

5D Anti-Collision Report

Primary Well: North Thistle 15-10 State Com 2H (p) (TVD Relative to Kelly Bushing; All Azimuth Relative to GRID NORTH)									
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	SF	Risk
9700.00	9687.66	198.06	21.48	20.01	North Thistle 15-10 State Com 1H Pilot (p)	180.72	137.10	4.14	
9800.00	9770.15	195.88	21.81	18.92	North Thistle 15-10 State Com 1H Pilot (p)	235.25	191.25	5.35	
9900.00	9839.15	195.11	22.22	17.60	North Thistle 15-10 State Com 1H Pilot (p)	306.11	261.78	6.90	
10000.00	9891.65	196.54	22.72	16.26	North Thistle 15-10 State Com 1H Pilot (p)	390.12	345.59	8.76	
10100.00	9925.35	203.61	23.34	15.23	North Thistle 15-10 State Com 1H Pilot (p)	483.45	438.76	10.82	
10200.00	9938.78	186.56	24.06	14.73	North Thistle 15-10 State Com 1H Lateral (p)	403.22	371.64	12.77	
10300.00	9939.00	186.48	24.88	14.89	North Thistle 15-10 State Com 1H Lateral (p)	402.30	370.38	12.60	
10400.00	9939.00	186.40	25.81	15.08	North Thistle 15-10 State Com 1H Lateral (p)	401.59	369.26	12.42	
10500.00	9939.00	186.31	26.83	15.30	North Thistle 15-10 State Com 1H Lateral (p)	400.89	368.08	12.22	
10600.00	9939.00	186.23	27.93	15.55	North Thistle 15-10 State Com 1H Lateral (p)	400.19	366.84	12.00	
10700.00	9939.00	186.15	29.11	15.82	North Thistle 15-10 State Com 1H Lateral (p)	399.49	365.54	11.77	
10800.00	9939.00	186.06	30.36	16.13	North Thistle 15-10 State Com 1H Lateral (p)	398.79	364.19	11.53	
10900.00	9939.00	185.98	31.66	16.47	North Thistle 15-10 State Com 1H Lateral (p)	398.09	362.79	11.28	
11000.00	9939.00	185.89	33.02	16.83	North Thistle 15-10 State Com 1H Lateral (p)	397.39	361.35	11.02	
11100.00	9939.00	185.81	34.42	17.21	North Thistle 15-10 State Com 1H Lateral (p)	396.70	359.85	10.77	
11200.00	9939.00	185.72	35.86	17.62	North Thistle 15-10 State Com 1H Lateral (p)	396.00	358.32	10.51	
11300.00	9939.00	185.64	37.34	18.04	North Thistle 15-10 State Com 1H Lateral (p)	395.31	356.75	10.25	
11400.00	9939.00	185.55	38.85	18.49	North Thistle 15-10 State Com 1H Lateral (p)	394.61	355.15	10.00	
11500.00	9939.00	185.46	40.38	18.95	North Thistle 15-10 State Com 1H Lateral (p)	393.92	353.52	9.75	
11600.00	9939.00	185.38	41.95	19.42	North Thistle 15-10 State Com 1H Lateral (p)	393.22	351.87	9.51	

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Primary Well: North Thistle 15-10 State Com 2H (p) (TVD Relative to Kelly Bushing; All Azimuth Relative to GRID NORTH)									
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	SF	Risk
11700.00	9939.00	185.29	43.53	19.91	North Thistle 15-10 State Com 1H Lateral (p)	392.53	350.21	9.27	
11800.00	9939.00	185.20	45.13	20.40	North Thistle 15-10 State Com 1H Lateral (p)	391.84	348.44	9.03	
11900.00	9939.00	185.12	46.75	20.92	North Thistle 15-10 State Com 1H Lateral (p)	391.15	346.68	8.80	
12000.00	9939.00	185.03	48.39	21.51	North Thistle 15-10 State Com 1H Lateral (p)	390.46	344.95	8.58	
12100.00	9939.00	184.94	50.04	22.06	North Thistle 15-10 State Com 1H Lateral (p)	389.78	343.23	8.37	
12200.00	9939.00	184.85	51.70	22.57	North Thistle 15-10 State Com 1H Lateral (p)	389.09	341.37	8.15	
12300.00	9939.00	184.76	53.38	23.13	North Thistle 15-10 State Com 1H Lateral (p)	388.40	339.54	7.95	
12400.00	9939.00	184.67	55.07	23.73	North Thistle 15-10 State Com 1H Lateral (p)	387.72	337.77	7.76	
12500.00	9939.00	184.58	56.76	24.33	North Thistle 15-10 State Com 1H Lateral (p)	387.03	335.82	7.56	
12600.00	9939.00	184.49	58.47	24.94	North Thistle 15-10 State Com 1H Lateral (p)	386.35	333.95	7.37	
12700.00	9939.00	184.40	60.18	25.54	North Thistle 15-10 State Com 1H Lateral (p)	385.67	332.09	7.20	
12800.00	9939.00	184.31	61.90	26.15	North Thistle 15-10 State Com 1H Lateral (p)	384.99	330.22	7.03	
12900.00	9939.00	184.22	63.63	26.76	North Thistle 15-10 State Com 1H Lateral (p)	384.31	328.35	6.87	
13000.00	9939.00	184.13	65.37	27.38	North Thistle 15-10 State Com 1H Lateral (p)	383.63	326.47	6.71	
13100.00	9939.00	184.04	67.11	28.01	North Thistle 15-10 State Com 1H Lateral (p)	382.95	324.55	6.56	
13200.00	9939.00	183.95	68.85	28.64	North Thistle 15-10 State Com 1H Lateral (p)	382.27	322.61	6.41	
13300.00	9939.00	183.86	70.60	29.27	North Thistle 15-10 State Com 1H Lateral (p)	381.60	320.67	6.26	
13400.00	9939.00	183.77	72.36	29.91	North Thistle 15-10 State Com 1H Lateral (p)	380.92	318.73	6.13	
13500.00	9939.00	183.67	74.12	30.55	North Thistle 15-10 State Com 1H Lateral (p)	380.25	316.78	5.99	
13600.00	9939.00	183.58	75.88	31.20	North Thistle 15-10 State Com 1H Lateral (p)	379.57	314.83	5.86	

5D Anti-Collision Report

Primary Well : North Thistle 15-10 State Com 2H (p) (TVD Relative to Kelly Bushing ; All Azimuth Relative to GRID NORTH)									
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	SF	Risk
13700.00	9939.00	183.49	77.65	31.85	North Thistle 15-10 State Com 1H Lateral (p)	378.90	312.88	5.74	
13800.00	9939.00	183.39	79.42	32.51	North Thistle 15-10 State Com 1H Lateral (p)	378.23	310.92	5.62	
13900.00	9939.00	183.30	81.20	33.17	North Thistle 15-10 State Com 1H Lateral (p)	377.56	308.96	5.50	
14000.00	9939.00	183.21	82.97	33.83	North Thistle 15-10 State Com 1H Lateral (p)	376.89	307.00	5.39	
14100.00	9939.00	183.11	84.75	34.49	North Thistle 15-10 State Com 1H Lateral (p)	376.22	305.04	5.29	
14200.00	9939.00	183.02	86.54	35.16	North Thistle 15-10 State Com 1H Lateral (p)	375.55	303.07	5.18	
14300.00	9939.00	182.92	88.32	35.83	North Thistle 15-10 State Com 1H Lateral (p)	374.89	301.10	5.08	
14400.00	9939.00	182.82	90.11	36.50	North Thistle 15-10 State Com 1H Lateral (p)	374.22	299.13	4.98	
14500.00	9939.00	182.73	91.90	37.17	North Thistle 15-10 State Com 1H Lateral (p)	373.56	297.16	4.89	
14600.00	9939.00	182.63	93.69	37.85	North Thistle 15-10 State Com 1H Lateral (p)	372.89	295.19	4.80	
14700.00	9939.00	182.54	95.48	38.53	North Thistle 15-10 State Com 1H Lateral (p)	372.23	293.22	4.71	
14800.00	9939.00	182.44	97.28	39.21	North Thistle 15-10 State Com 1H Lateral (p)	371.57	291.24	4.63	
14900.00	9939.00	182.34	99.08	39.89	North Thistle 15-10 State Com 1H Lateral (p)	370.91	289.27	4.54	
15000.00	9939.00	182.24	100.88	40.57	North Thistle 15-10 State Com 1H Lateral (p)	370.25	287.29	4.46	
15100.00	9939.00	182.15	102.68	41.26	North Thistle 15-10 State Com 1H Lateral (p)	369.59	285.32	4.39	
15200.00	9939.00	182.05	104.48	41.95	North Thistle 15-10 State Com 1H Lateral (p)	368.94	283.35	4.31	
15300.00	9939.00	181.95	106.28	42.64	North Thistle 15-10 State Com 1H Lateral (p)	368.28	281.34	4.24	
15400.00	9939.00	181.85	108.09	43.33	North Thistle 15-10 State Com 1H Lateral (p)	367.63	279.31	4.16	
15500.00	9939.00	181.75	109.90	44.02	North Thistle 15-10 State Com 1H Lateral (p)	366.97	277.27	4.09	
15600.00	9939.00	181.65	111.70	44.71	North Thistle 15-10 State Com 1H Lateral (p)	366.32	275.23	4.02	

5D Anti-Collision Report

Primary Well : North Thistle 15-10 State Com 2H (p) (TVD Relative to Kelly Bushing ; All Azimuth Relative to GRID NORTH)									
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	SF	Risk
15700.00	9939.00	181.55	113.51	45.41	North Thistle 15-10 State Com 1H Lateral (p)	365.67	273.19	3.95	
15800.00	9939.00	181.45	115.32	46.10	North Thistle 15-10 State Com 1H Lateral (p)	365.02	271.15	3.89	
15900.00	9939.00	181.35	117.13	46.80	North Thistle 15-10 State Com 1H Lateral (p)	364.37	269.10	3.82	
16000.00	9939.00	181.25	118.94	47.50	North Thistle 15-10 State Com 1H Lateral (p)	363.72	267.06	3.76	
16100.00	9939.00	181.15	120.76	48.19	North Thistle 15-10 State Com 1H Lateral (p)	363.07	265.01	3.70	
16200.00	9939.00	181.04	122.57	48.89	North Thistle 15-10 State Com 1H Lateral (p)	362.43	262.97	3.64	
16300.00	9939.00	180.94	124.39	49.60	North Thistle 15-10 State Com 1H Lateral (p)	361.78	260.92	3.59	
16400.00	9939.00	180.84	126.20	50.30	North Thistle 15-10 State Com 1H Lateral (p)	361.14	258.87	3.53	
16500.00	9939.00	180.74	128.02	51.00	North Thistle 15-10 State Com 1H Lateral (p)	360.50	256.83	3.48	
16600.00	9939.00	180.63	129.84	51.70	North Thistle 15-10 State Com 1H Lateral (p)	359.86	254.78	3.42	
16700.00	9939.00	180.53	131.65	52.41	North Thistle 15-10 State Com 1H Lateral (p)	359.22	252.73	3.37	
16800.00	9939.00	180.43	133.47	53.11	North Thistle 15-10 State Com 1H Lateral (p)	358.58	250.68	3.32	
16900.00	9939.00	180.32	135.29	53.82	North Thistle 15-10 State Com 1H Lateral (p)	357.94	248.64	3.27	
17000.00	9939.00	180.22	137.11	54.53	North Thistle 15-10 State Com 1H Lateral (p)	357.31	246.59	3.23	
17100.00	9939.00	180.11	138.93	55.23	North Thistle 15-10 State Com 1H Lateral (p)	356.67	244.54	3.18	
17200.00	9939.00	180.00	140.75	55.94	North Thistle 15-10 State Com 1H Lateral (p)	356.04	242.49	3.14	
17206.93	9939.00	180.00	140.88	55.99	North Thistle 15-10 State Com 1H Lateral (p)	356.00	242.38	3.13	

Secondary Well : North Thistle 15-10 State Com 1H Pilot (p) (TVD Relative to Kelly Bushing (Primary) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	269.52	0.00	0.00	49.93	49.31	80.70	
100.00	100.00	100.00	269.52	0.11	0.11	49.93	49.09	59.49	
200.00	200.00	200.00	269.52	0.34	0.34	49.93	48.64	38.74	
300.00	300.00	300.00	269.52	0.56	0.56	49.93	48.19	28.72	
400.00	400.00	400.00	269.52	0.79	0.79	49.93	47.74	22.82	
500.00	500.00	500.00	269.52	1.01	1.01	49.93	47.29	18.93	

SD Anti-Collision Report

Secondary Well : North Thistle 15-10 State Com 4H Pilot (p) (TVD Relative to Kelly Bushing (Primary) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
600.00	600.00	600.00	269.52	1.24	1.24	49.93	46.84	16.17	
700.00	700.00	700.00	269.52	1.46	1.46	49.93	46.40	14.12	
800.00	800.00	800.00	269.52	1.69	1.69	49.93	45.95	12.53	
900.00	900.00	900.00	269.52	1.91	1.91	49.93	45.50	11.26	
1000.00	1000.00	1000.00	269.52	2.14	2.14	49.93	45.05	10.22	
1100.00	1100.00	1100.00	269.52	2.36	2.36	49.93	44.60	9.36	
1200.00	1200.00	1200.00	269.52	2.59	2.59	49.93	44.15	8.63	
1300.00	1300.00	1300.00	269.52	2.81	2.81	49.93	43.70	8.01	
1400.00	1400.00	1400.00	269.52	3.03	3.03	49.93	43.25	7.47	
1500.00	1500.00	1500.00	269.52	3.26	3.26	49.93	42.80	7.00	
1600.00	1600.00	1600.00	269.52	3.48	3.48	49.93	42.35	6.58	
1700.00	1700.00	1700.00	269.52	3.71	3.71	49.93	41.90	6.22	
1800.00	1800.00	1800.00	269.52	3.93	3.93	49.93	41.45	5.89	
1900.00	1900.00	1900.00	269.52	4.16	4.16	49.93	41.00	5.59	
2000.00	2000.00	2000.00	269.52	4.38	4.38	49.93	40.55	5.32	
2100.00	2100.00	2100.00	269.52	4.61	4.61	49.93	40.10	5.08	
2200.00	2200.00	2200.00	269.52	4.83	4.83	49.93	39.65	4.86	
2300.00	2300.00	2300.00	269.52	5.06	5.06	49.93	39.20	4.65	
2400.00	2400.00	2400.00	269.52	5.28	5.28	49.93	38.75	4.47	
2500.00	2500.00	2500.00	269.52	5.51	5.51	49.93	38.30	4.29	
2600.00	2600.00	2600.00	269.52	5.73	5.73	49.93	37.85	4.13	
2700.00	2700.00	2700.00	269.52	5.96	5.96	49.93	37.40	3.99	
2800.00	2800.00	2800.00	269.52	6.18	6.18	49.93	36.95	3.85	
2900.00	2900.00	2900.00	269.52	6.41	6.41	49.93	36.50	3.72	
3000.00	3000.00	3000.00	269.52	6.63	6.63	49.93	36.06	3.60	
3100.00	3100.00	3100.00	269.52	6.86	6.86	49.93	35.61	3.49	
3200.00	3200.00	3200.00	269.52	7.08	7.08	49.93	35.16	3.38	
3300.00	3300.00	3300.00	269.52	7.31	7.31	49.93	34.71	3.28	
3400.00	3400.00	3400.00	269.52	7.53	7.53	49.93	34.26	3.19	
3500.00	3500.00	3500.00	269.52	7.76	7.76	49.93	33.81	3.10	
3600.00	3600.00	3600.00	269.52	7.98	7.98	49.93	33.36	3.01	
3700.00	3700.00	3700.00	269.52	8.20	8.20	49.93	32.91	2.93	
3800.00	3800.00	3800.00	269.52	8.43	8.43	49.93	32.46	2.86	
3900.00	3900.00	3900.00	269.52	8.65	8.65	49.93	32.01	2.79	
4000.00	4000.00	4000.00	269.52	8.88	8.88	49.93	31.56	2.72	
4100.00	4100.00	4100.00	269.52	9.10	9.10	49.93	31.11	2.65	
4200.00	4200.00	4200.00	269.52	9.33	9.33	49.93	30.66	2.59	
4300.00	4300.00	4300.00	269.52	9.55	9.55	49.93	30.21	2.53	
4400.00	4400.00	4400.00	269.52	9.78	9.78	49.93	29.76	2.48	
4500.00	4500.00	4500.00	269.52	10.00	10.00	49.93	29.31	2.42	
4600.00	4600.00	4600.00	269.52	10.23	10.23	49.93	28.86	2.37	
4700.00	4700.00	4700.00	269.52	10.45	10.45	49.93	28.41	2.32	
4800.00	4800.00	4800.00	269.52	10.68	10.68	49.93	27.96	2.27	
4900.00	4900.00	4900.00	269.52	10.90	10.90	49.93	27.51	2.23	
5000.00	5000.00	5000.00	269.52	11.13	11.13	49.93	27.06	2.18	
5100.00	5100.00	5100.00	269.52	11.35	11.35	49.93	26.61	2.14	
5200.00	5199.99	5199.99	271.24	11.58	11.58	49.91	26.19	2.10	
5300.00	5299.96	5299.96	268.23	11.80	11.80	49.92	25.74	2.07	
5400.00	5399.86	5399.86	263.26	12.03	12.03	50.24	25.60	2.04	
5500.00	5499.73	5499.73	257.43	12.25	12.25	51.12	26.05	2.04	
5600.00	5599.59	5599.59	251.86	12.47	12.47	52.51	26.96	2.05	
5700.00	5699.45	5699.45	246.62	12.70	12.70	54.37	28.42	2.10	
5800.00	5799.31	5799.31	241.76	12.92	12.92	56.65	30.22	2.14	
5900.00	5899.18	5899.18	237.30	13.15	13.15	59.31	32.46	2.21	
6000.00	5999.04	5999.04	233.25	13.37	13.37	62.30	34.97	2.28	
6100.00	6098.90	6098.90	229.59	13.60	13.60	65.57	37.78	2.36	
6200.00	6198.77	6198.77	226.28	13.82	13.82	69.08	40.88	2.45	
6300.00	6298.63	6298.63	223.31	14.05	14.05	72.79	44.09	2.54	

5D Anti-Collision Report

Secondary Well : North Thistle 15-10 State Com 1H Pilot (p) (TVD Relative to Kelly Bushing (Primary) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
6400.00	6398.49	6398.49	220.63	14.27	14.27	76.69	47.55	2.63	
6500.00	6498.36	6498.36	218.21	14.50	14.50	80.73	51.21	2.73	
6600.00	6598.22	6598.22	216.02	14.72	14.72	84.91	54.87	2.83	
6700.00	6698.08	6698.08	214.05	14.94	14.94	89.20	58.72	2.93	
6800.00	6797.94	6797.94	212.25	15.17	15.17	93.58	62.63	3.02	
6900.00	6897.81	6897.81	210.62	15.39	15.39	98.05	66.64	3.12	
7000.00	6997.67	6997.67	209.13	15.62	15.62	102.59	70.77	3.22	
7100.00	7097.53	7097.53	207.77	15.84	15.84	107.19	74.99	3.33	
7200.00	7197.40	7197.40	206.52	16.07	16.07	111.85	79.14	3.42	
7300.00	7297.27	7297.27	205.43	16.29	16.29	116.29	83.12	3.51	
7400.00	7397.19	7397.19	204.58	16.52	16.52	120.00	86.41	3.57	
7500.00	7497.14	7497.14	203.96	16.74	16.74	122.92	88.95	3.62	
7600.00	7597.11	7597.11	203.52	16.96	16.96	125.06	90.71	3.64	
7700.00	7697.10	7697.10	203.25	17.19	17.19	126.41	91.67	3.64	
7800.00	7797.10	7797.10	203.14	17.41	17.41	126.95	91.82	3.61	
7900.00	7897.10	7897.10	200.42	17.64	17.64	126.97	91.42	3.57	
8000.00	7997.10	7997.10	200.42	17.86	17.86	126.97	90.97	3.53	
8100.00	8097.10	8097.10	200.42	18.09	18.09	126.97	90.52	3.48	
8200.00	8197.10	8197.10	200.42	18.31	18.31	126.97	90.07	3.44	
8300.00	8297.10	8297.10	200.42	18.54	18.54	126.97	89.62	3.40	
8400.00	8397.10	8397.10	200.42	18.76	18.76	126.97	89.17	3.36	
8500.00	8497.10	8497.10	200.42	18.99	18.99	126.97	88.72	3.32	
8600.00	8597.10	8597.10	200.42	19.21	19.21	126.97	88.27	3.28	
8700.00	8697.10	8697.10	200.42	19.44	19.44	126.97	87.82	3.24	
8800.00	8797.10	8797.10	200.42	19.66	19.66	126.97	87.37	3.21	
8900.00	8897.10	8897.10	200.42	19.89	19.89	126.97	86.92	3.17	
9000.00	8997.10	8997.10	200.42	20.11	20.11	126.97	86.47	3.13	
9100.00	9097.10	9097.10	200.42	20.34	20.34	126.97	86.02	3.10	
9200.00	9197.10	9197.10	200.42	20.56	20.56	126.97	85.57	3.07	
9300.00	9297.10	9297.10	200.42	20.79	20.79	126.97	85.11	3.03	
9400.00	9397.10	9397.10	200.42	21.01	21.01	126.97	84.66	3.00	
9500.00	9497.06	9497.06	202.96	21.24	21.24	128.19	85.44	3.00	
9600.00	9595.28	9595.28	200.93	21.46	21.46	144.74	101.59	3.35	
9700.00	9687.66	9687.66	198.06	21.66	21.66	180.72	137.10	4.14	
9800.00	9770.15	9770.15	195.88	21.85	21.85	235.25	191.25	5.35	
9900.00	9839.15	9839.15	195.11	22.00	22.00	306.11	261.78	6.90	
10000.00	9891.65	9891.65	196.54	22.12	22.12	390.12	345.59	8.76	
10100.00	9925.35	9925.35	203.61	22.20	22.20	483.45	438.76	10.82	
10200.00	9938.78	9938.78	250.64	22.23	22.23	581.92	537.18	13.00	
10300.00	9939.00	9939.00	270.00	22.23	22.23	681.61	636.84	15.23	
10400.00	9939.00	9939.00	270.00	22.23	22.23	781.37	736.58	17.44	
10500.00	9939.00	9939.00	270.00	22.23	22.23	881.19	836.38	19.66	
10600.00	9939.00	9939.00	270.00	22.23	22.23	981.05	936.22	21.88	
10700.00	9939.00	9939.00	270.00	22.23	22.23	1080.93	1036.08	24.10	
10800.00	9939.00	9939.00	270.00	22.23	22.23	1180.83	1135.97	26.32	
10900.00	9939.00	9939.00	270.00	22.23	22.23	1280.75	1235.87	28.54	
11000.00	9939.00	9939.00	270.00	22.23	22.23	1380.68	1335.78	30.75	
11100.00	9939.00	9939.00	270.00	22.23	22.23	1480.62	1435.71	32.97	
11200.00	9939.00	9939.00	270.00	22.23	22.23	1580.57	1535.64	35.18	
11300.00	9939.00	9939.00	270.00	22.23	22.23	1680.52	1635.57	37.39	
11400.00	9939.00	9939.00	270.00	22.23	22.23	1780.48	1735.52	39.60	
11500.00	9939.00	9939.00	270.00	22.23	22.23	1880.44	1835.46	41.81	
11600.00	9939.00	9939.00	270.00	22.23	22.23	1980.41	1935.41	44.01	
11700.00	9939.00	9939.00	270.00	22.23	22.23	2080.38	2035.37	46.22	
11800.00	9939.00	9939.00	270.00	22.23	22.23	2180.35	2135.34	48.44	
11900.00	9939.00	9939.00	270.00	22.23	22.23	2280.33	2235.32	50.67	
12000.00	9939.00	9939.00	270.00	22.23	22.23	2380.30	2335.21	52.79	
12100.00	9939.00	9939.00	270.00	22.23	22.23	2480.28	2435.15	54.96	

5D Anti-Collision Report

Secondary Well : North Thistle 15-10 State Com 1H Pilot (p) (TVD Relative to Kelly Bushing (Primary)) ; All Azimuth Relative to GRID NORTH									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
12200.00	9939.00	9939.00	270.00	22.23	22.23	2580.26	2535.14	57.18	
12300.00	9939.00	9939.00	270.00	22.23	22.23	2680.24	2635.09	59.36	
12400.00	9939.00	9939.00	270.00	22.23	22.23	2780.23	2735.06	61.56	
12500.00	9939.00	9939.00	270.00	22.23	22.23	2880.21	2834.99	63.70	
12600.00	9939.00	9939.00	270.00	22.23	22.23	2980.20	2934.94	65.85	
12700.00	9939.00	9939.00	270.00	22.23	22.23	3080.18	3034.89	68.01	
12800.00	9939.00	9939.00	270.00	22.23	22.23	3180.17	3134.84	70.16	
12900.00	9939.00	9939.00	270.00	22.23	22.23	3280.16	3234.80	72.31	
13000.00	9939.00	9939.00	270.00	22.23	22.23	3380.15	3334.75	74.46	
13100.00	9939.00	9939.00	270.00	22.23	22.23	3480.14	3434.71	76.61	
13200.00	9939.00	9939.00	270.00	22.23	22.23	3580.13	3534.66	78.75	
13300.00	9939.00	9939.00	270.00	22.23	22.23	3680.12	3634.62	80.88	
13400.00	9939.00	9939.00	270.00	22.23	22.23	3780.11	3734.57	83.01	
13500.00	9939.00	9939.00	270.00	22.23	22.23	3880.10	3834.53	85.14	
13600.00	9939.00	9939.00	270.00	22.23	22.23	3980.09	3934.48	87.26	
13700.00	9939.00	9939.00	270.00	22.23	22.23	4080.08	4034.43	89.37	
13800.00	9939.00	9939.00	270.00	22.23	22.23	4180.08	4134.38	91.48	
13900.00	9939.00	9939.00	270.00	22.23	22.23	4280.07	4234.34	93.58	
14000.00	9939.00	9939.00	270.00	22.23	22.23	4380.06	4334.29	95.68	
14100.00	9939.00	9939.00	270.00	22.23	22.23	4480.06	4434.24	97.78	
14200.00	9939.00	9939.00	270.00	22.23	22.23	4580.05	4534.19	99.86	
14300.00	9939.00	9939.00	270.00	22.23	22.23	4680.05	4634.14	101.94	
14400.00	9939.00	9939.00	270.00	22.23	22.23	4780.04	4734.09	104.02	
14500.00	9939.00	9939.00	270.00	22.23	22.23	4880.03	4834.04	106.09	
14600.00	9939.00	9939.00	270.00	22.23	22.23	4980.03	4933.98	108.15	
14700.00	9939.00	9939.00	270.00	22.23	22.23	5080.02	5033.93	110.21	
14800.00	9939.00	9939.00	270.00	22.23	22.23	5180.02	5133.88	112.26	
14900.00	9939.00	9939.00	270.00	22.23	22.23	5280.02	5233.82	114.30	
15000.00	9939.00	9939.00	270.00	22.23	22.23	5380.01	5333.77	116.34	
15100.00	9939.00	9939.00	270.00	22.23	22.23	5480.01	5433.71	118.37	
15200.00	9939.00	9939.00	270.00	22.23	22.23	5580.00	5533.66	120.40	
15300.00	9939.00	9939.00	270.00	22.23	22.23	5680.00	5633.60	122.41	
15400.00	9939.00	9939.00	270.00	22.23	22.23	5780.00	5733.54	124.43	
15500.00	9939.00	9939.00	270.00	22.23	22.23	5879.99	5833.48	126.43	
15600.00	9939.00	9939.00	270.00	22.23	22.23	5979.99	5933.43	128.43	
15700.00	9939.00	9939.00	270.00	22.23	22.23	6079.98	6033.37	130.42	
15800.00	9939.00	9939.00	270.00	22.23	22.23	6179.98	6133.31	132.40	
15900.00	9939.00	9939.00	270.00	22.23	22.23	6279.98	6233.25	134.38	
16000.00	9939.00	9939.00	270.00	22.23	22.23	6379.97	6333.18	136.35	
16100.00	9939.00	9939.00	270.00	22.23	22.23	6479.97	6433.12	138.31	
16200.00	9939.00	9939.00	270.00	22.23	22.23	6579.97	6533.06	140.27	
16300.00	9939.00	9939.00	270.00	22.23	22.23	6679.97	6633.00	142.22	
16400.00	9939.00	9939.00	270.00	22.23	22.23	6779.96	6732.93	144.16	
16500.00	9939.00	9939.00	270.00	22.23	22.23	6879.96	6832.87	146.09	
16600.00	9939.00	9939.00	270.00	22.23	22.23	6979.96	6932.80	148.02	
16700.00	9939.00	9939.00	270.00	22.23	22.23	7079.96	7032.74	149.94	
16800.00	9939.00	9939.00	270.00	22.23	22.23	7179.95	7132.67	151.85	
16900.00	9939.00	9939.00	270.00	22.23	22.23	7279.95	7232.60	153.75	
17000.00	9939.00	9939.00	270.00	22.23	22.23	7379.95	7332.53	155.65	
17100.00	9939.00	9939.00	270.00	22.23	22.23	7479.95	7432.47	157.54	
17200.00	9939.00	9939.00	270.00	22.23	22.23	7579.94	7532.40	159.42	
17206.93	9939.00	9939.00	270.00	22.23	22.23	7586.87	7539.32	159.55	
Secondary Well : North Thistle 15-10 State Com 1H Lateral (p) (TVD Relative to Kelly Bushing (Primary)) ; All Azimuth Relative to GRID NORTH									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
0.00	9862.54	9862.54	269.52	22.06	22.06	9862.67	9847.49	649.85	
100.00	9862.54	9862.54	269.52	22.06	22.06	9762.67	9745.19	558.68	
200.00	9862.54	9862.54	269.52	22.06	22.06	9662.67	9645.18	552.64	

5D Anti-Collision Report

Secondary Well : North Thistle 15-10 State Com 1H Lateral (p) (TVD Relative to Kelly Bushing (Primary)) ; All Azimuth Relative to GRID NORTH									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
300.00	9862.54	9862.54	269.52	22.06	22.06	9562.67	9545.17	546.41	
400.00	9862.54	9862.54	269.52	22.06	22.06	9462.67	9445.15	540.00	
500.00	9862.54	9862.54	269.52	22.06	22.06	9362.67	9345.12	533.44	
600.00	9862.54	9862.54	269.52	22.06	22.06	9262.67	9245.09	526.75	
700.00	9862.54	9862.54	269.52	22.06	22.06	9162.68	9145.05	519.93	
800.00	9862.54	9862.54	269.52	22.06	22.06	9062.68	9045.01	513.01	
900.00	9862.54	9862.54	269.52	22.06	22.06	8962.68	8944.97	506.00	
1000.00	9862.54	9862.54	269.52	22.06	22.06	8862.68	8844.92	498.92	
1100.00	9862.54	9862.54	269.52	22.06	22.06	8762.68	8744.86	491.79	
1200.00	9862.54	9862.54	269.52	22.06	22.06	8662.68	8644.81	484.60	
1300.00	9862.54	9862.54	269.52	22.06	22.06	8562.69	8544.75	477.39	
1400.00	9862.54	9862.54	269.52	22.06	22.06	8462.69	8444.69	470.15	
1500.00	9862.54	9862.54	269.52	22.06	22.06	8362.69	8344.62	462.90	
1600.00	9862.54	9862.54	269.52	22.06	22.06	8262.69	8244.56	455.65	
1700.00	9862.54	9862.54	269.52	22.06	22.06	8162.69	8144.49	448.40	
1800.00	9862.54	9862.54	269.52	22.06	22.06	8062.69	8044.42	441.15	
1900.00	9862.54	9862.54	269.52	22.06	22.06	7962.70	7944.35	433.92	
2000.00	9862.54	9862.54	269.52	22.06	22.06	7862.70	7844.27	426.71	
2100.00	9862.54	9862.54	269.52	22.06	22.06	7762.70	7744.20	419.53	
2200.00	9862.54	9862.54	269.52	22.06	22.06	7662.70	7644.12	412.37	
2300.00	9862.54	9862.54	269.52	22.06	22.06	7562.70	7544.04	405.24	
2400.00	9862.54	9862.54	269.52	22.06	22.06	7462.71	7443.96	398.14	
2500.00	9862.54	9862.54	269.52	22.06	22.06	7362.71	7343.88	391.08	
2600.00	9862.54	9862.54	269.52	22.06	22.06	7262.71	7243.80	384.06	
2700.00	9862.54	9862.54	269.52	22.06	22.06	7162.71	7143.72	377.07	
2800.00	9862.54	9862.54	269.52	22.06	22.06	7062.72	7043.63	370.12	
2900.00	9862.54	9862.54	269.52	22.06	22.06	6962.72	6943.55	363.22	
3000.00	9862.54	9862.54	269.52	22.06	22.06	6862.72	6843.46	356.35	
3100.00	9862.54	9862.54	269.52	22.06	22.06	6762.72	6743.38	349.53	
3200.00	9862.54	9862.54	269.52	22.06	22.06	6662.73	6643.29	342.75	
3300.00	9862.54	9862.54	269.52	22.06	22.06	6562.73	6543.20	336.01	
3400.00	9862.54	9862.54	269.52	22.06	22.06	6462.73	6443.11	329.32	
3500.00	9862.54	9862.54	269.52	22.06	22.06	6362.74	6343.02	322.67	
3600.00	9862.54	9862.54	269.52	22.06	22.06	6262.74	6242.92	316.06	
3700.00	9862.54	9862.54	269.52	22.06	22.06	6162.74	6142.83	309.50	
3800.00	9862.54	9862.54	269.52	22.06	22.06	6062.75	6042.74	302.98	
3900.00	9862.54	9862.54	269.52	22.06	22.06	5962.75	5942.64	296.51	
4000.00	9862.54	9862.54	269.52	22.06	22.06	5862.75	5842.54	290.08	
4100.00	9862.54	9862.54	269.52	22.06	22.06	5762.76	5742.44	283.69	
4200.00	9862.54	9862.54	269.52	22.06	22.06	5662.76	5642.34	277.35	
4300.00	9862.54	9862.54	269.52	22.06	22.06	5562.76	5542.24	271.06	
4400.00	9862.54	9862.54	269.52	22.06	22.06	5462.77	5442.14	264.81	
4500.00	9862.54	9862.54	269.52	22.06	22.06	5362.77	5342.04	258.61	
4600.00	9862.54	9862.54	269.52	22.06	22.06	5262.78	5241.93	252.45	
4700.00	9862.54	9862.54	269.52	22.06	22.06	5162.78	5141.82	246.34	
4800.00	9862.54	9862.54	269.52	22.06	22.06	5062.79	5041.72	240.27	
4900.00	9862.54	9862.54	269.52	22.06	22.06	4962.79	4941.61	234.25	
5000.00	9862.54	9862.54	269.52	22.06	22.06	4862.80	4841.49	228.28	
5100.00	9862.54	9862.54	269.52	22.06	22.06	4762.80	4741.38	222.35	
5200.00	9862.54	9862.54	211.86	22.06	22.06	4662.81	4641.27	216.47	
5300.00	9862.54	9862.54	197.24	22.06	22.06	4562.85	4541.19	210.64	
5400.00	9862.54	9862.54	191.77	22.06	22.06	4462.96	4441.18	204.87	
5500.00	9862.54	9862.54	191.77	22.06	22.06	4363.11	4341.20	199.14	
5600.00	9862.54	9862.54	191.77	22.06	22.06	4263.27	4241.24	193.46	
5700.00	9862.54	9862.54	191.77	22.06	22.06	4163.44	4141.28	187.83	
5800.00	9862.54	9862.54	191.77	22.06	22.06	4063.62	4041.32	182.24	
5900.00	9862.54	9862.54	191.77	22.06	22.06	3963.81	3941.38	176.71	
6000.00	9862.54	9862.54	191.77	22.06	22.06	3864.00	3841.44	171.23	

5D Anti-Collision Report

Secondary Well : North Thistle 15-10 State Com 1H Lateral (p) (TVD Relative to Kelly Bushing (Primary)) ; All Azimuth Relative to GRID NORTH									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
6100.00	9862.54	9862.54	191.77	22.06	22.06	3764.21	3741.50	165.80	
6200.00	9862.54	9862.54	191.77	22.06	22.06	3664.42	3641.58	160.42	
6300.00	9862.54	9862.54	191.77	22.06	22.06	3564.65	3541.67	155.09	
6400.00	9862.54	9862.54	191.77	22.06	22.06	3464.90	3441.77	149.82	
6500.00	9862.54	9862.54	191.77	22.06	22.06	3365.15	3341.88	144.60	
6600.00	9862.54	9862.54	191.77	22.06	22.06	3265.43	3242.01	139.43	
6700.00	9862.54	9862.54	191.77	22.06	22.06	3165.72	3142.15	134.31	
6800.00	9862.54	9862.54	191.77	22.06	22.06	3066.02	3042.30	129.25	
6900.00	9862.54	9862.54	191.77	22.06	22.06	2966.35	2942.48	124.24	
7000.00	9862.54	9862.54	191.77	22.06	22.06	2866.71	2842.67	119.29	
7100.00	9862.54	9862.54	191.77	22.06	22.06	2767.08	2742.89	114.39	
7200.00	9862.54	9862.54	191.77	22.06	22.06	2667.49	2643.13	109.52	
7300.00	9862.54	9862.54	192.73	22.06	22.06	2567.90	2543.37	104.69	
7400.00	9862.54	9862.54	194.08	22.06	22.06	2468.27	2443.57	99.92	
7500.00	9862.54	9862.54	195.66	22.06	22.06	2368.59	2343.71	95.20	
7600.00	9862.54	9862.54	197.55	22.06	22.06	2268.88	2243.82	90.55	
7700.00	9862.54	9862.54	199.82	22.06	22.06	2169.13	2143.89	85.94	
7800.00	9862.54	9862.54	202.58	22.06	22.06	2069.34	2043.91	81.36	
7900.00	9862.54	9862.54	200.42	22.06	22.06	1969.54	1943.91	76.84	
8000.00	9862.54	9862.54	200.42	22.06	22.06	1869.76	1843.92	72.38	
8100.00	9862.54	9862.54	200.42	22.06	22.06	1770.00	1743.96	67.97	
8200.00	9862.54	9862.54	200.42	22.06	22.06	1670.28	1644.03	63.63	
8300.00	9862.54	9862.54	200.42	22.06	22.06	1570.58	1544.12	59.34	
8400.00	9862.54	9862.54	200.42	22.06	22.06	1470.93	1444.25	55.12	
8500.00	9862.54	9862.54	200.42	22.06	22.06	1371.33	1344.42	50.95	
8600.00	9862.54	9862.54	200.42	22.06	22.06	1271.80	1244.65	46.85	
8700.00	9862.54	9862.54	200.42	22.06	22.06	1172.34	1144.95	42.81	
8800.00	9862.54	9862.54	200.42	22.06	22.06	1072.98	1045.35	38.83	
8900.00	9862.54	9862.54	200.42	22.06	22.06	973.76	945.87	34.92	
9000.00	9862.54	9862.54	200.42	22.06	22.06	874.71	846.56	31.07	
9100.00	9862.54	9862.54	200.42	22.06	22.06	775.90	747.47	27.29	
9200.00	9862.54	9862.54	200.42	22.06	22.06	677.45	648.61	23.49	
9300.00	9862.54	9862.54	200.42	22.06	22.06	579.52	550.18	19.75	
9400.00	9862.54	9862.54	200.42	22.06	22.06	482.45	452.53	16.13	
9500.00	9862.54	9862.54	198.99	22.06	22.06	387.30	356.43	12.54	
9600.00	9862.54	9862.54	193.66	22.06	22.06	303.93	270.87	9.19	
9700.00	9862.54	9862.54	191.95	22.06	22.06	251.48	213.84	6.68	
9800.00	9862.54	9862.54	191.98	22.06	22.06	252.74	210.30	5.95	
9900.00	9862.54	9862.54	193.79	22.06	22.06	307.01	262.73	6.93	
10000.00	10009.14	10011.55	190.68	22.38	21.77	385.57	341.83	8.81	
10100.00	10339.97	10618.89	186.63	24.52	15.74	417.26	385.99	13.34	
10200.00	10339.35	10717.71	186.56	25.20	15.89	403.22	371.64	12.77	
10300.00	10338.72	10817.70	186.48	25.98	16.07	402.30	370.38	12.60	
10400.00	10338.08	10917.70	186.40	26.87	16.27	401.59	369.26	12.42	
10500.00	10337.45	11017.70	186.31	27.86	16.51	400.89	368.08	12.22	
10600.00	10336.82	11117.69	186.23	28.92	16.78	400.19	366.84	12.00	
10700.00	10336.18	11217.69	186.15	30.07	17.07	399.49	365.54	11.77	
10800.00	10335.55	11317.68	186.06	31.27	17.39	398.79	364.19	11.53	
10900.00	10334.92	11417.68	185.98	32.54	17.73	398.09	362.79	11.28	
11000.00	10334.28	11517.67	185.89	33.86	18.09	397.39	361.35	11.02	
11100.00	10333.65	11617.67	185.81	35.23	18.47	396.70	359.85	10.77	
11200.00	10333.02	11717.67	185.72	36.64	18.87	396.00	358.32	10.51	
11300.00	10332.38	11817.66	185.64	38.09	19.28	395.31	356.75	10.25	
11400.00	10331.75	11917.66	185.55	39.56	19.73	394.61	355.15	10.00	
11500.00	10331.12	12017.65	185.46	41.07	20.22	393.92	353.52	9.75	
11600.00	10330.48	12117.65	185.38	42.61	20.72	393.22	351.87	9.51	
11700.00	10329.85	12217.65	185.29	44.16	21.23	392.53	350.21	9.27	
11800.00	10329.22	12317.64	185.20	45.74	21.71	391.84	348.44	9.03	

**Weatherford®**

Weatherford Drilling Services

GeoDec4 v2.1.0.0

Report Date: March 16, 2015
Job Number: _____
Customer: Devon Energy
Well Name: North Thistle 15-10 State Com 2H
API Number: _____
Rig Name: _____
Location: Lea Co, NM Nad83 NME
Block: _____
Engineer: RWJ

NAD83 / New Mexico East (ftUS)	NAD83 (1986)
Projected Coordinate System	Geodetic Coordinate System
Datum: North American Datum 1983 (1986)	Datum: North American Datum 1983 (1986)
Ellipsoid: GRS 1980	Ellipsoid: GRS 1980
EPSG: 2257	EPSG: 4269
North: 475459.90 US Survey Foot	Latitude: 32.304757 Degree
East: 779588.20 US Survey Foot	Longitude: -103.562202 Degree
Convergence: 0.41°	
Declination: 7.27°	
Total Correction: 6.86°	
Datum Transformation: none	

Geodetic Location WGS84

MSL Elevation = 0 m
Latitude = 32° 18' 17.12" N
Longitude = 103° 33' 43.93" W

Magnetic Declination = 7.27 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6628
Local Field Strength = 48219 nT	Magnetic Vector X = 23806 nT
Magnetic Dip = 60.15 deg	Magnetic Vector Y = 3035 nT
Magnetic Model = bggm2014.dat	Magnetic Vector Z = 41823 nT
Run Date = July 31, 2015	Magnetic Vector H = 23999 nT

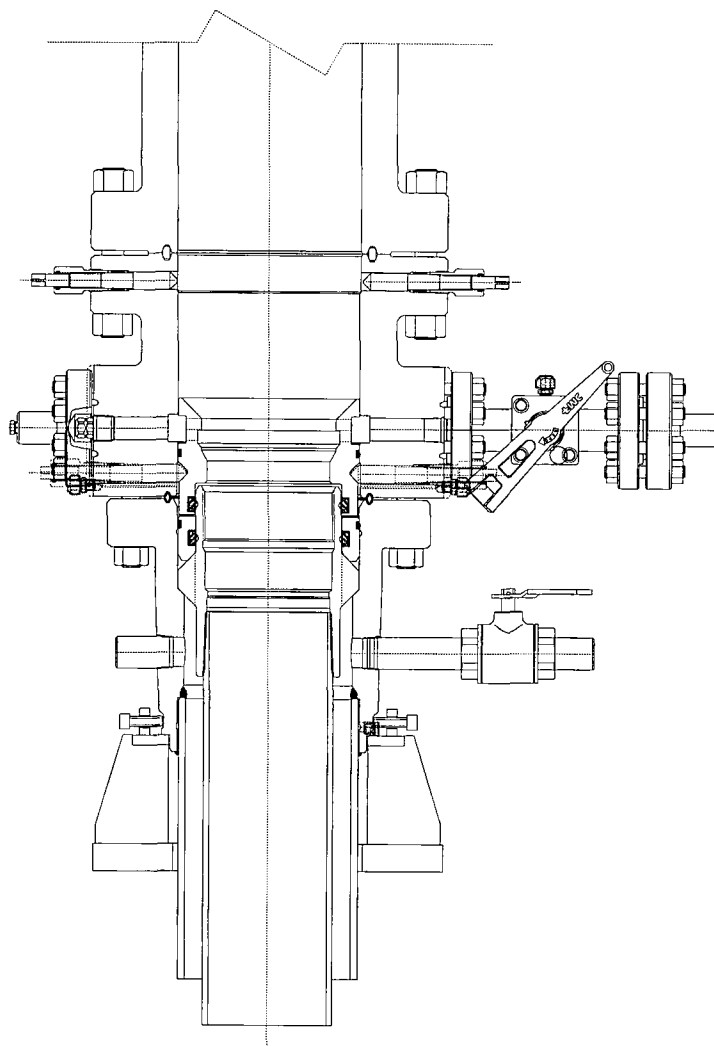
Signed: _____ Date: _____

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5D Anti-Collision Report

Secondary Well : North Thistle 15-10 State Com 1H Lateral (p) (TVD Relative to Kelly Bushing (Primary)) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
11900.00	10328.59	12417.64	185.12	47.34	22.25	391.15	346.68	8.80	
12000.00	10327.95	12517.63	185.03	48.96	22.76	390.46	344.95	8.58	
12100.00	10327.32	12617.63	184.94	50.59	23.30	389.78	343.23	8.37	
12200.00	10326.69	12717.62	184.85	52.23	23.88	389.09	341.37	8.15	
12300.00	10326.05	12817.62	184.76	53.89	24.45	388.40	339.54	7.95	
12400.00	10325.42	12917.62	184.67	55.56	24.94	387.72	337.77	7.76	
12500.00	10324.79	13017.61	184.58	57.24	25.59	387.03	335.82	7.56	
12600.00	10324.15	13117.61	184.49	58.92	26.19	386.35	333.95	7.37	
12700.00	10323.52	13217.60	184.40	60.62	26.76	385.67	332.09	7.20	
12800.00	10322.89	13317.60	184.31	62.33	27.34	384.99	330.22	7.03	
12900.00	10322.25	13417.60	184.22	64.04	27.92	384.31	328.35	6.87	
13000.00	10321.62	13517.59	184.13	65.76	28.50	383.63	326.47	6.71	
13100.00	10320.99	13617.59	184.04	67.49	29.13	382.95	324.55	6.56	
13200.00	10320.35	13717.58	183.95	69.22	29.77	382.27	322.61	6.41	
13300.00	10319.72	13817.58	183.86	70.96	30.41	381.60	320.67	6.26	
13400.00	10319.09	13917.57	183.77	72.70	31.05	380.92	318.73	6.13	
13500.00	10318.46	14017.57	183.67	74.45	31.70	380.25	316.78	5.99	
13600.00	10317.82	14117.57	183.58	76.20	32.35	379.57	314.83	5.86	
13700.00	10317.19	14217.56	183.49	77.96	33.00	378.90	312.88	5.74	
13800.00	10316.56	14317.56	183.39	79.72	33.65	378.23	310.92	5.62	
13900.00	10315.92	14417.55	183.30	81.48	34.31	377.56	308.96	5.50	
14000.00	10315.29	14517.55	183.21	83.25	34.97	376.89	307.00	5.39	
14100.00	10314.66	14617.55	183.11	85.02	35.63	376.22	305.04	5.29	
14200.00	10314.02	14717.54	183.02	86.80	36.29	375.55	303.07	5.18	
14300.00	10313.39	14817.54	182.92	88.57	36.96	374.89	301.10	5.08	
14400.00	10312.76	14917.53	182.82	90.35	37.63	374.22	299.13	4.98	
14500.00	10312.12	15017.53	182.73	92.13	38.30	373.56	297.16	4.89	
14600.00	10311.49	15117.52	182.63	93.91	38.97	372.89	295.19	4.80	
14700.00	10310.86	15217.52	182.54	95.70	39.65	372.23	293.22	4.71	
14800.00	10310.22	15317.52	182.44	97.49	40.33	371.57	291.24	4.63	
14900.00	10309.59	15417.51	182.34	99.28	41.00	370.91	289.27	4.54	
15000.00	10308.96	15517.51	182.24	101.07	41.69	370.25	287.29	4.46	
15100.00	10308.33	15617.50	182.15	102.86	42.37	369.59	285.32	4.39	
15200.00	10307.69	15717.50	182.05	104.66	43.05	368.94	283.35	4.31	
15300.00	10307.06	15817.50	181.95	106.45	43.74	368.28	281.34	4.24	
15400.00	10306.43	15917.49	181.85	108.25	44.43	367.63	279.31	4.16	
15500.00	10305.79	16017.49	181.75	110.05	45.11	366.97	277.27	4.09	
15600.00	10305.16	16117.48	181.65	111.85	45.80	366.32	275.23	4.02	
15700.00	10304.53	16217.48	181.55	113.65	46.50	365.67	273.19	3.95	
15800.00	10303.89	16317.47	181.45	115.46	47.19	365.02	271.15	3.89	
15900.00	10303.26	16417.47	181.35	117.26	47.88	364.37	269.10	3.82	
16000.00	10302.63	16517.47	181.25	119.07	48.58	363.72	267.06	3.76	
16100.00	10301.99	16617.46	181.15	120.88	49.27	363.07	265.01	3.70	
16200.00	10301.36	16717.46	181.04	122.68	49.97	362.43	262.97	3.64	
16300.00	10300.73	16817.45	180.94	124.49	50.67	361.78	260.92	3.59	
16400.00	10300.09	16917.45	180.84	126.30	51.37	361.14	258.87	3.53	
16500.00	10299.46	17017.45	180.74	128.11	52.07	360.50	256.83	3.48	
16600.00	10298.83	17117.44	180.63	129.92	52.77	359.86	254.78	3.42	
16700.00	10298.20	17217.44	180.53	131.74	53.47	359.22	252.73	3.37	
16800.00	10297.56	17317.43	180.43	133.55	54.17	358.58	250.68	3.32	
16900.00	10296.93	17417.43	180.32	135.36	54.87	357.94	248.64	3.27	
17000.00	10296.30	17517.42	180.22	137.18	55.58	357.31	246.59	3.23	
17100.00	10295.66	17617.42	180.11	138.99	56.28	356.67	244.54	3.18	
17200.00	10295.03	17717.42	180.00	140.81	56.99	356.04	242.49	3.14	
17206.93	10295.00	17722.09	180.00	140.89	57.02	356.00	242.38	3.13	



PRIMARY MODE

DEVON ENERGY

ARTESIA

S.E.N.M

13 3/8 X 9 5/8

QUOTE LAYOUT
F18648
REF: DM100161737
DM100151315

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REVISIONS	
A	05-08-13
B	1-22-14
C	5-13-14

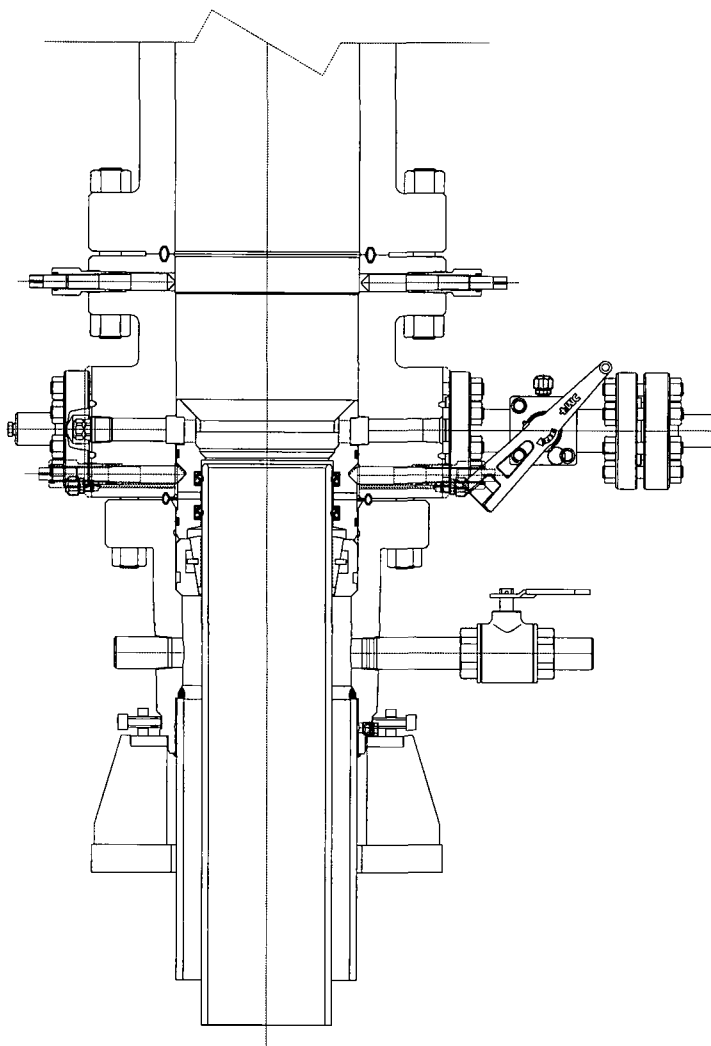
DESCRIPTION

SURFACE WELLHEAD LAYOUT
UNIHEAD, UH-1, SOW,
DEVON ENERGY, ODESSA

DRAWN BY	K. VU	05-08-13
DRAFTING REVIEW	Z. MARQUEZ	05-08-13
DESIGN REVIEW	K. TAHA	05-08-13
APPROVED BY	R. HAMILTON	05-08-13

FMCTechnologies

DRAWING NUMBER
DM100161771-2A



CONTINGENCY MODE

DEVON ENERGY
ARTESIA
S.E.N.M
13 3/8 X 9 5/8

QUOTE LAYOUT
F18648
REF: DM100161737
DM100151315

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		B	1-22-14		K. VU	05-08-13	
		C	5-13-14		DRAFTING REVIEW	Z. MARQUEZ	05-08-13
					DESIGN REVIEW	K. TAHA	05-08-13
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