	3120.32	3.87	2.48
13715.00	90.30	2.50	10728.11	3177.13	213.41	3184.21	3184.29	3.84	.70
13778.00	90.70	1.70	10727.56	3240.09	215.71	3247.19	3247.26	3.81	1.42
13842.00	90.20	2.50	10727.06	3304.04	218.06	3311.17	3311.23	3.78	1.47
13905.00	89.50	2.60	10727.22	3366.98	220.86	3374.17	3374.22	3.75	1.12
13969.00	89.70	2.20	10727.67	3430.92	223.54	3438.15	3438.20	3.73	.70
14032.00	90.20	1.80	10727.72	3493.88	225.74	3501.13	3501.17	3.70	1.02
14096.00	90.50	1.10	10727.33	3557.86	227.36	3565.09	3565.12	3.66	1.19
14159.00	90.90	.50	10726.56	3620.85	228.24	3628.02	3628.04	3.61	1.14
14223.00	90.20	1.60	10725.95	3684.84	229.41	3691.96	3691.97	3.56	2.04
14286.00	90.40	1.70	10725.62	3747.81	231.23	3754.93	3754.93	3.53	.35
14349.00	90.80	1.60	10724.96	3810.78	233.04	3817.90	3817.90	3.50	.65
14413.00	91.10	1.20	10723.90	3874.75	234.60	3881.85	3881.85	3.46	.78
14476.00	90.60	2.00	10722.96	3937.72	236.36	3944.81	3944.81	3.44	1.50
14540.00	90.50	1.90	10722.35	4001.68	238.54	4008.78	4008.78	3.41	.22
14603.00	91.20	1.10	10721.41	4064.65	240.19	4071.74	4071.74	3.38	1.69
14667.00	90.20	2.10	10720.63	4128.62	241.98	4135.70	4135.70	3.35	2.21
14725.00	89.90	1.90	10720.58	4186.58	244.00	4193.68	4193.69	3.34	.62
14789.00	90.60	1.30	10720.30	4250.56	245.79	4257.65	4257.66	3.31	1.44
14852.00	91.00	.80	10719.42	4313.54	246.94	4320.58	4320.60	3.28	1.02
14916.00	91.90	.60	10717.80	4377.51	247.72	4384.49	4384.52	3.24	1.44
14979.00	91.10	1.90	10716.15	4440.47	249.10	4447.42	4447.46	3.21	2.42
15043.00	91.40	1.20	10714.76	4504.44	250.83	4511.37	4511.41	3.19	1.19
15106.00	92.20	1.10	10712.78	4567.39	252.09	4574.29	4574.34	3.16	1.28
15169.00	91.80	1.30	10710.58	4630.34	253.41	4637.20	4637.27	3.13	.71
15247.00	92.40	1.60	10707.72	4708.26	255.38	4715.10	4715.18	3.10	.86
Projection to Bit									
15300.00	92.40	1.60	10705.50	4761.19	256.86	4768.03	4768.12	3.09	.00