

30-015-38477

Today's Date 4/20/2011



DIRECTIONAL REPORT

WELLNAME: BLUE THUNDER 5 FEDERAL #4H

FIELD: WATKINS

AFE NO.: 30-015-38477

WELL ID NO.: 30-015-00000

API NO.: 30-015-38477

RECEIVED

JUL 20 2011

NMOCD ARTESIA

SURVEY TYPE: MWD-2 MD: 8,235 ANGLE: 0.88 AZIMUTH: 278 17 TVD: 8,233
 N/S: 29.75 E/W: -96 56 VS: 96 39 TARGET:

MEASURED DEPTH	INCLINATION ANGLE	AZIMUTH ANGLE	TVD	+NORTH -SOUTH	+EAST -WEST	VERTICAL SECTION	DOGLEG SEVERITY
8,235	0 88	278 17	8,233	29.75	-96 56	101.04	0 00
8,309	2.55	266 12	8,307	29 72	-98 77	29.72	2 30
8,341	6 16	268 41	8,339	29.62	-101 19	29.62	11 29
8,373	9 76	267 71	8,371	29 47	-105 62	29 47	11.25
8,405	12 22	265 51	8,402	29 09	-111 71	29.09	7.80
8,437	16 53	267.88	8,433	28 66	-119 64	28 66	13.59
8,469	19 79	269.64	8,464	28 46	-129 61	28 46	10 33
8,500	23 04	270 96	8,492	28 53	-140 92	28.53	10 60
8,531	25 94	272 72	8,521	28 95	-153 76	28 95	9 64
8,563	28.75	271 84	8,549	29 53	-168.45	29 53	8 87
8,595	31 13	269 38	8,577	29 69	-184.41	29 69	8.37
8,627	34 65	267 97	8,604	29.27	-201 78	29 27	11 26
8,658	38 78	267 27	8,629	28 50	-220 29	28 50	13.39
8,690	41 33	267 53	8,653	27.57	-240.87	27.57	7.99
8,722	43 26	268 23	8,677	26.77	-262.38	26.77	6 21
8,754	45.55	269 90	8,700	26.41	-284.77	26 41	8 03
8,786	50.03	270.78	8,721	26 56	-308.46	26.56	14 15
8,817	54.96	270 87	8,740	26 92	-333.05	26.92	15 90
8,849	59.53	270 08	8,757	27.13	-359 95	27.13	14.43
8,881	61 55	270.08	8,773	27.17	-387 81	27.17	6 31
8,913	65 33	270.08	8,787	27 21	-416 43	27 21	11 81
8,944	69 56	270 08	8,799	27.25	-445 05	27 25	13 64
8,976	74.30	270 17	8,809	27.32	-475.46	27.32	14 81
9,014	78 44	270.13	8,818	27 42	-512.38	27.42	10 89
9,046	81 69	270 07	8,824	27.47	-543 90	27.47	10.16
9,078	84 59	269 93	8,827	27 47	-575.67	27 47	9.07
9,110	87.14	269 51	8,830	27 32	-607 58	27 32	8.08
9,142	87 49	269 50	8,831	27 04	-639.55	27 04	1 09
9,173	87 67	269 56	8,833	26 79	-670.52	26 79	0 61
9,205	87 58	269 76	8,834	26 59	-702 49	26 59	0 69
9,237	87 85	270.18	8,835	26.58	-734 46	26.58	1.56
9,300	89 52	269 41	8,837	26 35	-797 44	26.35	2.92
9,364	89.96	269 43	8,837	25 70	-861 44	25 70	0 69
9,428	90 13	269 15	8,837	24.91	-925.43	24.91	0 51
9,522	89 96	268 97	8,837	23.37	-1019 42	23 37	0 26
9,618	89.52	268 75	8,837	21.46	-1115 40	21.46	0 51
9,713	89 25	267 58	8,838	18.42	-1210 35	18.42	1.26
9,808	90 92	268.00	8,838	14 76	-1305 27	14.76	1 81
9,872	90 66	267 28	8,837	12 12	-1369.21	12 12	1 20
9,967	91 28	267 50	8,836	7.79	-1464 10	7 79	0 69
10,031	91 01	266 98	8,834	4 71	-1528 01	4 71	0 92
10,126	91 10	268 03	8,833	0 58	-1622 90	0 58	1.11
10,190	91 10	268.06	8,831	-1.60	-1686 85	-1.60	0.05
10,285	91 71	268 77	8,829	-4 23	-1781.79	-4 23	0 98
10,381	91 54	267 52	8,826	-7 34	-1877.70	-7 34	1 31
10,476	89.78	267 55	8,825	-11.42	-1972 60	-11 42	1 85
10,572	87 93	267 45	8,827	-15 61	-2068 49	-15 61	1.93
10,667	88.55	267.52	8,830	-19 78	-2163 35	-19 78	0 66
10,762	88 37	266 93	8,833	-24 37	-2258.20	-24 37	0 65
10,858	88.20	267.41	8,835	-29 11	-2354 04	-29.11	0 53
10,921	89 08	268.02	8,837	-31 62	-2416 97	-31 62	1 70
11,017	89 96	268.53	8,838	-34 51	-2512.92	-34 51	1 06
11,112	89 34	268 93	8,838	-36 62	-2607 90	-36 62	0 78
11,207	89 87	270 54	8,839	-37 06	-2702.89	-37 06	1 78
11,334	90.84	271 48	8,838	-34 82	-2829 87	-34 82	1.06
11,429	91 10	272 76	8,837	-31.30	-2924 79	-31 30	1 38
11,525	91 19	273 37	8,835	-26.17	-3020.63	-26 17	0 64
11,620	91.45	273 57	8,832	-20.43	-3115 43	-20 43	0 34
11,715	90 75	272 75	8,831	-15 19	-3210 27	-15 19	1 14
11,811	90 84	271 82	8,829	-11 36	-3306 18	-11 36	0 97
11,906	91 54	271 69	8,827	-8.45	-3401 11	-8.45	0 75
12,001	91 28	271.65	8,825	-5 68	-3496 05	-5.68	0 28
12,065	90 84	271 36	8,824	-4 00	-3560 01	-4 00	0 82
12,160	90 84	271 02	8,822	-2.03	-3654 98	-2 03	0 36
12,256	90 66	271 26	8,821	-0.12	-3750.95	-0 12	0 31
12,319	90 22	271 18	8,821	1 22	-3813.94	1 22	0 71
12,383	90 31	271 04	8,820	2.46	-3877 93	2 46	0 26
12,478	90 22	270 67	8,820	3 88	-3972.91	3 88	0.40
12,574	90 75	269 88	8,819	4 34	-4068.91	4 34	0.99
12,669	90.04	269 40	8,818	3 74	-4163 90	3 74	0 90
12,764	90 57	268 63	8,818	2 11	-4258 89	2 11	0 98
12,859	90 84	268 52	8,817	-0.26	-4353 85	-0.26	0 31



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WELL ID NO.: 30-015-00000

AFE NO.: 30-015-38477

API NO.: 30-015-38477

SURVEY TYPE: MWD-2 MD: 8.235 ANGLE: 0.88 AZIMUTH: 278.17 TVD: 8.233
 N/S: 29.75 E/W: -96.56 VS: 96.39 TARGET:

MEASURED DEPTH	INCLINATION ANGLE	AZIMUTH ANGLE	TVD	+NORTH -SOUTH	+EAST -WEST	VERTICAL SECTION	DOGLEG SEVERITY
12,955	90.84	268.52	8,815	-2.73	-4449.81	-2.73	0.00