

## Survey Data Sheet

<b>Company:</b>		<b>Pioneer Natural Resources</b>					<b>Date:</b>		<b>2/9/2015</b>			
	<b>Well:</b>	<b>Billheimer Hz - Actual</b>					<b>Total Correction.:</b>		<b>8.30</b>			
	<b>Field:</b>	<b>Black Fox</b>					<b>Target TVD:</b>		<b>5225</b>			
	<b>Rig:</b>	<b>UTI Patt</b>					<b>Target Az.:</b>		<b>181.1</b>			
<b>BVES MWD:</b>							<b>Tgt. Coord.:</b>					
<b>BVES Job #:</b>							<b>Lateral #</b>		<b>1</b>			
<b>Date</b>	<b>No.</b>	<b>DEPTH</b>	<b>INC.</b>	<b>AZM</b>	<b>C.L.</b>	<b>T.V.D.</b>	<b>V.S.</b>	<b>N/S</b>	<b>E/W</b>	<b>DLS</b>	<b>B./D.</b>	<b>BHA</b>
<b>Tie - In</b>		2,582	1.11	198.79		2581.89		13.81 S	0.28 E	0.00		
	1	2787	0.48	227.78	205	2786.87	16.28	16.27 S	1.00 W	0.35	0.00	1
	2	2883	1.38	232.27	96	2882.86	17.29	17.25 S	2.21 W	0.94	0.00	
	3	2978	1.18	217.49	95	2977.83	18.79	18.73 S	3.72 W	0.41	0.00	
	4	3073	1.02	192.96	95	3072.82	20.41	20.33 S	4.50 W	0.52	0.00	
	5	3168	0.94	220.33	95	3167.80	21.85	21.75 S	5.19 W	0.50	0.00	
	6	3265	0.63	212.20	97	3264.79	22.92	22.81 S	5.99 W	0.34	0.00	
	7	3361	0.66	172.98	96	3360.79	23.91	23.80 S	6.21 W	0.45	0.00	
	8	3456	0.51	197.83	95	3455.78	24.85	24.74 S	6.27 W	0.30	0.00	
	9	3551	0.64	222.51	95	3550.78	25.66	25.53 S	6.76 W	0.29	0.00	
	10	3646	0.45	221.14	95	3645.77	26.34	26.21 S	7.37 W	0.20	0.00	
	11	3742	0.54	219.93	96	3741.77	26.99	26.84 S	7.91 W	0.09	0.00	
	12	3837	0.47	245.26	95	3836.77	27.51	27.35 S	8.55 W	0.25	0.00	
	13	3932	0.25	204.26	95	3931.76	27.87	27.71 S	8.99 W	0.34	0.00	
	14	4027	0.25	191.59	95	4026.76	28.26	28.09 S	9.12 W	0.06	0.00	
	15	4123	0.29	149.91	96	4122.76	28.68	28.51 S	9.04 W	0.20	0.00	
	16	4218	4.07	169.78	95	4217.68	32.19	32.04 S	8.32 W	3.99	0.00	ST
	17	4250	5.04	168.65	32	4249.58	34.68	34.53 S	7.84 W	3.06	0.00	
	18	4282	6.03	172.03	32	4281.43	37.71	37.58 S	7.33 W	3.25	0.00	
	19	4314	7.41	179.52	32	4313.21	41.43	41.30 S	7.08 W	5.09	0.00	
	20	4345	9.47	182.59	31	4343.87	45.98	45.85 S	7.18 W	6.81	0.00	
	21	4377	11.44	183.73	32	4375.34	51.78	51.65 S	7.50 W	6.20	0.00	
	22	4409	13.23	185.97	32	4406.60	58.60	58.46 S	8.09 W	5.78	0.00	
	23	4441	15.04	185.98	32	4437.63	66.38	66.23 S	8.90 W	5.64	0.00	
	24	4472	16.09	185.38	31	4467.49	74.67	74.50 S	9.73 W	3.43	0.00	
	25	4504	17.45	184.61	32	4498.13	83.89	83.70 S	10.53 W	4.32	0.00	
	26	4535	18.46	184.01	31	4527.62	93.43	93.23 S	11.24 W	3.29	0.00	
	27	4567	19.37	182.23	32	4557.89	103.79	103.58 S	11.80 W	3.37	0.00	
	28	4598	20.27	182.39	31	4587.05	114.30	114.09 S	12.23 W	2.92	0.00	
	29	4630	21.15	180.80	32	4616.99	125.62	125.40 S	12.54 W	3.26	0.00	
	30	4661	21.99	178.45	31	4645.81	137.01	136.79 S	12.46 W	3.88	0.00	
	31	4692	22.86	178.94	31	4674.47	148.82	148.62 S	12.19 W	2.88	0.00	
	32	4723	24.57	178.77	31	4702.85	161.28	161.08 S	11.94 W	5.52	0.00	
	33	4755	26.28	180.16	32	4731.75	175.01	174.82 S	11.82 W	5.67	0.00	
	34	4786	27.87	181.70	31	4759.35	189.12	188.93 S	12.05 W	5.60	0.00	
	35	4817	29.10	181.43	31	4786.60	203.91	203.70 S	12.46 W	3.98	0.00	30°
	36	4848	29.89	181.96	31	4813.58	219.17	218.96 S	12.91 W	2.70	0.00	hold
	37	4880	30.09	181.70	32	4841.30	235.16	234.95 S	13.42 W	0.73	0.00	sect
	38	4911	32.80	181.84	31	4867.74	251.33	251.11 S	13.92 W	8.74	0.00	
	39	4942	36.19	181.75	31	4893.29	268.88	268.65 S	14.47 W	10.95	0.00	
	40	4973	39.18	181.83	31	4917.82	287.83	287.59 S	15.06 W	9.63	0.00	
	41	5005	41.47	181.92	32	4942.21	308.53	308.29 S	15.74 W	7.18	0.00	

	42	5037	43.28	181.58	32	4965.85	330.10	329.85 S	16.39 W	5.68	0.00	
	43	5069	44.33	182.02	32	4988.95	352.25	351.99 S	17.09 W	3.43	0.00	
	44	5101	45.17	182.28	32	5011.67	374.77	374.50 S	17.94 W	2.69	0.00	
	45	5132	47.19	182.38	31	5033.13	397.14	396.85 S	18.85 W	6.51	0.00	
	46	5164	49.65	183.12	32	5054.37	421.06	420.75 S	20.00 W	7.86	0.00	
	47	5196	51.29	183.85	32	5074.74	445.72	445.39 S	21.50 W	5.45	0.00	
	48	5227	54.35	182.75	31	5093.47	470.40	470.04 S	22.92 W	10.26	0.00	
	49	5259	58.49	181.94	32	5111.16	497.05	496.68 S	24.00 W	13.10	0.00	
	50	5291	60.85	181.85	32	5127.32	524.66	524.28 S	24.92 W	7.37	0.00	
	51	5323	62.86	181.63	32	5142.42	552.87	552.48 S	25.77 W	6.31	0.00	
	52	5355	65.12	182.21	32	5156.45	581.63	581.22 S	26.74 W	7.24	0.00	
	53	5386	67.65	182.46	31	5168.87	610.02	609.60 S	27.89 W	8.21	0.00	
	54	5417	69.79	182.34	31	5180.11	638.90	638.46 S	29.10 W	6.92	0.00	
	55	5449	72.28	182.57	32	5190.51	669.15	668.69 S	30.40 W	7.81	0.00	
	56	5481	76.22	181.97	32	5199.20	699.94	699.46 S	31.61 W	12.45	0.00	
	57	5513	79.87	182.21	32	5205.82	731.23	730.74 S	32.75 W	11.41	0.00	
	58	5544	80.69	182.06	31	5211.06	761.78	761.27 S	33.89 W	2.68	0.00	
	59	5576	81.56	181.91	32	5215.99	793.40	792.87 S	34.99 W	2.78	0.00	
	60	5608	83.85	181.65	32	5220.05	825.13	824.59 S	35.97 W	7.20	0.00	
	61	5640	86.59	181.48	32	5222.72	857.02	856.47 S	36.84 W	8.56	0.00	
	62	5730	88.56	180.31	90	5226.54	946.93	946.37 S	38.24 W	2.54	0.00	
	63	5825	91.45	180.01	95	5226.53	1041.91	1041.36 S	38.51 W	3.06	0.00	Lateral
	64	5920	92.15	179.07	95	5223.55	1136.82	1136.31 S	37.74 W	1.23	0.00	
	65	6016	92.65	178.77	96	5219.53	1232.67	1232.21 S	35.94 W	0.61	0.00	
	66	6111	90.37	177.94	95	5217.02	1327.52	1327.13 S	33.21 W	2.56	0.00	
	67	6207	89.45	181.60	96	5217.17	1423.48	1423.11 S	32.81 W	3.93	0.00	
	68	6302	91.38	181.95	95	5216.48	1518.46	1518.06 S	35.75 W	2.08	0.00	
	69	6397	89.44	180.18	95	5215.80	1613.45	1613.03 S	37.52 W	2.77	0.00	
	70	6493	91.23	179.78	96	5215.23	1709.43	1709.02 S	37.48 W	1.91	0.00	
	71	6588	90.25	180.07	95	5214.01	1804.40	1804.01 S	37.35 W	1.08	0.00	
	72	6683	89.97	180.70	95	5213.82	1899.39	1899.01 S	37.99 W	0.72	0.00	
	73	6778	88.95	180.41	95	5214.72	1994.38	1994.00 S	38.91 W	1.11	0.00	
	74	6873	86.40	179.58	95	5218.57	2089.28	2088.91 S	38.90 W	2.83	0.00	
	75	6969	88.61	180.05	96	5222.75	2185.15	2184.82 S	38.59 W	2.36	0.00	
	76	7064	89.57	180.36	95	5224.25	2280.13	2279.80 S	38.93 W	1.06	0.00	
	77	7160	89.45	180.97	96	5225.08	2376.12	2375.79 S	40.03 W	0.65	0.00	
	78	7255	90.74	181.86	95	5224.93	2471.12	2470.76 S	42.38 W	1.65	0.00	
	79	7350	89.32	179.66	95	5224.88	2566.11	2565.74 S	43.64 W	2.76	0.00	
	80	7445	90.34	180.05	95	5225.16	2661.08	2660.74 S	43.39 W	1.15	0.00	
	81	7540	90.03	179.16	95	5224.85	2756.05	2755.74 S	42.73 W	0.99	0.00	
	82	7636	89.38	179.53	96	5225.34	2852.00	2851.73 S	41.63 W	0.78	0.00	
	83	7732	90.46	180.03	96	5225.47	2947.98	2947.73 S	41.27 W	1.24	0.00	
	84	7827	89.78	180.12	95	5225.27	3042.96	3042.73 S	41.40 W	0.72	0.00	
	85	7923	91.20	180.03	96	5224.44	3138.94	3138.72 S	41.53 W	1.48	0.00	
	86	8018	89.88	181.58	95	5223.54	3233.93	3233.70 S	42.87 W	2.15	0.00	
	87	8113	90.86	181.87	95	5222.93	3328.92	3328.66 S	45.73 W	1.08	0.00	
	88	8209	89.45	181.76	96	5222.68	3424.91	3424.60 S	48.77 W	1.48	0.00	
	89	8304	89.91	180.49	95	5223.21	3519.91	3519.58 S	50.63 W	1.42	0.00	
	90	8399	91.42	179.84	95	5222.11	3614.88	3614.57 S	50.89 W	1.73	0.00	
	91	8495	89.35	179.38	96	5221.47	3710.84	3710.56 S	50.24 W	2.20	0.00	
	92	8590	90.65	182.63	95	5221.47	3805.83	3805.53 S	51.91 W	3.69	0.00	
proj	93	8775	90.65	182.63	185	5219.38	3990.75	3990.33 S	60.41 W	0.00	0.00	proj