

HOBBS OCD

APR 27 2016

RECEIVED**5D Anti-Collision Report****Devon Energy****Field Name:** *Lea Co, NM Nad 83 NMEZ***Site Name:** *Coachwhip 26 Fed 4H, 6H, 8H Pad***Well Name:** *Coachwhip 26 Fed 8H*

08 May 2015

**Weatherford®**



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Coachwhip 26 Fed 8H

Field Name Lea Co. NM Nad 83 NMEZ	Map Units : US ft		Company Name : Devon Energy	
	Vertical Reference Datum (VRD) : Mean Sea Level			
Projected Coordinate System : NAD83 / New Mexico East (ftUS)				
Comment :				
Site Name Coachwhip 26 Fed 4H, 6H, 8H Pad	Units : US ft	North Reference : Grid	Convergence Angle : 0.43	
	Position	Northing : 467236.68 US ft	Latitude : 32° 16' 55.16"	
		Easting : 787875.60 US ft	Longitude : -103° 32' 8.08"	
Elevation above Mean Sea Level : 3662.00 US ft				
Comment :				
Slot Name Coachwhip 26 Fed 8H	Position (Offsets relative to Site Centre)			
	+N / -S : -0.46 US ft	Northing : 467236.22 US ft	Latitude : 32° 16' 55.16"	
	+E / -W : -100.00 US ft	Easting : 787775.60 US ft	Longitude : -103° 32' 9.25"	
Slot TVD Reference : Ground Elevation				
Elevation above Mean Sea Level : 3662.00 US ft				
Comment :				
Well Name Coachwhip 26 Fed 8H	Type : Main well		UWI :	Plan : Working Plan
	Rig Height : 25.00 US ft		Comment :	
	Well TVD Reference : 25.00 US ft			
	Relative to Mean Sea Level : 3687.00 US ft			
	Closure Distance : 4628.47 US ft		Closure Azimuth : 179.903°	
	Vertical Section (Position of Origin Relative to Slot)			
	+N / -S : 0.00 US ft		+E / -W : 0.00 US ft	Az : 176.72°
Magnetic Parameters				
Model : BGGM		Field Strength :	Dec : 7.23°	Dip : 60.13° Date : 30/Oct/2015
48178.0nT				

Collision / Uncertainty Analysis				
Primary Well	Start MD (US ft)	End MD (US ft)	Collision Risk Interval	No. of Std Deviations in Error Computation
Coachwhip 26 Fed 8H (p)	0.00	14078.90	100.00	2

Secondary Well Names

Coachwhip 26 Federal 1H (s)
Coachwhip 26 Fed 4H (p)
Coachwhip 26 Fed 6H (p)

Anti-Collision Report Terminology

S.Minor, S.Major : Radii of the ellipse of uncertainty at the current location as seen in the along hole direction.

PHI : Angle between high-side vector and semi-minor axis

TVD Spread : Total TVD range of the ellipsoid of uncertainty at the current location

ES : Distance between the extremities of the primary and secondary uncertainty ellipsoids in the direction Cr-Cr

T.Face to Sec : Angle between the Hi-Side vector of the primary well at the current location and line of closest approach between the two wells

5D Anti-Collision Report

Separation factors calculated using Pedal Curve (Independent Uncertainty). Well path created using minimum curvature.

Anti-Collision Proximity Summary (TVD relative to Well TVD Reference)

SF	Secondary Well Name	Prim MD (US ft)	Sec MD (US ft)	TVD (US ft)	CC (US ft)	ES (US ft)	SF	Risk
	Coachwhip 26 Fed 6H (p)	5300.00	5300.00	5300.00	49.97	25.64	2.05	
	Coachwhip 26 Fed 4H (p)	5384.77	5384.59	5384.76	100.70	76.06	4.09	
	Coachwhip 26 Federal 1H (s)	14078.90	9653.66	9617.00	609.95	506.18	5.88	

Primary Well : Coachwhip 26 Fed 8H (p) (TVD Relative to Well TVD Reference, All Azimuth Relative to GRID NORTH)								
MD (US ft)	TVD (US ft)	T Face to Sec (p)	S Major (US ft)	S Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	Risk
0.00	0.00	89.78	0.00	0.00	Coachwhip 26 Fed 6H (p)	49.97	48.85	44.67
100.00	100.00	89.78	0.11	0.11	Coachwhip 26 Fed 6H (p)	49.97	48.63	37.31
200.00	200.00	89.78	0.34	0.34	Coachwhip 26 Fed 6H (p)	49.97	48.18	27.93
300.00	300.00	89.78	0.56	0.56	Coachwhip 26 Fed 6H (p)	49.97	47.73	22.32
400.00	400.00	89.78	0.79	0.79	Coachwhip 26 Fed 6H (p)	49.97	47.28	18.59
500.00	500.00	89.78	1.01	1.01	Coachwhip 26 Fed 6H (p)	49.97	46.83	15.93
600.00	600.00	89.78	1.24	1.24	Coachwhip 26 Fed 6H (p)	49.97	46.38	13.93
700.00	700.00	89.78	1.46	1.46	Coachwhip 26 Fed 6H (p)	49.97	45.93	12.38
800.00	800.00	89.78	1.69	1.69	Coachwhip 26 Fed 6H (p)	49.97	45.48	11.14
900.00	900.00	89.78	1.91	1.91	Coachwhip 26 Fed 6H (p)	49.97	45.03	10.12
1000.00	1000.00	89.78	2.14	2.14	Coachwhip 26 Fed 6H (p)	49.97	44.58	9.28
1100.00	1100.00	89.78	2.36	2.36	Coachwhip 26 Fed 6H (p)	49.97	44.14	8.56
1200.00	1200.00	89.78	2.59	2.59	Coachwhip 26 Fed 6H (p)	49.97	43.69	7.95
1300.00	1300.00	89.78	2.81	2.81	Coachwhip 26 Fed 6H (p)	49.97	43.24	7.42
1400.00	1400.00	89.78	3.03	3.03	Coachwhip 26 Fed 6H (p)	49.97	42.79	6.96
1500.00	1500.00	89.78	3.26	3.26	Coachwhip 26 Fed 6H (p)	49.97	42.65	6.83
1600.00	1600.00	89.78	3.48	3.48	Coachwhip 26 Fed 6H (p)	49.97	42.20	6.43
1700.00	1700.00	89.78	3.71	3.71	Coachwhip 26 Fed 6H (p)	49.97	41.75	6.08
1800.00	1800.00	89.78	3.93	3.93	Coachwhip 26 Fed 6H (p)	49.97	41.30	5.76
1900.00	1900.00	89.78	4.16	4.16	Coachwhip 26 Fed 6H (p)	49.97	40.85	5.48
2000.00	2000.00	89.78	4.38	4.38	Coachwhip 26 Fed 6H (p)	49.97	40.40	5.22
2100.00	2100.00	89.78	4.61	4.61	Coachwhip 26 Fed 6H (p)	49.97	39.95	4.99
2200.00	2200.00	89.78	4.83	4.83	Coachwhip 26 Fed 6H (p)	49.97	39.50	4.77
2300.00	2300.00	89.78	5.06	5.06	Coachwhip 26 Fed 6H (p)	49.97	39.05	4.58
2400.00	2400.00	89.78	5.28	5.28	Coachwhip 26 Fed 6H (p)	49.97	38.60	4.40
2500.00	2500.00	89.78	5.51	5.51	Coachwhip 26 Fed 6H (p)	49.97	38.15	4.23
2600.00	2600.00	89.78	5.73	5.73	Coachwhip 26 Fed 6H (p)	49.97	37.70	4.07
2700.00	2700.00	89.78	5.96	5.96	Coachwhip 26 Fed 6H (p)	49.97	37.25	3.93
2800.00	2800.00	89.78	6.18	6.18	Coachwhip 26 Fed 6H (p)	49.97	36.81	3.80

5D Anti-Collision Report

Primary Well	Coachwhip 26 Fed 8H (p)	(TVD Relative to Well TVD Reference, 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
2900.00	2900.00	89.78	6.41	6.41	Coachwhip 26 Fed 6H (p)	49.97	36.36	3.67	
3000.00	3000.00	89.78	6.63	6.63	Coachwhip 26 Fed 6H (p)	49.97	35.91	3.55	
3100.00	3100.00	89.78	6.86	6.86	Coachwhip 26 Fed 6H (p)	49.97	35.46	3.44	
3200.00	3200.00	89.78	7.08	7.08	Coachwhip 26 Fed 6H (p)	49.97	35.01	3.34	
3300.00	3300.00	89.78	7.31	7.31	Coachwhip 26 Fed 6H (p)	49.97	34.56	3.24	
3400.00	3400.00	89.78	7.53	7.53	Coachwhip 26 Fed 6H (p)	49.97	34.11	3.15	
3500.00	3500.00	89.78	7.76	7.76	Coachwhip 26 Fed 6H (p)	49.97	33.66	3.06	
3600.00	3600.00	89.78	7.98	7.98	Coachwhip 26 Fed 6H (p)	49.97	33.21	2.98	
3700.00	3700.00	89.78	8.20	8.20	Coachwhip 26 Fed 6H (p)	49.97	32.76	2.90	
3800.00	3800.00	89.78	8.43	8.43	Coachwhip 26 Fed 6H (p)	49.97	32.31	2.83	
3900.00	3900.00	89.78	8.65	8.65	Coachwhip 26 Fed 6H (p)	49.97	31.86	2.76	
4000.00	4000.00	89.78	8.88	8.88	Coachwhip 26 Fed 6H (p)	49.97	31.41	2.69	
4100.00	4100.00	89.78	9.10	9.10	Coachwhip 26 Fed 6H (p)	49.97	30.96	2.63	
4200.00	4200.00	89.78	9.33	9.33	Coachwhip 26 Fed 6H (p)	49.97	30.51	2.57	
4300.00	4300.00	89.78	9.55	9.55	Coachwhip 26 Fed 6H (p)	49.97	30.06	2.51	
4400.00	4400.00	89.78	9.78	9.78	Coachwhip 26 Fed 6H (p)	49.97	29.61	2.45	
4500.00	4500.00	89.78	10.00	10.00	Coachwhip 26 Fed 6H (p)	49.97	29.16	2.40	
4600.00	4600.00	89.78	10.23	10.23	Coachwhip 26 Fed 6H (p)	49.97	28.71	2.35	
4700.00	4700.00	89.78	10.45	10.45	Coachwhip 26 Fed 6H (p)	49.97	28.26	2.30	
4800.00	4800.00	89.78	10.68	10.68	Coachwhip 26 Fed 6H (p)	49.97	27.81	2.26	
4900.00	4900.00	89.78	10.90	10.90	Coachwhip 26 Fed 6H (p)	49.97	27.36	2.21	
5000.00	5000.00	89.78	11.13	11.13	Coachwhip 26 Fed 6H (p)	49.97	26.91	2.17	
5100.00	5100.00	89.78	11.35	11.35	Coachwhip 26 Fed 6H (p)	49.97	26.47	2.13	
5200.00	5200.00	89.78	11.58	11.58	Coachwhip 26 Fed 6H (p)	49.97	26.09	2.09	
5300.00	5300.00	89.78	11.80	11.80	Coachwhip 26 Fed 6H (p)	49.97	25.64	2.05	
5400.00	5399.99	179.79	12.01	12.01	Coachwhip 26 Fed 6H (p)	50.84	26.10	2.06	
5500.00	5499.96	179.80	12.21	12.20	Coachwhip 26 Fed 6H (p)	53.46	28.29	2.12	
5600.00	5599.86	179.81	12.41	12.39	Coachwhip 26 Fed 6H (p)	57.82	32.23	2.26	
5700.00	5699.68	179.83	12.61	12.57	Coachwhip 26 Fed 6H (p)	63.93	37.90	2.46	
5800.00	5799.37	179.85	12.82	12.75	Coachwhip 26 Fed 6H (p)	71.77	45.32	2.71	
5900.00	5898.99	179.86	13.03	12.95	Coachwhip 26 Fed 6H (p)	80.49	53.61	2.99	
6000.00	5998.60	179.88	13.24	13.15	Coachwhip 26 Fed 6H (p)	89.20	61.90	3.27	
6100.00	6098.22	179.89	13.45	13.36	Coachwhip 26 Fed 6H (p)	97.92	70.19	3.53	
6200.00	6197.84	179.90	13.67	13.56	Coachwhip 26 Fed 6H (p)	106.64	78.48	3.79	
6300.00	6297.46	179.91	13.89	13.76	Coachwhip 26 Fed 6H (p)	115.35	86.77	4.04	
6400.00	6397.08	179.91	14.11	13.97	Coachwhip 26 Fed 6H (p)	124.07	95.06	4.28	

SD Anti-Collision Report

Primary Well : Coachwhip 26 Fed 6H (p) (TVD Relative to Well TVD Reference ; All Azimuth Relative to GRID NORTH)									
N 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
6500.00	6496.70	179.92	14.33	14.17	Coachwhip 26 Fed 6H (p)	132.78	103.34	4.51	
6600.00	6596.32	179.92	14.55	14.38	Coachwhip 26 Fed 6H (p)	141.50	111.63	4.74	
6700.00	6695.94	179.93	14.78	14.59	Coachwhip 26 Fed 6H (p)	150.21	119.91	4.96	
6800.00	6795.56	179.93	15.00	14.80	Coachwhip 26 Fed 6H (p)	158.93	128.20	5.17	
6900.00	6895.18	179.93	15.23	15.01	Coachwhip 26 Fed 6H (p)	167.64	136.48	5.38	
7000.00	6994.80	179.94	15.46	15.22	Coachwhip 26 Fed 6H (p)	176.36	144.76	5.58	
7100.00	7094.42	179.94	15.69	15.43	Coachwhip 26 Fed 6H (p)	185.08	153.05	5.78	
7200.00	7194.04	179.94	15.93	15.64	Coachwhip 26 Fed 6H (p)	193.79	161.33	5.97	
7300.00	7293.66	179.95	16.16	15.85	Coachwhip 26 Fed 6H (p)	202.51	169.61	6.16	
7400.00	7393.28	179.95	16.40	16.06	Coachwhip 26 Fed 6H (p)	211.22	177.89	6.34	
7500.00	7492.90	179.95	16.63	16.27	Coachwhip 26 Fed 6H (p)	219.94	186.17	6.51	
7600.00	7592.52	179.95	16.87	16.49	Coachwhip 26 Fed 6H (p)	228.65	194.45	6.68	
7700.00	7692.14	179.95	17.11	16.70	Coachwhip 26 Fed 6H (p)	237.37	202.73	6.85	
7800.00	7791.76	179.96	17.35	16.92	Coachwhip 26 Fed 6H (p)	246.08	211.00	7.01	
7900.00	7891.37	179.96	17.59	17.13	Coachwhip 26 Fed 6H (p)	254.80	219.28	7.17	
8000.00	7990.99	179.96	17.83	17.35	Coachwhip 26 Fed 6H (p)	263.52	227.56	7.33	
8100.00	8090.65	179.96	18.06	17.56	Coachwhip 26 Fed 6H (p)	271.80	235.41	7.47	
8200.00	8190.37	179.96	18.26	17.76	Coachwhip 26 Fed 6H (p)	279.21	242.40	7.59	
8300.00	8290.16	179.96	18.47	17.97	Coachwhip 26 Fed 6H (p)	285.75	248.52	7.68	
8400.00	8390.00	179.96	18.67	18.17	Coachwhip 26 Fed 6H (p)	291.42	253.77	7.74	
8500.00	8489.88	179.96	18.88	18.37	Coachwhip 26 Fed 6H (p)	296.21	258.15	7.78	
8600.00	8589.81	179.96	19.08	18.57	Coachwhip 26 Fed 6H (p)	300.14	261.65	7.80	
8700.00	8689.76	179.96	19.27	18.77	Coachwhip 26 Fed 6H (p)	303.19	264.28	7.79	
8800.00	8789.74	179.96	19.47	18.96	Coachwhip 26 Fed 6H (p)	305.38	266.04	7.76	
8900.00	8889.73	179.96	19.67	19.16	Coachwhip 26 Fed 6H (p)	306.68	266.93	7.71	
9000.00	8989.73	89.96	19.86	19.35	Coachwhip 26 Fed 6H (p)	307.12	266.95	7.64	
9100.00	9089.73	89.96	20.06	19.56	Coachwhip 26 Fed 6H (p)	307.12	266.51	7.56	
9200.00	9189.71	273.06	20.23	19.77	Coachwhip 26 Fed 6H (p)	307.07	266.02	7.48	
9300.00	9288.14	269.97	20.01	19.88	Coachwhip 26 Fed 6H (p)	306.63	265.22	7.40	
9400.00	9380.96	263.92	20.11	19.27	Coachwhip 26 Fed 6H (p)	308.84	267.02	7.39	
9500.00	9464.14	256.97	20.29	18.15	Coachwhip 26 Fed 6H (p)	320.14	277.98	7.59	
9600.00	9534.02	251.68	20.57	16.82	Coachwhip 26 Fed 6H (p)	347.41	304.92	8.18	
9700.00	9587.55	238.51	20.92	15.49	Coachwhip 26 Fed 6H (p)	387.61	345.45	9.19	
9800.00	9622.40	219.87	21.34	14.52	Coachwhip 26 Fed 6H (p)	422.79	384.74	11.11	
9900.00	9637.03	209.08	21.98	14.08	Coachwhip 26 Fed 6H (p)	429.96	395.48	12.47	
10000.00	9637.08	207.66	22.73	14.26	Coachwhip 26 Fed 6H (p)	429.00	394.06	12.28	

5D Anti-Collision Report

Primary Well : Coachwhip 26 Fed 6H (p) (TVD Relative to Well TVD Reference ; All Azimuth Relative to GRID NORTH)									
PMD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	Nearest Well	CC (US ft)	EST (US ft)	SF	Risk
10100.00	9636.59	207.08	23.56	14.45	Coachwhip 26 Fed 6H (p)	426.76	391.25	12.02	
10200.00	9636.09	206.49	24.46	14.68	Coachwhip 26 Fed 6H (p)	424.55	388.36	11.73	
10300.00	9635.60	205.90	25.56	14.94	Coachwhip 26 Fed 6H (p)	422.40	385.44	11.43	
10400.00	9635.11	205.30	26.72	15.23	Coachwhip 26 Fed 6H (p)	420.28	382.52	11.13	
10500.00	9634.62	204.69	27.93	15.56	Coachwhip 26 Fed 6H (p)	418.22	379.60	10.83	
10600.00	9634.12	204.08	29.20	15.90	Coachwhip 26 Fed 6H (p)	416.20	376.70	10.54	
10700.00	9633.63	203.47	30.51	16.28	Coachwhip 26 Fed 6H (p)	414.23	373.79	10.24	
10800.00	9633.14	202.84	31.88	16.67	Coachwhip 26 Fed 6H (p)	412.31	370.91	9.96	
10900.00	9632.65	202.21	33.28	17.09	Coachwhip 26 Fed 6H (p)	410.43	368.07	9.69	
11000.00	9632.16	201.58	34.72	17.52	Coachwhip 26 Fed 6H (p)	408.61	365.28	9.43	
11100.00	9631.66	200.94	36.23	17.97	Coachwhip 26 Fed 6H (p)	406.84	362.55	9.18	
11200.00	9631.17	200.30	37.79	18.42	Coachwhip 26 Fed 6H (p)	405.12	359.86	8.95	
11300.00	9630.68	199.64	39.36	18.93	Coachwhip 26 Fed 6H (p)	403.45	357.23	8.73	
11400.00	9630.19	198.99	40.96	19.48	Coachwhip 26 Fed 6H (p)	401.83	354.61	8.51	
11500.00	9629.69	198.33	42.58	19.98	Coachwhip 26 Fed 6H (p)	400.27	352.14	8.32	
11600.00	9629.20	197.66	44.21	20.48	Coachwhip 26 Fed 6H (p)	398.76	349.64	8.12	
11700.00	9628.71	196.99	45.86	21.09	Coachwhip 26 Fed 6H (p)	397.31	347.20	7.93	
11800.00	9628.22	196.31	47.53	21.65	Coachwhip 26 Fed 6H (p)	395.91	345.01	7.78	
11900.00	9627.73	195.63	49.20	22.22	Coachwhip 26 Fed 6H (p)	394.56	342.66	7.60	
12000.00	9627.23	194.95	50.89	22.80	Coachwhip 26 Fed 6H (p)	393.27	340.45	7.45	
12100.00	9626.74	194.26	52.59	23.35	Coachwhip 26 Fed 6H (p)	392.04	338.37	7.30	
12200.00	9626.25	193.56	54.30	23.91	Coachwhip 26 Fed 6H (p)	390.87	336.28	7.16	
12300.00	9625.76	192.87	56.02	24.52	Coachwhip 26 Fed 6H (p)	389.75	334.29	7.03	
12400.00	9625.26	192.16	57.74	25.14	Coachwhip 26 Fed 6H (p)	388.69	332.41	6.91	
12500.00	9624.77	191.46	59.47	25.77	Coachwhip 26 Fed 6H (p)	387.69	330.63	6.79	
12600.00	9624.28	190.75	61.21	26.40	Coachwhip 26 Fed 6H (p)	386.76	328.84	6.68	
12700.00	9623.79	190.04	62.96	27.04	Coachwhip 26 Fed 6H (p)	385.87	327.05	6.56	
12800.00	9623.30	189.32	64.71	27.68	Coachwhip 26 Fed 6H (p)	385.05	325.27	6.44	
12900.00	9622.80	188.60	66.46	28.32	Coachwhip 26 Fed 6H (p)	384.29	323.58	6.33	
13000.00	9622.31	187.88	68.22	28.96	Coachwhip 26 Fed 6H (p)	383.60	321.98	6.23	
13100.00	9621.82	187.16	69.99	29.61	Coachwhip 26 Fed 6H (p)	382.96	320.47	6.13	
13200.00	9621.33	186.43	71.76	30.27	Coachwhip 26 Fed 6H (p)	382.38	319.06	6.04	
13300.00	9620.83	185.70	73.53	30.92	Coachwhip 26 Fed 6H (p)	381.87	317.59	5.94	
13400.00	9620.34	184.97	75.30	31.58	Coachwhip 26 Fed 6H (p)	381.42	316.05	5.83	
13500.00	9619.85	184.24	77.08	32.24	Coachwhip 26 Fed 6H (p)	381.02	314.58	5.73	
13600.00	9619.36	183.51	78.87	32.91	Coachwhip 26 Fed 6H (p)	380.70	313.19	5.64	

5D Anti-Collision Report

Primary Well: Coachwhip 26 Fed 6H (p) (TVD Relative to Well TVD Reference; All Azimuth Relative to GRID NORTH)									
Pri 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	9618.87	182.77	80.65	33.58	Coachwhip 26 Fed 6H (p)	380.43	311.89	5.55	
13800.00	9618.37	182.04	82.44	34.25	Coachwhip 26 Fed 6H (p)	380.23	310.66	5.47	
13900.00	9617.88	181.30	84.23	34.92	Coachwhip 26 Fed 6H (p)	380.09	309.31	5.37	
14000.00	9617.39	180.57	86.03	35.60	Coachwhip 26 Fed 6H (p)	380.01	307.87	5.27	
14078.90	9617.00	180.00	87.44	36.13	Coachwhip 26 Fed 6H (p)	380.00	306.82	5.19	

Secondary Well: Coachwhip 26 Federal 1H (s) (TVD Relative to Well TVD Reference (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	10.00	0.00	192.60	0.00	0.00	4864.02	4862.90	4347.81	
100.00	105.44	95.44	192.60	0.14	0.14	4863.96	4862.59	3555.36	
200.00	209.50	199.51	192.61	0.29	0.28	4863.79	4862.05	2801.14	
300.00	305.21	295.21	192.62	0.48	0.47	4863.60	4861.45	2261.50	
400.00	399.48	389.49	192.63	0.67	0.67	4863.60	4861.03	1891.72	
500.00	498.99	489.00	192.64	0.88	0.88	4863.60	4860.60	1618.30	
600.00	594.47	584.49	192.65	1.08	1.08	4863.67	4860.24	1416.77	
700.00	689.05	679.08	192.67	1.27	1.27	4863.83	4859.99	1265.85	
800.00	791.05	781.09	192.68	1.47	1.47	4864.05	4859.78	1138.54	
900.00	888.76	878.80	192.69	1.68	1.67	4864.26	4859.56	1035.18	
1000.00	997.21	987.25	192.70	1.91	1.91	4864.35	4859.20	943.85	
1100.00	1087.91	1077.96	192.71	2.10	2.09	4864.53	4858.97	874.13	
1200.00	1190.53	1180.58	192.72	2.31	2.31	4864.71	4858.70	810.21	
1300.00	1283.17	1273.22	192.72	2.51	2.50	4864.98	4858.56	758.06	
1400.00	1388.09	1378.14	192.73	2.65	2.65	4865.32	4858.53	716.41	
1500.00	1501.11	1491.17	192.73	2.78	2.77	4865.43	4858.60	712.56	
1600.00	1605.53	1595.58	192.74	2.84	2.83	4865.33	4858.20	683.23	
1700.00	1719.29	1709.34	192.74	2.89	2.88	4865.05	4857.66	658.78	
1800.00	1804.55	1794.60	192.74	2.93	2.92	4864.81	4857.16	636.08	
1900.00	1913.52	1903.57	192.74	3.00	2.99	4864.55	4856.60	612.13	
2000.00	1989.77	1979.82	192.74	3.05	3.04	4864.52	4856.29	591.07	
2100.00	2087.22	2077.28	192.74	3.13	3.13	4864.76	4856.22	569.86	
2200.00	2188.58	2178.64	192.74	3.23	3.23	4865.02	4856.16	549.10	
2300.00	2309.08	2299.14	192.74	3.37	3.35	4865.00	4855.79	527.96	
2400.00	2413.05	2403.11	192.74	3.49	3.49	4864.76	4855.19	508.67	
2500.00	2507.39	2497.45	192.73	3.62	3.60	4864.51	4854.61	490.98	
2600.00	2605.73	2595.79	192.73	3.75	3.73	4864.44	4854.17	473.58	
2700.00	2747.05	2737.11	192.73	3.95	3.93	4864.02	4853.33	454.84	
2800.00	2864.59	2854.67	192.72	4.13	4.12	4862.82	4851.72	438.32	
2900.00	2957.37	2947.46	192.70	4.28	4.27	4861.54	4850.06	423.61	
3000.00	3041.92	3032.01	192.70	4.41	4.40	4860.53	4848.70	410.79	
3100.00	3137.97	3128.06	192.69	4.56	4.56	4859.73	4847.54	398.51	
3200.00	3244.83	3234.93	192.69	4.73	4.73	4858.81	4846.20	385.37	
3300.00	3332.75	3322.86	192.69	4.88	4.88	4858.04	4845.07	374.44	
3400.00	3428.59	3418.69	192.69	5.05	5.04	4857.36	4844.00	363.63	
3500.00	3508.13	3498.24	192.69	5.18	5.18	4857.00	4843.27	353.80	
3600.00	3613.55	3603.65	192.69	5.37	5.37	4856.76	4842.62	343.41	
3700.00	3714.40	3704.51	192.69	5.56	5.55	4856.48	4841.93	333.71	
3800.00	3822.30	3812.41	192.68	5.76	5.75	4856.13	4841.16	324.43	
3900.00	3931.82	3921.95	192.65	5.96	5.96	4855.54	4840.13	315.13	
4000.00	4036.08	4026.27	192.61	6.16	6.15	4854.85	4839.02	306.84	
4100.00	4162.20	4152.57	192.54	6.41	6.39	4853.90	4837.60	297.76	
4200.00	4331.98	4322.83	192.39	6.76	6.71	4852.04	4835.17	287.62	
4300.00	4414.79	4405.99	192.31	6.93	6.87	4849.38	4832.11	280.85	
4400.00	4480.87	4472.38	192.23	7.07	7.00	4847.34	4829.71	274.96	
4500.00	4546.58	4538.41	192.15	7.20	7.13	4846.05	4828.06	269.40	
4600.00	4647.22	4639.50	192.04	7.40	7.33	4845.10	4826.69	263.15	

5D Anti-Collision Report

Secondary Well: Coachwhip 26 Federal 1H (S) (TVD Relative to Well TVD Reference (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
4700.00	4764.66	4757.37	191.92	7.64	7.56	4843.95	4825.08	256.71	
4800.00	4870.52	4863.61	191.82	7.87	7.77	4842.50	4823.19	250.77	
4900.00	4961.25	4954.67	191.73	8.07	7.95	4841.11	4821.38	245.35	
5000.00	5054.35	5048.12	191.63	8.27	8.13	4839.96	4819.80	240.04	
5100.00	5152.21	5146.29	191.54	8.47	8.33	4838.84	4818.24	234.90	
5200.00	5239.28	5233.58	191.47	8.66	8.50	4837.86	4816.89	230.67	
5300.00	5331.04	5325.53	191.40	8.85	8.68	4837.21	4815.94	227.48	
5400.00	5493.06	5488.03	281.22	9.22	9.00	4835.96	4814.13	221.47	
5500.00	5588.03	5583.42	281.07	9.44	9.20	4833.59	4811.33	217.12	
5600.00	5691.42	5687.28	280.88	9.68	9.42	4830.86	4808.15	212.75	
5700.00	5771.54	5767.74	280.70	9.87	9.58	4828.02	4804.92	209.04	
5800.00	5874.62	5871.23	280.47	10.10	9.79	4825.03	4801.49	204.99	
5900.00	5966.65	5963.62	280.29	10.31	9.98	4821.97	4798.01	201.28	
6000.00	6061.39	6058.69	280.10	10.53	10.17	4819.10	4794.71	197.63	
6100.00	6195.39	6193.22	279.82	10.84	10.45	4815.75	4790.84	193.31	
6200.00	6288.21	6286.40	279.63	11.06	10.64	4812.29	4786.94	189.87	
6300.00	6380.66	6379.18	279.45	11.28	10.83	4809.06	4783.28	186.54	
6400.00	6477.02	6475.96	279.24	11.51	11.03	4805.92	4779.69	183.21	
6500.00	6572.31	6571.65	279.04	11.74	11.23	4802.91	4776.23	180.00	
6600.00	11321.28	15767.00	180.83	83.86	39.20	4727.67	4679.33	97.80	
6700.00	11321.28	15767.00	180.83	83.86	39.20	4627.81	4579.34	95.46	
6800.00	11321.28	15767.00	180.83	83.86	39.20	4527.97	4479.35	93.13	
6900.00	11321.28	15767.00	180.83	83.86	39.20	4428.12	4379.36	90.82	
7000.00	11321.28	15767.00	180.83	83.86	39.20	4328.29	4279.39	88.51	
7100.00	11321.28	15767.00	180.83	83.86	39.20	4228.46	4179.42	86.21	
7200.00	11321.28	15767.00	180.83	83.86	39.20	4128.65	4079.45	83.92	
7300.00	11321.28	15767.00	180.83	83.86	39.20	4028.84	3979.50	81.65	
7400.00	11321.28	15767.00	180.83	83.86	39.20	3929.04	3879.55	79.39	
7500.00	11321.28	15767.00	180.83	83.86	39.20	3829.25	3779.61	77.14	
7600.00	11321.28	15767.00	180.83	83.86	39.20	3729.48	3679.68	74.90	
7700.00	11321.28	15767.00	180.83	83.86	39.20	3629.71	3579.76	72.67	
7800.00	11321.28	15767.00	180.83	83.86	39.20	3529.96	3479.86	70.45	
7900.00	11321.28	15767.00	180.83	83.86	39.20	3430.22	3379.96	68.25	
8000.00	11321.28	15767.00	180.83	83.86	39.20	3330.50	3280.08	66.05	
8100.00	11321.28	15767.00	180.94	83.86	39.20	3230.77	3180.15	63.83	
8200.00	11321.28	15767.00	181.07	83.86	39.20	3130.98	3080.18	61.62	
8300.00	11321.28	15767.00	181.24	83.86	39.20	3031.16	2980.16	59.43	
8400.00	11321.28	15767.00	181.46	83.86	39.20	2931.30	2880.10	57.25	
8500.00	11321.28	15767.00	181.77	83.86	39.20	2831.40	2780.00	55.08	
8600.00	11321.28	15767.00	182.23	83.86	39.20	2731.47	2679.87	52.93	
8700.00	11321.28	15767.00	182.97	83.86	39.20	2631.52	2579.71	50.79	
8800.00	11321.28	15767.00	184.36	83.86	39.20	2531.55	2479.53	48.67	
8900.00	11321.28	15767.00	187.90	83.86	39.20	2431.56	2379.33	46.55	
9000.00	11321.28	15767.00	123.26	83.86	39.20	2331.56	2279.12	44.46	
9100.00	11321.28	15767.00	123.26	83.86	39.20	2231.56	2178.90	42.38	
9200.00	11321.28	15767.00	182.37	83.86	39.20	2131.58	2078.70	40.31	
9300.00	11321.28	15753.21	180.49	83.64	39.11	2033.15	1980.15	38.36	
9400.00	11321.28	15716.56	180.19	83.03	38.87	1940.32	1887.37	36.65	
9500.00	11321.37	15673.55	180.04	82.40	38.59	1857.27	1804.46	35.17	
9600.00	11322.11	15615.14	179.89	81.56	38.21	1788.27	1735.71	34.03	
9700.00	11321.80	15475.15	179.57	79.20	37.30	1734.56	1682.81	33.52	
9800.00	11316.61	15327.09	179.29	76.72	36.30	1696.44	1645.58	33.36	
9900.00	11310.35	15214.17	179.04	75.08	35.56	1676.44	1626.20	33.37	
10000.00	11302.53	15093.54	178.75	73.08	34.76	1670.05	1620.44	33.66	
10100.00	11293.02	14973.34	178.43	71.15	33.96	1662.78	1613.75	33.92	
10200.00	11287.39	14901.11	178.22	70.19	33.55	1655.73	1606.86	33.88	
10300.00	11281.73	14811.42	177.90	68.91	33.01	1650.19	1601.54	33.92	
10400.00	11276.73	14729.58	177.58	67.70	32.52	1645.03	1596.48	33.89	

5D Anti-Collision Report

Secondary Well : Coachwhip 26 Federal 1H (S) (TVD Relative to Well TVD Reference (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
10500.00	11273.44	14655.86	177.27	66.57	32.09	1641.54	1593.00	33.82	
10600.00	11270.87	14575.73	176.93	65.29	31.62	1639.41	1590.92	33.80	
10700.00	11269.34	14498.64	176.59	64.15	31.17	1638.64	1590.14	33.79	
10800.00	11268.52	14411.11	176.19	62.70	30.65	1639.02	1590.58	33.84	
10900.00	11263.12	14244.96	175.53	59.74	29.62	1636.57	1588.73	34.21	
11000.00	11257.61	14127.68	175.11	57.85	28.91	1633.24	1585.61	34.29	
11100.00	11251.98	14028.88	174.74	56.19	28.34	1628.92	1581.34	34.24	
11200.00	11247.06	13936.28	174.41	54.61	27.81	1625.01	1577.42	34.14	
11300.00	11242.89	13847.79	174.12	53.12	27.33	1621.70	1574.04	34.03	
11400.00	11239.03	13753.47	173.82	51.61	26.81	1618.99	1571.29	33.94	
11500.00	11234.83	13649.69	173.50	50.02	26.24	1616.37	1568.59	33.83	
11600.00	11231.12	13557.78	173.22	48.60	25.75	1613.82	1565.87	33.66	
11700.00	11225.62	13433.77	172.85	46.68	25.07	1610.85	1563.10	33.74	
11800.00	11219.71	13325.38	172.50	45.16	24.50	1607.01	1559.17	33.59	
11900.00	11212.20	13210.55	172.10	43.48	23.91	1602.19	1554.21	33.39	
12000.00	11205.69	13116.33	171.75	42.09	23.45	1597.14	1549.00	33.17	
12100.00	11199.91	13024.34	171.41	40.70	23.02	1592.75	1544.25	32.84	
12200.00	11193.24	12916.76	171.03	39.12	22.52	1588.49	1539.72	32.57	
12300.00	11186.41	12816.49	170.66	37.68	22.08	1583.70	1534.62	32.27	
12400.00	11178.22	12700.33	170.23	36.01	21.59	1578.76	1529.45	32.02	
12500.00	11171.58	12611.16	169.91	34.69	21.20	1573.44	1523.67	31.62	
12600.00	11165.00	12515.29	169.57	33.27	20.91	1568.68	1518.49	31.25	
12700.00	11160.58	12441.32	169.32	32.32	20.56	1564.82	1514.13	30.87	
12800.00	9622.72	9633.46	90.59	19.26	17.76	1507.31	1458.28	30.75	
12900.00	9624.27	9635.01	90.74	19.26	17.77	1416.18	1365.38	27.88	
13000.00	9625.82	9636.57	90.89	19.26	17.77	1326.32	1273.56	25.14	
13100.00	9627.37	9638.12	91.04	19.27	17.77	1238.02	1182.86	22.44	
13200.00	9628.92	9639.67	91.18	19.27	17.78	1151.64	1093.65	19.86	
13300.00	9630.47	9641.22	91.33	19.27	17.78	1067.63	1006.44	17.45	
13400.00	9632.04	9642.79	91.48	19.28	17.78	986.60	921.46	15.15	
13500.00	9633.61	9644.37	91.63	19.28	17.79	909.36	839.66	13.05	
13600.00	9635.20	9645.96	91.78	19.28	17.79	836.95	762.15	11.19	
13700.00	9636.79	9647.55	91.94	19.29	17.79	770.72	690.10	9.56	
13800.00	9638.39	9649.15	92.09	19.29	17.80	712.43	625.31	8.18	
13900.00	9640.00	9650.76	92.24	19.29	17.80	664.14	570.56	7.10	
14000.00	9641.61	9652.38	92.40	19.30	17.80	628.17	528.69	6.31	
14078.90	9642.89	9653.66	92.52	19.30	17.80	609.95	506.18	5.88	

Secondary Well : Coachwhip 26 Fed 4H (p) (TVD Relative to Well TVD Reference (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	89.74	0.00	0.00	100.00	98.88	89.39	
100.00	100.00	100.00	89.74	0.11	0.11	100.00	98.66	74.66	
200.00	200.00	200.00	89.74	0.34	0.34	100.00	98.21	55.90	
300.00	300.00	300.00	89.74	0.56	0.56	100.00	97.76	44.67	
400.00	400.00	400.00	89.74	0.79	0.79	100.00	97.31	37.20	
500.00	500.00	500.00	89.74	1.01	1.01	100.00	96.86	31.87	
600.00	600.00	600.00	89.74	1.24	1.24	100.00	96.41	27.88	
700.00	700.00	700.00	89.74	1.46	1.46	100.00	95.96	24.77	
800.00	800.00	800.00	89.74	1.69	1.69	100.00	95.51	22.29	
900.00	900.00	900.00	89.74	1.91	1.91	100.00	95.07	20.26	
1000.00	1000.00	1000.00	89.74	2.14	2.14	100.00	94.62	18.57	
1100.00	1100.00	1100.00	89.74	2.36	2.36	100.00	94.17	17.14	
1200.00	1200.00	1200.00	89.74	2.59	2.59	100.00	93.72	15.91	
1300.00	1300.00	1300.00	89.74	2.81	2.81	100.00	93.27	14.85	
1400.00	1400.00	1400.00	89.74	3.03	3.03	100.00	92.82	13.92	
1500.00	1500.00	1500.00	89.74	3.26	3.26	100.00	92.68	13.66	
1600.00	1600.00	1600.00	89.74	3.48	3.48	100.00	92.23	12.87	
1700.00	1700.00	1700.00	89.74	3.71	3.71	100.00	91.78	12.17	

5D Anti-Collision Report

Secondary Well : Coachwhip 26 Fed 4H (p) (TVD Relative to Well TVD Reference (Primary)) : All Azimuth Relative to GRID NORTH									Risk
Prim 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 (°)	
1800.00	1800.00	1800.00	89.74	3.93	3.93	100.00	91.33	11.53	
1900.00	1900.00	1900.00	89.74	4.16	4.16	100.00	90.88	10.97	
2000.00	2000.00	2000.00	89.74	4.38	4.38	100.00	90.43	10.45	
2100.00	2100.00	2100.00	89.74	4.61	4.61	100.00	89.98	9.98	
2200.00	2200.00	2200.00	89.74	4.83	4.83	100.00	89.53	9.55	
2300.00	2300.00	2300.00	89.74	5.06	5.06	100.00	89.08	9.16	
2400.00	2400.00	2400.00	89.74	5.28	5.28	100.00	88.63	8.80	
2500.00	2500.00	2500.00	89.74	5.51	5.51	100.00	88.18	8.46	
2600.00	2600.00	2600.00	89.74	5.73	5.73	100.00	87.74	8.15	
2700.00	2700.00	2700.00	89.74	5.96	5.96	100.00	87.29	7.86	
2800.00	2800.00	2800.00	89.74	6.18	6.18	100.00	86.84	7.60	
2900.00	2900.00	2900.00	89.74	6.41	6.41	100.00	86.39	7.35	
3000.00	3000.00	3000.00	89.74	6.63	6.63	100.00	85.94	7.11	
3100.00	3100.00	3100.00	89.74	6.86	6.86	100.00	85.49	6.89	
3200.00	3200.00	3200.00	89.74	7.08	7.08	100.00	85.04	6.68	
3300.00	3300.00	3300.00	89.74	7.31	7.31	100.00	84.59	6.49	
3400.00	3400.00	3400.00	89.74	7.53	7.53	100.00	84.14	6.30	
3500.00	3500.00	3500.00	89.74	7.76	7.76	100.00	83.69	6.13	
3600.00	3600.00	3600.00	89.74	7.98	7.98	100.00	83.24	5.97	
3700.00	3700.00	3700.00	89.74	8.20	8.20	100.00	82.79	5.81	
3800.00	3800.00	3800.00	89.74	8.43	8.43	100.00	82.34	5.66	
3900.00	3900.00	3900.00	89.74	8.65	8.65	100.00	81.89	5.52	
4000.00	4000.00	4000.00	89.74	8.88	8.88	100.00	81.44	5.39	
4100.00	4100.00	4100.00	89.74	9.10	9.10	100.00	80.99	5.26	
4200.00	4200.00	4200.00	89.74	9.33	9.33	100.00	80.54	5.14	
4300.00	4300.00	4300.00	89.74	9.55	9.55	100.00	80.09	5.02	
4400.00	4400.00	4400.00	89.74	9.78	9.78	100.00	79.64	4.91	
4500.00	4500.00	4500.00	89.74	10.00	10.00	100.00	79.19	4.81	
4600.00	4600.00	4600.00	89.74	10.23	10.23	100.00	78.74	4.70	
4700.00	4700.00	4700.00	89.74	10.45	10.45	100.00	78.29	4.61	
4800.00	4800.00	4800.00	89.74	10.68	10.68	100.00	77.84	4.51	
4900.00	4900.00	4900.00	89.74	10.90	10.90	100.00	77.39	4.42	
5000.00	5000.00	5000.00	89.74	11.13	11.13	100.00	76.95	4.34	
5100.00	5100.00	5100.00	89.74	11.35	11.35	100.00	76.50	4.25	
5200.00	5200.00	5200.00	89.74	11.58	11.58	100.00	76.12	4.19	
5300.00	5300.00	5300.00	89.74	11.80	11.80	100.00	75.67	4.11	
5400.00	5399.79	5399.79	179.25	12.03	12.02	100.97	76.28	4.09	
5500.00	5499.45	5499.49	177.84	12.25	12.24	103.93	78.82	4.14	
5600.00	5598.84	5598.98	175.67	12.47	12.46	108.98	83.41	4.26	
5700.00	5697.85	5698.17	172.95	12.69	12.66	116.29	90.27	4.47	
5800.00	5796.35	5796.97	169.94	12.91	12.87	126.01	99.58	4.77	
5900.00	5897.47	5898.45	167.04	13.12	13.08	136.33	109.52	5.09	
6000.00	5999.07	6000.39	164.55	13.32	13.28	145.18	118.00	5.34	
6100.00	6100.96	6102.62	162.35	13.53	13.47	152.49	124.84	5.52	
6200.00	6202.31	6204.35	160.32	13.73	13.66	158.27	130.21	5.64	
6300.00	6301.65	6304.06	158.46	13.96	13.88	163.75	135.26	5.75	
6400.00	6400.98	6403.78	156.72	14.19	14.10	169.39	140.47	5.86	
6500.00	6500.31	6503.49	155.10	14.42	14.32	175.17	145.84	5.97	
6600.00	6599.65	6603.20	153.58	14.65	14.54	181.09	151.30	6.08	
6700.00	6698.98	6702.92	152.16	14.88	14.76	187.12	156.88	6.19	
6800.00	6798.32	6802.63	150.82	15.12	14.99	193.26	162.57	6.30	
6900.00	6897.65	6902.34	149.57	15.35	15.21	199.50	168.36	6.41	
7000.00	6996.98	7002.06	148.40	15.59	15.43	205.83	174.26	6.52	
7100.00	7096.32	7101.77	147.29	15.82	15.65	212.24	180.22	6.63	
7200.00	7195.65	7201.48	146.26	16.06	15.87	218.73	186.24	6.73	
7300.00	7294.99	7301.20	145.28	16.30	16.10	225.28	192.34	6.84	
7400.00	7394.32	7400.91	144.35	16.54	16.32	231.89	198.50	6.94	
7500.00	7493.65	7500.62	143.48	16.78	16.54	238.56	204.68	7.04	

5D Anti-Collision Report

Secondary Well	Coachwhip 26 Fed 4H (p) (TVD Relative to Well TVD Reference (Primary))					All Azimuth Relative to GRID NORTH		
Pri MD (US ft)	P 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)	Risk
7600.00	7592.99	7600.34	142.66	17.03	16.77	245.28	210.92	7.14
7700.00	7692.32	7700.05	141.88	17.27	16.99	252.05	217.20	7.23
7800.00	7791.65	7799.76	141.14	17.51	17.22	258.87	223.53	7.33
7900.00	7890.99	7899.47	140.44	17.76	17.44	265.72	229.91	7.42
8000.00	7990.32	7999.19	139.77	18.00	17.67	272.62	236.33	7.51
8100.00	8089.80	8099.01	139.19	18.23	17.88	279.20	242.48	7.60
8200.00	8189.42	8198.91	138.69	18.42	18.06	285.11	248.01	7.68
8300.00	8289.18	8298.88	138.27	18.61	18.25	290.35	252.88	7.75
8400.00	8389.04	8398.90	137.91	18.81	18.43	294.91	257.06	7.79
8500.00	8489.01	8498.98	137.62	19.00	18.62	298.77	260.54	7.81
8600.00	8589.05	8599.11	137.39	19.18	18.80	301.94	263.31	7.82
8700.00	8689.16	8699.27	137.21	19.37	18.98	304.41	265.39	7.80
8800.00	8789.32	8799.45	137.08	19.56	19.16	306.18	266.77	7.77
8900.00	8889.52	8899.65	137.01	19.74	19.34	307.24	267.45	7.72
9000.00	8989.72	8999.86	46.99	19.92	19.52	307.59	267.43	7.66
9100.00	9089.73	9099.86	46.99	20.12	19.73	307.59	267.03	7.58
9200.00	9189.71	9199.84	230.18	20.34	19.95	308.18	267.18	7.52
9300.00	9288.14	9298.27	228.91	20.55	20.17	319.07	277.65	7.70
9400.00	9380.96	9391.10	226.77	20.75	20.37	344.77	303.01	8.26
9500.00	9464.14	9474.27	225.07	20.94	20.56	386.78	344.70	9.19
9600.00	9534.02	9544.15	225.24	21.09	20.71	445.32	403.02	10.53
9700.00	9587.55	9597.69	229.02	21.21	20.83	518.63	476.10	12.19
9800.00	9622.40	9632.53	239.67	21.28	20.91	603.39	560.82	14.17
9900.00	9637.03	9647.17	263.31	21.31	20.94	695.30	652.66	16.31
10000.00	9637.08	9647.22	270.90	21.31	20.94	790.06	747.43	18.53
10100.00	9636.59	9646.72	271.02	21.31	20.94	885.98	843.40	20.81
10200.00	10556.25	11329.07	191.62	26.67	17.33	939.49	905.44	27.59
10300.00	10556.01	11428.95	191.33	27.64	17.63	938.77	904.12	27.09
10400.00	10555.77	11528.83	191.03	28.69	17.95	938.07	902.76	26.57
10500.00	10555.53	11628.71	190.74	29.85	18.29	937.39	901.39	26.04
10600.00	10555.29	11728.59	190.44	31.09	18.64	936.74	899.99	25.49
10700.00	10555.06	11828.47	190.14	32.38	19.00	936.11	898.57	24.94
10800.00	10554.82	11928.35	189.85	33.71	19.36	935.51	897.16	24.39
10900.00	10554.58	12028.23	189.55	35.09	19.83	934.94	895.75	23.86
11000.00	10554.34	12128.11	189.25	36.51	20.29	934.39	894.32	23.32
11100.00	10554.10	12227.99	188.95	37.97	20.71	933.86	892.82	22.75
11200.00	10553.86	12327.87	188.66	39.45	21.19	933.36	891.38	22.23
11300.00	10553.62	12427.75	188.36	40.96	21.68	932.89	889.99	21.74
11400.00	10553.39	12527.63	188.06	42.50	22.18	932.44	888.50	21.22
11500.00	10553.15	12627.51	187.76	44.05	22.63	932.02	887.13	20.76
11600.00	10552.91	12727.39	187.46	45.63	23.22	931.62	885.64	20.26
11700.00	10552.67	12827.27	187.16	47.23	23.72	931.25	884.29	19.83
11800.00	10552.43	12927.15	186.86	48.84	24.29	930.91	882.88	19.38
11900.00	10552.19	13027.03	186.56	50.46	24.79	930.59	881.57	18.98
12000.00	10551.95	13126.91	186.26	52.10	25.42	930.29	880.18	18.56
12100.00	10551.72	13226.79	185.96	53.75	25.98	930.02	878.86	18.18
12200.00	10551.48	13326.67	185.66	55.42	26.50	929.78	877.60	17.82
12300.00	10551.24	13426.55	185.35	57.09	27.08	929.56	876.24	17.43
12400.00	10551.00	13526.43	185.05	58.77	27.72	929.37	874.83	17.04
12500.00	10550.76	13626.31	184.75	60.46	28.34	929.20	873.46	16.67
12600.00	10550.52	13726.19	184.45	62.16	28.95	929.06	872.13	16.32
12700.00	10550.28	13826.07	184.15	63.86	29.57	928.95	870.84	15.99
12800.00	10550.05	13925.95	183.85	65.57	30.18	928.86	869.57	15.67
12900.00	10549.81	14025.83	183.55	67.29	30.79	928.80	868.33	15.36
13000.00	10549.57	14125.71	183.24	69.01	31.41	928.76	867.12	15.07
13100.00	10549.33	14225.59	182.94	70.74	32.02	928.75	865.93	14.79
13200.00	10549.09	14325.47	182.64	72.48	32.65	928.76	864.78	14.51
13300.00	10548.85	14425.35	182.34	74.21	33.27	928.80	863.64	14.25

5D Anti-Collision Report

Secondary Well : Coachwhip 26 Fed 4H (p) (TVD Relative to Well TVD Reference (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
13400.00	10548.61	14525.23	182.04	75.96	33.90	928.87	862.54	14.00	
13500.00	10548.38	14625.11	181.74	77.70	34.53	928.96	861.44	13.76	
13600.00	10548.14	14724.99	181.44	79.45	35.16	929.08	860.32	13.51	
13700.00	10547.90	14824.87	181.13	81.20	35.80	929.22	859.15	13.26	
13800.00	10547.66	14924.75	180.83	82.96	36.46	929.39	857.97	13.01	
13900.00	10547.42	15024.63	180.53	84.72	37.13	929.58	856.82	12.77	
14000.00	10547.18	15124.51	180.23	86.48	37.80	929.81	855.69	12.54	
14078.90	10547.00	15201.09	180.00	87.83	38.32	930.00	854.84	12.37	

Secondary Well : Coachwhip 26 Fed 6H (p) (TVD Relative to Well TVD Reference (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	89.78	0.00	0.00	49.97	48.85	44.67	
100.00	100.00	100.00	89.78	0.11	0.11	49.97	48.63	37.31	
200.00	200.00	200.00	89.78	0.34	0.34	49.97	48.18	27.93	
300.00	300.00	300.00	89.78	0.56	0.56	49.97	47.73	22.32	
400.00	400.00	400.00	89.78	0.79	0.79	49.97	47.28	18.59	
500.00	500.00	500.00	89.78	1.01	1.01	49.97	46.83	15.93	
600.00	600.00	600.00	89.78	1.24	1.24	49.97	46.38	13.93	
700.00	700.00	700.00	89.78	1.46	1.46	49.97	45.93	12.38	
800.00	800.00	800.00	89.78	1.69	1.69	49.97	45.48	11.14	
900.00	900.00	900.00	89.78	1.91	1.91	49.97	45.03	10.12	
1000.00	1000.00	1000.00	89.78	2.14	2.14	49.97	44.58	9.28	
1100.00	1100.00	1100.00	89.78	2.36	2.36	49.97	44.14	8.56	
1200.00	1200.00	1200.00	89.78	2.59	2.59	49.97	43.69	7.95	
1300.00	1300.00	1300.00	89.78	2.81	2.81	49.97	43.24	7.42	
1400.00	1400.00	1400.00	89.78	3.03	3.03	49.97	42.79	6.96	
1500.00	1500.00	1500.00	89.78	3.26	3.26	49.97	42.65	6.83	
1600.00	1600.00	1600.00	89.78	3.48	3.48	49.97	42.20	6.43	
1700.00	1700.00	1700.00	89.78	3.71	3.71	49.97	41.75	6.08	
1800.00	1800.00	1800.00	89.78	3.93	3.93	49.97	41.30	5.76	
1900.00	1900.00	1900.00	89.78	4.16	4.16	49.97	40.85	5.48	
2000.00	2000.00	2000.00	89.78	4.38	4.38	49.97	40.40	5.22	
2100.00	2100.00	2100.00	89.78	4.61	4.61	49.97	39.95	4.99	
2200.00	2200.00	2200.00	89.78	4.83	4.83	49.97	39.50	4.77	
2300.00	2300.00	2300.00	89.78	5.06	5.06	49.97	39.05	4.58	
2400.00	2400.00	2400.00	89.78	5.28	5.28	49.97	38.60	4.40	
2500.00	2500.00	2500.00	89.78	5.51	5.51	49.97	38.15	4.23	
2600.00	2600.00	2600.00	89.78	5.73	5.73	49.97	37.70	4.07	
2700.00	2700.00	2700.00	89.78	5.96	5.96	49.97	37.25	3.93	
2800.00	2800.00	2800.00	89.78	6.18	6.18	49.97	36.81	3.80	
2900.00	2900.00	2900.00	89.78	6.41	6.41	49.97	36.36	3.67	
3000.00	3000.00	3000.00	89.78	6.63	6.63	49.97	35.91	3.55	
3100.00	3100.00	3100.00	89.78	6.86	6.86	49.97	35.46	3.44	
3200.00	3200.00	3200.00	89.78	7.08	7.08	49.97	35.01	3.34	
3300.00	3300.00	3300.00	89.78	7.31	7.31	49.97	34.56	3.24	
3400.00	3400.00	3400.00	89.78	7.53	7.53	49.97	34.11	3.15	
3500.00	3500.00	3500.00	89.78	7.76	7.76	49.97	33.66	3.06	
3600.00	3600.00	3600.00	89.78	7.98	7.98	49.97	33.21	2.98	
3700.00	3700.00	3700.00	89.78	8.20	8.20	49.97	32.76	2.90	
3800.00	3800.00	3800.00	89.78	8.43	8.43	49.97	32.31	2.83	
3900.00	3900.00	3900.00	89.78	8.65	8.65	49.97	31.86	2.76	
4000.00	4000.00	4000.00	89.78	8.88	8.88	49.97	31.41	2.69	
4100.00	4100.00	4100.00	89.78	9.10	9.10	49.97	30.96	2.63	
4200.00	4200.00	4200.00	89.78	9.33	9.33	49.97	30.51	2.57	
4300.00	4300.00	4300.00	89.78	9.55	9.55	49.97	30.06	2.51	
4400.00	4400.00	4400.00	89.78	9.78	9.78	49.97	29.61	2.45	
4500.00	4500.00	4500.00	89.78	10.00	10.00	49.97	29.16	2.40	
4600.00	4600.00	4600.00	89.78	10.23	10.23	49.97	28.71	2.35	

5D Anti-Collision Report

Secondary Well : Coachwhip 26 Fed 6H (p) (TVD Relative to Well TVD Reference (Primary)) : All Azimuth Relative to GRID NORTH								
Prim 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)	SFA
4700.00	4700.00	4700.00	89.78	10.45	10.45	49.97	28.26	2.30
4800.00	4800.00	4800.00	89.78	10.68	10.68	49.97	27.81	2.26
4900.00	4900.00	4900.00	89.78	10.90	10.90	49.97	27.36	2.21
5000.00	5000.00	5000.00	89.78	11.13	11.13	49.97	26.91	2.17
5100.00	5100.00	5100.00	89.78	11.35	11.35	49.97	26.47	2.13
5200.00	5200.00	5200.00	89.78	11.58	11.58	49.97	26.09	2.09
5300.00	5300.00	5300.00	89.78	11.80	11.80	49.97	25.64	2.05
5400.00	5399.99	5399.99	179.79	12.03	12.03	50.84	26.10	2.06
5500.00	5499.96	5499.96	179.80	12.25	12.25	53.46	28.29	2.12
5600.00	5599.86	5599.86	179.81	12.48	12.48	57.82	32.23	2.26
5700.00	5699.68	5699.68	179.83	12.70	12.70	63.93	37.90	2.46
5800.00	5799.37	5799.37	179.85	12.92	12.92	71.77	45.32	2.71
5900.00	5898.99	5898.99	179.86	13.15	13.15	80.49	53.61	2.99
6000.00	5998.60	5998.60	179.88	13.37	13.37	89.20	61.90	3.27
6100.00	6098.22	6098.22	179.89	13.60	13.60	97.92	70.19	3.53
6200.00	6197.84	6197.84	179.90	13.82	13.82	106.64	78.48	3.79
6300.00	6297.46	6297.46	179.91	14.04	14.04	115.35	86.77	4.04
6400.00	6397.08	6397.08	179.91	14.27	14.27	124.07	95.06	4.28
6500.00	6496.70	6496.70	179.92	14.49	14.49	132.78	103.34	4.51
6600.00	6596.32	6596.32	179.92	14.72	14.72	141.50	111.63	4.74
6700.00	6695.94	6695.94	179.93	14.94	14.94	150.21	119.91	4.96
6800.00	6795.56	6795.56	179.93	15.16	15.16	158.93	128.20	5.17
6900.00	6895.18	6895.18	179.93	15.39	15.39	167.64	136.48	5.38
7000.00	6994.80	6994.80	179.94	15.61	15.61	176.36	144.76	5.58
7100.00	7094.42	7094.42	179.94	15.83	15.83	185.08	153.05	5.78
7200.00	7194.04	7194.04	179.94	16.06	16.06	193.79	161.33	5.97
7300.00	7293.66	7293.66	179.95	16.28	16.28	202.51	169.61	6.16
7400.00	7393.28	7393.28	179.95	16.51	16.51	211.22	177.89	6.34
7500.00	7492.90	7492.90	179.95	16.73	16.73	219.94	186.17	6.51
7600.00	7592.52	7592.52	179.95	16.95	16.95	228.65	194.45	6.68
7700.00	7692.14	7692.14	179.95	17.18	17.18	237.37	202.73	6.85
7800.00	7791.76	7791.76	179.96	17.40	17.40	246.08	211.00	7.01
7900.00	7891.37	7891.37	179.96	17.63	17.63	254.80	219.28	7.17
8000.00	7990.99	7990.99	179.96	17.85	17.85	263.52	227.56	7.33
8100.00	8090.65	8090.65	179.96	18.07	18.07	271.80	235.41	7.47
8200.00	8190.37	8190.37	179.96	18.30	18.30	279.21	242.40	7.59
8300.00	8290.16	8290.16	179.96	18.52	18.52	285.75	248.52	7.68
8400.00	8390.00	8390.00	179.96	18.75	18.75	291.42	253.77	7.74
8500.00	8489.88	8489.88	179.96	18.97	18.97	296.21	258.15	7.78
8600.00	8589.81	8589.81	179.96	19.20	19.20	300.14	261.65	7.80
8700.00	8689.76	8689.76	179.96	19.42	19.42	303.19	264.28	7.79
8800.00	8789.74	8789.74	179.96	19.65	19.65	305.38	266.04	7.76
8900.00	8889.73	8889.73	179.96	19.87	19.87	306.68	266.93	7.71
9000.00	8989.73	8989.73	89.96	20.10	20.10	307.12	266.95	7.64
9100.00	9089.73	9089.73	89.96	20.32	20.32	307.12	266.51	7.56
9200.00	9189.71	9189.71	273.06	20.54	20.54	307.07	266.02	7.48
9300.00	9288.14	9288.14	269.97	20.77	20.77	306.63	265.22	7.40
9400.00	9380.96	9380.96	263.92	20.97	20.97	308.84	267.02	7.39
9500.00	9464.14	9464.14	256.97	21.16	21.16	320.14	277.98	7.59
9600.00	9534.02	9534.02	251.68	21.32	21.32	347.41	304.92	8.18
9700.00	9681.37	9683.74	238.51	21.57	20.98	387.61	345.45	9.19
9800.00	9904.22	9956.78	219.87	22.08	17.91	422.79	384.74	11.11
9900.00	10011.88	10233.22	209.08	23.21	15.09	429.96	395.48	12.47
10000.00	10016.90	10372.02	207.66	24.07	15.12	429.00	394.06	12.28
10100.00	10016.42	10471.90	207.08	24.81	15.30	426.76	391.25	12.02
10200.00	10015.93	10571.78	206.49	25.65	15.51	424.55	388.36	11.73
10300.00	10015.44	10671.66	205.90	26.58	15.75	422.40	385.44	11.43
10400.00	10014.95	10771.54	205.30	27.66	16.02	420.28	382.52	11.13

5D Anti-Collision Report

Secondary Well : Coachwhip 26 Fed 6H (P) (TVD Relative to Well TVD Reference (Primary)) ; All Azimuth Relative to GRID NORTH									Risk
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)	ISF	
10500.00	10014.46	10871.42	204.69	28.81	16.32	418.22	379.60	10.83	
10600.00	10013.97	10971.30	204.08	30.02	16.65	416.20	376.70	10.54	
10700.00	10013.49	11071.18	203.47	31.29	16.99	414.23	373.79	10.24	
10800.00	10013.00	11171.06	202.84	32.61	17.36	412.31	370.91	9.96	
10900.00	10012.51	11270.94	202.21	33.98	17.75	410.43	368.07	9.69	
11000.00	10012.02	11370.82	201.58	35.39	18.16	408.61	365.28	9.43	
11100.00	10011.53	11470.70	200.94	36.83	18.58	406.84	362.55	9.18	
11200.00	10011.05	11570.58	200.30	38.31	19.06	405.12	359.86	8.95	
11300.00	10010.56	11670.46	199.64	39.81	19.56	403.45	357.23	8.73	
11400.00	10010.07	11770.34	198.99	41.34	20.07	401.83	354.61	8.51	
11500.00	10009.58	11870.22	198.33	42.90	20.57	400.27	352.14	8.32	
11600.00	10009.09	11970.10	197.66	44.47	21.02	398.76	349.64	8.12	
11700.00	10008.60	12069.98	196.99	46.07	21.62	397.31	347.20	7.93	
11800.00	10008.12	12169.86	196.31	47.68	22.09	395.91	345.01	7.78	
11900.00	10007.63	12269.74	195.63	49.30	22.68	394.56	342.66	7.60	
12000.00	10007.14	12369.62	194.95	50.94	23.25	393.27	340.45	7.45	
12100.00	10006.65	12469.50	194.26	52.59	23.78	392.04	338.37	7.30	
12200.00	10006.16	12569.38	193.56	54.25	24.42	390.87	336.28	7.16	
12300.00	10005.68	12669.26	192.87	55.93	25.02	389.75	334.29	7.03	
12400.00	10005.19	12769.15	192.16	57.61	25.59	388.69	332.41	6.91	
12500.00	10004.70	12869.03	191.46	59.30	26.17	387.69	330.63	6.79	
12600.00	10004.21	12968.91	190.75	61.00	26.75	386.76	328.84	6.68	
12700.00	10003.72	13068.79	190.04	62.70	27.34	385.87	327.05	6.56	
12800.00	10003.23	13168.67	189.32	64.41	27.98	385.05	325.27	6.44	
12900.00	10002.75	13268.55	188.60	66.13	28.62	384.29	323.58	6.33	
13000.00	10002.26	13368.43	187.88	67.86	29.26	383.60	321.98	6.23	
13100.00	10001.77	13468.31	187.16	69.59	29.91	382.96	320.47	6.13	
13200.00	10001.28	13568.19	186.43	71.32	30.55	382.38	319.06	6.04	
13300.00	10000.79	13668.07	185.70	73.06	31.20	381.87	317.59	5.94	
13400.00	10000.31	13767.95	184.97	74.80	31.86	381.42	316.05	5.83	
13500.00	9999.82	13867.83	184.24	76.55	32.51	381.02	314.58	5.73	
13600.00	9999.33	13967.71	183.51	78.30	33.17	380.70	313.19	5.64	
13700.00	9998.84	14067.59	182.77	80.05	33.83	380.43	311.89	5.55	
13800.00	9998.35	14167.47	182.04	81.81	34.49	380.23	310.66	5.47	
13900.00	9997.86	14267.35	181.30	83.57	35.16	380.09	309.31	5.37	
14000.00	9997.38	14367.23	180.57	85.34	35.83	380.01	307.87	5.27	
14078.90	9997.00	14444.18	180.00	86.69	36.34	380.00	306.82	5.19	

**Weatherford****Weatherford Drilling Services**

GeoDec4 v2.1.0.0

Report Date: May 07, 2015
Job Number: _____
Customer: Devon Energy
Well Name: Coachwhip 26 Fed 8H
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: 467236.22 US Survey Foot	Latitude: 32.281989 Degree
East: 787775.60 US Survey Foot	Longitude: -103.535902 Degree
Convergence: 0.43°	
Declination: 7.23°	
Total Correction: 6.80°	
Datum Transformation: none	

Geodetic Location WGS84

MSL Elevation = 0 m
Latitude = 32° 16' 55.16" N
Longitude = 103° 32' 09.25" W

Magnetic Declination = 7.23 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6552
Local Field Strength = 48178 nT	Magnetic Vector X = 23805 nT
Magnetic Dip = 60.13 deg	Magnetic Vector Y = 3018 nT
Magnetic Model = bggm2014.dat	Magnetic Vector Z = 41777 nT
Run Date = October 30, 2015	Magnetic Vector H = 23996 nT

Signed: _____ Date: _____

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