

APR 29 2016

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5D Anti-Collision Report

Devon Energy

Field Name: *Lea Co, NM Nad 83 NMEZ*

Site Name: *Green Wave 20-29 Fed 76H, 77H, 78H Pad*

Well Name: *Green Wave 20-29 Fed 77H*

12 May 2015



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Green Wave 20-29 Fed 77H

Field Name	Map Units : US ft		Company Name : Devon Energy	
Lea Co, NM Nad .83 NMEZ	Vertical Reference Datum (VRD) : Mean Sea Level			
	Projected Coordinate System : NAD83 / New Mexico East (ftUS)			
	Comment :			
Site Name	Units : US ft	North Reference : Grid	Convergence Angle : 0.45	
Green Wave 20- 29 Fed 76H, 77H, 78H Pad	Position	Northing : 375210.52 US ft	Latitude : 32° 1' 43.35"	
		Easting : 803702.93 US ft	Longitude : -103° 29' 12.16"	
	Elevation above Mean Sea Level: 3349.00 US ft			
Comment :				
Slot Name	Position (Offsets relative to Site Centre)			
Green Wave 20- 29 Fed 77H	+N / -S : 0.25 US ft	Northing : 375210.77 US ft	Latitude : 32° 1' 43.35"	
	+E / -W : 49.95 US ft	Easting : 803752.88 US ft	Longitude : -103° 29' 11.58"	
	Slot TVD Reference : Ground Elevation			
Elevation above Mean Sea Level : 3349.00 US ft				
Comment :				
Well Name	Type : Main well	UWI :	Plan : Working Plan	
Green Wave 20- 29 Fed 77H	Rig Height <i>Kelly Bushing</i> : 30.00 US ft	Comment :		
	Relative to Mean Sea Level: 3379.00 US ft			
	Closure Distance : 7509.4 US ft	Closure Azimuth : 179.684°		
	Vertical Section (Position of Origin Relative to Slot)			
	+N / -S : 0.00 US ft	+E / -W : 0.00 US ft	Az : 179.49°	
Magnetic Parameters				
Model : BGGM	Field Strength : 48030.7nT	Dec : 7.18°	Dip : 59.90°	Date : 30/Oct/2015

Collision / Uncertainty Analysis				
Primary Well	Start MD (US ft)	End MD (US ft)	Collision Risk Interval	No. of Std Deviations in Error Computation
Green Wave 20-29 Fed 77H (p)	0.00	19912.86	100.00	2

Secondary Well Names
Green Wave 20-29 Fed 78H Lat (p)
Green Wave 20-29 Fed 78H Pilot (p)
Green Wave 20-29 Fed 76H (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 Kelly Bushing)

Secondary Well Name	Pri MD (US ft)	Sec MD (US ft)	TVD (US ft)	CC (US ft)	ES (US ft)	SF	Risk
Green Wave 20-29 Fed 78H Pilot (p)	5456.05	5454.62	5456.05	50.22	25.39	2.02	
Green Wave 20-29 Fed 76H (p)	5400.00	5400.00	5400.00	49.95	25.33	2.03	
Green Wave 20-29 Fed 78H Lat (p)	19912.86	19988.70	12605.00	659.92	380.49	2.36	

Primary Well: Green Wave 20-29 Fed 77H (p) (TVD Relative to Kelly Bushing; All Azimuth Relative to GRID NORTH)									
MD (US ft)	TVD (US ft)	Face to Sec (°)	S Major (US ft)	S Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	269.71	0.00	0.00	Green Wave 20-29 Fed 76H (p)	49.95	49.38	88.15	
100.00	100.00	269.71	0.11	0.11	Green Wave 20-29 Fed 76H (p)	49.95	49.16	63.44	
200.00	200.00	269.71	0.34	0.34	Green Wave 20-29 Fed 76H (p)	49.95	48.71	40.38	
300.00	300.00	269.71	0.56	0.56	Green Wave 20-29 Fed 76H (p)	49.95	48.26	29.62	
400.00	400.00	269.71	0.79	0.79	Green Wave 20-29 Fed 76H (p)	49.95	47.81	23.38	
500.00	500.00	269.71	1.01	1.01	Green Wave 20-29 Fed 76H (p)	49.95	47.36	19.32	
600.00	600.00	269.71	1.24	1.24	Green Wave 20-29 Fed 76H (p)	49.95	46.92	16.46	
700.00	700.00	269.71	1.46	1.46	Green Wave 20-29 Fed 76H (p)	49.95	46.47	14.33	
800.00	800.00	269.71	1.69	1.69	Green Wave 20-29 Fed 76H (p)	49.95	46.02	12.69	
900.00	900.00	269.71	1.91	1.91	Green Wave 20-29 Fed 76H (p)	49.95	45.57	11.39	
1000.00	1000.00	269.71	2.14	2.14	Green Wave 20-29 Fed 76H (p)	49.95	45.12	10.33	
1100.00	1100.00	269.71	2.36	2.36	Green Wave 20-29 Fed 76H (p)	49.95	44.67	9.45	
1200.00	1200.00	269.71	2.59	2.59	Green Wave 20-29 Fed 76H (p)	49.95	44.22	8.71	
1300.00	1300.00	269.71	2.81	2.81	Green Wave 20-29 Fed 76H (p)	49.95	43.77	8.08	
1400.00	1400.00	269.71	3.04	3.04	Green Wave 20-29 Fed 76H (p)	49.95	43.32	7.53	
1500.00	1500.00	269.71	3.26	3.26	Green Wave 20-29 Fed 76H (p)	49.95	42.87	7.05	
1600.00	1600.00	269.71	3.48	3.48	Green Wave 20-29 Fed 76H (p)	49.95	42.42	6.63	
1700.00	1700.00	269.71	3.71	3.71	Green Wave 20-29 Fed 76H (p)	49.95	41.97	6.26	
1800.00	1800.00	269.71	3.93	3.93	Green Wave 20-29 Fed 76H (p)	49.95	41.52	5.92	
1900.00	1900.00	269.71	4.16	4.16	Green Wave 20-29 Fed 76H (p)	49.95	41.07	5.62	
2000.00	2000.00	269.71	4.38	4.38	Green Wave 20-29 Fed 76H (p)	49.95	40.62	5.35	

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Primary Well : Green Wave 20-29 Fed 77H (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
2100.00	2100.00	269.71	4.61	4.61	Green Wave 20-29 Fed 76H (p)	49.95	40.17	5.11	
2200.00	2200.00	269.71	4.83	4.83	Green Wave 20-29 Fed 76H (p)	49.95	39.72	4.88	
2300.00	2300.00	269.71	5.06	5.06	Green Wave 20-29 Fed 76H (p)	49.95	39.27	4.68	
2400.00	2400.00	269.71	5.28	5.28	Green Wave 20-29 Fed 76H (p)	49.95	38.82	4.49	
2500.00	2500.00	269.71	5.51	5.51	Green Wave 20-29 Fed 76H (p)	49.95	38.37	4.31	
2600.00	2600.00	269.71	5.73	5.73	Green Wave 20-29 Fed 76H (p)	49.95	37.92	4.15	
2700.00	2700.00	269.71	5.96	5.96	Green Wave 20-29 Fed 76H (p)	49.95	37.47	4.00	
2800.00	2800.00	269.71	6.18	6.18	Green Wave 20-29 Fed 76H (p)	49.95	37.02	3.86	
2900.00	2900.00	269.71	6.41	6.41	Green Wave 20-29 Fed 76H (p)	49.95	36.57	3.73	
3000.00	3000.00	269.71	6.63	6.63	Green Wave 20-29 Fed 76H (p)	49.95	36.12	3.61	
3100.00	3100.00	269.71	6.86	6.86	Green Wave 20-29 Fed 76H (p)	49.95	35.67	3.50	
3200.00	3200.00	269.71	7.08	7.08	Green Wave 20-29 Fed 76H (p)	49.95	35.22	3.39	
3300.00	3300.00	269.71	7.31	7.31	Green Wave 20-29 Fed 76H (p)	49.95	34.78	3.29	
3400.00	3400.00	269.71	7.53	7.53	Green Wave 20-29 Fed 76H (p)	49.95	34.33	3.20	
3500.00	3500.00	269.71	7.76	7.76	Green Wave 20-29 Fed 76H (p)	49.95	33.88	3.11	
3600.00	3600.00	269.71	7.98	7.98	Green Wave 20-29 Fed 76H (p)	49.95	33.43	3.02	
3700.00	3700.00	269.71	8.21	8.21	Green Wave 20-29 Fed 76H (p)	49.95	32.98	2.94	
3800.00	3800.00	269.71	8.43	8.43	Green Wave 20-29 Fed 76H (p)	49.95	32.53	2.87	
3900.00	3900.00	269.71	8.66	8.66	Green Wave 20-29 Fed 76H (p)	49.95	32.08	2.79	
4000.00	4000.00	269.71	8.88	8.88	Green Wave 20-29 Fed 76H (p)	49.95	31.63	2.73	
4100.00	4100.00	269.71	9.11	9.11	Green Wave 20-29 Fed 76H (p)	49.95	31.18	2.66	
4200.00	4200.00	269.71	9.33	9.33	Green Wave 20-29 Fed 76H (p)	49.95	30.73	2.60	
4300.00	4300.00	269.71	9.55	9.55	Green Wave 20-29 Fed 76H (p)	49.95	30.28	2.54	
4400.00	4400.00	269.71	9.78	9.78	Green Wave 20-29 Fed 76H (p)	49.95	29.83	2.48	
4500.00	4500.00	269.71	10.00	10.00	Green Wave 20-29 Fed 76H (p)	49.95	29.38	2.43	
4600.00	4600.00	269.71	10.23	10.23	Green Wave 20-29 Fed 76H (p)	49.95	28.93	2.38	

5D Anti-Collision Report

Primary Well : Green Wave 20-29 Fed 77H (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	TRisk
4700.00	4700.00	269.71	10.45	10.45	Green Wave 20-29 Fed 76H (p)	49.95	28.48	2.33	
4800.00	4800.00	269.71	10.68	10.68	Green Wave 20-29 Fed 76H (p)	49.95	28.03	2.28	
4900.00	4900.00	269.71	10.90	10.90	Green Wave 20-29 Fed 76H (p)	49.95	27.58	2.23	
5000.00	5000.00	269.71	11.13	11.13	Green Wave 20-29 Fed 76H (p)	49.95	27.13	2.19	
5100.00	5100.00	269.71	11.35	11.35	Green Wave 20-29 Fed 76H (p)	49.95	26.68	2.15	
5200.00	5200.00	269.71	11.58	11.58	Green Wave 20-29 Fed 76H (p)	49.95	26.23	2.11	
5300.00	5300.00	269.71	11.80	11.80	Green Wave 20-29 Fed 76H (p)	49.95	25.78	2.07	
5400.00	5400.00	269.71	12.03	12.03	Green Wave 20-29 Fed 76H (p)	49.95	25.33	2.03	
5500.00	5500.00	89.55	12.25	12.25	Green Wave 20-29 Fed 78H Pilot (p)	50.76	25.75	2.03	
5600.00	5600.00	89.37	12.48	12.48	Green Wave 20-29 Fed 78H Pilot (p)	53.25	27.84	2.10	
5700.00	5700.00	89.10	12.70	12.70	Green Wave 20-29 Fed 78H Pilot (p)	57.46	31.64	2.23	
5800.00	5800.00	88.78	12.93	12.93	Green Wave 20-29 Fed 78H Pilot (p)	63.39	37.18	2.42	
5900.00	5900.00	88.45	13.15	13.15	Green Wave 20-29 Fed 78H Pilot (p)	71.04	44.44	2.67	
6000.00	6000.00	88.13	13.38	13.38	Green Wave 20-29 Fed 78H Pilot (p)	80.36	53.36	2.98	
6100.00	6100.00	87.87	13.60	13.60	Green Wave 20-29 Fed 78H Pilot (p)	90.19	62.77	3.29	
6200.00	6200.00	87.65	13.83	13.83	Green Wave 20-29 Fed 78H Pilot (p)	100.03	72.18	3.59	
6300.00	6300.00	87.47	14.05	14.05	Green Wave 20-29 Fed 78H Pilot (p)	109.86	81.59	3.89	
6400.00	6400.00	87.32	14.28	14.28	Green Wave 20-29 Fed 78H Pilot (p)	119.70	91.00	4.17	
6500.00	6500.00	87.20	14.50	14.50	Green Wave 20-29 Fed 78H Pilot (p)	129.54	100.41	4.45	
6600.00	6600.00	87.09	14.73	14.73	Green Wave 20-29 Fed 78H Pilot (p)	139.38	109.82	4.72	
6700.00	6700.00	87.00	14.95	14.95	Green Wave 20-29 Fed 78H Pilot (p)	149.21	119.23	4.98	
6800.00	6800.00	86.92	15.18	15.18	Green Wave 20-29 Fed 78H Pilot (p)	159.05	128.64	5.23	
6900.00	6900.00	86.84	15.40	15.40	Green Wave 20-29 Fed 78H Pilot (p)	168.89	138.05	5.48	
7000.00	7000.00	86.78	15.62	15.62	Green Wave 20-29 Fed 78H Pilot (p)	178.73	147.46	5.71	
7100.00	7100.00	86.72	15.85	15.85	Green Wave 20-29 Fed 78H Pilot (p)	188.57	156.86	5.95	
7200.00	7200.00	86.67	16.07	16.07	Green Wave 20-29 Fed 78H Pilot (p)	198.41	166.27	6.17	

5D Anti-Collision Report

Primary Well : Green Wave 20-29 Fed 77H (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
7300.00	7300.00	86.62	16.30	16.30	Green Wave 20-29 Fed 78H Pilot (p)	208.25	175.68	6.39	
7400.00	7400.00	86.58	16.52	16.52	Green Wave 20-29 Fed 78H Pilot (p)	218.09	185.08	6.61	
7500.00	7500.00	86.54	16.75	16.75	Green Wave 20-29 Fed 78H Pilot (p)	227.93	194.49	6.82	
7600.00	7600.00	86.50	16.97	16.97	Green Wave 20-29 Fed 78H Pilot (p)	237.77	203.89	7.02	
7700.00	7700.00	86.47	17.20	17.20	Green Wave 20-29 Fed 78H Pilot (p)	247.61	213.30	7.22	
7800.00	7800.00	86.44	17.42	17.42	Green Wave 20-29 Fed 78H Pilot (p)	257.45	222.70	7.41	
7900.00	7900.00	86.41	17.65	17.65	Green Wave 20-29 Fed 78H Pilot (p)	267.29	232.10	7.60	
8000.00	8000.00	86.39	17.87	17.87	Green Wave 20-29 Fed 78H Pilot (p)	277.13	241.51	7.78	
8100.00	8100.00	86.36	18.10	18.10	Green Wave 20-29 Fed 78H Pilot (p)	286.98	250.91	7.96	
8200.00	8200.00	86.34	18.32	18.32	Green Wave 20-29 Fed 78H Pilot (p)	296.82	260.31	8.13	
8300.00	8300.00	272.95	18.55	18.55	Green Wave 20-29 Fed 76H (p)	306.99	270.01	8.30	
8400.00	8400.00	272.97	18.77	18.77	Green Wave 20-29 Fed 76H (p)	316.83	279.40	8.47	
8500.00	8500.00	272.99	19.00	19.00	Green Wave 20-29 Fed 76H (p)	326.66	288.79	8.63	
8600.00	8600.00	273.01	19.22	19.22	Green Wave 20-29 Fed 76H (p)	336.49	298.18	8.78	
8700.00	8700.00	273.02	19.45	19.45	Green Wave 20-29 Fed 76H (p)	346.32	307.57	8.94	
8800.00	8800.00	273.04	19.67	19.67	Green Wave 20-29 Fed 76H (p)	356.15	316.97	9.09	
8900.00	8900.00	273.05	19.90	19.90	Green Wave 20-29 Fed 76H (p)	365.99	326.36	9.24	
9000.00	9000.00	273.07	20.12	20.12	Green Wave 20-29 Fed 76H (p)	375.82	335.75	9.38	
9100.00	9100.00	273.08	20.35	20.35	Green Wave 20-29 Fed 76H (p)	385.65	345.14	9.52	
9200.00	9200.00	273.09	20.57	20.57	Green Wave 20-29 Fed 76H (p)	395.48	354.52	9.66	
9300.00	9300.00	273.10	20.80	20.80	Green Wave 20-29 Fed 76H (p)	405.31	363.91	9.79	
9400.00	9400.00	273.12	21.02	21.02	Green Wave 20-29 Fed 76H (p)	415.15	373.30	9.92	
9500.00	9500.00	273.13	21.25	21.25	Green Wave 20-29 Fed 76H (p)	424.98	382.69	10.05	
9600.00	9600.00	273.14	21.47	21.47	Green Wave 20-29 Fed 76H (p)	434.81	392.08	10.18	
9700.00	9700.00	273.15	21.69	21.69	Green Wave 20-29 Fed 76H (p)	444.64	401.47	10.30	
9800.00	9800.00	273.16	21.92	21.92	Green Wave 20-29 Fed 76H (p)	454.48	410.86	10.42	

5D Anti-Collision Report

Primary Well	Green Wave 20-29 Fed 77H (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
9900.00	9900.00	273.17	22.14	22.14	Green Wave 20-29 Fed 76H (p)	464.31	420.24	10.54	
10000.00	10000.00	273.17	22.37	22.37	Green Wave 20-29 Fed 76H (p)	474.14	429.63	10.65	
10100.00	10100.00	273.18	22.59	22.59	Green Wave 20-29 Fed 76H (p)	483.97	439.02	10.77	
10200.00	10200.00	273.19	22.82	22.82	Green Wave 20-29 Fed 76H (p)	493.81	448.40	10.88	
10300.00	10300.00	273.20	23.04	23.04	Green Wave 20-29 Fed 76H (p)	503.64	457.79	10.99	
10400.00	10400.00	273.21	23.27	23.27	Green Wave 20-29 Fed 76H (p)	513.47	467.18	11.09	
10500.00	10500.00	273.21	23.49	23.49	Green Wave 20-29 Fed 76H (p)	523.30	476.56	11.20	
10600.00	10600.00	273.22	23.72	23.72	Green Wave 20-29 Fed 76H (p)	533.13	485.95	11.30	
10700.00	10700.00	273.23	23.94	23.94	Green Wave 20-29 Fed 76H (p)	542.97	495.34	11.40	
10800.00	10800.00	273.23	24.17	24.17	Green Wave 20-29 Fed 76H (p)	552.80	504.72	11.50	
10900.00	10900.00	273.24	24.39	24.39	Green Wave 20-29 Fed 76H (p)	562.63	514.11	11.59	
11000.00	11000.00	273.24	24.62	24.62	Green Wave 20-29 Fed 76H (p)	572.46	523.49	11.69	
11100.00	11100.00	273.25	24.84	24.84	Green Wave 20-29 Fed 76H (p)	582.30	532.88	11.78	
11200.00	11200.00	273.26	25.07	25.07	Green Wave 20-29 Fed 76H (p)	592.13	542.26	11.87	
11300.00	11300.00	273.26	25.29	25.29	Green Wave 20-29 Fed 76H (p)	601.96	551.65	11.96	
11400.00	11400.00	273.27	25.52	25.52	Green Wave 20-29 Fed 76H (p)	611.79	561.03	12.05	
11500.00	11500.00	273.27	25.74	25.74	Green Wave 20-29 Fed 76H (p)	620.63	569.36	12.10	
11600.00	11600.00	273.28	25.97	25.97	Green Wave 20-29 Fed 76H (p)	627.53	575.76	12.12	
11700.00	11700.00	273.28	26.19	26.19	Green Wave 20-29 Fed 76H (p)	632.47	580.22	12.11	
11800.00	11800.00	273.28	26.42	26.42	Green Wave 20-29 Fed 76H (p)	635.45	582.75	12.06	
11900.00	11900.00	273.28	26.64	26.64	Green Wave 20-29 Fed 76H (p)	636.47	583.34	11.98	
12000.00	12000.00	273.28	26.87	26.87	Green Wave 20-29 Fed 76H (p)	636.47	582.91	11.88	
12100.00	12100.00	273.28	27.09	27.09	Green Wave 20-29 Fed 76H (p)	636.47	582.47	11.79	
12200.00	12199.46	84.33	27.28	27.10	Green Wave 20-29 Fed 76H (p)	634.94	580.52	11.67	
12300.00	12295.41	85.27	27.42	26.71	Green Wave 20-29 Fed 76H (p)	630.22	575.55	11.53	
12400.00	12384.39	88.44	27.59	26.02	Green Wave 20-29 Fed 76H (p)	624.62	569.65	11.36	

5D Anti-Collision Report

Primary Well : Green Wave 20-29 Fed 77H (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
12500.00	12463.17	89.85	27.74	25.17	Green Wave 20-29 Fed 76H (p)	619.60	564.20	11.18	
12600.00	12528.85	90.44	27.97	24.25	Green Wave 20-29 Fed 76H (p)	615.39	559.53	11.02	
12700.00	12579.03	90.52	28.28	23.41	Green Wave 20-29 Fed 76H (p)	612.17	555.66	10.83	
12800.00	12611.85	90.23	28.67	22.83	Green Wave 20-29 Fed 76H (p)	610.08	552.78	10.65	
12900.00	12626.11	89.68	29.14	22.75	Green Wave 20-29 Fed 76H (p)	609.21	550.86	10.44	
13000.00	12626.46	89.63	29.72	22.81	Green Wave 20-29 Fed 76H (p)	609.19	549.60	10.22	
13100.00	12626.15	89.63	30.39	22.92	Green Wave 20-29 Fed 76H (p)	609.21	548.34	10.01	
13200.00	12625.84	89.63	31.16	23.06	Green Wave 20-29 Fed 76H (p)	609.22	546.69	9.74	
13300.00	12625.53	89.63	32.00	23.26	Green Wave 20-29 Fed 76H (p)	609.23	545.00	9.49	
13400.00	12625.22	89.63	32.93	23.47	Green Wave 20-29 Fed 76H (p)	609.25	543.18	9.22	
13500.00	12624.91	89.63	33.93	23.70	Green Wave 20-29 Fed 76H (p)	609.26	541.08	8.94	
13600.00	12624.60	89.63	35.00	23.94	Green Wave 20-29 Fed 76H (p)	609.28	538.91	8.66	
13700.00	12624.29	89.63	36.13	24.20	Green Wave 20-29 Fed 76H (p)	609.29	536.67	8.39	
13800.00	12623.98	89.63	37.31	24.46	Green Wave 20-29 Fed 76H (p)	609.30	534.35	8.13	
13900.00	12623.67	89.63	38.55	24.73	Green Wave 20-29 Fed 76H (p)	609.32	531.89	7.87	
14000.00	12623.36	89.63	39.83	24.98	Green Wave 20-29 Fed 76H (p)	609.33	529.27	7.61	
14100.00	12623.05	89.63	41.15	25.36	Green Wave 20-29 Fed 76H (p)	609.35	526.59	7.36	
14200.00	12622.74	89.63	42.51	25.74	Green Wave 20-29 Fed 76H (p)	609.36	523.85	7.13	
14300.00	12622.43	89.63	43.90	26.09	Green Wave 20-29 Fed 76H (p)	609.38	521.06	6.90	
14400.00	12622.12	89.63	45.32	26.39	Green Wave 20-29 Fed 76H (p)	609.39	518.24	6.69	
14500.00	12621.81	89.63	46.77	26.87	Green Wave 20-29 Fed 76H (p)	609.40	515.38	6.48	
14600.00	12621.50	89.63	48.25	27.22	Green Wave 20-29 Fed 76H (p)	609.42	512.49	6.29	
14700.00	12621.19	89.63	49.75	27.68	Green Wave 20-29 Fed 76H (p)	609.43	509.58	6.10	
14800.00	12620.87	89.63	51.27	28.05	Green Wave 20-29 Fed 76H (p)	609.45	506.62	5.93	
14900.00	12620.56	89.63	52.81	28.56	Green Wave 20-29 Fed 76H (p)	609.46	503.56	5.75	
15000.00	12620.25	89.63	54.37	28.93	Green Wave 20-29 Fed 76H (p)	609.48	500.41	5.59	

SD Anti-Collision Report

Primary Well : Green Wave 20-29 Fed 77H (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
15100.00	12619.94	89.63	55.94	29.48	Green Wave 20-29 Fed 76H (p)	609.49	497.23	5.43	
15200.00	12619.63	89.63	57.53	29.93	Green Wave 20-29 Fed 76H (p)	609.50	494.03	5.28	
15300.00	12619.32	89.63	59.14	30.38	Green Wave 20-29 Fed 76H (p)	609.52	490.80	5.13	
15400.00	12619.01	89.63	60.75	30.94	Green Wave 20-29 Fed 76H (p)	609.53	487.55	5.00	
15500.00	12618.70	89.63	62.38	31.45	Green Wave 20-29 Fed 76H (p)	609.55	484.28	4.87	
15600.00	12618.39	89.63	64.02	31.93	Green Wave 20-29 Fed 76H (p)	609.56	480.99	4.74	
15700.00	12618.08	89.63	65.67	32.40	Green Wave 20-29 Fed 76H (p)	609.57	477.69	4.62	
15800.00	12617.77	89.63	67.32	32.93	Green Wave 20-29 Fed 76H (p)	609.59	474.36	4.51	
15900.00	12617.46	89.63	68.99	33.51	Green Wave 20-29 Fed 76H (p)	609.60	471.02	4.40	
16000.00	12617.15	89.63	70.67	34.08	Green Wave 20-29 Fed 76H (p)	609.62	467.67	4.29	
16100.00	12616.84	89.63	72.35	34.65	Green Wave 20-29 Fed 76H (p)	609.63	464.31	4.19	
16200.00	12616.53	89.63	74.04	35.22	Green Wave 20-29 Fed 76H (p)	609.65	460.93	4.10	
16300.00	12616.22	89.63	75.73	35.78	Green Wave 20-29 Fed 76H (p)	609.66	457.54	4.01	
16400.00	12615.91	89.63	77.43	36.35	Green Wave 20-29 Fed 76H (p)	609.67	454.14	3.92	
16500.00	12615.60	89.63	79.14	36.92	Green Wave 20-29 Fed 76H (p)	609.69	450.72	3.84	
16600.00	12615.29	89.63	80.85	37.50	Green Wave 20-29 Fed 76H (p)	609.70	447.30	3.75	
16700.00	12614.98	89.63	82.57	38.07	Green Wave 20-29 Fed 76H (p)	609.72	443.87	3.68	
16800.00	12614.66	89.63	84.29	38.65	Green Wave 20-29 Fed 76H (p)	609.73	440.43	3.60	
16900.00	12614.35	89.63	86.01	39.24	Green Wave 20-29 Fed 76H (p)	609.74	436.98	3.53	
17000.00	12614.04	89.63	87.75	39.83	Green Wave 20-29 Fed 76H (p)	609.76	433.53	3.46	
17100.00	12613.73	89.63	89.48	40.42	Green Wave 20-29 Fed 76H (p)	609.77	430.07	3.39	
17200.00	12613.42	89.63	91.22	41.01	Green Wave 20-29 Fed 76H (p)	609.79	426.60	3.33	
17300.00	12613.11	89.63	92.96	41.61	Green Wave 20-29 Fed 76H (p)	609.80	423.12	3.27	
17400.00	12612.80	89.63	94.70	42.21	Green Wave 20-29 Fed 76H (p)	609.82	419.64	3.21	
17500.00	12612.49	89.63	96.45	42.82	Green Wave 20-29 Fed 76H (p)	609.83	416.15	3.15	
17600.00	12612.18	89.63	98.20	43.43	Green Wave 20-29 Fed 76H (p)	609.84	412.66	3.09	

5D Anti-Collision Report

Primary Well : Green Wave 20-29 Fed 77H (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	GC (US-ft)	ES (US-ft)	SF	Risk
17700.00	12611.87	89.63	99.95	44.07	Green Wave 20-29 Fed 76H (p)	609.86	409.16	3.04	
17800.00	12611.56	89.63	101.71	44.72	Green Wave 20-29 Fed 76H (p)	609.87	405.66	2.99	
17900.00	12611.25	89.63	103.47	45.36	Green Wave 20-29 Fed 76H (p)	609.89	402.15	2.94	
18000.00	12610.94	89.63	105.23	46.01	Green Wave 20-29 Fed 76H (p)	609.90	398.64	2.89	
18100.00	12610.63	89.63	106.99	46.65	Green Wave 20-29 Fed 76H (p)	609.92	395.12	2.84	
18200.00	12610.32	89.63	108.75	47.30	Green Wave 20-29 Fed 76H (p)	609.93	391.60	2.79	
18300.00	12610.01	89.62	110.52	47.96	Green Wave 20-29 Fed 76H (p)	609.94	388.08	2.75	
18400.00	12609.70	89.62	112.29	48.61	Green Wave 20-29 Fed 76H (p)	609.96	384.55	2.71	
18500.00	12609.39	89.62	114.06	49.27	Green Wave 20-29 Fed 76H (p)	609.97	381.02	2.66	
18600.00	12609.08	89.62	115.83	49.93	Green Wave 20-29 Fed 76H (p)	609.99	377.48	2.62	
18700.00	12608.77	89.62	117.61	50.59	Green Wave 20-29 Fed 76H (p)	610.00	373.94	2.58	
18800.00	12608.46	89.62	119.38	51.25	Green Wave 20-29 Fed 76H (p)	610.01	370.40	2.55	
18900.00	12608.14	89.62	121.16	51.91	Green Wave 20-29 Fed 76H (p)	610.03	366.86	2.51	
19000.00	12607.83	89.62	122.94	52.58	Green Wave 20-29 Fed 76H (p)	610.04	363.31	2.47	
19100.00	12607.52	89.62	124.72	53.24	Green Wave 20-29 Fed 76H (p)	610.06	359.76	2.44	
19200.00	12607.21	89.62	126.50	53.91	Green Wave 20-29 Fed 76H (p)	610.07	356.21	2.40	
19300.00	12606.90	89.62	128.28	54.58	Green Wave 20-29 Fed 76H (p)	610.09	352.66	2.37	
19400.00	12606.59	89.62	130.07	55.25	Green Wave 20-29 Fed 76H (p)	610.10	349.10	2.34	
19500.00	12606.28	89.62	131.85	55.93	Green Wave 20-29 Fed 76H (p)	610.11	345.54	2.31	
19600.00	12605.97	89.62	133.64	56.60	Green Wave 20-29 Fed 76H (p)	610.13	341.98	2.28	
19700.00	12605.66	89.62	135.43	57.28	Green Wave 20-29 Fed 76H (p)	610.14	338.42	2.25	
19800.00	12605.35	89.62	137.22	57.95	Green Wave 20-29 Fed 76H (p)	610.16	334.85	2.22	
19900.00	12605.04	89.62	139.01	58.63	Green Wave 20-29 Fed 76H (p)	610.17	331.28	2.19	
19912.86	12605.00	89.62	139.24	58.72	Green Wave 20-29 Fed 76H (p)	610.17	330.83	2.18	

5D Anti-Collision Report

Secondary Well : Green Wave 20-29 Fed 78H Lat (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	12116.00	12143.00	85.98	28.25	26.43	12132.69	12110.90	556.99	
100.00	12116.00	12143.00	85.98	28.25	26.43	12032.83	12008.75	499.77	
200.00	12116.00	12143.00	85.98	28.25	26.43	11932.97	11908.88	495.43	
300.00	12116.00	12143.00	85.98	28.25	26.43	11833.11	11809.01	490.97	
400.00	12116.00	12143.00	85.98	28.25	26.43	11733.26	11709.13	486.40	
500.00	12116.00	12143.00	85.98	28.25	26.43	11633.40	11609.25	481.73	
600.00	12116.00	12143.00	85.98	28.25	26.43	11533.56	11509.37	476.96	
700.00	12116.00	12143.00	85.98	28.25	26.43	11433.71	11409.49	472.12	
800.00	12116.00	12143.00	85.98	28.25	26.43	11333.87	11309.61	467.20	
900.00	12116.00	12143.00	85.98	28.25	26.43	11234.02	11209.72	462.22	
1000.00	12116.00	12143.00	85.98	28.25	26.43	11134.19	11109.83	457.19	
1100.00	12116.00	12143.00	85.98	28.25	26.43	11034.35	11009.94	452.11	
1200.00	12116.00	12143.00	85.98	28.25	26.43	10934.52	10910.06	446.99	
1300.00	12116.00	12143.00	85.98	28.25	26.43	10834.69	10810.17	441.84	
1400.00	12116.00	12143.00	85.98	28.25	26.43	10734.86	10710.28	436.67	
1500.00	12116.00	12143.00	85.98	28.25	26.43	10635.04	10610.39	431.48	
1600.00	12116.00	12143.00	85.98	28.25	26.43	10535.22	10510.51	426.28	
1700.00	12116.00	12143.00	85.98	28.25	26.43	10435.41	10410.62	421.06	
1800.00	12116.00	12143.00	85.98	28.25	26.43	10335.59	10310.74	415.85	
1900.00	12116.00	12143.00	85.98	28.25	26.43	10235.79	10210.86	410.63	
2000.00	12116.00	12143.00	85.98	28.25	26.43	10135.98	10110.98	405.41	
2100.00	12116.00	12143.00	85.98	28.25	26.43	10036.18	10011.10	400.19	
2200.00	12116.00	12143.00	85.98	28.25	26.43	9936.38	9911.22	394.95	
2300.00	12116.00	12143.00	85.98	28.25	26.43	9836.59	9811.35	389.73	
2400.00	12116.00	12143.00	85.98	28.25	26.43	9736.80	9711.48	384.51	
2500.00	12116.00	12143.00	85.98	28.25	26.43	9637.02	9611.61	379.31	
2600.00	12116.00	12143.00	85.98	28.25	26.43	9537.24	9511.75	374.12	
2700.00	12116.00	12143.00	85.98	28.25	26.43	9437.46	9411.88	368.95	
2800.00	12116.00	12143.00	85.98	28.25	26.43	9337.69	9312.02	363.79	
2900.00	12116.00	12143.00	85.98	28.25	26.43	9237.93	9212.17	358.65	
3000.00	12116.00	12143.00	85.98	28.25	26.43	9138.17	9112.32	353.53	
3100.00	12116.00	12143.00	85.98	28.25	26.43	9038.41	9012.47	348.43	
3200.00	12116.00	12143.00	85.98	28.25	26.43	8938.66	8912.63	343.34	
3300.00	12116.00	12143.00	85.98	28.25	26.43	8838.92	8812.79	338.27	
3400.00	12116.00	12143.00	85.98	28.25	26.43	8739.18	8712.96	333.23	
3500.00	12116.00	12143.00	85.98	28.25	26.43	8639.45	8613.13	328.20	
3600.00	12116.00	12143.00	85.98	28.25	26.43	8539.72	8513.30	323.19	
3700.00	12116.00	12143.00	85.98	28.25	26.43	8440.01	8413.48	318.21	
3800.00	12116.00	12143.00	85.98	28.25	26.43	8340.29	8313.67	313.24	
3900.00	12116.00	12143.00	85.98	28.25	26.43	8240.59	8213.86	308.30	
4000.00	12116.00	12143.00	85.98	28.25	26.43	8140.89	8114.06	303.38	
4100.00	12116.00	12143.00	85.98	28.25	26.43	8041.20	8014.26	298.48	
4200.00	12116.00	12143.00	85.98	28.25	26.43	7941.52	7914.47	293.60	
4300.00	12116.00	12143.00	85.98	28.25	26.43	7841.84	7814.68	288.74	
4400.00	12116.00	12143.00	85.98	28.25	26.43	7742.18	7714.91	283.91	
4500.00	12116.00	12143.00	85.98	28.25	26.43	7642.52	7615.14	279.10	
4600.00	12116.00	12143.00	85.98	28.25	26.43	7542.87	7515.37	274.31	
4700.00	12116.00	12143.00	85.98	28.25	26.43	7443.23	7415.62	269.55	
4800.00	12116.00	12143.00	85.98	28.25	26.43	7343.60	7315.87	264.80	
4900.00	12116.00	12143.00	85.98	28.25	26.43	7243.98	7216.13	260.09	
5000.00	12116.00	12143.00	85.98	28.25	26.43	7144.38	7116.40	255.39	
5100.00	12116.00	12143.00	85.98	28.25	26.43	7044.78	7016.68	250.72	
5200.00	12116.00	12143.00	85.98	28.25	26.43	6945.19	6916.97	246.08	
5300.00	12116.00	12143.00	85.98	28.25	26.43	6845.62	6817.27	241.45	
5400.00	12116.00	12143.00	85.98	28.25	26.43	6746.06	6717.57	236.81	
5500.00	12116.00	12143.00	85.98	28.25	26.43	6646.51	6617.88	232.19	
5600.00	12116.00	12143.00	85.98	28.25	26.43	6546.98	6518.21	227.59	
5700.00	12116.00	12143.00	85.98	28.25	26.43	6447.46	6418.55	223.03	

SD Anti-Collision Report

Secondary Well : Green Wave 20-29 Feb 78H Lat (p) (TVD Relative to Kelly Bushing (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)	SF	
5800.00	12116.00	12143.00	85.98	28.25	26.43	6347.95	6318.90	218.49	
5900.00	12116.00	12143.00	85.98	28.25	26.43	6248.46	6219.26	213.98	
6000.00	12116.00	12143.00	85.98	28.25	26.43	6148.99	6119.64	209.50	
6100.00	12116.00	12143.00	85.98	28.25	26.43	6049.54	6020.03	205.05	
6200.00	12116.00	12143.00	85.98	28.25	26.43	5950.10	5920.44	200.62	
6300.00	12116.00	12143.00	85.98	28.25	26.43	5850.68	5820.87	196.23	
6400.00	12116.00	12143.00	85.98	28.25	26.43	5751.29	5721.31	191.87	
6500.00	12116.00	12143.00	85.98	28.25	26.43	5651.91	5621.77	187.54	
6600.00	12116.00	12143.00	85.98	28.25	26.43	5552.56	5522.26	183.24	
6700.00	12116.00	12143.00	85.98	28.25	26.43	5453.23	5422.76	178.97	
6800.00	12116.00	12143.00	85.98	28.25	26.43	5353.92	5323.28	174.74	
6900.00	12116.00	12143.00	85.98	28.25	26.43	5254.65	5223.83	170.53	
7000.00	12116.00	12143.00	85.98	28.25	26.43	5155.39	5124.41	166.36	
7100.00	12116.00	12143.00	85.98	28.25	26.43	5056.17	5025.01	162.23	
7200.00	12116.00	12143.00	85.98	28.25	26.43	4956.98	4925.64	158.13	
7300.00	12116.00	12143.00	85.98	28.25	26.43	4857.83	4826.30	154.06	
7400.00	12116.00	12143.00	85.98	28.25	26.43	4758.71	4726.99	150.03	
7500.00	12116.00	12143.00	85.98	28.25	26.43	4659.62	4627.71	146.03	
7600.00	12116.00	12143.00	85.98	28.25	26.43	4560.58	4528.48	142.07	
7700.00	12116.00	12143.00	85.98	28.25	26.43	4461.58	4429.28	138.14	
7800.00	12116.00	12143.00	85.98	28.25	26.43	4362.62	4330.13	134.25	
7900.00	12116.00	12143.00	85.98	28.25	26.43	4263.72	4231.02	130.40	
8000.00	12116.00	12143.00	85.98	28.25	26.43	4164.86	4131.96	126.59	
8100.00	12116.00	12143.00	85.98	28.25	26.43	4066.07	4032.96	122.81	
8200.00	12116.00	12143.00	85.98	28.25	26.43	3967.33	3934.01	119.08	
8300.00	12116.00	12143.00	85.98	28.25	26.43	3868.66	3835.12	115.37	
8400.00	12116.00	12143.00	85.98	28.25	26.43	3770.05	3736.29	111.67	
8500.00	12116.00	12143.00	85.98	28.25	26.43	3671.53	3637.53	108.02	
8600.00	12116.00	12143.00	85.98	28.25	26.43	3573.08	3538.86	104.40	
8700.00	12116.00	12143.00	85.98	28.25	26.43	3474.72	3440.26	100.83	
8800.00	12116.00	12143.00	85.98	28.25	26.43	3376.46	3341.76	97.30	
8900.00	12116.00	12143.00	85.98	28.25	26.43	3278.31	3243.36	93.80	
9000.00	12116.00	12143.00	85.98	28.25	26.43	3180.27	3145.07	90.36	
9100.00	12116.00	12143.00	85.98	28.25	26.43	3082.35	3046.90	86.95	
9200.00	12116.00	12143.00	85.98	28.25	26.43	2984.58	2948.87	83.59	
9300.00	12116.00	12143.00	85.98	28.25	26.43	2886.95	2850.99	80.27	
9400.00	12116.00	12143.00	85.98	28.25	26.43	2789.50	2753.27	77.00	
9500.00	12116.00	12143.00	85.98	28.25	26.43	2692.23	2655.72	73.74	
9600.00	12116.00	12143.00	85.98	28.25	26.43	2595.17	2558.35	70.48	
9700.00	12116.00	12143.00	85.98	28.25	26.43	2498.34	2461.20	67.27	
9800.00	12116.00	12143.00	85.98	28.25	26.43	2401.77	2364.31	64.12	
9900.00	12116.00	12143.00	85.98	28.25	26.43	2305.49	2267.71	61.02	
10000.00	12116.00	12143.00	85.98	28.25	26.43	2209.55	2171.43	57.97	
10100.00	12116.00	12143.00	85.98	28.25	26.43	2113.98	2075.53	54.98	
10200.00	12116.00	12143.00	85.98	28.25	26.43	2018.84	1980.02	52.01	
10300.00	12116.00	12143.00	85.98	28.25	26.43	1924.19	1884.97	49.07	
10400.00	12116.00	12143.00	85.98	28.25	26.43	1830.11	1790.49	46.20	
10500.00	12116.00	12143.00	85.98	28.25	26.43	1736.69	1696.67	43.40	
10600.00	12116.00	12143.00	85.98	28.25	26.43	1644.05	1603.55	40.60	
10700.00	12116.00	12143.00	85.98	28.25	26.43	1552.32	1511.30	37.85	
10800.00	12116.00	12143.00	85.98	28.25	26.43	1461.68	1420.14	35.19	
10900.00	12116.00	12143.00	85.98	28.25	26.43	1372.33	1330.23	32.59	
11000.00	12116.00	12143.00	85.98	28.25	26.43	1284.56	1241.82	30.05	
11100.00	12116.00	12143.00	85.98	28.25	26.43	1198.71	1155.23	27.57	
11200.00	12116.00	12143.00	85.98	28.25	26.43	1115.21	1070.94	25.19	
11300.00	12116.00	12143.00	85.98	28.25	26.43	1034.65	989.52	22.93	
11400.00	12116.00	12143.00	85.98	28.25	26.43	957.76	911.60	20.75	
11500.00	12116.00	12143.00	85.98	28.25	26.43	885.49	838.23	18.74	

SD Anti-Collision Report

Secondary Well : Green Wave 20-29 Fed 78H Lat (p) (TVD Relative to Kelly Bushing (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)	SF	
11600.00	12116.00	12143.00	85.98	28.25	26.43	819.08	770.61	16.90	
11700.00	12116.00	12143.00	85.98	28.25	26.43	760.06	710.25	15.26	
11800.00	12116.00	12143.00	85.98	28.25	26.43	710.28	659.12	13.88	
11900.00	12116.00	12143.00	85.98	28.25	26.43	671.79	619.49	12.85	
12000.00	12116.00	12143.00	85.98	28.25	26.43	646.60	593.21	12.11	
12100.00	12116.00	12143.00	85.98	28.25	26.43	636.31	582.36	11.79	
12200.00	12206.47	12233.93	257.02	28.19	26.60	637.65	583.30	11.73	
12300.00	12310.40	12342.22	258.25	27.67	26.78	642.16	587.49	11.74	
12400.00	12405.72	12450.23	262.02	27.00	26.60	647.39	592.30	11.75	
12500.00	12488.23	12557.66	264.26	27.18	25.57	651.93	596.57	11.77	
12600.00	12554.47	12664.19	265.90	27.46	24.40	655.65	599.73	11.73	
12700.00	12602.02	12769.57	267.20	27.80	23.37	658.42	601.90	11.65	
12800.00	12629.52	12873.59	268.25	28.23	22.91	660.18	602.82	11.51	
12900.00	12636.83	12975.85	269.06	28.71	22.87	660.89	602.55	11.33	
13000.00	12636.52	13075.84	269.13	29.43	22.98	660.90	601.28	11.08	
13100.00	12636.21	13175.84	269.13	30.08	23.11	660.89	599.96	10.85	
13200.00	12635.89	13275.84	269.13	30.96	23.26	660.87	598.29	10.56	
13300.00	12635.58	13375.84	269.13	31.78	23.43	660.86	596.60	10.28	
13400.00	12635.27	13475.84	269.13	32.76	23.62	660.84	594.69	9.99	
13500.00	12634.96	13575.84	269.13	33.85	23.87	660.83	592.57	9.68	
13600.00	12634.65	13675.84	269.13	34.94	24.15	660.82	590.39	9.38	
13700.00	12634.34	13775.84	269.13	36.05	24.45	660.80	588.12	9.09	
13800.00	12634.03	13875.84	269.13	37.19	24.75	660.79	585.77	8.81	
13900.00	12633.72	13975.84	269.13	38.50	25.04	660.77	583.24	8.52	
14000.00	12633.40	14075.84	269.13	39.85	25.33	660.76	580.59	8.24	
14100.00	12633.09	14175.84	269.13	41.21	25.67	660.74	577.88	7.97	
14200.00	12632.78	14275.84	269.13	42.59	26.09	660.73	575.11	7.72	
14300.00	12632.47	14375.84	269.13	43.99	26.41	660.72	572.29	7.47	
14400.00	12632.16	14475.84	269.13	45.40	26.88	660.70	569.43	7.24	
14500.00	12631.85	14575.84	269.13	46.82	27.25	660.69	566.54	7.02	
14600.00	12631.54	14675.84	269.13	48.25	27.72	660.67	563.61	6.81	
14700.00	12631.23	14775.84	269.13	49.71	28.20	660.66	560.66	6.61	
14800.00	12630.92	14875.84	269.13	51.27	28.57	660.64	557.66	6.41	
14900.00	12630.60	14975.84	269.13	52.84	28.96	660.63	554.61	6.23	
15000.00	12630.29	15075.84	269.13	54.40	29.38	660.62	551.43	6.05	
15100.00	12629.98	15175.84	269.13	55.98	29.92	660.60	548.23	5.88	
15200.00	12629.67	15275.84	269.13	57.60	30.40	660.59	545.00	5.71	
15300.00	12629.36	15375.84	269.13	59.23	30.84	660.57	541.74	5.56	
15400.00	12629.05	15475.84	269.13	60.88	31.30	660.56	538.47	5.41	
15500.00	12628.74	15575.84	269.13	62.53	31.86	660.54	535.17	5.27	
15600.00	12628.43	15675.84	269.13	64.19	32.42	660.53	531.86	5.13	
15700.00	12628.11	15775.84	269.13	65.86	32.97	660.52	528.52	5.00	
15800.00	12627.80	15875.84	269.13	67.54	33.51	660.50	525.17	4.88	
15900.00	12627.49	15975.84	269.13	69.22	34.06	660.49	521.81	4.76	
16000.00	12627.18	16075.84	269.13	70.91	34.61	660.47	518.43	4.65	
16100.00	12626.87	16175.84	269.13	72.61	35.16	660.46	515.03	4.54	
16200.00	12626.56	16275.84	269.13	74.31	35.72	660.45	511.63	4.44	
16300.00	12626.25	16375.84	269.13	76.02	36.28	660.43	508.21	4.34	
16400.00	12625.94	16475.84	269.13	77.74	36.84	660.42	504.78	4.24	
16500.00	12625.63	16575.84	269.13	79.45	37.41	660.40	501.34	4.15	
16600.00	12625.31	16675.84	269.13	81.18	37.99	660.39	497.89	4.06	
16700.00	12625.00	16775.84	269.13	82.90	38.57	660.37	494.43	3.98	
16800.00	12624.69	16875.84	269.13	84.63	39.15	660.36	490.96	3.90	
16900.00	12624.38	16975.84	269.13	86.37	39.74	660.35	487.49	3.82	
17000.00	12624.07	17075.84	269.13	88.11	40.33	660.33	484.01	3.74	
17100.00	12623.76	17175.84	269.13	89.85	40.92	660.32	480.52	3.67	
17200.00	12623.45	17275.84	269.13	91.59	41.53	660.30	477.02	3.60	
17300.00	12623.14	17375.84	269.13	93.34	42.15	660.29	473.52	3.54	

SD Anti-Collision Report

Secondary Well : Green Wave 20-29 Fed 78H Lat (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
17400.00	12622.82	17475.84	269.13	95.09	42.78	660.27	470.01	3.47	
17500.00	12622.51	17575.84	269.13	96.84	43.42	660.26	466.49	3.41	
17600.00	12622.20	17675.84	269.13	98.60	44.06	660.25	462.97	3.35	
17700.00	12621.89	17775.84	269.13	100.36	44.69	660.23	459.44	3.29	
17800.00	12621.58	17875.84	269.13	102.12	45.34	660.22	455.91	3.23	
17900.00	12621.27	17975.84	269.13	103.88	45.98	660.20	452.38	3.18	
18000.00	12620.96	18075.84	269.13	105.65	46.63	660.19	448.84	3.12	
18100.00	12620.65	18175.84	269.13	107.41	47.27	660.17	445.29	3.07	
18200.00	12620.34	18275.84	269.13	109.18	47.93	660.16	441.74	3.02	
18300.00	12620.02	18375.84	269.13	110.95	48.58	660.15	438.19	2.97	
18400.00	12619.71	18475.84	269.13	112.73	49.23	660.13	434.64	2.93	
18500.00	12619.40	18575.84	269.13	114.50	49.89	660.12	431.08	2.88	
18600.00	12619.09	18675.84	269.13	116.28	50.55	660.10	427.51	2.84	
18700.00	12618.78	18775.84	269.13	118.06	51.21	660.09	423.95	2.80	
18800.00	12618.47	18875.84	269.13	119.83	51.87	660.07	420.38	2.75	
18900.00	12618.16	18975.84	269.13	121.62	52.54	660.06	416.81	2.71	
19000.00	12617.85	19075.84	269.13	123.40	53.20	660.05	413.23	2.67	
19100.00	12617.53	19175.84	269.13	125.18	53.87	660.03	409.65	2.64	
19200.00	12617.22	19275.84	269.13	126.96	54.54	660.02	406.07	2.60	
19300.00	12616.91	19375.84	269.13	128.75	55.21	660.00	402.49	2.56	
19400.00	12616.60	19475.84	269.13	130.54	55.88	659.99	398.91	2.53	
19500.00	12616.29	19575.84	269.13	132.32	56.56	659.98	395.32	2.49	
19600.00	12615.98	19675.84	269.13	134.11	57.23	659.96	391.73	2.46	
19700.00	12615.67	19775.84	269.13	135.90	57.91	659.95	388.14	2.43	
19800.00	12615.36	19875.84	269.13	137.69	58.59	659.93	384.54	2.40	
19900.00	12615.05	19975.84	269.13	139.49	59.27	659.92	380.95	2.37	
19912.86	12615.01	19988.70	269.13	139.71	59.35	659.92	380.49	2.36	

Secondary Well : Green Wave 20-29 Fed 78H 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	1.00	0.00	89.61	0.00	0.00	50.01	49.44	88.26	
100.00	100.00	99.00	89.61	0.11	0.11	50.00	49.21	63.55	
200.00	200.00	199.00	89.61	0.34	0.34	50.00	48.77	40.47	
300.00	300.00	299.00	89.61	0.56	0.56	50.00	48.32	29.68	
400.00	400.00	399.00	89.61	0.78	0.78	50.00	47.87	23.43	
500.00	500.00	499.00	89.61	1.01	1.01	50.00	47.42	19.35	
600.00	600.00	599.00	89.61	1.23	1.23	50.00	46.97	16.48	
700.00	700.00	699.00	89.61	1.46	1.46	50.00	46.52	14.36	
800.00	800.00	799.00	89.61	1.68	1.68	50.00	46.07	12.71	
900.00	900.00	899.00	89.61	1.91	1.91	50.00	45.62	11.41	
1000.00	1000.00	999.00	89.61	2.13	2.13	50.00	45.17	10.35	
1100.00	1100.00	1099.00	89.61	2.36	2.36	50.00	44.72	9.47	
1200.00	1200.00	1199.00	89.61	2.58	2.58	50.00	44.27	8.72	
1300.00	1300.00	1299.00	89.61	2.81	2.81	50.00	43.82	8.09	
1400.00	1400.00	1399.00	89.61	3.03	3.03	50.00	43.37	7.54	
1500.00	1500.00	1499.00	89.61	3.26	3.26	50.00	42.92	7.06	
1600.00	1600.00	1599.00	89.61	3.48	3.48	50.00	42.47	6.64	
1700.00	1700.00	1699.00	89.61	3.71	3.71	50.00	42.02	6.27	
1800.00	1800.00	1799.00	89.61	3.93	3.93	50.00	41.57	5.93	
1900.00	1900.00	1899.00	89.61	4.16	4.16	50.00	41.12	5.63	
2000.00	2000.00	1999.00	89.61	4.38	4.38	50.00	40.67	5.36	
2100.00	2100.00	2099.00	89.61	4.61	4.61	50.00	40.22	5.11	
2200.00	2200.00	2199.00	89.61	4.83	4.83	50.00	39.77	4.89	
2300.00	2300.00	2299.00	89.61	5.06	5.06	50.00	39.32	4.68	
2400.00	2400.00	2399.00	89.61	5.28	5.28	50.00	38.87	4.49	
2500.00	2500.00	2499.00	89.61	5.51	5.51	50.00	38.43	4.32	
2600.00	2600.00	2599.00	89.61	5.73	5.73	50.00	37.98	4.16	
2700.00	2700.00	2699.00	89.61	5.96	5.96	50.00	37.53	4.01	

5D Anti-Collision Report

Secondary Well : Green Wave 20-29 Fed 78H 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
2800.00	2800.00	2799.00	89.61	6.18	6.18	50.00	37.08	3.87	
2900.00	2900.00	2899.00	89.61	6.41	6.41	50.00	36.63	3.74	
3000.00	3000.00	2999.00	89.61	6.63	6.63	50.00	36.18	3.62	
3100.00	3100.00	3099.00	89.61	6.85	6.85	50.00	35.73	3.50	
3200.00	3200.00	3199.00	89.61	7.08	7.08	50.00	35.28	3.40	
3300.00	3300.00	3299.00	89.61	7.30	7.30	50.00	34.83	3.30	
3400.00	3400.00	3399.00	89.61	7.53	7.53	50.00	34.38	3.20	
3500.00	3500.00	3499.00	89.61	7.75	7.75	50.00	33.93	3.11	
3600.00	3600.00	3599.00	89.61	7.98	7.98	50.00	33.48	3.03	
3700.00	3700.00	3699.00	89.61	8.20	8.20	50.00	33.03	2.95	
3800.00	3800.00	3799.00	89.61	8.43	8.43	50.00	32.58	2.87	
3900.00	3900.00	3899.00	89.61	8.65	8.65	50.00	32.13	2.80	
4000.00	4000.00	3999.00	89.61	8.88	8.88	50.00	31.68	2.73	
4100.00	4100.00	4099.00	89.61	9.10	9.10	50.00	31.23	2.66	
4200.00	4200.00	4199.00	89.61	9.33	9.33	50.00	30.78	2.60	
4300.00	4300.00	4299.00	89.61	9.55	9.55	50.00	30.33	2.54	
4400.00	4400.00	4399.00	89.61	9.78	9.78	50.00	29.88	2.49	
4500.00	4500.00	4499.00	89.61	10.00	10.00	50.00	29.43	2.43	
4600.00	4600.00	4599.00	89.61	10.23	10.23	50.00	28.98	2.38	
4700.00	4700.00	4699.00	89.61	10.45	10.45	50.00	28.53	2.33	
4800.00	4800.00	4799.00	89.61	10.68	10.68	50.00	28.08	2.28	
4900.00	4900.00	4899.00	89.61	10.90	10.90	50.00	27.63	2.24	
5000.00	5000.00	4999.00	89.61	11.13	11.13	50.00	27.18	2.19	
5100.00	5100.00	5099.00	89.61	11.35	11.35	50.00	26.73	2.15	
5200.00	5200.00	5199.00	89.61	11.58	11.58	50.00	26.29	2.11	
5300.00	5300.00	5299.00	89.61	11.80	11.80	50.00	25.84	2.07	
5400.00	5400.00	5399.00	89.61	12.03	12.03	50.00	25.39	2.03	
5500.00	5499.18	5498.18	89.55	12.24	12.23	50.76	25.75	2.03	
5600.00	5598.22	5597.25	89.37	12.43	12.42	53.25	27.84	2.10	
5700.00	5697.09	5696.21	89.10	12.63	12.61	57.46	31.64	2.23	
5800.00	5795.69	5795.00	88.78	12.83	12.80	63.39	37.18	2.42	
5900.00	5893.96	5893.55	88.45	13.04	12.98	71.04	44.44	2.67	
6000.00	5992.10	5992.12	88.13	13.24	13.16	80.36	53.36	2.98	
6100.00	6091.13	6091.64	87.87	13.46	13.36	90.19	62.77	3.29	
6200.00	6190.16	6191.15	87.65	13.67	13.56	100.03	72.18	3.59	
6300.00	6289.19	6290.67	87.47	13.89	13.77	109.86	81.59	3.89	
6400.00	6388.22	6390.18	87.32	14.11	13.97	119.70	91.00	4.17	
6500.00	6487.26	6489.69	87.20	14.33	14.17	129.54	100.41	4.45	
6600.00	6586.29	6589.21	87.09	14.56	14.38	139.38	109.82	4.72	
6700.00	6685.32	6688.72	87.00	14.78	14.59	149.21	119.23	4.98	
6800.00	6784.35	6788.24	86.92	15.01	14.80	159.05	128.64	5.23	
6900.00	6883.38	6887.75	86.84	15.24	15.00	168.89	138.05	5.48	
7000.00	6982.41	6987.27	86.78	15.47	15.21	178.73	147.46	5.71	
7100.00	7081.44	7086.78	86.72	15.71	15.42	188.57	156.86	5.95	
7200.00	7180.48	7186.30	86.67	15.94	15.63	198.41	166.27	6.17	
7300.00	7279.51	7285.81	86.62	16.18	15.84	208.25	175.68	6.39	
7400.00	7378.54	7385.33	86.58	16.42	16.06	218.09	185.08	6.61	
7500.00	7477.57	7484.84	86.54	16.66	16.27	227.93	194.49	6.82	
7600.00	7576.60	7584.35	86.50	16.90	16.48	237.77	203.89	7.02	
7700.00	7675.63	7683.87	86.47	17.14	16.70	247.61	213.30	7.22	
7800.00	7774.67	7783.38	86.44	17.39	16.91	257.45	222.70	7.41	
7900.00	7873.70	7882.90	86.41	17.63	17.12	267.29	232.10	7.60	
8000.00	7972.73	7982.41	86.39	17.88	17.34	277.13	241.51	7.78	
8100.00	8071.76	8081.93	86.36	18.13	17.56	286.98	250.91	7.96	
8200.00	8170.79	8181.44	86.34	18.37	17.77	296.82	260.31	8.13	
8300.00	8269.82	8280.96	86.32	18.62	17.99	306.66	269.71	8.30	
8400.00	8368.85	8380.47	86.30	18.88	18.21	316.50	279.11	8.47	
8500.00	8467.89	8479.99	86.28	19.13	18.42	326.34	288.52	8.63	

SD Anti-Collision Report

Secondary Well : Green Wave 20-29 Feb 78H 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)	ICC (US ft)	ES (US ft)	SF	Risk
8600.00	8566.92	8579.50	86.26	19.38	18.64	336.18	297.92	8.79	
8700.00	8665.95	8679.01	86.24	19.63	18.86	346.02	307.32	8.94	
8800.00	8764.98	8778.53	86.23	19.89	19.08	355.86	316.72	9.09	
8900.00	8864.01	8878.04	86.21	20.14	19.30	365.70	326.12	9.24	
9000.00	8963.04	8977.56	86.20	20.40	19.51	375.54	335.51	9.38	
9100.00	9062.07	9077.07	86.19	20.65	19.73	385.38	344.91	9.52	
9200.00	9161.11	9176.59	86.17	20.91	19.95	395.23	354.31	9.66	
9300.00	9260.14	9276.10	86.16	21.17	20.17	405.07	363.71	9.79	
9400.00	9359.17	9375.62	86.15	21.43	20.39	414.91	373.11	9.93	
9500.00	9458.20	9475.13	86.14	21.69	20.62	424.75	382.51	10.06	
9600.00	9557.23	9574.65	86.13	21.95	20.84	434.59	391.90	10.18	
9700.00	9656.26	9674.16	86.12	22.21	21.06	444.43	401.30	10.30	
9800.00	9755.29	9773.67	86.11	22.47	21.28	454.27	410.70	10.43	
9900.00	9854.33	9873.19	86.10	22.73	21.50	464.11	420.09	10.54	
10000.00	9953.36	9972.70	86.09	22.99	21.72	473.95	429.49	10.66	
10100.00	10052.39	10072.22	86.08	23.26	21.94	483.80	438.89	10.77	
10200.00	10151.42	10171.73	86.07	23.52	22.17	493.64	448.28	10.88	
10300.00	10250.45	10271.25	86.07	23.78	22.39	503.48	457.68	10.99	
10400.00	10349.48	10370.76	86.06	24.05	22.61	513.32	467.08	11.10	
10500.00	10448.51	10470.28	86.05	24.31	22.83	523.16	476.47	11.21	
10600.00	10547.55	10569.79	86.04	24.58	23.06	533.00	485.87	11.31	
10700.00	10646.58	10669.31	86.04	24.84	23.28	542.84	495.26	11.41	
10800.00	10745.61	10768.82	86.03	25.11	23.50	552.68	504.66	11.51	
10900.00	10844.64	10868.33	86.02	25.37	23.73	562.52	514.05	11.60	
11000.00	10943.67	10967.85	86.02	25.64	23.95	572.37	523.45	11.70	
11100.00	11042.70	11067.36	86.01	25.91	24.18	582.21	532.84	11.79	
11200.00	11141.74	11166.88	86.01	26.18	24.40	592.05	542.24	11.89	
11300.00	11240.77	11266.39	86.00	26.44	24.62	601.89	551.63	11.98	
11400.00	11340.36	11366.47	86.00	26.71	24.85	611.73	561.02	12.06	
11500.00	11451.54	11478.09	85.99	26.96	25.10	620.51	569.28	12.11	
11600.00	11563.24	11590.05	85.99	27.19	25.33	627.34	575.62	12.13	
11700.00	11675.32	11702.26	85.98	27.41	25.56	632.23	580.03	12.11	
11800.00	11787.66	11814.65	85.98	27.62	25.77	635.15	582.50	12.06	
11900.00	11900.00	11927.00	85.98	27.82	25.97	636.11	583.03	11.98	
12000.00	12000.00	12027.00	85.98	28.02	26.18	636.11	582.60	11.89	
12100.00	12100.00	12127.00	85.98	28.22	26.39	636.11	582.16	11.79	
12200.00	12199.46	12226.46	256.44	28.42	26.61	638.16	583.77	11.73	
12300.00	12295.41	12322.41	255.60	28.62	26.81	645.27	590.51	11.78	
12400.00	12384.39	12411.39	256.45	28.80	27.00	657.28	602.09	11.91	
12500.00	12463.17	12490.17	255.81	28.96	27.17	675.70	620.26	12.19	
12600.00	12528.85	12555.85	255.56	29.09	27.31	703.25	647.22	12.55	
12700.00	12579.03	12606.03	256.93	29.20	27.42	741.73	685.21	13.12	
12800.00	12611.85	12638.85	260.81	29.26	27.49	791.34	734.45	13.91	
12900.00	12626.11	12653.11	267.78	29.29	27.52	850.54	793.13	14.81	
13000.00	12626.46	12653.46	270.17	29.29	27.53	916.81	859.26	15.93	
13100.00	12626.15	12653.15	270.20	29.29	27.52	988.75	930.72	17.04	
13200.00	12625.84	12652.84	270.22	29.29	27.52	1065.23	1006.96	18.28	
13300.00	12625.53	12652.53	270.25	29.29	27.52	1145.33	1086.96	19.62	
13400.00	12625.22	12652.22	270.28	29.29	27.52	1228.36	1169.81	20.98	
13500.00	12624.91	12651.91	270.31	29.29	27.52	1313.75	1254.99	22.36	
13600.00	12624.60	12651.60	270.33	29.29	27.52	1401.08	1342.17	23.78	
13700.00	12624.29	12651.29	270.36	29.29	27.52	1490.00	1430.97	25.24	
13800.00	12623.98	12650.98	270.39	29.29	27.52	1580.25	1521.08	26.71	
13900.00	12623.67	12650.67	270.41	29.29	27.52	1671.61	1612.28	28.18	
14000.00	12623.36	12650.36	270.44	29.29	27.52	1763.90	1704.46	29.68	
14100.00	12623.05	12650.05	270.47	29.29	27.52	1856.99	1797.49	31.21	
14200.00	12622.74	12649.74	270.49	29.29	27.52	1950.77	1891.25	32.78	
14300.00	12622.43	12649.43	270.52	29.29	27.52	2045.14	1985.57	34.33	

5D Anti-Collision Report

Secondary Well : Green Wave 20-29 Fed 78H 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
14400.00	12622.12	12649.12	270.55	29.29	27.52	2140.01	2080.33	35.86	
14500.00	12621.81	12648.81	270.57	29.29	27.52	2235.34	2175.63	37.44	
14600.00	12621.50	12648.50	270.60	29.28	27.51	2331.05	2271.35	39.04	
14700.00	12621.19	12648.19	270.63	29.28	27.51	2427.12	2367.31	40.58	
14800.00	12620.87	12647.88	270.66	29.28	27.51	2523.48	2463.75	42.24	
14900.00	12620.56	12647.56	270.68	29.28	27.51	2620.12	2560.25	43.76	
15000.00	12620.25	12647.25	270.71	29.28	27.51	2717.01	2657.18	45.41	
15100.00	12619.94	12646.94	270.74	29.28	27.51	2814.11	2754.13	46.92	
15200.00	12619.63	12646.63	270.76	29.28	27.51	2911.40	2851.34	48.47	
15300.00	12619.32	12646.32	270.79	29.28	27.51	3008.88	2948.81	50.09	
15400.00	12619.01	12646.01	270.82	29.28	27.51	3106.51	3046.45	51.72	
15500.00	12618.70	12645.70	270.84	29.28	27.51	3204.29	3144.13	53.26	
15600.00	12618.39	12645.39	270.87	29.28	27.51	3302.21	3241.95	54.80	
15700.00	12618.08	12645.08	270.90	29.28	27.51	3400.24	3339.92	56.37	
15800.00	12617.77	12644.77	270.92	29.28	27.51	3498.39	3438.02	57.95	
15900.00	12617.46	12644.46	270.95	29.28	27.51	3596.64	3536.23	59.54	
16000.00	12617.15	12644.15	270.98	29.28	27.51	3694.98	3634.55	61.14	
16100.00	12616.84	12643.84	271.01	29.28	27.50	3793.41	3732.95	62.74	
16200.00	12616.53	12643.53	271.03	29.27	27.50	3891.92	3831.43	64.34	
16300.00	12616.22	12643.22	271.06	29.27	27.50	3990.50	3929.98	65.93	
16400.00	12615.91	12642.91	271.09	29.27	27.50	4089.15	4028.59	67.52	
16500.00	12615.60	12642.60	271.11	29.27	27.50	4187.87	4127.27	69.11	
16600.00	12615.29	12642.29	271.14	29.27	27.50	4286.64	4226.01	70.70	
16700.00	12614.98	12641.98	271.17	29.27	27.50	4385.48	4324.81	72.29	
16800.00	12614.66	12641.67	271.19	29.27	27.50	4484.36	4423.66	73.87	
16900.00	12614.35	12641.36	271.22	29.27	27.50	4583.29	4522.53	75.43	
17000.00	12614.04	12641.04	271.25	29.27	27.50	4682.27	4621.45	76.99	
17100.00	12613.73	12640.73	271.27	29.27	27.50	4781.28	4720.41	78.55	
17200.00	12613.42	12640.42	271.30	29.27	27.50	4880.34	4819.42	80.10	
17300.00	12613.11	12640.11	271.33	29.27	27.50	4979.44	4918.46	81.66	
17400.00	12612.80	12639.80	271.36	29.27	27.50	5078.57	5017.54	83.21	
17500.00	12612.49	12639.49	271.38	29.27	27.50	5177.74	5116.65	84.76	
17600.00	12612.18	12639.18	271.41	29.27	27.49	5276.94	5215.79	86.30	
17700.00	12611.87	12638.87	271.44	29.26	27.49	5376.16	5314.96	87.85	
17800.00	12611.56	12638.56	271.46	29.26	27.49	5475.42	5414.16	89.39	
17900.00	12611.25	12638.25	271.49	29.26	27.49	5574.70	5513.39	90.93	
18000.00	12610.94	12637.94	271.52	29.26	27.49	5674.00	5612.64	92.46	
18100.00	12610.63	12637.63	271.54	29.26	27.49	5773.34	5711.91	93.99	
18200.00	12610.32	12637.32	271.57	29.26	27.49	5872.69	5811.21	95.52	
18300.00	12610.01	12637.01	271.60	29.26	27.49	5972.06	5910.53	97.05	
18400.00	12609.70	12636.70	271.62	29.26	27.49	6071.46	6009.86	98.57	
18500.00	12609.39	12636.39	271.65	29.26	27.49	6170.87	6109.22	100.09	
18600.00	12609.08	12636.08	271.68	29.26	27.49	6270.31	6208.59	101.60	
18700.00	12608.77	12635.77	271.70	29.26	27.49	6369.76	6307.98	103.11	
18800.00	12608.46	12635.46	271.73	29.26	27.49	6469.23	6407.39	104.62	
18900.00	12608.14	12635.15	271.76	29.26	27.49	6568.71	6506.81	106.12	
19000.00	12607.83	12634.84	271.79	29.26	27.49	6668.21	6606.25	107.62	
19100.00	12607.52	12634.52	271.81	29.26	27.48	6767.72	6705.70	109.12	
19200.00	12607.21	12634.21	271.84	29.26	27.48	6867.25	6805.17	110.61	
19300.00	12606.90	12633.90	271.87	29.25	27.48	6966.80	6904.64	112.09	
19400.00	12606.59	12633.59	271.89	29.25	27.48	7066.35	7004.13	113.57	
19500.00	12606.28	12633.28	271.92	29.25	27.48	7165.92	7103.63	115.05	
19600.00	12605.97	12632.97	271.95	29.25	27.48	7265.50	7203.14	116.52	
19700.00	12605.66	12632.66	271.97	29.25	27.48	7365.09	7302.67	117.99	
19800.00	12605.35	12632.35	272.00	29.25	27.48	7464.69	7402.20	119.45	
19900.00	12605.04	12632.04	272.03	29.25	27.48	7564.30	7501.74	120.91	
19912.86	12605.00	12632.00	272.03	29.25	27.48	7577.11	7514.54	121.10	

5D Anti-Collision Report

Secondary Well : Green Wave 20-29 Fed 76H (p) (TVD Relative to Kelly Bushing (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)	SFI	Risk
0.00	0.00	0.00	269.71	0.00	0.00	49.95	49.38	88.15	
100.00	100.00	100.00	269.71	0.11	0.11	49.95	49.16	63.44	
200.00	200.00	200.00	269.71	0.34	0.34	49.95	48.71	40.38	
300.00	300.00	300.00	269.71	0.56	0.56	49.95	48.26	29.62	
400.00	400.00	400.00	269.71	0.79	0.79	49.95	47.81	23.38	
500.00	500.00	500.00	269.71	1.01	1.01	49.95	47.36	19.32	
600.00	600.00	600.00	269.71	1.24	1.24	49.95	46.92	16.46	
700.00	700.00	700.00	269.71	1.46	1.46	49.95	46.47	14.33	
800.00	800.00	800.00	269.71	1.69	1.69	49.95	46.02	12.69	
900.00	900.00	900.00	269.71	1.91	1.91	49.95	45.57	11.39	
1000.00	1000.00	1000.00	269.71	2.14	2.14	49.95	45.12	10.33	
1100.00	1100.00	1100.00	269.71	2.36	2.36	49.95	44.67	9.45	
1200.00	1200.00	1200.00	269.71	2.59	2.59	49.95	44.22	8.71	
1300.00	1300.00	1300.00	269.71	2.81	2.81	49.95	43.77	8.08	
1400.00	1400.00	1400.00	269.71	3.04	3.04	49.95	43.32	7.53	
1500.00	1500.00	1500.00	269.71	3.26	3.26	49.95	42.87	7.05	
1600.00	1600.00	1600.00	269.71	3.48	3.48	49.95	42.42	6.63	
1700.00	1700.00	1700.00	269.71	3.71	3.71	49.95	41.97	6.26	
1800.00	1800.00	1800.00	269.71	3.93	3.93	49.95	41.52	5.92	
1900.00	1900.00	1900.00	269.71	4.16	4.16	49.95	41.07	5.62	
2000.00	2000.00	2000.00	269.71	4.38	4.38	49.95	40.62	5.35	
2100.00	2100.00	2100.00	269.71	4.61	4.61	49.95	40.17	5.11	
2200.00	2200.00	2200.00	269.71	4.83	4.83	49.95	39.72	4.88	
2300.00	2300.00	2300.00	269.71	5.06	5.06	49.95	39.27	4.68	
2400.00	2400.00	2400.00	269.71	5.28	5.28	49.95	38.82	4.49	
2500.00	2500.00	2500.00	269.71	5.51	5.51	49.95	38.37	4.31	
2600.00	2600.00	2600.00	269.71	5.73	5.73	49.95	37.92	4.15	
2700.00	2700.00	2700.00	269.71	5.96	5.96	49.95	37.47	4.00	
2800.00	2800.00	2800.00	269.71	6.18	6.18	49.95	37.02	3.86	
2900.00	2900.00	2900.00	269.71	6.41	6.41	49.95	36.57	3.73	
3000.00	3000.00	3000.00	269.71	6.63	6.63	49.95	36.12	3.61	
3100.00	3100.00	3100.00	269.71	6.86	6.86	49.95	35.67	3.50	
3200.00	3200.00	3200.00	269.71	7.08	7.08	49.95	35.22	3.39	
3300.00	3300.00	3300.00	269.71	7.31	7.31	49.95	34.78	3.29	
3400.00	3400.00	3400.00	269.71	7.53	7.53	49.95	34.33	3.20	
3500.00	3500.00	3500.00	269.71	7.76	7.76	49.95	33.88	3.11	
3600.00	3600.00	3600.00	269.71	7.98	7.98	49.95	33.43	3.02	
3700.00	3700.00	3700.00	269.71	8.21	8.21	49.95	32.98	2.94	
3800.00	3800.00	3800.00	269.71	8.43	8.43	49.95	32.53	2.87	
3900.00	3900.00	3900.00	269.71	8.66	8.66	49.95	32.08	2.79	
4000.00	4000.00	4000.00	269.71	8.88	8.88	49.95	31.63	2.73	
4100.00	4100.00	4100.00	269.71	9.11	9.11	49.95	31.18	2.66	
4200.00	4200.00	4200.00	269.71	9.33	9.33	49.95	30.73	2.60	
4300.00	4300.00	4300.00	269.71	9.55	9.55	49.95	30.28	2.54	
4400.00	4400.00	4400.00	269.71	9.78	9.78	49.95	29.83	2.48	
4500.00	4500.00	4500.00	269.71	10.00	10.00	49.95	29.38	2.43	
4600.00	4600.00	4600.00	269.71	10.23	10.23	49.95	28.93	2.38	
4700.00	4700.00	4700.00	269.71	10.45	10.45	49.95	28.48	2.33	
4800.00	4800.00	4800.00	269.71	10.68	10.68	49.95	28.03	2.28	
4900.00	4900.00	4900.00	269.71	10.90	10.90	49.95	27.58	2.23	
5000.00	5000.00	5000.00	269.71	11.13	11.13	49.95	27.13	2.19	
5100.00	5100.00	5100.00	269.71	11.35	11.35	49.95	26.68	2.15	
5200.00	5200.00	5200.00	269.71	11.58	11.58	49.95	26.23	2.11	
5300.00	5300.00	5300.00	269.71	11.80	11.80	49.95	25.78	2.07	
5400.00	5400.00	5400.00	269.71	12.03	12.03	49.95	25.33	2.03	
5500.00	5499.12	5499.13	269.78	12.24	12.24	50.81	25.79	2.03	
5600.00	5598.16	5598.20	269.96	12.44	12.43	53.40	27.96	2.10	
5700.00	5697.01	5697.15	270.23	12.63	12.61	57.72	31.87	2.23	

5D Anti-Collision Report

Secondary Well : Green Wave 20-29 Fed 76H (p) (TVD Relative to Kelly Bushing (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)	CE (US ft)	ES (US ft)	SF	
5800.00	5795.60	5795.92	270.54	12.84	12.80	63.75	37.50	2.43	
5900.00	5893.84	5894.46	270.87	13.04	12.98	71.50	44.87	2.68	
6000.00	5992.05	5993.10	271.18	13.25	13.16	80.90	53.87	2.99	
6100.00	6091.09	6092.62	271.44	13.46	13.36	90.72	63.27	3.30	
6200.00	6190.12	6192.13	271.65	13.68	13.56	100.55	72.67	3.61	
6300.00	6289.15	6291.65	271.82	13.89	13.77	110.38	82.07	3.90	
6400.00	6388.19	6391.17	271.97	14.12	13.97	120.20	91.47	4.18	
6500.00	6487.22	6490.68	272.09	14.34	14.18	130.03	100.87	4.46	
6600.00	6586.25	6590.20	272.20	14.56	14.38	139.86	110.27	4.73	
6700.00	6685.29	6689.71	272.29	14.79	14.59	149.69	119.67	4.99	
6800.00	6784.32	6789.23	272.37	15.02	14.80	159.52	129.07	5.24	
6900.00	6883.35	6888.74	272.44	15.25	15.01	169.35	138.47	5.48	
7000.00	6982.38	6988.26	272.50	15.48	15.22	179.18	147.87	5.72	
7100.00	7081.42	7087.77	272.56	15.72	15.43	189.01	157.27	5.95	
7200.00	7180.45	7187.29	272.61	15.95	15.64	198.85	166.67	6.18	
7300.00	7279.48	7286.80	272.65	16.19	15.85	208.68	176.06	6.40	
7400.00	7378.52	7386.32	272.70	16.43	16.06	218.51	185.46	6.61	
7500.00	7477.55	7485.84	272.73	16.67	16.27	228.34	194.86	6.82	
7600.00	7576.58	7585.35	272.77	16.91	16.49	238.17	204.25	7.02	
7700.00	7675.62	7684.87	272.80	17.16	16.70	248.00	213.65	7.22	
7800.00	7774.65	7784.38	272.83	17.40	16.91	257.83	223.04	7.41	
7900.00	7873.68	7883.90	272.86	17.65	17.13	267.67	232.44	7.60	
8000.00	7972.72	7983.41	272.88	17.89	17.34	277.50	241.83	7.78	
8100.00	8071.75	8082.93	272.91	18.14	17.56	287.33	251.22	7.96	
8200.00	8170.78	8182.44	272.93	18.39	17.78	297.16	260.62	8.13	
8300.00	8269.82	8281.96	272.95	18.64	17.99	306.99	270.01	8.30	
8400.00	8368.85	8381.47	272.97	18.89	18.21	316.83	279.40	8.47	
8500.00	8467.88	8480.99	272.99	19.15	18.43	326.66	288.79	8.63	
8600.00	8566.92	8580.51	273.01	19.40	18.65	336.49	298.18	8.78	
8700.00	8665.95	8680.02	273.02	19.65	18.86	346.32	307.57	8.94	
8800.00	8764.98	8779.54	273.04	19.91	19.08	356.15	316.97	9.09	
8900.00	8864.02	8879.05	273.05	20.16	19.30	365.99	326.36	9.24	
9000.00	8963.05	8978.57	273.07	20.42	19.52	375.82	335.75	9.38	
9100.00	9062.08	9078.08	273.08	20.68	19.74	385.65	345.14	9.52	
9200.00	9161.12	9177.60	273.09	20.94	19.96	395.48	354.52	9.66	
9300.00	9260.15	9277.11	273.10	21.20	20.18	405.31	363.91	9.79	
9400.00	9359.18	9376.63	273.12	21.46	20.40	415.15	373.30	9.92	
9500.00	9458.22	9476.14	273.13	21.72	20.62	424.98	382.69	10.05	
9600.00	9557.25	9575.66	273.14	21.98	20.84	434.81	392.08	10.18	
9700.00	9656.28	9675.18	273.15	22.24	21.06	444.64	401.47	10.30	
9800.00	9755.31	9774.69	273.16	22.50	21.28	454.48	410.86	10.42	
9900.00	9854.35	9874.21	273.17	22.76	21.51	464.31	420.24	10.54	
10000.00	9953.38	9973.72	273.17	23.02	21.73	474.14	429.63	10.65	
10100.00	10052.41	10073.24	273.18	23.29	21.95	483.97	439.02	10.77	
10200.00	10151.45	10172.75	273.19	23.55	22.17	493.81	448.40	10.88	
10300.00	10250.48	10272.27	273.20	23.82	22.40	503.64	457.79	10.99	
10400.00	10349.51	10371.78	273.21	24.08	22.62	513.47	467.18	11.09	
10500.00	10448.55	10471.30	273.21	24.35	22.84	523.30	476.56	11.20	
10600.00	10547.58	10570.81	273.22	24.61	23.06	533.13	485.95	11.30	
10700.00	10646.61	10670.33	273.23	24.88	23.29	542.97	495.34	11.40	
10800.00	10745.65	10769.84	273.23	25.15	23.51	552.80	504.72	11.50	
10900.00	10844.68	10869.36	273.24	25.41	23.73	562.63	514.11	11.59	
11000.00	10943.71	10968.88	273.24	25.68	23.96	572.46	523.49	11.69	
11100.00	11042.75	11068.39	273.25	25.95	24.18	582.30	532.88	11.78	
11200.00	11141.78	11167.91	273.26	26.22	24.41	592.13	542.26	11.87	
11300.00	11240.81	11267.42	273.26	26.49	24.63	601.96	551.65	11.96	
11400.00	11339.99	11367.08	273.27	26.76	24.85	611.79	561.03	12.05	
11500.00	11451.17	11478.70	273.27	27.00	25.10	620.63	569.36	12.10	

SD Anti-Collision Report

Secondary Well: Green Wave 20-29 Fed 76H (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)	Risk
11600.00	11562.86	11590.65	273.28	27.23	25.34	627.53	575.76	12.12
11700.00	11674.93	11702.87	273.28	27.45	25.56	632.47	580.22	12.11
11800.00	11787.28	11815.27	273.28	27.66	25.78	635.45	582.75	12.06
11900.00	11899.75	11927.75	273.28	27.86	25.98	636.47	583.34	11.98
12000.00	12000.00	12028.00	273.28	28.06	26.18	636.47	582.91	11.88
12100.00	12100.00	12128.00	273.28	28.26	26.40	636.47	582.47	11.79
12200.00	12207.73	12236.46	84.33	28.17	26.60	634.94	580.52	11.67
12300.00	12310.45	12344.46	85.27	27.58	26.78	630.22	575.55	11.53
12400.00	12403.45	12451.48	88.44	26.97	26.52	624.62	569.65	11.36
12500.00	12482.97	12557.31	89.85	27.16	25.44	619.60	564.20	11.18
12600.00	12546.08	12661.75	90.44	27.42	24.23	615.39	559.53	11.02
12700.00	12590.88	12764.67	90.52	27.73	23.31	612.17	555.66	10.83
12800.00	12616.41	12866.01	90.23	28.12	22.85	610.08	552.78	10.65
12900.00	12622.82	12965.89	89.68	28.69	22.83	609.21	550.86	10.44
13000.00	12622.51	13065.88	89.63	29.35	22.94	609.19	549.60	10.22
13100.00	12622.20	13165.88	89.63	29.95	23.07	609.21	548.34	10.01
13200.00	12621.89	13265.88	89.63	30.86	23.22	609.22	546.69	9.74
13300.00	12621.58	13365.88	89.63	31.70	23.39	609.23	545.00	9.49
13400.00	12621.27	13465.88	89.63	32.62	23.59	609.25	543.18	9.22
13500.00	12620.96	13565.88	89.63	33.73	23.84	609.26	541.08	8.94
13600.00	12620.65	13665.88	89.63	34.83	24.12	609.28	538.91	8.66
13700.00	12620.33	13765.88	89.63	35.95	24.42	609.29	536.67	8.39
13800.00	12620.02	13865.88	89.63	37.09	24.72	609.30	534.35	8.13
13900.00	12619.71	13965.88	89.63	38.35	25.01	609.32	531.89	7.87
14000.00	12619.40	14065.88	89.63	39.70	25.30	609.33	529.27	7.61
14100.00	12619.09	14165.88	89.63	41.07	25.64	609.35	526.59	7.36
14200.00	12618.78	14265.88	89.63	42.45	26.06	609.36	523.85	7.13
14300.00	12618.47	14365.88	89.63	43.86	26.40	609.38	521.06	6.90
14400.00	12618.16	14465.88	89.63	45.27	26.85	609.39	518.24	6.69
14500.00	12617.84	14565.88	89.63	46.69	27.19	609.40	515.38	6.48
14600.00	12617.53	14665.88	89.63	48.13	27.72	609.42	512.49	6.29
14700.00	12617.22	14765.88	89.63	49.57	28.20	609.43	509.58	6.10
14800.00	12616.91	14865.88	89.63	51.14	28.54	609.45	506.62	5.93
14900.00	12616.60	14965.88	89.63	52.71	28.97	609.46	503.56	5.75
15000.00	12616.29	15065.88	89.63	54.28	29.34	609.48	500.41	5.59
15100.00	12615.98	15165.88	89.63	55.85	29.90	609.49	497.23	5.43
15200.00	12615.66	15265.88	89.63	57.43	30.38	609.50	494.03	5.28
15300.00	12615.35	15365.88	89.63	59.06	30.84	609.52	490.80	5.13
15400.00	12615.04	15465.88	89.63	60.70	31.28	609.53	487.55	5.00
15500.00	12614.73	15565.88	89.63	62.36	31.84	609.55	484.28	4.87
15600.00	12614.42	15665.88	89.63	64.02	32.40	609.56	480.99	4.74
15700.00	12614.11	15765.88	89.63	65.69	32.95	609.57	477.69	4.62
15800.00	12613.80	15865.88	89.63	67.37	33.50	609.59	474.36	4.51
15900.00	12613.49	15965.88	89.63	69.05	34.05	609.60	471.02	4.40
16000.00	12613.17	16065.88	89.63	70.74	34.60	609.62	467.67	4.29
16100.00	12612.86	16165.88	89.63	72.44	35.16	609.63	464.31	4.19
16200.00	12612.55	16265.88	89.63	74.15	35.71	609.65	460.93	4.10
16300.00	12612.24	16365.88	89.63	75.85	36.28	609.66	457.54	4.01
16400.00	12611.93	16465.88	89.63	77.57	36.84	609.67	454.14	3.92
16500.00	12611.62	16565.88	89.63	79.29	37.41	609.69	450.72	3.84
16600.00	12611.31	16665.88	89.63	81.01	37.99	609.70	447.30	3.75
16700.00	12611.00	16765.88	89.63	82.74	38.57	609.72	443.87	3.68
16800.00	12610.68	16865.88	89.63	84.47	39.15	609.73	440.43	3.60
16900.00	12610.37	16965.88	89.63	86.20	39.74	609.74	436.98	3.53
17000.00	12610.06	17065.88	89.63	87.94	40.33	609.76	433.53	3.46
17100.00	12609.75	17165.88	89.63	89.68	40.93	609.77	430.07	3.39
17200.00	12609.44	17265.88	89.63	91.43	41.53	609.79	426.60	3.33
17300.00	12609.13	17365.88	89.63	93.18	42.15	609.80	423.12	3.27

5D Anti-Collision Report

Secondary Well: Green Wave 20-29 Feb 76H (p) (TVD Relative to Kelly Bushing (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)	SF	
17400.00	12608.82	17465.88	89.63	94.93	42.78	609.82	419.64	3.21	
17500.00	12608.51	17565.88	89.63	96.68	43.42	609.83	416.15	3.15	
17600.00	12608.19	17665.88	89.63	98.44	44.05	609.84	412.66	3.09	
17700.00	12607.88	17765.88	89.63	100.20	44.69	609.86	409.16	3.04	
17800.00	12607.57	17865.88	89.63	101.96	45.34	609.87	405.66	2.99	
17900.00	12607.26	17965.88	89.63	103.72	45.98	609.89	402.15	2.94	
18000.00	12606.95	18065.88	89.63	105.49	46.63	609.90	398.64	2.89	
18100.00	12606.64	18165.88	89.63	107.25	47.28	609.92	395.12	2.84	
18200.00	12606.33	18265.88	89.63	109.02	47.93	609.93	391.60	2.79	
18300.00	12606.02	18365.88	89.62	110.79	48.58	609.94	388.08	2.75	
18400.00	12605.70	18465.88	89.62	112.57	49.24	609.96	384.55	2.71	
18500.00	12605.39	18565.88	89.62	114.34	49.89	609.97	381.02	2.66	
18600.00	12605.08	18665.88	89.62	116.12	50.55	609.99	377.48	2.62	
18700.00	12604.77	18765.88	89.62	117.90	51.21	610.00	373.94	2.58	
18800.00	12604.46	18865.88	89.62	119.68	51.88	610.01	370.40	2.55	
18900.00	12604.15	18965.88	89.62	121.46	52.54	610.03	366.86	2.51	
19000.00	12603.84	19065.88	89.62	123.24	53.21	610.04	363.31	2.47	
19100.00	12603.53	19165.88	89.62	125.02	53.88	610.06	359.76	2.44	
19200.00	12603.21	19265.88	89.62	126.81	54.55	610.07	356.21	2.40	
19300.00	12602.90	19365.88	89.62	128.59	55.22	610.09	352.66	2.37	
19400.00	12602.59	19465.88	89.62	130.38	55.89	610.10	349.10	2.34	
19500.00	12602.28	19565.88	89.62	132.17	56.56	610.11	345.54	2.31	
19600.00	12601.97	19665.88	89.62	133.96	57.24	610.13	341.98	2.28	
19700.00	12601.66	19765.88	89.62	135.75	57.92	610.14	338.42	2.25	
19800.00	12601.35	19865.88	89.62	137.54	58.60	610.16	334.85	2.22	
19900.00	12601.04	19965.88	89.62	139.33	59.27	610.17	331.28	2.19	
19912.86	12601.00	19977.15	89.62	139.53	59.35	610.17	330.83	2.18	

**Weatherford**

Weatherford Drilling Services

GeoDec4 v2.1.0.0

Report Date: May 12, 2015
Job Number: _____
Customer: Devon Energy
Well Name: Green Wave 20-29 Fed 77H
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: 375210.77 US Survey Foot	Latitude: 32.028707 Degree
East: 803752.88 US Survey Foot	Longitude: -103.486549 Degree
Convergence: 0.45°	
Declination: 7.18°	
Total Correction: 6.73°	
Datum Transformation: none	

Geodetic Location WGS84

MSL Elevation = 0 m
Latitude = 32° 01' 43.35" N
Longitude = 103° 29' 11.58" W

Magnetic Declination = 7.18 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6696
Local Field Strength = 48031 nT	Magnetic Vector X = 23899 nT
Magnetic Dip = 59.90 deg	Magnetic Vector Y = 3011 nT
Magnetic Model = bggm2014.dat	Magnetic Vector Z = 41554 nT
Run Date = October 30, 2015	Magnetic Vector H = 24088 nT

Signed: _____ Date: _____

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