



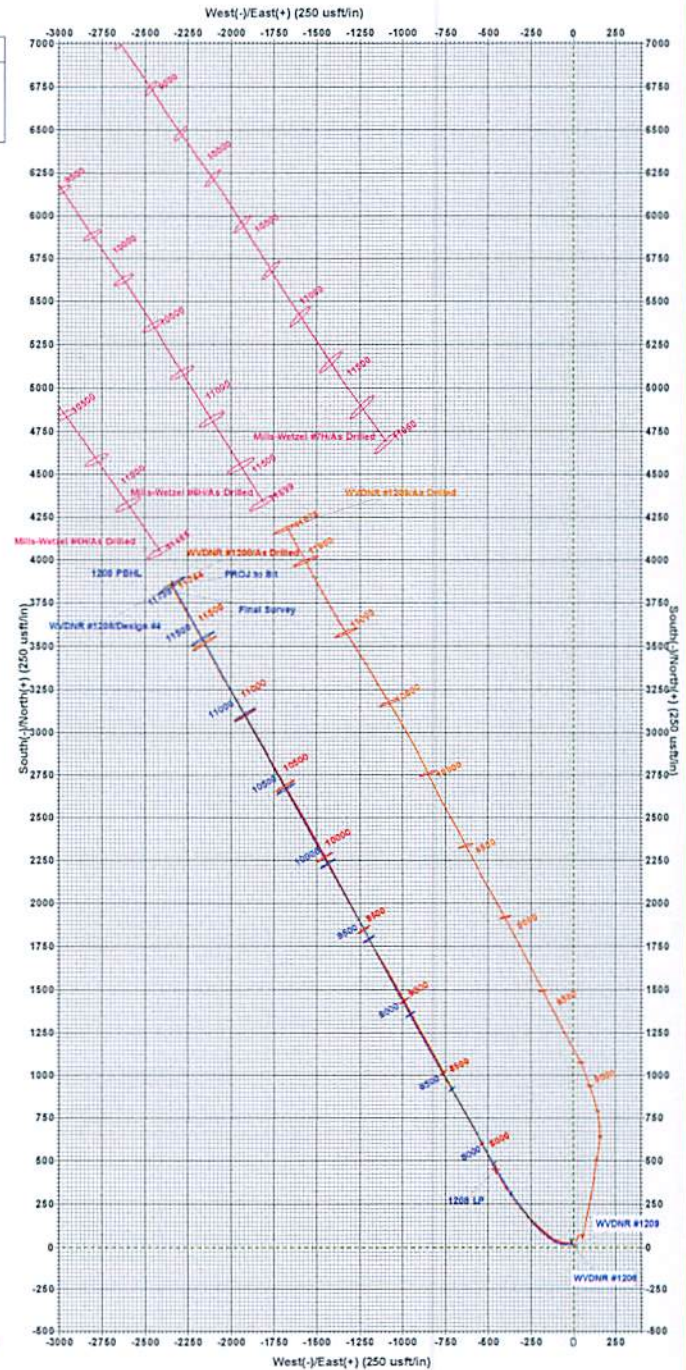
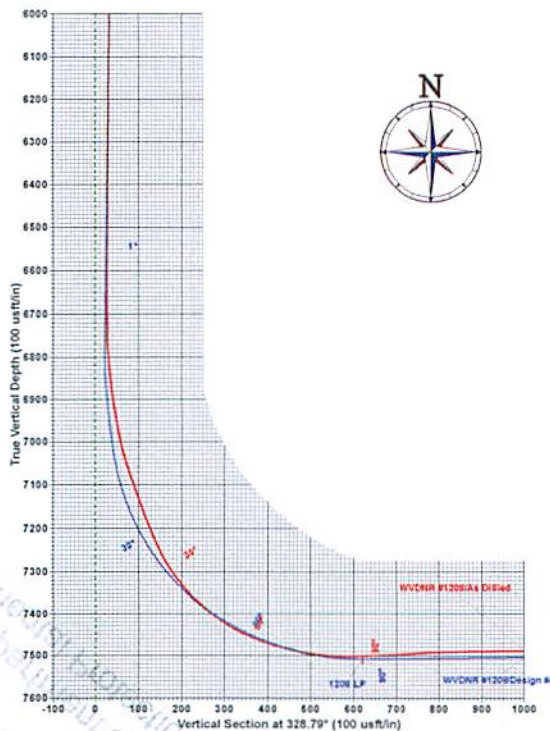
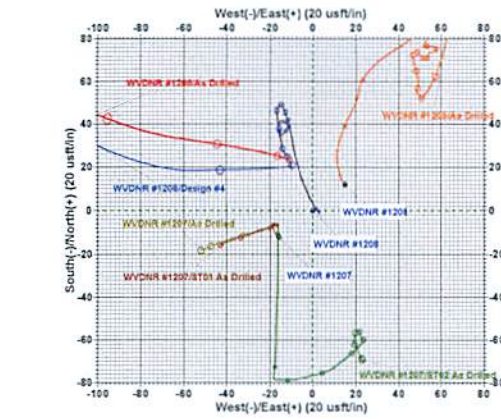
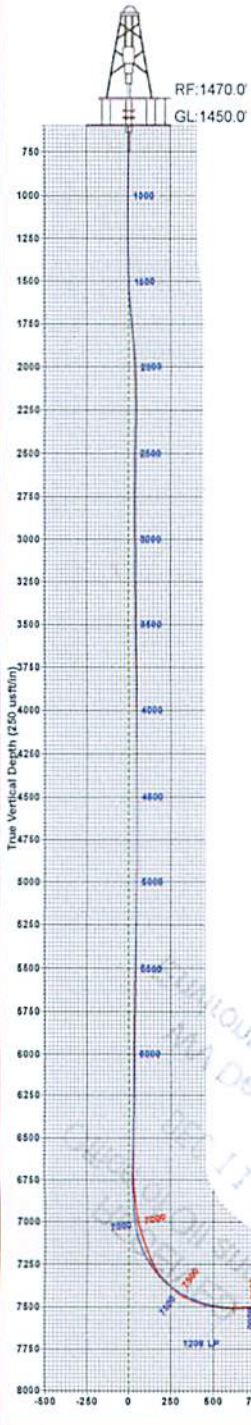
Azimuths to Grid North
True North 0.74°
Magnetic North -7.78°

Magnetic Field
Strength: 52069 Gs/T
Dip Angle: 67.18°
Date: 2/24/2012
Model: IGRF2010_14

WVDNR #1208
WVDNR Pad 6
20' RKB - 1450' GL @ 1470.0usft (Warren 12)
Latitude: 39° 30' 18.526 N
Longitude: 80° 39' 27.839 W
Northing: 368200.00
Easting: 1673336.00
Design #4

SECTION DETAILS									
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect	Target
6350.0	0.78	150.88	6347.8	25.6	-12.3	0.00	0.00	28.3	
6741.0	0.78	150.88	6738.8	21.0	-9.7	0.00	0.00	23.0	
7045.3	17.88	269.21	7038.3	18.5	-55.8	6.00	120.40	44.8	
7866.5	90.50	331.01	7509.0	453.0	-451.0	10.00	62.83	621.1	1208 LP
11758.2	90.50	331.01	7475.0	3857.0	-2337.0	0.00	0.00	4509.8	1208 PBHL

DESIGN TARGET DETAILS									
Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Shape	Point
1208 PBHL	7475.0	3857.0	-2337.0	372057.00	1670999.0039	30° 56.347' N	80° 39' 58.292' W		- plan hits target center
1208 LP	7509.0	453.0	-451.0	368653.00	1672855.0039	30° 22.946' N	80° 39' 33.667' W		- plan hits target center





Triad Hunter

WVDNR Pad 6
WVDNR Pad 6 - Wetzel County, WV
WVDNR #1208

Original Well

Design: As Drilled

Standard Survey Report

16 October, 2013

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Phoenix Technology Services

Survey Report



Company: Triad Hunter	Local Co-ordinate Reference: Well WVDNR #1208
Project: WVDNR Pad 6	TVD Reference: 20' RKB - 1450' GL @ 1470.0usft (Warren 12)
Site: WVDNR Pad 6 - Wetzel County, WV	MD Reference: 20' RKB - 1450' GL @ 1470.0usft (Warren 12)
Well: WVDNR #1208	North Reference: Grid
Wellbore: Original Well	Survey Calculation Method: Minimum Curvature
Design: As Drilled	Database: Local database

Project WVDNR Pad 6		
Map System: US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum: NAD 1927 (NADCON CONUS)		
Map Zone: West Virginia North 4701		

Site WVDNR Pad 6 - Wetzel County, WV				
Site Position:	Northing:	368,188.00 usft	Latitude:	39° 30' 18.406 N
From: Map	Easting:	1,673,320.00 usft	Longitude:	80° 39' 28.041 W
Position Uncertainty: 0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.74 "

Well WVDNR #1208				
Well Position	+N/-S	0.0 usft	Northing:	368,200.00 usft
	+E/-W	0.0 usft	Easting:	1,673,336.00 usft
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft
			Ground Level:	1,450.0 usft

Wellbore Original Well					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	2/24/2012	-8.52	67.18	52,669

Design As Drilled					
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0		334.31

Survey Program Date 10/16/2013					
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
111.0	6,350.0	VES Gyro (Original Well)	GyroFlex		
6,435.0	6,525.0	Phoenix MWD (Original Well)	MWD		
6,556.0	11,744.0	Phoenix MWD R2 (Original Well)	MWD		

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
111.0	0.19	49.49	111.0	0.1	0.1	0.0	0.17	0.17	0.00	
211.0	0.27	31.67	211.0	0.4	0.4	0.2	0.11	0.08	-17.82	
311.0	0.12	56.56	311.0	0.7	0.6	0.4	0.17	-0.15	24.89	
411.0	0.25	59.78	411.0	0.9	0.9	0.4	0.13	0.13	3.22	
511.0	0.20	96.35	511.0	0.9	1.2	0.3	0.15	-0.05	36.57	
611.0	0.27	105.95	611.0	0.9	1.6	0.1	0.08	0.07	9.60	
711.0	0.36	123.96	711.0	0.6	2.1	-0.4	0.13	0.09	18.01	
811.0	0.20	138.42	811.0	0.3	2.5	-0.8	0.17	-0.16	14.46	



Phoenix Technology Services

Survey Report



Company:	Triad Hunter	Local Co-ordinate Reference:	Well WVDNR #1208
Project:	WVDNR Pad 6	TVD Reference:	20' RKB - 1450' GL @ 1470.0usft (Warren 12)
Site:	WVDNR Pad 6 - Wetzel County, WV	MD Reference:	20' RKB - 1450' GL @ 1470.0usft (Warren 12)
Well:	WVDNR #1208	North Reference:	Grid
Wellbore:	Original Well	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Local database

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
911.0	0.18	143.94	911.0	0.1	2.7	-1.1	0.03	-0.02	5.52	
1,011.0	0.23	161.30	1,011.0	-0.3	2.9	-1.5	0.08	0.05	17.36	
1,111.0	0.21	141.53	1,111.0	-0.6	3.0	-1.9	0.08	-0.02	-19.77	
1,211.0	0.05	127.01	1,211.0	-0.8	3.2	-2.1	0.16	-0.16	-14.52	
1,311.0	0.20	184.29	1,311.0	-1.0	3.2	-2.3	0.18	0.15	57.28	
1,411.0	0.16	313.01	1,411.0	-1.0	3.1	-2.3	0.33	-0.04	128.72	
1,511.0	2.48	325.14	1,511.0	0.8	1.8	0.0	2.32	2.32	12.13	
1,611.0	4.93	332.92	1,610.7	6.4	-1.4	6.4	2.50	2.45	7.78	
1,711.0	5.57	339.02	1,710.3	14.8	-5.1	15.5	0.85	0.64	6.10	
1,811.0	5.71	347.22	1,809.8	24.2	-8.0	25.2	0.82	0.14	8.20	
1,911.0	4.71	352.37	1,909.4	33.1	-9.6	34.0	1.10	-1.00	5.15	
2,011.0	2.46	329.90	2,009.2	39.0	-11.2	40.0	2.61	-2.25	-22.47	
2,111.0	1.56	294.81	2,109.2	41.4	-13.5	43.2	1.48	-0.90	-35.09	
2,211.0	0.88	218.59	2,209.2	41.4	-15.3	43.9	1.60	-0.68	-76.22	
2,311.0	0.99	186.01	2,309.1	40.0	-15.8	42.9	0.54	0.11	-32.58	
2,411.0	0.86	177.95	2,409.1	38.3	-15.9	41.4	0.18	-0.13	-8.06	
2,511.0	0.89	162.32	2,509.1	36.9	-15.6	40.0	0.24	0.03	-15.63	
2,611.0	0.83	168.96	2,609.1	35.4	-15.3	38.5	0.12	-0.06	6.64	
2,711.0	0.48	63.72	2,709.1	34.9	-14.7	37.8	1.06	-0.35	-105.24	
2,811.0	0.59	60.11	2,809.1	35.3	-13.9	37.9	0.11	0.11	-3.61	
2,911.0	0.70	34.30	2,909.1	36.1	-13.1	38.2	0.31	0.11	-25.81	
3,011.0	0.66	30.38	3,009.1	37.1	-12.5	38.8	0.06	-0.04	-3.92	
3,111.0	0.69	13.94	3,109.1	38.2	-12.1	39.6	0.20	0.03	-16.44	
3,211.0	0.70	13.54	3,209.1	39.3	-11.8	40.6	0.01	0.01	-0.40	
3,311.0	0.53	22.08	3,309.1	40.4	-11.4	41.3	0.19	-0.17	8.54	
3,411.0	0.51	345.42	3,409.1	41.2	-11.4	42.1	0.33	-0.02	-36.66	
3,511.0	0.48	347.55	3,509.1	42.1	-11.6	42.9	0.04	-0.03	2.13	
3,611.0	0.45	340.22	3,609.1	42.8	-11.8	43.7	0.07	-0.03	-7.33	
3,711.0	0.48	338.76	3,709.0	43.6	-12.1	44.5	0.03	0.03	-1.46	
3,811.0	0.40	340.18	3,809.0	44.3	-12.4	45.3	0.08	-0.08	1.42	
3,911.0	0.48	340.84	3,909.0	45.0	-12.6	46.1	0.08	0.08	0.66	
4,011.0	0.41	342.11	4,009.0	45.8	-12.9	46.8	0.07	-0.07	1.27	
4,111.0	0.51	336.50	4,109.0	46.5	-13.2	47.6	0.11	0.10	-5.61	
4,211.0	0.40	331.82	4,209.0	47.2	-13.5	48.4	0.12	-0.11	-4.68	
4,311.0	0.57	329.61	4,309.0	48.0	-13.9	49.3	0.17	0.17	-2.21	
4,411.0	0.41	327.74	4,409.0	48.7	-14.4	50.1	0.16	-0.16	-1.87	
4,511.0	0.35	308.43	4,509.0	49.2	-14.8	50.8	0.14	-0.06	-19.31	
4,611.0	0.30	236.72	4,609.0	49.3	-15.2	51.0	0.38	-0.05	-71.71	
4,711.0	0.37	219.93	4,709.0	48.9	-15.7	50.8	0.12	0.07	-16.79	
4,811.0	0.43	217.13	4,809.0	48.3	-16.1	50.5	0.06	0.06	-2.80	
4,911.0	0.53	215.31	4,909.0	47.6	-16.6	50.0	0.10	0.10	-1.82	
5,011.0	0.75	175.19	5,009.0	46.6	-16.8	49.3	0.49	0.22	-40.12	
5,111.0	0.86	172.17	5,109.0	45.2	-16.7	48.0	0.12	0.11	-3.02	

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Survey Report



Company:	Triad Hunter	Local Co-ordinate Reference:	Well WVDNR #1208
Project:	WVDNR Pad 6	TVD Reference:	20' RKB - 1450' GL @ 1470.0usft (Warren 12)
Site:	WVDNR Pad 6 - Wetzel County, WV	MD Reference:	20' RKB - 1450' GL @ 1470.0usft (Warren 12)
Well:	WVDNR #1208	North Reference:	Grid
Wellbore:	Original Well	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Local database

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,211.0	0.88	176.67	5,209.0	43.7	-16.5	46.5	0.07	0.02	4.50	
5,311.0	1.04	171.01	5,309.0	42.0	-16.3	45.0	0.19	0.16	-5.66	
5,411.0	1.18	170.94	5,409.0	40.1	-16.0	43.1	0.14	0.14	-0.07	
5,511.0	1.23	172.92	5,508.9	38.0	-15.7	41.1	0.07	0.05	1.98	
5,611.0	1.35	170.26	5,608.9	35.8	-15.4	39.0	0.13	0.12	-2.66	
5,711.0	1.27	169.23	5,708.9	33.6	-15.0	36.8	0.08	-0.08	-1.03	
5,811.0	1.09	171.25	5,808.9	31.5	-14.6	34.8	0.18	-0.18	2.02	
5,911.0	0.85	170.71	5,908.8	29.9	-14.4	33.1	0.24	-0.24	-0.54	
6,011.0	0.59	165.77	6,008.8	28.6	-14.1	31.9	0.27	-0.26	-4.94	
6,111.0	0.40	151.62	6,108.8	27.8	-13.8	31.1	0.22	-0.19	-14.15	
6,211.0	0.61	145.94	6,208.8	27.1	-13.4	30.2	0.22	0.21	-5.68	
6,311.0	0.85	141.88	6,308.8	26.1	-12.6	29.0	0.25	0.24	-4.06	
6,350.0	0.78	150.88	6,347.8	25.6	-12.3	28.4	0.38	-0.19	23.08	
6,435.0	0.40	160.30	6,432.8	24.8	-11.9	27.5	0.46	-0.44	11.08	
6,525.0	0.66	167.70	6,522.8	24.0	-11.7	26.7	0.30	0.29	8.22	
6,556.0	0.60	96.80	6,553.8	23.8	-11.5	26.5	2.36	-0.19	-228.71	
6,586.0	0.30	82.90	6,583.8	23.8	-11.3	26.3	1.06	-1.00	-46.33	
6,619.0	0.50	119.10	6,616.8	23.8	-11.1	26.2	0.95	0.61	109.70	
6,647.0	0.30	32.20	6,644.8	23.8	-10.9	26.1	2.03	-0.71	-310.36	
6,678.0	0.90	288.20	6,675.8	23.9	-11.1	26.4	3.27	1.94	-335.48	
6,708.0	1.40	289.90	6,705.8	24.1	-11.7	26.8	1.67	1.67	5.67	
6,739.0	2.20	288.10	6,736.8	24.4	-12.6	27.5	2.59	2.58	-5.81	
6,769.0	3.80	285.70	6,766.7	24.9	-14.1	28.5	5.35	5.33	-8.00	
6,799.0	5.50	284.20	6,796.6	25.5	-16.5	30.1	5.68	5.67	-5.00	
6,830.0	8.00	283.10	6,827.4	26.3	-20.0	32.4	8.07	8.06	-3.55	
6,861.0	9.90	281.80	6,858.0	27.4	-24.7	35.4	6.16	6.13	-4.19	
6,891.0	11.60	280.80	6,887.5	28.5	-30.2	38.7	5.70	5.67	-3.33	
6,922.0	13.30	281.10	6,917.8	29.7	-36.8	42.7	5.49	5.48	0.97	
6,953.0	15.40	278.00	6,947.8	31.0	-44.3	47.2	7.21	6.77	-10.00	
6,983.0	17.00	277.80	6,976.6	32.1	-52.6	51.8	5.34	5.33	-0.67	
7,014.0	19.60	279.10	7,006.1	33.6	-62.2	57.2	8.49	8.39	4.19	
7,044.0	22.50	282.80	7,034.1	35.7	-72.8	63.7	10.63	9.67	12.33	
7,074.0	23.90	288.40	7,061.6	38.8	-84.2	71.5	8.70	4.67	18.67	
7,104.0	22.50	290.70	7,089.2	42.8	-95.3	79.9	5.56	-4.67	7.67	
7,134.0	23.10	296.20	7,116.9	47.4	-108.0	88.7	7.38	2.00	18.33	
7,165.0	22.20	300.80	7,145.5	53.1	-116.5	98.3	6.41	-2.90	14.84	
7,195.0	23.60	304.90	7,173.1	59.4	-126.2	108.3	7.07	4.67	13.67	
7,226.0	23.30	310.10	7,201.6	66.9	-136.0	119.3	6.74	-0.97	16.77	
7,256.0	24.80	309.00	7,228.9	74.7	-145.5	130.4	5.22	5.00	-3.67	
7,287.0	29.40	307.40	7,256.5	83.4	-156.6	143.1	15.02	14.84	-5.16	
7,319.0	33.50	308.10	7,283.8	93.7	-169.8	158.0	12.86	12.81	2.19	
7,351.0	37.90	309.80	7,309.8	105.4	-184.3	174.9	14.09	13.75	5.31	
7,383.0	42.30	311.10	7,334.3	118.8	-199.9	193.7	14.00	13.75	4.06	



Phoenix Technology Services

Survey Report



Company:	Triad Hunter	Local Co-ordinate Reference:	Well WVDNR #1208
Project:	WVDNR Pad 6	TVD Reference:	20' RKB - 1450' GL @ 1470.0usft (Warren 12)
Site:	WVDNR Pad 6 - Wetzel County, WV	MD Reference:	20' RKB - 1450' GL @ 1470.0usft (Warren 12)
Well:	WVDNR #1208	North Reference:	Grid
Wellbore:	Original Well	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Local database

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
7,415.0	46.50	313.50	7,357.1	133.9	-216.5	214.5	14.13	13.13	7.50	
7,446.0	46.70	314.40	7,378.4	149.5	-232.7	235.6	2.21	0.65	2.90	
7,478.0	50.70	316.40	7,399.6	166.6	-249.6	258.3	13.35	12.50	6.25	
7,510.0	55.90	317.90	7,418.7	185.4	-267.0	282.9	16.68	16.25	4.69	
7,542.0	60.40	319.30	7,435.6	205.8	-285.0	309.0	14.54	14.06	4.38	
7,573.0	65.00	320.70	7,449.8	226.9	-302.7	335.7	15.37	14.84	4.52	
7,605.0	68.80	321.80	7,462.3	249.9	-321.1	364.4	12.29	11.88	3.44	
7,637.0	72.00	323.10	7,473.1	273.8	-339.4	393.9	10.71	10.00	4.06	
7,669.0	74.90	324.50	7,482.2	298.5	-357.6	424.0	9.99	9.06	4.38	
7,701.0	78.00	326.10	7,489.7	324.1	-375.3	454.7	10.84	9.69	5.00	
7,733.0	81.80	328.50	7,495.3	350.6	-392.3	486.0	13.98	11.88	7.50	
7,764.0	85.30	329.60	7,498.8	377.0	-408.1	516.7	11.83	11.29	3.55	
7,796.0	88.30	329.50	7,500.6	404.6	-424.3	548.5	9.38	9.38	-0.31	
7,828.0	89.90	330.10	7,501.1	432.2	-440.4	580.4	5.34	5.00	1.88	
7,851.0	90.92	330.61	7,500.9	452.2	-451.8	603.4	4.94	4.42	2.21	
1208 LP										
7,923.0	94.10	332.20	7,497.7	515.3	-486.2	675.2	4.94	4.42	2.21	
8,019.0	92.50	331.30	7,492.2	599.8	-531.6	770.9	1.91	-1.67	-0.94	
8,115.0	90.90	331.20	7,489.4	683.9	-577.7	866.7	1.67	-1.67	-0.10	
8,211.0	89.80	331.00	7,488.8	767.9	-624.1	962.6	1.16	-1.15	-0.21	
8,306.0	88.70	331.20	7,490.0	851.1	-670.0	1,057.4	1.18	-1.16	0.21	
8,401.0	89.40	332.90	7,491.6	935.0	-714.5	1,152.3	1.94	0.74	1.79	
8,496.0	91.70	333.80	7,490.7	1,019.9	-757.1	1,247.3	2.60	2.42	0.95	
8,592.0	92.00	332.40	7,487.6	1,105.5	-800.5	1,343.2	1.49	0.31	-1.46	
8,687.0	89.60	331.10	7,486.3	1,189.1	-845.5	1,438.1	2.87	-2.53	-1.37	
8,783.0	89.80	330.00	7,486.8	1,272.7	-892.7	1,533.9	1.16	0.21	-1.15	
8,878.0	91.50	331.20	7,485.7	1,355.5	-939.3	1,628.7	2.19	1.79	1.26	
8,974.0	91.90	331.00	7,482.8	1,439.5	-985.7	1,724.5	0.47	0.42	-0.21	
9,069.0	90.70	330.40	7,480.7	1,522.3	-1,032.2	1,819.3	1.41	-1.26	-0.63	
9,164.0	90.90	329.50	7,479.4	1,604.5	-1,079.7	1,914.0	0.97	0.21	-0.95	
9,260.0	90.50	328.10	7,478.2	1,686.6	-1,129.5	2,009.6	1.52	-0.42	-1.46	
9,356.0	91.10	329.80	7,476.8	1,768.9	-1,179.0	2,105.1	1.88	0.63	1.77	
9,451.0	89.60	331.70	7,476.3	1,851.7	-1,225.4	2,199.9	2.55	-1.58	2.00	
9,547.0	90.60	332.20	7,476.1	1,936.5	-1,270.5	2,295.9	1.16	1.04	0.52	
9,642.0	91.10	331.70	7,474.7	2,020.3	-1,315.2	2,390.8	0.74	0.53	-0.53	
9,737.0	91.30	331.20	7,472.7	2,103.7	-1,360.6	2,485.6	0.57	0.21	-0.53	
9,832.0	90.50	332.70	7,471.2	2,187.6	-1,405.3	2,580.5	1.79	-0.84	1.58	
9,928.0	89.70	332.10	7,471.0	2,272.6	-1,449.7	2,676.5	1.04	-0.83	-0.63	
10,023.0	89.60	331.00	7,471.6	2,358.2	-1,495.0	2,771.4	1.16	-0.11	-1.16	
10,119.0	91.90	331.90	7,470.4	2,440.5	-1,540.9	2,867.2	2.57	2.40	0.94	
10,214.0	90.50	330.60	7,468.4	2,523.7	-1,586.6	2,962.1	2.01	-1.47	-1.37	
10,310.0	90.20	328.90	7,467.8	2,606.7	-1,634.9	3,057.8	1.80	-0.31	-1.77	
10,405.0	91.30	331.80	7,466.5	2,689.2	-1,681.9	3,152.5	3.26	1.16	3.05	
10,500.0	91.90	329.70	7,463.9	2,772.1	-1,728.3	3,247.3	2.30	0.63	-2.21	



Phoenix Technology Services
Survey Report



Company:	Triad Hunter	Local Co-ordinate Reference:	Well WVDNR #1208
Project:	WVDNR Pad 6	TVD Reference:	20' RKB - 1450' GL @ 1470.0usft (Warren 12)
Site:	WVDNR Pad 6 - Wetzel County, WV	MD Reference:	20' RKB - 1450' GL @ 1470.0usft (Warren 12)
Well:	WVDNR #1208	North Reference:	Grid
Wellbore:	Original Well	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Local database

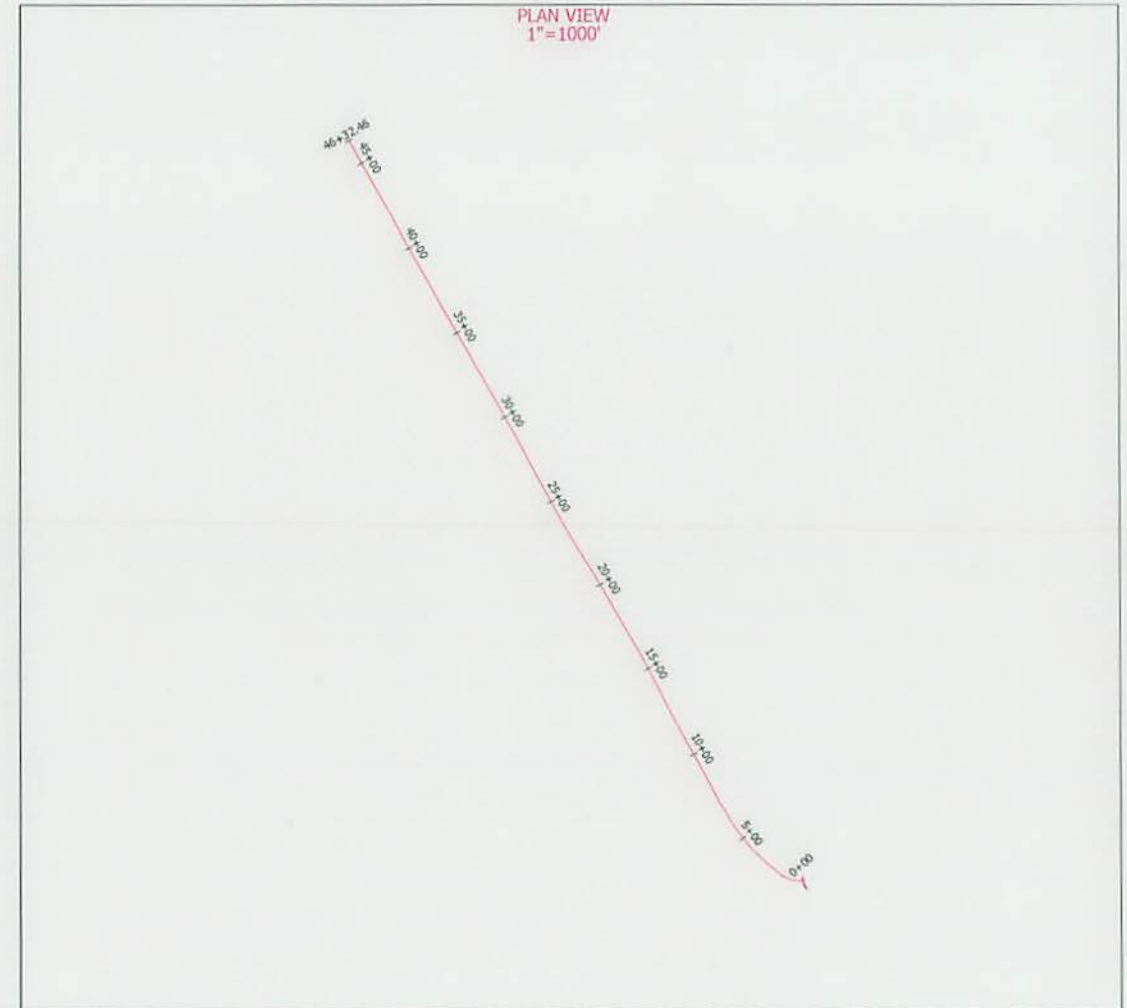
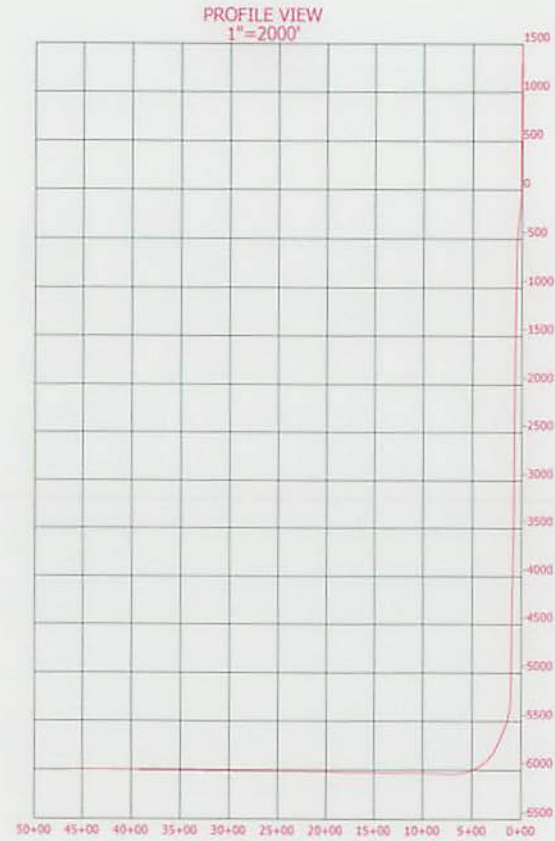
Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,596.0	89.90	331.00	7,462.4	2,855.5	-1,775.8	3,343.0	2.48	-2.08	1.35	
10,691.0	90.00	330.20	7,462.5	2,938.2	-1,822.4	3,437.8	0.85	0.11	-0.84	
10,786.0	90.40	331.30	7,462.1	3,021.1	-1,868.8	3,532.7	1.23	0.42	1.16	
10,881.0	90.20	329.90	7,461.6	3,103.9	-1,915.5	3,627.4	1.49	-0.21	-1.47	
10,977.0	90.50	330.90	7,461.0	3,187.3	-1,962.9	3,723.2	1.09	0.31	1.04	
11,072.0	90.30	329.00	7,460.4	3,269.6	-2,010.4	3,817.9	2.01	-0.21	-2.00	
11,168.0	90.70	332.00	7,459.5	3,353.1	-2,057.7	3,913.7	3.15	0.42	3.13	
11,263.0	90.70	331.40	7,458.4	3,438.8	-2,102.7	4,008.6	0.63	0.00	-0.63	
11,359.0	90.90	330.70	7,457.0	3,520.7	-2,149.2	4,104.4	0.76	0.21	-0.73	
11,453.0	90.30	329.80	7,456.1	3,602.4	-2,195.9	4,198.2	1.15	-0.64	-0.96	
11,548.0	90.70	330.60	7,455.2	3,684.8	-2,243.1	4,293.0	0.94	0.42	0.84	
11,643.0	89.30	331.10	7,455.2	3,767.7	-2,289.3	4,387.8	1.56	-1.47	0.53	
11,692.0	89.30	330.50	7,455.8	3,810.5	-2,313.2	4,436.7	1.22	0.00	-1.22	
Final Survey										
11,744.0	89.30	330.50	7,456.5	3,855.8	-2,338.8	4,488.6	0.00	0.00	0.00	
PROJ to Bit - 1208 PBHL										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,692.0	7,455.8	3,810.5	-2,313.2	Final Survey
11,744.0	7,456.5	3,855.8	-2,338.8	PROJ to Bit

Checked By: _____ Approved By: _____ Date: _____

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WV Department of
Environmental Protection

PLAN AND PROFILE VIEW FOR WVDNR #1208 API #47-103-02782



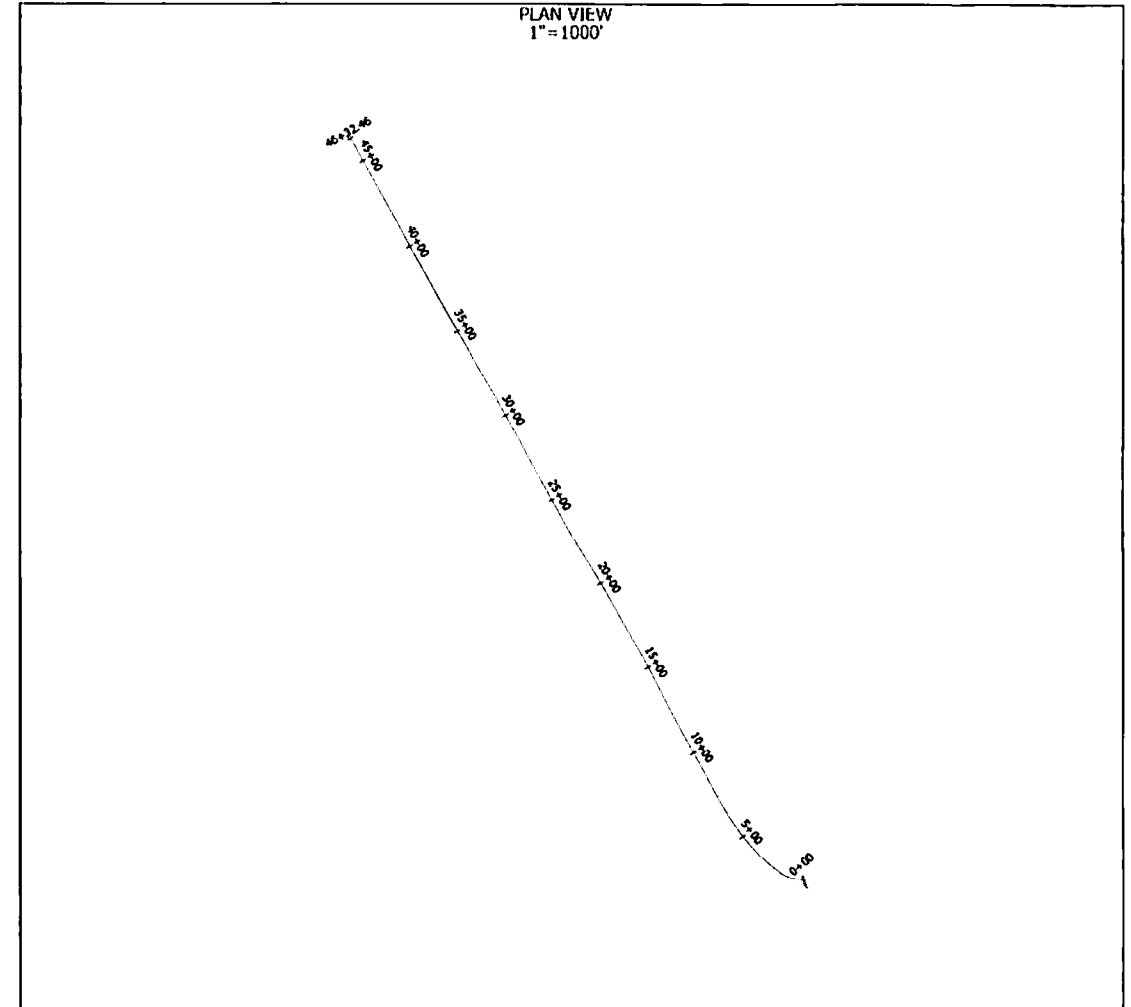
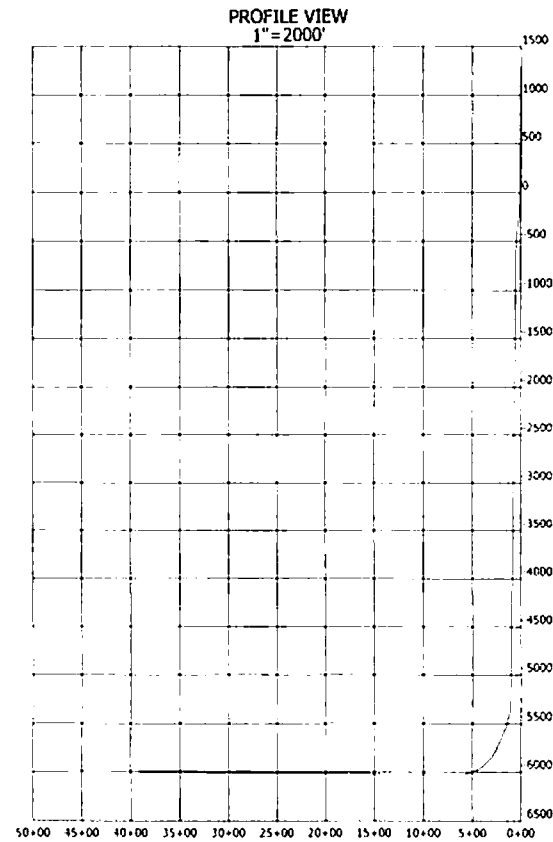
NOTES

1. AS DRILLED DATA WAS PROVIDED BY TRIAD HUNTER.
2. HSM IS NOT CERTIFYING THIS DATA AND IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA THAT HAS BEEN PROVIDED.

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(304) 354-7035 EMAIL: hupp@frontiernet.net

PLAN AND PROFILE VIEW FOR WVDNR #1208 API #47-103-02782



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