

5D Anti-Collision Report

Devon Energy

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

Site Name: *Fighting Okra 18-19 Fed 71H*

Well Name: *Fighting Okra 18-19 Fed 71H Pilot*

13 May 2015



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Fighting Okra 18-19 Fed 71H Pilot

Field Name	Map Units : US ft		Company Name : Devon Energy	
	Vertical Reference Datum (VRD) : Mean Sea Level			
	Projected Coordinate System : NAD83 / New Mexico East (ftUS)			
Lea Co, NM Nad 83 NMEZ	Comment :			
Site Name	Units : US ft	North Reference : Grid	Convergence Angle : 0.43	
	Position	Northing : 382937.52 US ft	Latitude : 32° 3' 0.52"	
		Easting : 794421.25 US ft	Longitude : -103° 30' 59.29"	
Fighting Okra 18-19 Fed 71H	Elevation above Mean Sea Level:3354.00 US ft			
	Comment :			
Slot Name	Position (Offsets relative to Site Centre)			
	+N / -S : 0.00 US ft	Northing :382937.52 US ft	Latitude : 32°3'0.52"	
	+E / -W : 0.00 US ft	Easting :794421.25 US ft	Longitude : -103°30'59.29"	
Fighting Okra 18-19 Fed 71H	Slot TVD Reference : Ground Elevation			
	Elevation above Mean Sea Level : 3354.00 US ft			
	Comment :			
Well Name	Type : Main well	UWI :	Plan : Working Plan	
	Rig Height <i>Kelly Bushing</i> : 30.00 US ft	Comment :		
	Relative to Mean Sea Level: 3384.00 US ft			
Fighting Okra 18-19 Fed 71H Pilot	Closure Distance : 217.917 US ft	Closure Azimuth : 90°		
	Vertical Section (Position of Origin Relative to Slot)			
	+N / -S : 0.00 US ft	+E / -W : 0.00 US ft	Az :179.58°	
	Magnetic Parameters			
	Model : BGGM	Field Strength : 48045.2nT	Dec : 7.20°	Dip : 59.92°
			Date : 15/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
Fighting Okra 18-19 Fed 71H Pilot (p)	0.00	13460.88	100.00	2

Secondary Well Names

Fighting Okra Federal Com 1H ST01 (s)

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

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

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Anti Collision Proximity Summary (TVD relative to Kelly Bushing)

SF						
Secondary Well Name	Pri MD (US ft)	Sec MD (US ft)	TVD (US ft)	CC (US ft)	ES (US ft)	Risk
Fighting Okra Federal Com 1H ST01 (s)	9826.76	12079.04	9817.88	147.93	81.45	2.23

Primary Well : Fighting Okra 18-19 Fed 71H Pilot (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
0.00	0.00	176.11	0.00	0.00	Fighting Okra Federal Com 1H ST01 (s)	9643.75	9628.90	649.46	
100.00	100.00	176.11	0.11	0.11	Fighting Okra Federal Com 1H ST01 (s)	9547.13	9530.05	559.02	
200.00	200.00	176.11	0.34	0.34	Fighting Okra Federal Com 1H ST01 (s)	9450.59	9433.49	552.78	
300.00	300.00	176.11	0.56	0.56	Fighting Okra Federal Com 1H ST01 (s)	9354.11	9336.99	546.37	
400.00	400.00	176.11	0.79	0.79	Fighting Okra Federal Com 1H ST01 (s)	9257.71	9240.56	539.74	
500.00	500.00	176.11	1.01	1.01	Fighting Okra Federal Com 1H ST01 (s)	9161.39	9144.19	532.71	
600.00	600.00	176.11	1.24	1.24	Fighting Okra Federal Com 1H ST01 (s)	9065.15	9047.90	525.57	
700.00	700.00	176.11	1.46	1.46	Fighting Okra Federal Com 1H ST01 (s)	8968.98	8951.68	518.33	
800.00	800.00	176.11	1.69	1.69	Fighting Okra Federal Com 1H ST01 (s)	8872.91	8855.54	511.01	
900.00	900.00	176.11	1.91	1.91	Fighting Okra Federal Com 1H ST01 (s)	8776.92	8759.49	503.62	
1000.00	1000.00	176.11	2.14	2.14	Fighting Okra Federal Com 1H ST01 (s)	8681.02	8663.53	496.19	
1100.00	1100.00	176.11	2.36	2.36	Fighting Okra Federal Com 1H ST01 (s)	8585.22	8567.65	488.70	
1200.00	1200.00	176.11	2.59	2.59	Fighting Okra Federal Com 1H ST01 (s)	8489.51	8471.85	480.83	
1300.00	1300.00	176.11	2.81	2.81	Fighting Okra Federal Com 1H ST01 (s)	8393.90	8376.15	472.74	
1400.00	1400.00	176.11	3.03	3.03	Fighting Okra Federal Com 1H ST01 (s)	8298.40	8280.54	464.65	
1500.00	1500.00	176.11	3.26	3.26	Fighting Okra Federal Com 1H ST01 (s)	8203.00	8185.04	456.59	
1600.00	1600.00	176.11	3.48	3.48	Fighting Okra Federal Com 1H ST01 (s)	8107.72	8089.64	448.56	
1700.00	1700.00	176.11	3.71	3.71	Fighting Okra Federal Com 1H ST01 (s)	8012.54	7994.36	440.57	
1800.00	1800.00	176.11	3.93	3.93	Fighting Okra Federal Com 1H ST01 (s)	7917.49	7899.19	432.62	
1900.00	1900.00	176.11	4.16	4.16	Fighting Okra Federal Com 1H ST01 (s)	7822.56	7804.15	424.71	
2000.00	2000.00	176.11	4.38	4.38	Fighting Okra Federal Com 1H ST01 (s)	7727.76	7709.23	416.86	
2100.00	2100.00	176.11	4.61	4.61	Fighting Okra Federal Com 1H ST01 (s)	7633.10	7614.43	408.96	
2200.00	2200.00	176.11	4.83	4.83	Fighting Okra Federal Com 1H ST01 (s)	7538.57	7519.77	401.03	

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Primary Well : Fighting Okra 18-19 Fed 71H Pilot (p) (TYD Relative to Kelly Bushing ; All Azimuth Relative to GRID NORTH)									
MD (US ft)	TYD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	SF	Risk
2300.00	2300.00	176.11	5.06	5.06	Fighting Okra Federal Com 1H ST01 (s)	7444.18	7425.24	393.17	
2400.00	2400.00	176.11	5.28	5.28	Fighting Okra Federal Com 1H ST01 (s)	7349.94	7330.87	385.37	
2500.00	2500.00	176.11	5.51	5.51	Fighting Okra Federal Com 1H ST01 (s)	7255.86	7236.64	377.65	
2600.00	2600.00	176.11	5.73	5.73	Fighting Okra Federal Com 1H ST01 (s)	7161.93	7142.57	370.00	
2700.00	2700.00	176.11	5.96	5.96	Fighting Okra Federal Com 1H ST01 (s)	7068.17	7048.67	362.43	
2800.00	2800.00	176.11	6.18	6.18	Fighting Okra Federal Com 1H ST01 (s)	6974.59	6954.94	354.94	
2900.00	2900.00	176.11	6.41	6.41	Fighting Okra Federal Com 1H ST01 (s)	6881.19	6861.38	347.52	
3000.00	3000.00	176.11	6.63	6.63	Fighting Okra Federal Com 1H ST01 (s)	6787.97	6768.02	340.19	
3100.00	3100.00	176.11	6.86	6.86	Fighting Okra Federal Com 1H ST01 (s)	6694.95	6674.84	332.94	
3200.00	3200.00	176.11	7.08	7.08	Fighting Okra Federal Com 1H ST01 (s)	6602.13	6581.87	325.77	
3300.00	3300.00	176.11	7.31	7.31	Fighting Okra Federal Com 1H ST01 (s)	6509.53	6489.10	318.68	
3400.00	3400.00	176.11	7.53	7.53	Fighting Okra Federal Com 1H ST01 (s)	6417.15	6396.56	311.62	
3500.00	3500.00	160.64	7.76	7.76	Fighting Okra Federal Com 1H ST01 (s)	6317.56	6291.16	239.31	
3600.00	3600.00	160.40	7.98	7.98	Fighting Okra Federal Com 1H ST01 (s)	6217.62	6191.11	234.57	
3700.00	3700.00	160.14	8.20	8.20	Fighting Okra Federal Com 1H ST01 (s)	6117.68	6091.07	229.86	
3800.00	3800.00	159.88	8.43	8.43	Fighting Okra Federal Com 1H ST01 (s)	6017.74	5991.01	225.08	
3900.00	3900.00	159.61	8.65	8.65	Fighting Okra Federal Com 1H ST01 (s)	5917.80	5890.94	220.32	
4000.00	4000.00	159.33	8.88	8.88	Fighting Okra Federal Com 1H ST01 (s)	5817.86	5790.88	215.60	
4100.00	4100.00	159.04	9.10	9.10	Fighting Okra Federal Com 1H ST01 (s)	5717.93	5690.81	210.90	
4200.00	4200.00	158.75	9.33	9.33	Fighting Okra Federal Com 1H ST01 (s)	5617.99	5590.75	206.24	
4300.00	4300.00	158.44	9.55	9.55	Fighting Okra Federal Com 1H ST01 (s)	5518.05	5490.68	201.62	
4400.00	4400.00	158.13	9.78	9.78	Fighting Okra Federal Com 1H ST01 (s)	5418.12	5390.62	197.02	
4500.00	4500.00	157.80	10.00	10.00	Fighting Okra Federal Com 1H ST01 (s)	5318.18	5290.55	192.46	
4600.00	4600.00	157.47	10.23	10.23	Fighting Okra Federal Com 1H ST01 (s)	5218.25	5190.48	187.93	
4700.00	4700.00	157.12	10.45	10.45	Fighting Okra Federal Com 1H ST01 (s)	5118.31	5090.41	183.44	
4800.00	4800.00	42.47	10.68	10.68	Fighting Okra Federal Com 1H ST01 (s)	5018.36	4988.85	170.04	

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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
4900.00	4900.00	43.23	10.90	10.90	Fighting Okra Federal Com 1H ST01 (s)	4918.38	4888.76	166.05	
5000.00	5000.00	44.01	11.13	11.13	Fighting Okra Federal Com 1H ST01 (s)	4818.40	4788.67	162.08	
5100.00	5100.00	44.80	11.35	11.35	Fighting Okra Federal Com 1H ST01 (s)	4718.42	4688.58	158.13	
5200.00	5200.00	45.60	11.58	11.58	Fighting Okra Federal Com 1H ST01 (s)	4618.44	4588.49	154.20	
5300.00	5300.00	46.41	11.80	11.80	Fighting Okra Federal Com 1H ST01 (s)	4518.47	4488.40	150.29	
5400.00	5400.00	47.24	12.03	12.03	Fighting Okra Federal Com 1H ST01 (s)	4418.49	4388.31	146.40	
5500.00	5500.00	48.07	12.25	12.25	Fighting Okra Federal Com 1H ST01 (s)	4318.51	4288.21	142.53	
5600.00	5600.00	48.92	12.48	12.48	Fighting Okra Federal Com 1H ST01 (s)	4218.54	4188.12	138.68	
5700.00	5700.00	49.77	12.70	12.70	Fighting Okra Federal Com 1H ST01 (s)	4118.56	4088.02	134.85	
5800.00	5800.00	50.64	12.93	12.93	Fighting Okra Federal Com 1H ST01 (s)	4018.59	3987.92	131.04	
5900.00	5900.00	51.52	13.15	13.15	Fighting Okra Federal Com 1H ST01 (s)	3918.61	3887.82	127.26	
6000.00	6000.00	52.40	13.37	13.37	Fighting Okra Federal Com 1H ST01 (s)	3818.64	3787.72	123.49	
6100.00	6100.00	53.30	13.60	13.60	Fighting Okra Federal Com 1H ST01 (s)	3718.66	3687.61	119.75	
6200.00	6200.00	54.21	13.82	13.82	Fighting Okra Federal Com 1H ST01 (s)	3618.69	3587.51	116.04	
6300.00	6300.00	55.13	14.05	14.05	Fighting Okra Federal Com 1H ST01 (s)	3518.72	3487.40	112.34	
6400.00	6400.00	56.05	14.27	14.27	Fighting Okra Federal Com 1H ST01 (s)	3418.75	3387.29	108.67	
6500.00	6500.00	56.99	14.50	14.50	Fighting Okra Federal Com 1H ST01 (s)	3318.78	3287.18	105.03	
6600.00	6600.00	59.22	14.72	14.72	Fighting Okra Federal Com 1H ST01 (s)	3218.81	3187.09	101.46	
6700.00	6700.00	62.62	14.95	14.95	Fighting Okra Federal Com 1H ST01 (s)	3118.84	3087.00	97.96	
6800.00	6800.00	65.53	15.17	15.17	Fighting Okra Federal Com 1H ST01 (s)	3018.88	2986.91	94.45	
6900.00	6899.99	302.53	15.38	15.38	Fighting Okra Federal Com 1H ST01 (s)	2918.89	2886.80	90.95	
7000.00	6999.96	217.83	15.58	15.57	Fighting Okra Federal Com 1H ST01 (s)	2818.90	2786.67	87.46	
7100.00	7099.86	195.47	15.78	15.75	Fighting Okra Federal Com 1H ST01 (s)	2718.92	2686.55	83.99	
7200.00	7199.68	188.90	15.98	15.93	Fighting Okra Federal Com 1H ST01 (s)	2619.00	2586.47	80.50	
7300.00	7299.37	185.91	16.18	16.11	Fighting Okra Federal Com 1H ST01 (s)	2519.18	2486.48	77.04	
7400.00	7398.99	185.29	16.39	16.31	Fighting Okra Federal Com 1H ST01 (s)	2419.42	2386.55	73.60	

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Primary Well : Fighting Okra 18-19 Fed 71H Pilot (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
7500.00	7498.60	184.73	16.60	16.51	Fighting Okra Federal Com 1H ST01 (s)	2319.69	2286.64	70.20	
7600.00	7598.22	184.24	16.81	16.71	Fighting Okra Federal Com 1H ST01 (s)	2219.98	2186.76	66.83	
7700.00	7697.84	183.79	17.02	16.91	Fighting Okra Federal Com 1H ST01 (s)	2120.29	2086.89	63.49	
7800.00	7797.46	183.38	17.24	17.11	Fighting Okra Federal Com 1H ST01 (s)	2020.64	1987.06	60.18	
7900.00	7897.08	183.01	17.45	17.31	Fighting Okra Federal Com 1H ST01 (s)	1921.02	1887.26	56.90	
8000.00	7996.70	182.67	17.67	17.51	Fighting Okra Federal Com 1H ST01 (s)	1821.44	1787.49	53.65	
8100.00	8096.32	182.36	17.89	17.72	Fighting Okra Federal Com 1H ST01 (s)	1721.91	1687.78	50.44	
8200.00	8195.94	182.08	18.11	17.92	Fighting Okra Federal Com 1H ST01 (s)	1622.44	1588.12	47.27	
8300.00	8295.56	181.81	18.33	18.13	Fighting Okra Federal Com 1H ST01 (s)	1523.04	1488.53	44.13	
8400.00	8395.18	181.57	18.55	18.33	Fighting Okra Federal Com 1H ST01 (s)	1423.72	1389.01	41.01	
8500.00	8494.80	181.34	18.78	18.54	Fighting Okra Federal Com 1H ST01 (s)	1324.51	1289.55	37.89	
8600.00	8594.42	181.13	19.00	18.75	Fighting Okra Federal Com 1H ST01 (s)	1225.42	1190.20	34.79	
8700.00	8694.04	180.93	19.23	18.95	Fighting Okra Federal Com 1H ST01 (s)	1126.49	1090.97	31.72	
8800.00	8793.66	180.75	19.46	19.16	Fighting Okra Federal Com 1H ST01 (s)	1027.77	991.95	28.69	
8900.00	8893.28	180.58	19.69	19.37	Fighting Okra Federal Com 1H ST01 (s)	929.32	893.18	25.71	
9000.00	8992.90	180.41	19.92	19.58	Fighting Okra Federal Com 1H ST01 (s)	831.25	794.67	22.73	
9100.00	9092.52	180.26	20.15	19.79	Fighting Okra Federal Com 1H ST01 (s)	733.69	696.60	19.78	
9200.00	9192.14	180.11	20.38	20.00	Fighting Okra Federal Com 1H ST01 (s)	636.89	599.11	16.86	
9300.00	9291.76	179.98	20.61	20.21	Fighting Okra Federal Com 1H ST01 (s)	541.26	502.33	13.90	
9400.00	9391.45	179.85	20.83	20.44	Fighting Okra Federal Com 1H ST01 (s)	447.20	406.71	11.04	
9500.00	9491.26	179.72	21.03	20.65	Fighting Okra Federal Com 1H ST01 (s)	355.60	312.55	8.26	
9600.00	9591.16	179.60	21.23	20.86	Fighting Okra Federal Com 1H ST01 (s)	269.02	221.30	5.64	
9700.00	9691.13	179.49	21.43	21.06	Fighting Okra Federal Com 1H ST01 (s)	194.30	138.24	3.47	
9800.00	9791.12	269.39	21.62	21.25	Fighting Okra Federal Com 1H ST01 (s)	150.37	84.83	2.29	
9900.00	9891.12	269.31	21.83	21.46	Fighting Okra Federal Com 1H ST01 (s)	164.97	102.96	2.66	
10000.00	9991.12	269.23	22.05	21.69	Fighting Okra Federal Com 1H ST01 (s)	227.63	175.46	4.36	

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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
10100.00	10091.12	269.16	22.27	21.91	Fighting Okra Federal Com 1H ST01 (s)	310.51	264.08	6.69	
10200.00	10191.12	269.09	22.49	22.13	Fighting Okra Federal Com 1H ST01 (s)	401.27	357.54	9.18	
10300.00	10291.12	269.02	22.71	22.35	Fighting Okra Federal Com 1H ST01 (s)	495.60	453.25	11.70	
10400.00	10391.12	268.96	22.93	22.57	Fighting Okra Federal Com 1H ST01 (s)	591.80	550.17	14.22	
10500.00	10491.12	268.90	23.15	22.80	Fighting Okra Federal Com 1H ST01 (s)	689.07	647.85	16.71	
10600.00	10591.12	268.84	23.37	23.02	Fighting Okra Federal Com 1H ST01 (s)	787.04	746.03	19.19	
10700.00	10691.12	268.78	23.59	23.24	Fighting Okra Federal Com 1H ST01 (s)	885.45	844.37	21.55	
10800.00	10791.12	268.73	23.81	23.46	Fighting Okra Federal Com 1H ST01 (s)	984.19	943.00	23.90	
10900.00	10891.12	268.68	24.03	23.69	Fighting Okra Federal Com 1H ST01 (s)	1083.16	1041.84	26.22	
11000.00	10991.12	268.63	24.25	23.91	Fighting Okra Federal Com 1H ST01 (s)	1182.30	1140.83	28.51	
11100.00	11091.12	268.58	24.47	24.13	Fighting Okra Federal Com 1H ST01 (s)	1281.57	1239.94	30.78	
11200.00	11191.12	268.53	24.69	24.36	Fighting Okra Federal Com 1H ST01 (s)	1380.95	1339.11	33.00	
11300.00	11291.12	268.49	24.91	24.58	Fighting Okra Federal Com 1H ST01 (s)	1480.42	1438.33	35.18	
11400.00	11391.12	268.44	25.13	24.80	Fighting Okra Federal Com 1H ST01 (s)	1579.95	1537.62	37.32	
11500.00	11491.12	268.40	25.35	25.02	Fighting Okra Federal Com 1H ST01 (s)	1679.53	1636.95	39.44	
11600.00	11591.12	268.36	25.58	25.25	Fighting Okra Federal Com 1H ST01 (s)	1779.17	1736.32	41.53	
11700.00	11691.12	268.32	25.80	25.47	Fighting Okra Federal Com 1H ST01 (s)	1878.84	1835.73	43.58	
11800.00	11791.12	268.29	26.02	25.69	Fighting Okra Federal Com 1H ST01 (s)	1978.54	1935.16	45.60	
11900.00	11891.12	268.25	26.24	25.92	Fighting Okra Federal Com 1H ST01 (s)	2078.28	2034.60	47.58	
12000.00	11991.12	268.22	26.46	26.14	Fighting Okra Federal Com 1H ST01 (s)	2178.04	2134.06	49.53	
12100.00	12091.12	268.18	26.68	26.36	Fighting Okra Federal Com 1H ST01 (s)	2277.81	2233.54	51.45	
12200.00	12191.12	268.15	26.90	26.58	Fighting Okra Federal Com 1H ST01 (s)	2377.61	2333.03	53.34	
12300.00	12291.12	268.12	27.12	26.81	Fighting Okra Federal Com 1H ST01 (s)	2477.43	2432.54	55.19	
12400.00	12391.12	268.09	27.35	27.03	Fighting Okra Federal Com 1H ST01 (s)	2577.25	2532.06	57.02	
12500.00	12491.12	268.06	27.57	27.25	Fighting Okra Federal Com 1H ST01 (s)	2677.10	2631.59	58.82	
12600.00	12591.12	268.03	27.79	27.48	Fighting Okra Federal Com 1H ST01 (s)	2776.95	2731.12	60.59	

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Primary Well : Fighting Okra 18-19 Fed 71H Pilot (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
12700.00	12691.12	268.00	28.01	27.70	Fighting Okra Federal Com 1H ST01 (s)	2876.81	2830.66	62.34	
12800.00	12791.12	267.97	28.23	27.92	Fighting Okra Federal Com 1H ST01 (s)	2976.68	2930.21	64.05	
12900.00	12891.12	267.95	28.45	28.15	Fighting Okra Federal Com 1H ST01 (s)	3076.56	3029.76	65.73	
13000.00	12991.12	267.92	28.68	28.37	Fighting Okra Federal Com 1H ST01 (s)	3176.45	3129.32	67.39	
13100.00	13091.12	267.89	28.90	28.59	Fighting Okra Federal Com 1H ST01 (s)	3276.35	3228.88	69.02	
13200.00	13191.12	267.87	29.12	28.82	Fighting Okra Federal Com 1H ST01 (s)	3376.25	3328.44	70.62	
13300.00	13291.12	267.85	29.34	29.04	Fighting Okra Federal Com 1H ST01 (s)	3476.15	3428.00	72.19	
13400.00	13391.12	267.82	29.56	29.26	Fighting Okra Federal Com 1H ST01 (s)	3576.07	3527.57	73.74	
13460.88	13452.00	267.81	29.70	29.40	Fighting Okra Federal Com 1H ST01 (s)	3636.89	3588.19	74.67	

Secondary Well : Fighting Okra Federal Com 1H ST01 (s) (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	9320.90	9323.46	176.11	21.35	21.29	9643.75	9628.90	649.46	
100.00	9320.90	9323.46	176.11	21.35	21.29	9547.13	9530.05	559.02	
200.00	9320.90	9323.46	176.11	21.35	21.29	9450.59	9433.49	552.78	
300.00	9320.90	9323.46	176.11	21.35	21.29	9354.11	9336.99	546.37	
400.00	9320.90	9323.46	176.11	21.35	21.29	9257.71	9240.56	539.74	
500.00	9320.90	9323.46	176.11	21.35	21.29	9161.39	9144.19	532.71	
600.00	9320.90	9323.46	176.11	21.35	21.29	9065.15	9047.90	525.57	
700.00	9320.90	9323.46	176.11	21.35	21.29	8968.98	8951.68	518.33	
800.00	9320.90	9323.46	176.11	21.35	21.29	8872.91	8855.54	511.01	
900.00	9320.90	9323.46	176.11	21.35	21.29	8776.92	8759.49	503.62	
1000.00	9320.90	9323.46	176.11	21.35	21.29	8681.02	8663.53	496.19	
1100.00	9320.90	9323.46	176.11	21.35	21.29	8585.22	8567.65	488.70	
1200.00	9320.90	9323.46	176.11	21.35	21.29	8489.51	8471.85	480.83	
1300.00	9320.90	9323.46	176.11	21.35	21.29	8393.90	8376.15	472.74	
1400.00	9320.90	9323.46	176.11	21.35	21.29	8298.40	8280.54	464.65	
1500.00	9320.90	9323.46	176.11	21.35	21.29	8203.00	8185.04	456.59	
1600.00	9320.90	9323.46	176.11	21.35	21.29	8107.72	8089.64	448.56	
1700.00	9320.90	9323.46	176.11	21.35	21.29	8012.54	7994.36	440.57	
1800.00	9320.90	9323.46	176.11	21.35	21.29	7917.49	7899.19	432.62	
1900.00	9320.90	9323.46	176.11	21.35	21.29	7822.56	7804.15	424.71	
2000.00	9320.90	9323.46	176.11	21.35	21.29	7727.76	7709.23	416.86	
2100.00	9320.90	9323.46	176.11	21.35	21.29	7633.10	7614.43	408.96	
2200.00	9320.90	9323.46	176.11	21.35	21.29	7538.57	7519.77	401.03	
2300.00	9320.90	9323.46	176.11	21.35	21.29	7444.18	7425.24	393.17	
2400.00	9320.90	9323.46	176.11	21.35	21.29	7349.94	7330.87	385.37	
2500.00	9320.90	9323.46	176.11	21.35	21.29	7255.86	7236.64	377.65	
2600.00	9320.90	9323.46	176.11	21.35	21.29	7161.93	7142.57	370.00	
2700.00	9320.90	9323.46	176.11	21.35	21.29	7068.17	7048.67	362.43	
2800.00	9320.90	9323.46	176.11	21.35	21.29	6974.59	6954.94	354.94	
2900.00	9320.90	9323.46	176.11	21.35	21.29	6881.19	6861.38	347.52	
3000.00	9320.90	9323.46	176.11	21.35	21.29	6787.97	6768.02	340.19	
3100.00	9320.90	9323.46	176.11	21.35	21.29	6694.95	6674.84	332.94	
3200.00	9320.90	9323.46	176.11	21.35	21.29	6602.13	6581.87	325.77	
3300.00	9320.90	9323.46	176.11	21.35	21.29	6509.53	6489.10	318.68	
3400.00	9320.90	9323.46	176.11	21.35	21.29	6417.15	6396.56	311.62	

SD Anti-Collision Report

Secondary Well : Fighting Okra Federal Com 1H ST01 (s) (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
3500.00	9813.79	11874.71	160.64	41.75	21.22	6317.56	6291.16	239.31	
3600.00	9813.88	11877.55	160.40	41.79	21.23	6217.62	6191.11	234.57	
3700.00	9813.98	11880.39	160.14	41.83	21.24	6117.68	6091.07	229.86	
3800.00	9814.07	11883.26	159.88	41.86	21.26	6017.74	5991.01	225.08	
3900.00	9814.16	11886.13	159.61	41.90	21.28	5917.80	5890.94	220.32	
4000.00	9814.26	11889.02	159.33	41.94	21.31	5817.86	5790.88	215.60	
4100.00	9814.36	11891.92	159.04	41.98	21.33	5717.93	5690.81	210.90	
4200.00	9814.45	11894.83	158.75	42.02	21.35	5617.99	5590.75	206.24	
4300.00	9814.55	11897.76	158.44	42.06	21.37	5518.05	5490.68	201.62	
4400.00	9814.65	11900.70	158.13	42.10	21.39	5418.12	5390.62	197.02	
4500.00	9814.75	11903.66	157.80	42.15	21.41	5318.18	5290.55	192.46	
4600.00	9814.84	11906.63	157.47	42.19	21.43	5218.25	5190.48	187.93	
4700.00	9814.94	11909.61	157.12	42.23	21.45	5118.31	5090.41	183.44	
4800.00	9817.31	12156.52	42.47	45.64	22.94	5018.36	4988.85	170.04	
4900.00	9817.34	12154.52	43.23	45.61	22.93	4918.38	4888.76	166.05	
5000.00	9817.36	12152.55	44.01	45.58	22.92	4818.40	4788.67	162.08	
5100.00	9817.39	12150.60	44.80	45.56	22.91	4718.42	4688.58	158.13	
5200.00	9817.42	12148.68	45.60	45.53	22.90	4618.44	4588.49	154.20	
5300.00	9817.45	12146.79	46.41	45.50	22.88	4518.47	4488.40	150.29	
5400.00	9817.48	12144.92	47.24	45.48	22.87	4418.49	4388.31	146.40	
5500.00	9817.50	12143.08	48.07	45.45	22.86	4318.51	4288.21	142.53	
5600.00	9817.53	12141.26	48.92	45.43	22.85	4218.54	4188.12	138.68	
5700.00	9817.55	12139.46	49.77	45.40	22.83	4118.56	4088.02	134.85	
5800.00	9817.58	12137.69	50.64	45.38	22.82	4018.59	3987.92	131.04	
5900.00	9817.60	12135.93	51.52	45.35	22.81	3918.61	3887.82	127.26	
6000.00	9817.63	12134.21	52.40	45.33	22.80	3818.64	3787.72	123.49	
6100.00	9817.65	12132.50	53.30	45.30	22.79	3718.66	3687.61	119.75	
6200.00	9817.68	12130.81	54.21	45.28	22.77	3618.69	3587.51	116.04	
6300.00	9817.70	12129.15	55.13	45.25	22.76	3518.72	3487.40	112.34	
6400.00	9817.72	12127.50	56.05	45.23	22.75	3418.75	3387.29	108.67	
6500.00	9817.74	12125.88	56.99	45.21	22.74	3318.78	3287.18	105.03	
6600.00	9817.79	12122.13	59.22	45.16	22.71	3218.81	3187.09	101.46	
6700.00	9817.86	12116.74	62.62	45.08	22.66	3118.84	3087.00	97.96	
6800.00	9817.90	12112.38	65.53	45.02	22.63	3018.88	2986.91	94.45	
6900.00	9817.94	12108.74	302.53	44.97	22.60	2918.89	2886.80	90.95	
7000.00	9817.97	12105.63	217.83	44.93	22.57	2818.90	2786.67	87.46	
7100.00	9817.99	12102.93	195.47	44.89	22.54	2718.92	2686.55	83.99	
7200.00	9818.01	12100.56	188.90	44.86	22.53	2619.00	2586.47	80.50	
7300.00	9818.02	12098.44	185.91	44.83	22.53	2519.18	2486.48	77.04	
7400.00	9818.04	12096.56	185.29	44.81	22.52	2419.42	2386.55	73.60	
7500.00	9818.05	12094.88	184.73	44.78	22.52	2319.69	2286.64	70.20	
7600.00	9818.06	12093.38	184.24	44.76	22.51	2219.98	2186.76	66.83	
7700.00	9818.06	12092.03	183.79	44.74	22.51	2120.29	2086.89	63.49	
7800.00	9818.07	12090.81	183.38	44.73	22.50	2020.64	1987.06	60.18	
7900.00	9818.08	12089.70	183.01	44.71	22.50	1921.02	1887.26	56.90	
8000.00	9818.08	12088.68	182.67	44.70	22.50	1821.44	1787.49	53.65	
8100.00	9818.08	12087.75	182.36	44.68	22.49	1721.91	1687.78	50.44	
8200.00	9818.09	12086.89	182.08	44.67	22.49	1622.44	1588.12	47.27	
8300.00	9818.09	12086.10	181.81	44.66	22.49	1523.04	1488.53	44.13	
8400.00	9818.09	12085.37	181.57	44.65	22.48	1423.72	1389.01	41.01	
8500.00	9818.10	12084.69	181.34	44.64	22.48	1324.51	1289.55	37.89	
8600.00	9818.10	12084.05	181.13	44.63	22.48	1225.42	1190.20	34.79	
8700.00	9818.10	12083.46	180.93	44.63	22.48	1126.49	1090.97	31.72	
8800.00	9818.10	12082.91	180.75	44.62	22.47	1027.77	991.95	28.69	
8900.00	9818.10	12082.39	180.58	44.61	22.47	929.32	893.18	25.71	
9000.00	9818.10	12081.90	180.41	44.60	22.47	831.25	794.67	22.73	
9100.00	9818.11	12081.44	180.26	44.60	22.47	733.69	696.60	19.78	
9200.00	9818.11	12081.01	180.11	44.59	22.47	636.89	599.11	16.86	

5D Anti-Collision Report

Secondary Well : Fighting Okra Federal Com 1H ST01 (s) (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
9300.00	9818.11	12080.60	179.98	44.59	22.46	541.26	502.33	13.90	
9400.00	9818.11	12080.23	179.85	44.58	22.46	447.20	406.71	11.04	
9500.00	9818.11	12079.89	179.72	44.58	22.46	355.60	312.55	8.26	
9600.00	9818.11	12079.59	179.60	44.57	22.46	269.02	221.30	5.64	
9700.00	9818.11	12079.33	179.49	44.57	22.46	194.30	138.24	3.47	
9800.00	9818.11	12079.10	269.39	44.57	22.46	150.37	84.83	2.29	
9900.00	9818.11	12078.89	269.31	44.56	22.46	164.97	102.96	2.66	
10000.00	9818.11	12078.69	269.23	44.56	22.46	227.63	175.46	4.36	
10100.00	9818.11	12078.50	269.16	44.56	22.46	310.51	264.08	6.69	
10200.00	9818.11	12078.32	269.09	44.55	22.45	401.27	357.54	9.18	
10300.00	9818.11	12078.15	269.02	44.55	22.45	495.60	453.25	11.70	
10400.00	9818.11	12077.98	268.96	44.55	22.45	591.80	550.17	14.22	
10500.00	9818.11	12077.82	268.90	44.55	22.45	689.07	647.85	16.71	
10600.00	9818.11	12077.67	268.84	44.55	22.45	787.04	746.03	19.19	
10700.00	9818.11	12077.52	268.78	44.54	22.45	885.45	844.37	21.55	
10800.00	9818.11	12077.38	268.73	44.54	22.45	984.19	943.00	23.90	
10900.00	9818.11	12077.25	268.68	44.54	22.45	1083.16	1041.84	26.22	
11000.00	9818.11	12077.12	268.63	44.54	22.45	1182.30	1140.83	28.51	
11100.00	9818.12	12077.00	268.58	44.54	22.45	1281.57	1239.94	30.78	
11200.00	9818.12	12076.88	268.53	44.53	22.45	1380.95	1339.11	33.00	
11300.00	9818.12	12076.76	268.49	44.53	22.45	1480.42	1438.33	35.18	
11400.00	9818.12	12076.65	268.44	44.53	22.45	1579.95	1537.62	37.32	
11500.00	9818.12	12076.54	268.40	44.53	22.45	1679.53	1636.95	39.44	
11600.00	9818.12	12076.44	268.36	44.53	22.45	1779.17	1736.32	41.53	
11700.00	9818.12	12076.34	268.32	44.53	22.45	1878.84	1835.73	43.58	
11800.00	9818.12	12076.24	268.29	44.53	22.45	1978.54	1935.16	45.60	
11900.00	9818.12	12076.15	268.25	44.52	22.45	2078.28	2034.60	47.58	
12000.00	9818.12	12076.06	268.22	44.52	22.44	2178.04	2134.06	49.53	
12100.00	9818.12	12075.97	268.18	44.52	22.44	2277.81	2233.54	51.45	
12200.00	9818.12	12075.89	268.15	44.52	22.44	2377.61	2333.03	53.34	
12300.00	9818.12	12075.81	268.12	44.52	22.44	2477.43	2432.54	55.19	
12400.00	9818.12	12075.73	268.09	44.52	22.44	2577.25	2532.06	57.02	
12500.00	9818.12	12075.65	268.06	44.52	22.44	2677.10	2631.59	58.82	
12600.00	9818.12	12075.57	268.03	44.52	22.44	2776.95	2731.12	60.59	
12700.00	9818.12	12075.50	268.00	44.52	22.44	2876.81	2830.66	62.34	
12800.00	9818.12	12075.43	267.97	44.51	22.44	2976.68	2930.21	64.05	
12900.00	9818.12	12075.36	267.95	44.51	22.44	3076.56	3029.76	65.73	
13000.00	9818.12	12075.30	267.92	44.51	22.44	3176.45	3129.32	67.39	
13100.00	9818.12	12075.23	267.89	44.51	22.44	3276.35	3228.88	69.02	
13200.00	9818.12	12075.17	267.87	44.51	22.44	3376.25	3328.44	70.62	
13300.00	9818.12	12075.11	267.85	44.51	22.44	3476.15	3428.00	72.19	
13400.00	9818.12	12075.05	267.82	44.51	22.44	3576.07	3527.57	73.74	
13460.88	9818.12	12075.01	267.81	44.51	22.44	3636.89	3588.19	74.67	

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

GeoDec4 v2.1.0.0

Report Date: May 13, 2015
Job Number: _____
Customer: Devon Energy
Well Name: Fighting Okra 18-19 Fed 71H
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: 382937.52 US Survey Foot	Latitude: 32.050143 Degree
East: 794421.25 US Survey Foot	Longitude: -103.51647 Degree
Convergence: 0.43°	
Declination: 7.20°	
Total Correction: 6.77°	
Datum Transformation: none	

Geodetic Location WGS84

MSL Elevation = 0 m
Latitude = 32° 03' 00.52" N
Longitude = 103° 30' 59.29" W

Magnetic Declination = 7.20 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6792
Local Field Strength = 48045 nT	Magnetic Vector X = 23894 nT
Magnetic Dip = 59.92 deg	Magnetic Vector Y = 3019 nT
Magnetic Model = bggm2014.dat	Magnetic Vector Z = 41573 nT
Run Date = October 15, 2015	Magnetic Vector H = 24084 nT

Signed: _____ Date: _____

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Fighting Okra 18-19 Fed 71H Lea Co, NM



Plan Data for Fighting Okra 18-19 Fed 71H Lat

Plan Point Information:									
Dogleg Severity Unit: °/100.00ft									
Position offsets from Slot centre									
MD	Inc	Az	TVD	+N/-S	+E/-W	Northing	Easting	VSec	DLS
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)
11973.07	0.00	0.00	11964.19	0.00	217.92	382937.52	794639.17	1.60	0.00
12518.52	60.00	206.72	12415.28	-232.62	100.82	382784.90	794522.07	233.36	11.00
12878.39	90.00	179.58	12509.00	-565.07	29.20	382372.45	794450.45	565.27	11.00
14797.35	90.00	179.58	12509.00	-2483.98	43.23	380453.54	794464.48	2484.23	0.00
14803.81	90.13	179.58	12508.99	-2490.43	43.28	380447.09	794464.53	2490.68	2.00
22347.61	90.13	179.58	12492.00	-10034.02	98.77	372903.50	794520.02	10034.47	0.00

Plan Data for Fighting Okra 18-19 Fed 71H Lat

Slot: Fighting Okra 18-19 Fed 71H

Position:

Offset is from Site centre

+N/-S: 0.00USft Northing: 382937.52USft Latitude: 32°3'0.5"
+E/-W: 0.00USft Easting: 794421.25USft Longitude: -103°30'59.3"
Elevation Above VRD: 3354.00USft

Plan Data for Fighting Okra 18-19 Fed 71H Lat

Target Set Information:

Name: Fighting Okra 18-19 Fed 71H Lat

Position offsets from Slot centre

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape	Comment
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)		
LP	12509.00	-567.07	29.20	382370.45	794450.45	Cuboid	
T1	12509.00	-2483.98	43.23	380453.54	794464.48	Cuboid	
PBHL 71H Lat	12492.00	-10034.02	98.77	372903.50	794520.02	Cuboid	

Plan Data for Fighting Okra 18-19 Fed 71H Lat

Well: Fighting Okra 18-19 Fed 71H Lat

Type: Side-Track

File Number:

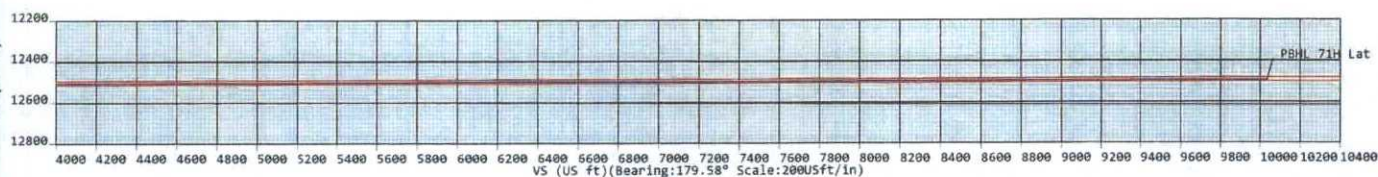
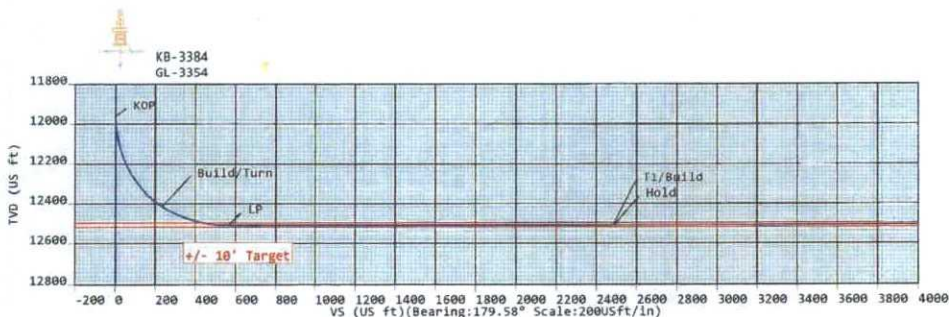
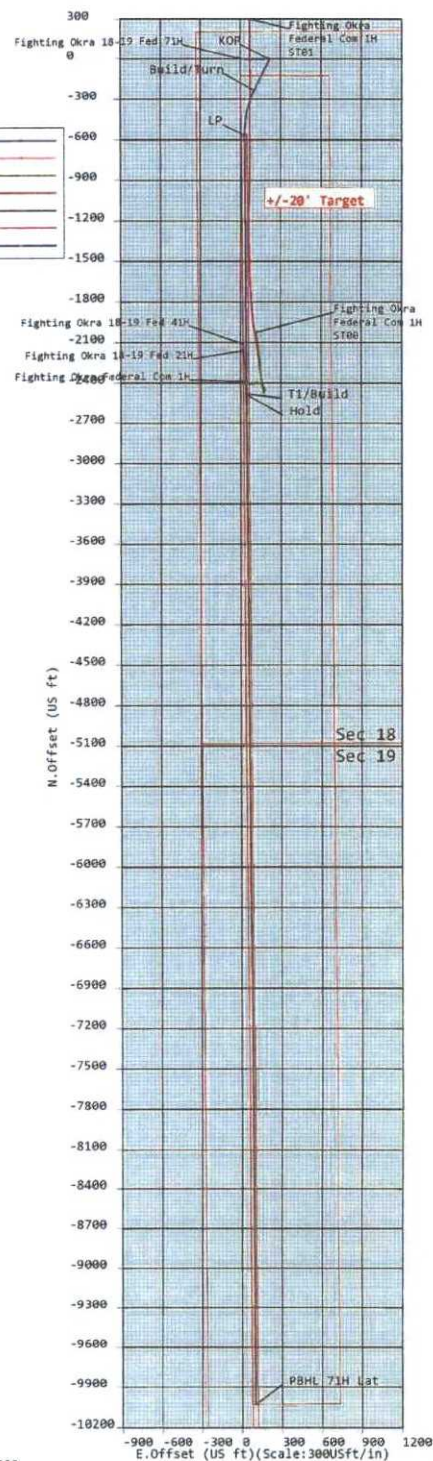
Plan Folder: P1

Plan: P1:V1

Vertical Section: Position offset of origin from Slot centre:
+N/-S: 0.00USft Azimuth: 179.58°

+E/-W: 0.00USft

Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
BGM 48045(nT) 7.20° 59.92° 2015-10-15



Sign Off: Russell Joyner

5D Plan Report

Devon Energy

Field Name: *Lea Co, NM Nad 83 NMEZ*
Site Name: *Fighting Okra 18-19 Fed 71H*
Well Name: *Fighting Okra 18-19 Fed 71H Lat*
Plan: *P1:V1*

13 May 2015



Fighting Okra 18-19 Fed 71H Lat

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 Fighting Okra 18-19 Fed 71H	Units : US ft	North Reference : Grid	Convergence Angle : 0.43	
	Position	Northing : 382937.52 US ft	Latitude : 32° 3' 0.52"	
		Easting : 794421.25 US ft	Longitude : -103° 30' 59.29"	
	Elevation above Mean Sea Level:3354.00 US ft			
Comment :				
Slot Name Fighting Okra 18-19 Fed 71H	Position (Offsets relative to Site Centre)			
	+N / -S : 0.00 US ft	Northing :382937.52 US ft	Latitude : 32°3'0.52"	
	+E / -W : 0.00 US ft	Easting :794421.25 US ft	Longitude : -103°30'59.29"	
	Slot TVD Reference : Ground Elevation			
Elevation above Mean Sea Level : 3354.00 US ft				
Comment :				
Well Name Fighting Okra 18-19 Fed 71H Lat	Type : Sidetrack	UWI :	Plan : P1:V1	
	Parent : Fighting Okra 18-19 Fed 71H Pilot	Tie Point Method : TVD	Tie Point :11964.19 US ft	
	Rig Height <i>Kelly Bushing</i> : 30.00 US ft	Comment :		
	Relative to Mean Sea Level: 3384.00 US ft			
Closure Distance : 10034.5 US ft		Closure Azimuth : 179.436°		
Vertical Section (Position of Origin Relative to Slot)				
+N / -S : 0.00 US ft		+E / -W : 0.00 US ft	Az :179.58°	
Magnetic Parameters				
Model : BGGM	Field Strength : 48045.2nT	Dec : 7.20°	Dip : 59.92°	Date : 15/Oct/2015

Target Set

Name : Fighting Okra 18-19 **Number of Targets :** 2
FEd 71H Lat

Comment :

Target Name: T1	Position (Relative to Slot centre)			
	+N / -S : -2483.98US ft		Northing : 380453.54 US ft	Latitude : 32°2'35.93"
	+E / -W : 43.23 US ft		Easting : 794464.48US ft	Longitude : -103°30'59.01"
Shape:	TVD (Kelly Bushing) : 12509.00 US ft			
Cuboid	Orientation Azimuth : 0.00°		Inclination : 0.00°	
	Dimensions Length : 20.00 US ft		Breadth : 20.00 US ft	Height : 20.00 US ft

SD Plan Report

Target Name:	Position (Relative to Slot centre)		
PBHL 71H Lat	+N / -S : -10034.02US ft	Northing : 372903.50 US ft	Latitude : 32°1'21.22"
	+E / -W : 98.77 US ft	Easting : 794520.02US ft	Longitude : -103°30'59.03"
Shape:	TVD (Kelly Bushing) : 12492.00 US ft		
Cuboid	Orientation Azimuth : 0.00°	Inclination : 0.00°	
	Dimensions Length : 20.00 US ft	Breadth : 20.00 US ft	Height : 20.00 US ft

Well path created using minimum curvature

Salient Points (Relative to Slot centre, TVD relative to Kelly Bushing)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	B.Rate (°/100 US ft)	T.Rate (°/100 US ft)	I.Face (°)	Comment
11973.07	0.00	0.00	11964.19	0.00	217.92	1.60	0.00	0.00	0.00	0.00	KOP
12518.52	60.00	206.72	12415.28	-232.62	100.82	233.36	11.00	11.00	0.00	206.72	Build/Turn
12878.39	90.00	179.58	12509.00	-565.07	29.20	565.27	11.00	8.34	-7.54	314.29	LP
14797.35	90.00	179.58	12509.00	-2483.98	43.23	2484.23	0.00	0.00	0.00	0.00	T1/Build
14803.81	90.13	179.58	12508.99	-2490.43	43.28	2490.68	2.00	2.00	-0.04	358.90	Hold
22347.61	90.13	179.58	12492.00	-10034.02	98.77	10034.47	0.00	0.00	0.00	0.00	PBHL 71H Lat

Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	Northing (US ft)	Easting (US ft)		Comment
11973.07	0.00	0.00	11964.19	0.00	217.92	1.60	0.00	382937.52	794639.17		KOP
12073.07	11.00	206.72	12063.58	-8.55	213.61	10.11	11.00	382928.97	794634.86		
12173.07	22.00	206.72	12159.31	-33.88	200.86	35.35	11.00	382903.64	794622.11		
12273.07	33.00	206.72	12247.88	-75.06	180.13	76.38	11.00	382862.46	794601.38		
12373.07	44.00	206.72	12326.02	-130.58	152.19	131.69	11.00	382806.94	794573.44		
12473.07	55.00	206.72	12390.86	-198.39	118.05	199.25	11.00	382739.13	794539.30		
12518.52	60.00	206.72	12415.28	-232.62	100.82	233.36	11.00	382704.90	794522.07		Build/Turn
12573.07	64.28	201.96	12440.77	-276.55	80.99	277.14	11.00	382660.97	794502.24		
12673.07	72.46	194.04	12477.66	-364.85	52.50	365.22	11.00	382572.67	794473.75		
12773.07	80.93	186.82	12500.68	-460.42	35.01	460.66	11.00	382477.10	794456.26		
12873.07	89.54	179.94	12508.98	-559.75	29.17	559.95	11.00	382377.77	794450.42		
12878.39	90.00	179.58	12509.00	-565.07	29.20	565.27	11.00	382372.45	794450.45		LP
12973.07	90.00	179.58	12509.00	-659.75	29.89	659.95	0.00	382277.77	794451.14		
13073.07	90.00	179.58	12509.00	-759.74	30.62	759.95	0.00	382177.78	794451.87		
13173.07	90.00	179.58	12509.00	-859.74	31.35	859.95	0.00	382077.78	794452.60		
13273.07	90.00	179.58	12509.00	-959.74	32.08	959.95	0.00	381977.78	794453.33		
13373.07	90.00	179.58	12509.00	-1059.74	32.81	1059.95	0.00	381877.78	794454.06		
13473.07	90.00	179.58	12509.00	-1159.73	33.55	1159.95	0.00	381777.79	794454.80		
13573.07	90.00	179.58	12509.00	-1259.73	34.28	1259.95	0.00	381677.79	794455.53		
13673.07	90.00	179.58	12509.00	-1359.73	35.01	1359.95	0.00	381577.79	794456.26		
13773.07	90.00	179.58	12509.00	-1459.73	35.74	1459.95	0.00	381477.79	794456.99		
13873.07	90.00	179.58	12509.00	-1559.72	36.47	1559.95	0.00	381377.80	794457.72		
13973.07	90.00	179.58	12509.00	-1659.72	37.20	1659.95	0.00	381277.80	794458.45		
14073.07	90.00	179.58	12509.00	-1759.72	37.93	1759.95	0.00	381177.80	794459.18		
14173.07	90.00	179.58	12509.00	-1859.71	38.66	1859.95	0.00	381077.81	794459.91		
14273.07	90.00	179.58	12509.00	-1959.71	39.40	1959.95	0.00	380977.81	794460.65		
14373.07	90.00	179.58	12509.00	-2059.71	40.13	2059.95	0.00	380877.81	794461.38		
14473.07	90.00	179.58	12509.00	-2159.71	40.86	2159.95	0.00	380777.81	794462.11		
14573.07	90.00	179.58	12509.00	-2259.70	41.59	2259.95	0.00	380677.82	794462.84		
14673.07	90.00	179.58	12509.00	-2359.70	42.32	2359.95	0.00	380577.82	794463.57		
14773.07	90.00	179.58	12509.00	-2459.70	43.05	2459.95	0.00	380477.82	794464.30		
14797.35	90.00	179.58	12509.00	-2483.98	43.23	2484.23	0.00	380453.54	794464.48		T1/Build
14803.81	90.13	179.58	12508.99	-2490.43	43.28	2490.68	2.00	380447.09	794464.53		Hold

5D Plan Report

Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	Northing (US ft)	Easting (US ft)	Comment	
14873.07	90.13	179.58	12508.84	-2559.70	43.79	2559.95	0.00	380377.82	794465.04		
14973.07	90.13	179.58	12508.61	-2659.69	44.52	2659.95	0.00	380277.83	794465.77		
15073.07	90.13	179.58	12508.39	-2759.69	45.26	2759.95	0.00	380177.83	794466.51		
15173.07	90.13	179.58	12508.16	-2859.69	45.99	2859.95	0.00	380077.83	794467.24		
15273.07	90.13	179.58	12507.94	-2959.68	46.73	2959.95	0.00	379977.84	794467.98		
15373.07	90.13	179.58	12507.71	-3059.68	47.46	3059.95	0.00	379877.84	794468.71		
15473.07	90.13	179.58	12507.49	-3159.68	48.20	3159.95	0.00	379777.84	794469.45		
15573.07	90.13	179.58	12507.26	-3259.67	48.94	3259.95	0.00	379677.85	794470.19		
15673.07	90.13	179.58	12507.04	-3359.67	49.67	3359.95	0.00	379577.85	794470.92		
15773.07	90.13	179.58	12506.81	-3459.67	50.41	3459.95	0.00	379477.85	794471.66		
15873.07	90.13	179.58	12506.59	-3559.67	51.14	3559.95	0.00	379377.85	794472.39		
15973.07	90.13	179.58	12506.36	-3659.66	51.88	3659.95	0.00	379277.86	794473.13		
16073.07	90.13	179.58	12506.14	-3759.66	52.61	3759.94	0.00	379177.86	794473.86		
16173.07	90.13	179.58	12505.91	-3859.66	53.35	3859.94	0.00	379077.86	794474.60		
16273.07	90.13	179.58	12505.68	-3959.65	54.09	3959.94	0.00	378977.87	794475.34		
16373.07	90.13	179.58	12505.46	-4059.65	54.82	4059.94	0.00	378877.87	794476.07		
16473.07	90.13	179.58	12505.23	-4159.65	55.56	4159.94	0.00	378777.87	794476.81		
16573.07	90.13	179.58	12505.01	-4259.65	56.29	4259.94	0.00	378677.87	794477.54		
16673.07	90.13	179.58	12504.78	-4359.64	57.03	4359.94	0.00	378577.88	794478.28		
16773.07	90.13	179.58	12504.56	-4459.64	57.76	4459.94	0.00	378477.88	794479.01		
16873.07	90.13	179.58	12504.33	-4559.64	58.50	4559.94	0.00	378377.88	794479.75		
16973.07	90.13	179.58	12504.11	-4659.63	59.23	4659.94	0.00	378277.89	794480.48		
17073.07	90.13	179.58	12503.88	-4759.63	59.97	4759.94	0.00	378177.89	794481.22		
17173.07	90.13	179.58	12503.66	-4859.63	60.71	4859.94	0.00	378077.89	794481.96		
17273.07	90.13	179.58	12503.43	-4959.62	61.44	4959.94	0.00	377977.90	794482.69		
17373.07	90.13	179.58	12503.21	-5059.62	62.18	5059.94	0.00	377877.90	794483.43		
17473.07	90.13	179.58	12502.98	-5159.62	62.91	5159.94	0.00	377777.90	794484.16		
17573.07	90.13	179.58	12502.76	-5259.62	63.65	5259.94	0.00	377677.90	794484.90		
17673.07	90.13	179.58	12502.53	-5359.61	64.38	5359.94	0.00	377577.91	794485.63		
17773.07	90.13	179.58	12502.31	-5459.61	65.12	5459.94	0.00	377477.91	794486.37		
17873.07	90.13	179.58	12502.08	-5559.61	65.86	5559.94	0.00	377377.91	794487.11		
17973.07	90.13	179.58	12501.86	-5659.60	66.59	5659.94	0.00	377277.92	794487.84		
18073.07	90.13	179.58	12501.63	-5759.60	67.33	5759.94	0.00	377177.92	794488.58		
18173.07	90.13	179.58	12501.41	-5859.60	68.06	5859.94	0.00	377077.92	794489.31		
18273.07	90.13	179.58	12501.18	-5959.60	68.80	5959.94	0.00	376977.92	794490.05		
18373.07	90.13	179.58	12500.95	-6059.59	69.53	6059.94	0.00	376877.93	794490.78		
18473.07	90.13	179.58	12500.73	-6159.59	70.27	6159.94	0.00	376777.93	794491.52		
18573.07	90.13	179.58	12500.50	-6259.59	71.00	6259.94	0.00	376677.93	794492.25		
18673.07	90.13	179.58	12500.28	-6359.58	71.74	6359.94	0.00	376577.94	794492.99		
18773.07	90.13	179.58	12500.05	-6459.58	72.48	6459.94	0.00	376477.94	794493.73		
18873.07	90.13	179.58	12499.83	-6559.58	73.21	6559.94	0.00	376377.94	794494.46		
18973.07	90.13	179.58	12499.60	-6659.57	73.95	6659.94	0.00	376277.95	794495.20		
19073.07	90.13	179.58	12499.38	-6759.57	74.68	6759.94	0.00	376177.95	794495.93		
19173.07	90.13	179.58	12499.15	-6859.57	75.42	6859.94	0.00	376077.95	794496.67		
19273.07	90.13	179.58	12498.93	-6959.57	76.15	6959.94	0.00	375977.95	794497.40		
19373.07	90.13	179.58	12498.70	-7059.56	76.89	7059.94	0.00	375877.96	794498.14		
19473.07	90.13	179.58	12498.48	-7159.56	77.62	7159.94	0.00	375777.96	794498.87		
19573.07	90.13	179.58	12498.25	-7259.56	78.36	7259.94	0.00	375677.96	794499.61		
19673.07	90.13	179.58	12498.03	-7359.55	79.10	7359.94	0.00	375577.97	794500.35		
19773.07	90.13	179.58	12497.80	-7459.55	79.83	7459.94	0.00	375477.97	794501.08		
19873.07	90.13	179.58	12497.58	-7559.55	80.57	7559.94	0.00	375377.97	794501.82		
19973.07	90.13	179.58	12497.35	-7659.54	81.30	7659.93	0.00	375277.98	794502.55		
20073.07	90.13	179.58	12497.13	-7759.54	82.04	7759.93	0.00	375177.98	794503.29		
20173.07	90.13	179.58	12496.90	-7859.54	82.77	7859.93	0.00	375077.98	794504.02		
20273.07	90.13	179.58	12496.67	-7959.54	83.51	7959.93	0.00	374977.98	794504.76		
20373.07	90.13	179.58	12496.45	-8059.53	84.25	8059.93	0.00	374877.99	794505.50		
20473.07	90.13	179.58	12496.22	-8159.53	84.98	8159.93	0.00	374777.99	794506.23		
20573.07	90.13	179.58	12496.00	-8259.53	85.72	8259.93	0.00	374677.99	794506.97		
20673.07	90.13	179.58	12495.77	-8359.52	86.45	8359.93	0.00	374578.00	794507.70		

5D Plan Report

Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
20773.07	90.13	179.58	12495.55	-8459.52	87.19	8459.93	0.00	374478.00	794508.44	
20873.07	90.13	179.58	12495.32	-8559.52	87.92	8559.93	0.00	374378.00	794509.17	
20973.07	90.13	179.58	12495.10	-8659.52	88.66	8659.93	0.00	374278.00	794509.91	
21073.07	90.13	179.58	12494.87	-8759.51	89.39	8759.93	0.00	374178.01	794510.64	
21173.07	90.13	179.58	12494.65	-8859.51	90.13	8859.93	0.00	374078.01	794511.38	
21273.07	90.13	179.58	12494.42	-8959.51	90.87	8959.93	0.00	373978.01	794512.12	
21373.07	90.13	179.58	12494.20	-9059.50	91.60	9059.93	0.00	373878.02	794512.85	
21473.07	90.13	179.58	12493.97	-9159.50	92.34	9159.93	0.00	373778.02	794513.59	
21573.07	90.13	179.58	12493.75	-9259.50	93.07	9259.93	0.00	373678.02	794514.32	
21673.07	90.13	179.58	12493.52	-9359.49	93.81	9359.93	0.00	373578.03	794515.06	
21773.07	90.13	179.58	12493.30	-9459.49	94.54	9459.93	0.00	373478.03	794515.79	
21873.07	90.13	179.58	12493.07	-9559.49	95.28	9559.93	0.00	373378.03	794516.53	
21973.07	90.13	179.58	12492.85	-9659.49	96.01	9659.93	0.00	373278.03	794517.26	
22073.07	90.13	179.58	12492.62	-9759.48	96.75	9759.93	0.00	373178.04	794518.00	
22173.07	90.13	179.58	12492.39	-9859.48	97.49	9859.93	0.00	373078.04	794518.74	
22273.07	90.13	179.58	12492.17	-9959.48	98.22	9959.93	0.00	372978.04	794519.47	
22347.61	90.13	179.58	12492.00	-10034.02	98.77	10034.47	0.00	372903.50	794520.02	PBHL 71H Lat

5D Anti-Collision Report**Devon Energy****Field Name:** *Lea Co, NM Nad 83 NMEZ***Site Name:** *Fighting Okra 18-19 Fed 71H***Well Name:** *Fighting Okra 18-19 Fed 71H Lat*

13 May 2015

**Weatherford®**


Weatherford

Fighting Okra 18-19 Fed 71H Lat

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 Fighting Okra 18-19 Fed 71H	Units : US ft	North Reference : Grid	Convergence Angle : 0.43	
	Position	Northing : 382937.52 US ft	Latitude : 32° 3' 0.52"	
		Easting : 794421.25 US ft	Longitude : -103° 30' 59.29"	
	Elevation above Mean Sea Level:3354.00 US ft			
Comment :				
Slot Name Fighting Okra 18-19 Fed 71H	Position (Offsets relative to Site Centre)			
	+N / -S : 0.00 US ft	Northing :382937.52 US ft	Latitude : 32°3'0.52"	
	+E / -W : 0.00 US ft	Easting :794421.25 US ft	Longitude : -103°30'59.29"	
	Slot TVD Reference : Ground Elevation			
Elevation above Mean Sea Level : 3354.00 US ft				
Comment :				
Well Name Fighting Okra 18-19 Fed 71H Lat	Type : Sidetrack	UWI :	Plan : Working Plan	
	Parent : Fighting Okra 18-19 Fed 71H Pilot	Tie Point Method : TVD	Tie Point :11964.19 US ft	
	Rig Height <i>Kelly Bushing</i> : 30.00 US ft	Comment :		
	Relative to Mean Sea Level: 3384.00 US ft			
Closure Distance : 10034.5 US ft		Closure Azimuth : 179.436°		
Vertical Section (Position of Origin Relative to Slot)				
+N / -S : 0.00 US ft		+E / -W : 0.00 US ft	Az :179.58°	
Magnetic Parameters				
Model : BGGM	Field Strength : 48045.2nT	Dec : 7.20°	Dip : 59.92°	Date : 15/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
Fighting Okra 18-19 Fed 71H Lat (p)	0.00	22347.61	100.00	2

Secondary Well Names

Fighting Okra Federal Com 1H ST01 (s)
 Fighting Okra Federal Com 1H ST00 (s)
 Fighting Okra 18-19 Fed 41H Lateral (p)
 Fighting Okra 18-19 Fed 41H Pilot (p)
 Fighting Okra 18-19 Fed 21H (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

SD 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)

SF	Secondary Well Name	Pri MD (US ft)	Sec MD (US ft)	TVD (US ft)	CC (US ft)	ES (US ft)	SF	Risk
	Fighting Okra 18-19 Fed 41H Lateral (p)	22347.61	18075.58	12492.00	2122.00	1985.55	15.55	
	Fighting Okra 18-19 Fed 21H (p)	22347.61	17353.81	12492.00	2689.00	2553.99	19.92	
	Fighting Okra 18-19 Fed 41H Pilot (p)	14966.62	10654.00	12508.63	1936.73	1888.85	40.45	
	Fighting Okra Federal Com 1H ST01 (s)	11973.07	12076.08	11964.19	2151.17	2107.27	49.01	
	Fighting Okra Federal Com 1H ST00 (s)	15317.01	10092.16	12507.84	2710.53	2662.97	56.99	

Primary Well : Fighting Okra 18-19 Fed 71H Lat (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
11973.07	11964.19	268.23	26.40	26.08	Fighting Okra Federal Com 1H ST01 (s)	2151.17	2107.27	49.01	
12073.07	12063.58	14.49	26.40	26.10	Fighting Okra Federal Com 1H ST01 (s)	2250.04	2205.88	50.96	
12173.07	12159.31	7.39	26.45	25.94	Fighting Okra Federal Com 1H ST01 (s)	2344.87	2300.55	52.90	
12273.07	12247.88	4.60	26.57	25.29	Fighting Okra Federal Com 1H ST01 (s)	2432.55	2388.18	54.83	
12373.07	12326.02	342.80	26.70	24.46	Fighting Okra 18-19 Fed 41H Pilot (p)	2596.92	2550.36	55.78	
12473.07	12390.86	342.47	26.87	23.58	Fighting Okra 18-19 Fed 41H Pilot (p)	2587.20	2540.93	55.91	
12573.07	12440.77	345.18	27.15	22.94	Fighting Okra 18-19 Fed 41H Pilot (p)	2563.40	2517.52	55.86	
12673.07	12477.66	350.25	27.55	22.57	Fighting Okra 18-19 Fed 41H Pilot (p)	2526.99	2481.42	55.45	
12773.07	12500.68	355.16	28.07	22.38	Fighting Okra 18-19 Fed 41H Pilot (p)	2478.91	2433.72	54.85	
12873.07	12508.98	0.46	28.69	22.43	Fighting Okra 18-19 Fed 41H Pilot (p)	2420.30	2375.38	53.88	
12973.07	12509.00	0.77	29.33	22.53	Fighting Okra 18-19 Fed 41H Pilot (p)	2357.55	2312.96	52.87	
13073.07	12509.00	0.77	30.05	22.67	Fighting Okra 18-19 Fed 41H Pilot (p)	2297.41	2253.24	52.01	
13173.07	12509.00	0.77	30.87	22.87	Fighting Okra 18-19 Fed 41H Pilot (p)	2240.12	2196.25	51.05	
13273.07	12509.00	0.77	31.77	23.09	Fighting Okra 18-19 Fed 41H Pilot (p)	2185.91	2142.27	50.08	
13373.07	12509.00	0.77	32.75	23.33	Fighting Okra 18-19 Fed 41H Pilot (p)	2135.02	2091.71	49.30	
13473.07	12509.00	0.77	33.80	23.58	Fighting Okra 18-19 Fed 41H Pilot (p)	2087.67	2044.59	48.46	
13573.07	12509.00	0.77	34.91	23.84	Fighting Okra 18-19 Fed 41H Pilot (p)	2044.12	2001.21	47.64	
13673.07	12509.00	0.77	36.09	24.11	Fighting Okra 18-19 Fed 41H Pilot (p)	2004.62	1961.82	46.83	
13773.07	12509.00	0.77	37.31	24.36		1969.41	1926.70	46.12	

SD Anti-Collision Report

Primary Well : Fighting Okra 18-19 Fed 71H Lat (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
					Fighting Okra 18-19 Fed 41H Pilot (p)				
13873.07	12509.00	0.77	38.58	24.69	Fighting Okra 18-19 Fed 41H Pilot (p)	1938.72	1895.98	45.36	
13973.07	12509.00	0.77	39.90	25.07	Fighting Okra 18-19 Fed 41H Pilot (p)	1912.77	1869.96	44.68	
14073.07	12509.00	0.77	41.25	25.42	Fighting Okra 18-19 Fed 41H Pilot (p)	1891.76	1848.78	44.01	
14173.07	12509.00	0.77	42.64	25.71	Fighting Okra 18-19 Fed 41H Pilot (p)	1875.86	1832.57	43.34	
14273.07	12509.00	0.77	44.06	26.18	Fighting Okra 18-19 Fed 41H Pilot (p)	1865.18	1821.63	42.83	
14373.07	12509.00	0.77	45.51	26.49	Fighting Okra 18-19 Fed 41H Pilot (p)	1859.83	1815.78	42.22	
14473.07	12509.00	0.77	46.99	26.99	Fighting Okra 18-19 Fed 41H Pilot (p)	1859.85	1815.25	41.71	
14573.07	12509.00	0.77	48.49	27.35	Fighting Okra 18-19 Fed 41H Pilot (p)	1865.24	1820.06	41.29	
14673.07	12509.00	0.77	50.01	27.84	Fighting Okra 18-19 Fed 41H Pilot (p)	1875.95	1830.11	40.93	
14773.07	12509.00	0.77	51.55	28.26	Fighting Okra 18-19 Fed 41H Pilot (p)	1891.89	1845.47	40.76	
14873.07	12508.84	0.77	53.12	28.76	Fighting Okra 18-19 Fed 41H Pilot (p)	1912.77	1865.62	40.57	
14973.07	12508.61	0.77	54.69	29.14	Fighting Okra 18-19 Fed 41H Pilot (p)	1938.54	1890.61	40.45	
15073.07	12508.39	0.77	56.28	29.71	Fighting Okra 18-19 Fed 41H Pilot (p)	1969.05	1920.52	40.57	
15173.07	12508.16	0.77	57.89	30.22	Fighting Okra 18-19 Fed 41H Pilot (p)	2004.09	1954.71	40.58	
15273.07	12507.94	0.77	59.51	30.70	Fighting Okra 18-19 Fed 41H Pilot (p)	2043.43	1993.45	40.88	
15373.07	12507.71	0.77	61.14	31.15	Fighting Okra 18-19 Fed 41H Pilot (p)	2086.83	2036.16	41.18	
15473.07	12507.49	0.77	62.78	31.67	Fighting Okra 18-19 Fed 41H Pilot (p)	2134.03	2082.65	41.53	
15573.07	12507.26	0.77	64.43	32.24	Fighting Okra 18-19 Fed 41H Pilot (p)	2184.79	2132.87	42.07	
15673.07	12507.04	0.03	66.09	32.80	Fighting Okra 18-19 Fed 41H Lateral (p)	2137.03	2085.71	41.64	
15773.07	12506.81	0.03	67.76	33.36	Fighting Okra 18-19 Fed 41H Lateral (p)	2136.81	2084.58	40.91	
15873.07	12506.59	0.03	69.44	33.92	Fighting Okra 18-19 Fed 41H Lateral (p)	2136.58	2083.44	40.20	
15973.07	12506.36	0.03	71.13	34.48	Fighting Okra 18-19 Fed 41H Lateral (p)	2136.36	2082.28	39.50	
16073.07	12506.14	0.03	72.82	35.04	Fighting Okra 18-19 Fed 41H Lateral (p)	2136.13	2081.06	38.79	
16173.07	12505.91	0.03	74.52	35.60	Fighting Okra 18-19 Fed 41H Lateral (p)	2135.91	2079.81	38.08	
16273.07	12505.68	0.03	76.22	36.17	Fighting Okra 18-19 Fed 41H Lateral (p)	2135.68	2078.55	37.38	

SD Anti-Collision Report

Primary Well : Fighting Okra 18-19 Fed 71H Lat (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
16373.07	12505.46	0.03	77.93	36.74	Fighting Okra 18-19 Fed 41H Lateral (p)	2135.46	2077.28	36.70	
16473.07	12505.23	0.03	79.64	37.31	Fighting Okra 18-19 Fed 41H Lateral (p)	2135.23	2076.02	36.06	
16573.07	12505.01	0.03	81.36	37.89	Fighting Okra 18-19 Fed 41H Lateral (p)	2135.01	2074.74	35.42	
16673.07	12504.78	0.03	83.09	38.48	Fighting Okra 18-19 Fed 41H Lateral (p)	2134.78	2073.41	34.79	
16773.07	12504.56	0.03	84.82	39.06	Fighting Okra 18-19 Fed 41H Lateral (p)	2134.56	2072.11	34.18	
16873.07	12504.33	0.03	86.55	39.65	Fighting Okra 18-19 Fed 41H Lateral (p)	2134.33	2070.70	33.54	
16973.07	12504.11	0.03	88.29	40.25	Fighting Okra 18-19 Fed 41H Lateral (p)	2134.11	2069.36	32.96	
17073.07	12503.88	0.03	90.03	40.85	Fighting Okra 18-19 Fed 41H Lateral (p)	2133.88	2067.96	32.37	
17173.07	12503.66	0.03	91.77	41.45	Fighting Okra 18-19 Fed 41H Lateral (p)	2133.66	2066.65	31.84	
17273.07	12503.43	0.03	93.52	42.08	Fighting Okra 18-19 Fed 41H Lateral (p)	2133.43	2065.17	31.25	
17373.07	12503.21	0.03	95.27	42.71	Fighting Okra 18-19 Fed 41H Lateral (p)	2133.21	2063.72	30.70	
17473.07	12502.98	0.02	97.02	43.35	Fighting Okra 18-19 Fed 41H Lateral (p)	2132.98	2062.28	30.17	
17573.07	12502.76	0.02	98.77	43.99	Fighting Okra 18-19 Fed 41H Lateral (p)	2132.75	2060.85	29.66	
17673.07	12502.53	0.02	100.53	44.64	Fighting Okra 18-19 Fed 41H Lateral (p)	2132.53	2059.40	29.16	
17773.07	12502.31	0.02	102.29	45.28	Fighting Okra 18-19 Fed 41H Lateral (p)	2132.30	2057.95	28.68	
17873.07	12502.08	0.02	104.05	45.93	Fighting Okra 18-19 Fed 41H Lateral (p)	2132.08	2056.49	28.21	
17973.07	12501.86	0.02	105.82	46.58	Fighting Okra 18-19 Fed 41H Lateral (p)	2131.85	2054.98	27.73	
18073.07	12501.63	0.02	107.59	47.23	Fighting Okra 18-19 Fed 41H Lateral (p)	2131.63	2053.47	27.27	
18173.07	12501.41	0.02	109.35	47.88	Fighting Okra 18-19 Fed 41H Lateral (p)	2131.40	2051.95	26.83	
18273.07	12501.18	0.02	111.13	48.54	Fighting Okra 18-19 Fed 41H Lateral (p)	2131.18	2050.43	26.39	
18373.07	12500.95	0.02	112.90	49.20	Fighting Okra 18-19 Fed 41H Lateral (p)	2130.95	2048.90	25.97	
18473.07	12500.73	0.02	114.67	49.86	Fighting Okra 18-19 Fed 41H Lateral (p)	2130.73	2047.37	25.56	
18573.07	12500.50	0.02	116.45	50.52	Fighting Okra 18-19 Fed 41H Lateral (p)	2130.50	2045.83	25.16	
18673.07	12500.28	0.02	118.23	51.18	Fighting Okra 18-19 Fed 41H Lateral (p)	2130.28	2044.29	24.78	
18773.07	12500.05	0.02	120.00	51.85	Fighting Okra 18-19 Fed 41H Lateral (p)	2130.05	2042.75	24.40	
18873.07	12499.83	0.02	121.79	52.52	Fighting Okra 18-19 Fed 41H Lateral (p)	2129.83	2041.20	24.03	

SD Anti-Collision Report

Primary Well : Fighting Okra 18-19 Fed 71H Lat (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
18973.07	12499.60	0.02	123.57	53.19	Fighting Okra 18-19 Fed 41H Lateral (p)	2129.60	2039.64	23.67	
19073.07	12499.38	0.02	125.35	53.86	Fighting Okra 18-19 Fed 41H Lateral (p)	2129.38	2038.09	23.33	
19173.07	12499.15	0.02	127.13	54.53	Fighting Okra 18-19 Fed 41H Lateral (p)	2129.15	2036.52	22.99	
19273.07	12498.93	0.02	128.92	55.20	Fighting Okra 18-19 Fed 41H Lateral (p)	2128.93	2034.96	22.66	
19373.07	12498.70	0.02	130.71	55.87	Fighting Okra 18-19 Fed 41H Lateral (p)	2128.70	2033.39	22.33	
19473.07	12498.48	0.01	132.49	56.55	Fighting Okra 18-19 Fed 41H Lateral (p)	2128.47	2031.82	22.02	
19573.07	12498.25	0.01	134.28	57.23	Fighting Okra 18-19 Fed 41H Lateral (p)	2128.25	2030.24	21.71	
19673.07	12498.03	0.01	136.07	57.91	Fighting Okra 18-19 Fed 41H Lateral (p)	2128.02	2028.66	21.42	
19773.07	12497.80	0.01	137.86	58.59	Fighting Okra 18-19 Fed 41H Lateral (p)	2127.80	2027.08	21.13	
19873.07	12497.58	0.01	139.66	59.27	Fighting Okra 18-19 Fed 41H Lateral (p)	2127.57	2025.49	20.84	
19973.07	12497.35	0.01	141.45	59.95	Fighting Okra 18-19 Fed 41H Lateral (p)	2127.35	2023.90	20.56	
20073.07	12497.13	0.01	143.24	60.63	Fighting Okra 18-19 Fed 41H Lateral (p)	2127.12	2022.31	20.29	
20173.07	12496.90	0.01	145.04	61.32	Fighting Okra 18-19 Fed 41H Lateral (p)	2126.90	2020.72	20.03	
20273.07	12496.67	0.01	146.83	62.00	Fighting Okra 18-19 Fed 41H Lateral (p)	2126.67	2019.12	19.77	
20373.07	12496.45	0.01	148.63	62.69	Fighting Okra 18-19 Fed 41H Lateral (p)	2126.45	2017.52	19.52	
20473.07	12496.22	0.01	150.43	63.38	Fighting Okra 18-19 Fed 41H Lateral (p)	2126.22	2015.92	19.28	
20573.07	12496.00	0.01	152.22	64.07	Fighting Okra 18-19 Fed 41H Lateral (p)	2126.00	2014.31	19.04	
20673.07	12495.77	0.01	154.02	64.76	Fighting Okra 18-19 Fed 41H Lateral (p)	2125.77	2012.71	18.80	
20773.07	12495.55	0.01	155.82	65.45	Fighting Okra 18-19 Fed 41H Lateral (p)	2125.55	2011.10	18.57	
20873.07	12495.32	0.01	157.62	66.14	Fighting Okra 18-19 Fed 41H Lateral (p)	2125.32	2009.49	18.35	
20973.07	12495.10	0.01	159.42	66.83	Fighting Okra 18-19 Fed 41H Lateral (p)	2125.10	2007.88	18.13	
21073.07	12494.87	0.01	161.22	67.52	Fighting Okra 18-19 Fed 41H Lateral (p)	2124.87	2006.26	17.92	
21173.07	12494.65	0.01	163.02	68.22	Fighting Okra 18-19 Fed 41H Lateral (p)	2124.65	2004.65	17.71	
21273.07	12494.42	0.01	164.82	68.91	Fighting Okra 18-19 Fed 41H Lateral (p)	2124.42	2003.03	17.50	
21373.07	12494.20	0.00	166.63	69.61	Fighting Okra 18-19 Fed 41H Lateral (p)	2124.19	2001.41	17.30	
21473.07	12493.97	0.00	168.43	70.31	Fighting Okra 18-19 Fed 41H Lateral (p)	2123.97	1999.79	17.10	

SD Anti-Collision Report

Primary Well : Fighting Okra 18-19 Fed 71H Lat (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
21573.07	12493.75	0.00	170.23	71.00	Fighting Okra 18-19 Fed 41H Lateral (p)	2123.74	1998.17	16.91	
21673.07	12493.52	0.00	172.04	71.70	Fighting Okra 18-19 Fed 41H Lateral (p)	2123.52	1996.54	16.72	
21773.07	12493.30	0.00	173.84	72.40	Fighting Okra 18-19 Fed 41H Lateral (p)	2123.29	1994.91	16.54	
21873.07	12493.07	0.00	175.65	73.10	Fighting Okra 18-19 Fed 41H Lateral (p)	2123.07	1993.29	16.36	
21973.07	12492.85	0.00	177.45	73.80	Fighting Okra 18-19 Fed 41H Lateral (p)	2122.84	1991.66	16.18	
22073.07	12492.62	0.00	179.26	74.50	Fighting Okra 18-19 Fed 41H Lateral (p)	2122.62	1990.03	16.01	
22173.07	12492.39	0.00	181.07	75.20	Fighting Okra 18-19 Fed 41H Lateral (p)	2122.39	1988.40	15.84	
22273.07	12492.17	0.00	182.87	75.90	Fighting Okra 18-19 Fed 41H Lateral (p)	2122.17	1986.76	15.67	
22347.61	12492.00	0.00	184.22	76.42	Fighting Okra 18-19 Fed 41H Lateral (p)	2122.00	1985.55	15.55	

Secondary Well : Fighting Okra Federal Com 1H ST01 (s) (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
11973.07	9818.12	12076.08	268.23	44.52	22.44	2151.17	2107.27	49.01	
12073.07	9818.12	12070.48	14.49	44.45	22.42	2250.04	2205.88	50.96	
12173.07	9818.09	12054.41	7.39	44.22	22.33	2344.87	2300.55	52.90	
12273.07	9817.91	12028.96	4.60	43.87	22.17	2432.55	2388.18	54.83	
12373.07	9817.43	11996.03	3.06	43.42	21.91	2510.32	2466.03	56.68	
12473.07	9816.48	11956.31	2.05	42.87	21.74	2575.87	2531.58	58.17	
12573.07	9814.32	11890.81	1.00	41.97	21.32	2627.90	2583.92	59.75	
12673.07	9811.41	11800.22	0.04	40.72	20.89	2667.66	2623.95	61.04	
12773.07	9808.06	11689.38	359.42	39.25	20.25	2693.74	2650.54	62.36	
12873.07	9808.03	11478.22	359.13	36.51	19.33	2701.59	2659.21	63.74	
12973.07	9809.72	11374.56	359.17	35.20	18.83	2699.96	2657.95	64.27	
13073.07	9811.09	11284.81	359.21	34.03	18.38	2698.41	2656.70	64.69	
13173.07	9811.61	11217.41	359.26	33.21	18.03	2697.62	2656.04	64.88	
13273.07	9811.37	11108.28	359.33	31.92	17.59	2697.84	2656.50	65.26	
13373.07	9814.35	10941.41	359.40	30.06	16.96	2695.96	2655.06	65.92	
13473.07	9820.36	10787.62	359.46	28.40	16.44	2692.05	2651.45	66.32	
13573.07	9825.56	10685.72	359.45	27.41	16.12	2686.95	2646.39	66.25	
13673.07	9829.06	10609.45	359.43	26.66	15.89	2682.37	2641.75	66.04	
13773.07	9833.55	10503.25	359.37	25.72	15.60	2678.17	2637.55	65.93	
13873.07	9840.11	10373.18	359.24	24.66	15.31	2673.17	2632.56	65.83	
13973.07	9844.39	10295.90	359.13	24.07	15.14	2667.79	2627.03	65.45	
14073.07	9846.28	10246.18	359.07	23.69	15.02	2664.09	2623.02	64.86	
14173.07	9847.48	10186.79	358.98	23.30	14.88	2662.15	2620.90	64.54	
14273.07	9847.70	10148.08	358.90	23.09	14.77	2661.95	2620.29	63.91	
14373.07	9847.23	10125.67	358.84	22.97	14.67	2664.44	2622.47	63.47	
14473.07	9846.39	10109.15	358.80	22.87	14.64	2669.99	2627.66	63.08	
14573.07	9845.28	10095.83	358.76	22.80	14.63	2678.72	2635.87	62.51	
14673.07	9843.76	10082.59	358.71	22.72	14.60	2690.67	2647.29	62.03	
14773.07	9841.67	10068.32	358.67	22.65	14.56	2705.75	2661.91	61.71	
14873.07	9839.18	10054.19	358.63	22.57	14.62	2723.76	2679.32	61.29	
14973.07	9836.36	10040.46	358.58	22.50	14.67	2744.74	2699.78	61.05	
15073.07	9833.18	10026.98	358.54	22.43	14.71	2768.71	2723.19	60.83	
15173.07	9829.63	10013.59	358.50	22.37	14.74	2795.58	2749.56	60.74	
15273.07	9825.73	10000.26	358.46	22.31	14.86	2825.30	2778.58	60.48	
15373.07	9821.54	9987.18	358.43	22.25	14.96	2857.76	2810.48	60.44	

SD Anti-Collision Report

Secondary Well : Fighting Okra Federal Com 1H ST01 (s) (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
15473.07	9817.19	9974.65	358.39	22.19	15.06	2892.91	2845.14	60.56	
15573.07	9812.61	9962.38	358.36	22.14	15.14	2930.66	2882.32	60.62	
15673.07	9807.79	9950.29	358.33	22.09	15.27	2970.93	2921.93	60.64	
15773.07	9802.77	9938.41	358.30	22.04	15.42	3013.61	2964.04	60.79	
15873.07	9797.60	9926.82	358.28	21.98	15.56	3058.63	3008.54	61.07	
15973.07	9791.95	9914.77	358.25	21.93	15.68	3105.88	3055.33	61.44	
16073.07	9786.13	9902.89	358.23	21.88	15.79	3155.26	3104.28	61.90	
16173.07	9780.20	9891.27	358.20	21.84	15.93	3206.68	3155.12	62.19	
16273.07	9774.12	9879.80	358.18	21.83	16.09	3260.06	3207.96	62.58	
16373.07	9768.00	9868.65	358.16	21.82	16.24	3315.31	3262.73	63.04	
16473.07	9761.48	9857.17	358.14	21.79	16.38	3372.36	3319.31	63.58	
16573.07	9754.37	9845.01	358.12	21.74	16.52	3431.08	3377.60	64.16	
16673.07	9747.27	9833.19	358.11	21.71	16.64	3491.40	3437.54	64.82	
16773.07	9739.79	9821.06	358.09	21.70	16.74	3553.25	3499.05	65.55	
16873.07	9732.25	9809.13	358.08	21.65	16.88	3616.55	3561.93	66.21	
16973.07	9724.72	9797.48	358.07	21.62	17.02	3681.23	3626.27	66.98	
17073.07	9716.97	9785.72	358.06	21.63	17.14	3747.23	3691.93	67.76	
17173.07	9709.31	9774.31	358.04	21.59	17.27	3814.48	3758.78	68.48	
17273.07	9702.39	9764.17	358.03	21.57	17.38	3882.93	3826.89	69.29	
17373.07	9696.40	9755.55	358.02	21.55	17.49	3952.56	3896.16	70.07	
17473.07	9690.51	9747.20	358.02	21.56	17.59	4023.33	3966.62	70.96	
17573.07	9684.71	9739.10	358.01	21.53	17.68	4095.17	4038.16	71.84	
17673.07	9676.60	9727.94	357.99	21.49	17.77	4168.02	4110.71	72.74	
17773.07	9667.77	9715.92	357.97	21.50	17.83	4241.78	4184.22	73.70	
17873.07	9658.95	9704.04	357.96	21.50	17.89	4316.41	4258.60	74.65	
17973.07	9648.01	9689.46	357.93	21.48	17.97	4391.86	4333.74	75.57	
18073.07	9637.27	9675.27	357.91	21.46	18.06	4468.06	4409.66	76.50	
18173.07	9629.91	9665.66	357.90	21.44	18.16	4545.01	4486.35	77.49	
18273.07	9623.32	9657.13	357.88	21.43	18.26	4622.72	4563.83	78.50	
18373.07	9616.85	9648.83	357.87	21.42	18.35	4701.17	4642.06	79.53	
18473.07	9610.70	9641.02	357.86	21.41	18.43	4780.31	4720.99	80.59	
18573.07	9605.71	9634.73	357.85	21.41	18.51	4860.14	4800.63	81.67	
18673.07	9600.82	9628.63	357.84	21.40	18.59	4940.62	4880.93	82.77	
18773.07	9596.04	9622.70	357.83	21.40	18.66	5021.74	4961.88	83.89	
18873.07	9591.36	9616.94	357.82	21.39	18.73	5103.46	5043.43	85.02	
18973.07	9586.77	9611.34	357.81	21.39	18.80	5185.76	5125.58	86.17	
19073.07	9582.04	9605.60	357.81	21.38	18.86	5268.61	5208.28	87.34	
19173.07	9577.34	9599.93	357.80	21.38	18.92	5351.99	5291.52	88.51	
19273.07	9572.73	9594.42	357.79	21.38	18.97	5435.87	5375.25	89.67	
19373.07	9568.22	9589.05	357.79	21.37	19.02	5520.23	5459.45	90.81	
19473.07	9563.81	9583.83	357.78	21.37	19.07	5605.06	5544.12	91.97	
19573.07	9559.49	9578.75	357.77	21.37	19.12	5690.34	5629.23	93.11	
19673.07	9554.43	9572.81	357.77	21.37	19.16	5776.04	5714.75	94.25	
19773.07	9549.32	9566.86	357.76	21.36	19.21	5862.14	5800.68	95.39	
19873.07	9544.33	9561.06	357.75	21.36	19.27	5948.62	5887.01	96.55	
19973.07	9539.43	9555.41	357.75	21.36	19.32	6035.48	5973.70	97.71	
20073.07	9534.65	9549.90	357.74	21.36	19.37	6122.69	6060.76	98.88	
20173.07	9530.23	9544.84	357.74	21.36	19.43	6210.24	6148.17	100.05	
20273.07	9526.21	9540.25	357.73	21.36	19.48	6298.13	6235.92	101.24	
20373.07	9522.27	9535.77	357.73	21.36	19.53	6386.34	6324.00	102.44	
20473.07	9518.42	9531.41	357.72	21.35	19.58	6474.87	6412.39	103.64	
20573.07	9514.64	9527.15	357.72	21.35	19.62	6563.69	6501.08	104.84	
20673.07	9510.95	9522.99	357.72	21.35	19.66	6652.80	6590.07	106.06	
20773.07	9507.33	9518.93	357.71	21.35	19.71	6742.19	6679.34	107.27	
20873.07	9503.94	9515.14	357.71	21.35	19.75	6831.84	6768.88	108.50	
20973.07	9501.05	9511.92	357.71	21.35	19.79	6921.76	6858.68	109.73	
21073.07	9498.22	9508.78	357.71	21.35	19.82	7011.93	6948.74	110.97	
21173.07	9495.44	9505.70	357.71	21.34	19.86	7102.35	7039.05	112.21	

SD Anti-Collision Report

Secondary Well : Fighting Okra Federal Com 1H ST01 (s) (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
21273.07	9492.73	9502.70	357.70	21.34	19.89	7193.00	7129.60	113.45	
21373.07	9490.06	9499.77	357.70	21.34	19.93	7283.88	7220.37	114.70	
21473.07	9487.46	9496.91	357.70	21.34	19.96	7374.98	7311.37	115.95	
21573.07	9484.90	9494.11	357.70	21.34	19.99	7466.29	7402.59	117.20	
21673.07	9482.40	9491.37	357.70	21.34	20.02	7557.81	7494.01	118.46	
21773.07	9479.95	9488.70	357.70	21.34	20.05	7649.52	7585.63	119.72	
21873.07	9477.54	9486.08	357.70	21.34	20.07	7741.43	7677.44	120.98	
21973.07	9475.13	9483.46	357.70	21.34	20.10	7833.52	7769.44	122.25	
22073.07	9472.54	9480.65	357.70	21.34	20.12	7925.79	7861.62	123.51	
22173.07	9469.99	9477.89	357.70	21.33	20.14	8018.23	7953.97	124.77	
22273.07	9467.49	9475.19	357.70	21.33	20.17	8110.84	8046.49	126.04	
22347.61	9465.67	9473.22	357.70	21.33	20.18	8179.98	8115.56	126.98	

Secondary Well : Fighting Okra Federal Com 1H ST00 (s) (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
11973.07	9970.14	10209.00	182.94	23.04	15.07	2838.49	2795.07	65.38	
12073.07	9970.14	10209.00	339.72	23.04	15.07	2903.10	2859.80	67.06	
12173.07	9970.14	10209.00	341.94	23.04	15.07	2955.41	2912.35	68.63	
12273.07	9970.14	10209.00	343.33	23.04	15.07	2994.20	2951.37	69.90	
12373.07	9970.14	10209.00	344.11	23.04	15.07	3018.58	2975.93	70.78	
12473.07	9970.14	10209.00	344.39	23.04	15.07	3028.01	2985.56	71.33	
12573.07	9970.14	10209.00	346.86	23.04	15.07	3022.56	2980.33	71.58	
12673.07	9970.14	10209.00	350.87	23.04	15.07	3003.75	2961.86	71.70	
12773.07	9970.14	10209.00	354.50	23.04	15.07	2972.24	2930.65	71.47	
12873.07	9970.14	10209.00	358.12	23.04	15.07	2928.79	2887.36	70.69	
12973.07	9970.14	10209.00	358.32	23.04	15.07	2880.33	2839.11	69.88	
13073.07	9970.14	10209.00	358.32	23.04	15.07	2834.54	2793.59	69.22	
13173.07	9970.14	10209.00	358.32	23.04	15.07	2791.59	2750.84	68.50	
13273.07	9970.14	10209.00	358.32	23.04	15.07	2751.60	2711.01	67.78	
13373.07	9970.14	10209.00	358.32	23.04	15.07	2714.71	2674.24	67.07	
13473.07	9970.14	10209.00	358.32	23.04	15.07	2681.05	2640.60	66.28	
13573.07	9970.14	10209.00	358.32	23.04	15.07	2650.73	2610.28	65.53	
13673.07	9970.14	10209.00	358.32	23.04	15.07	2623.87	2583.47	64.95	
13773.07	9970.14	10209.00	358.32	23.04	15.07	2600.59	2560.03	64.13	
13873.07	9970.14	10209.00	358.32	23.04	15.07	2580.97	2540.23	63.36	
13973.07	9970.14	10209.00	358.32	23.04	15.07	2565.10	2524.13	62.61	
14073.07	9970.14	10209.00	358.32	23.04	15.07	2553.05	2511.87	61.99	
14173.07	9970.14	10209.00	358.32	23.04	15.07	2544.88	2503.28	61.17	
14273.07	9970.14	10209.00	358.32	23.04	15.07	2540.62	2498.63	60.50	
14373.07	9970.14	10209.00	358.32	23.04	15.07	2540.30	2497.95	59.99	
14473.07	9970.14	10209.00	358.32	23.04	15.07	2543.91	2501.09	59.41	
14573.07	9970.14	10209.00	358.32	23.04	15.07	2551.43	2508.06	58.82	
14673.07	9969.64	10204.92	358.30	23.01	15.09	2562.82	2518.89	58.34	
14773.07	9967.54	10190.15	358.26	22.92	15.15	2577.62	2533.22	58.06	
14873.07	9964.95	10175.39	358.22	22.83	15.20	2595.48	2550.49	57.69	
14973.07	9961.78	10160.06	358.19	22.74	15.23	2616.41	2570.88	57.46	
15073.07	9958.04	10144.35	358.15	22.65	15.30	2640.41	2594.24	57.18	
15173.07	9951.93	10121.38	358.10	22.52	15.40	2667.24	2620.60	57.18	
15273.07	9945.89	10100.72	358.06	22.41	15.48	2696.73	2649.42	57.01	
15373.07	9939.75	10081.47	358.02	22.31	15.55	2728.88	2681.02	57.02	
15473.07	9934.35	10065.82	357.99	22.24	15.63	2763.68	2715.28	57.10	
15573.07	9928.64	10050.47	357.96	22.17	15.79	2801.11	2752.11	57.16	
15673.07	9922.38	10034.71	357.93	22.10	15.93	2841.06	2791.43	57.25	
15773.07	9915.94	10019.43	357.91	22.04	16.06	2883.44	2833.26	57.46	
15873.07	9910.50	10007.23	357.89	21.99	16.18	2928.20	2877.52	57.77	
15973.07	9904.92	9995.35	357.87	21.94	16.29	2975.29	2924.11	58.12	
16073.07	9899.50	9984.31	357.86	21.90	16.47	3024.62	2972.96	58.55	
16173.07	9894.44	9974.47	357.85	21.86	16.64	3076.12	3023.89	58.89	

SD Anti-Collision Report

Secondary Well : Fighting Okra Federal Com 1H ST00 (s) (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
16273.07	9889.34	9964.92	357.84	21.83	16.79	3129.71	3076.95	59.32	
16373.07	9884.22	9955.67	357.82	21.80	16.93	3185.29	3132.06	59.84	
16473.07	9879.22	9946.96	357.81	21.77	17.05	3242.77	3189.12	60.44	
16573.07	9874.23	9938.52	357.80	21.75	17.16	3302.07	3248.00	61.07	
16673.07	9869.26	9930.35	357.79	21.72	17.32	3363.10	3308.61	61.72	
16773.07	9864.12	9922.12	357.78	21.71	17.47	3425.78	3370.91	62.44	
16873.07	9858.60	9913.50	357.77	21.71	17.62	3490.01	3434.80	63.21	
16973.07	9853.13	9905.16	357.77	21.70	17.75	3555.71	3500.19	64.04	
17073.07	9847.72	9897.08	357.76	21.69	17.87	3622.81	3566.93	64.83	
17173.07	9842.55	9889.53	357.75	21.68	17.98	3691.24	3635.02	65.65	
17273.07	9837.65	9882.49	357.75	21.67	18.09	3760.95	3704.42	66.52	
17373.07	9832.83	9875.69	357.74	21.65	18.18	3831.87	3775.06	67.44	
17473.07	9828.10	9869.11	357.74	21.63	18.27	3903.95	3846.84	68.36	
17573.07	9823.45	9862.75	357.73	21.61	18.38	3977.12	3919.70	69.26	
17673.07	9818.78	9856.45	357.73	21.59	18.51	4051.34	3993.63	70.20	
17773.07	9814.18	9850.34	357.73	21.59	18.61	4126.54	4068.56	71.18	
17873.07	9809.68	9844.42	357.72	21.60	18.71	4202.68	4144.46	72.19	
17973.07	9805.27	9838.70	357.72	21.60	18.81	4279.72	4221.28	73.24	
18073.07	9800.96	9833.16	357.72	21.59	18.89	4357.61	4298.98	74.32	
18173.07	9796.01	9826.87	357.71	21.58	18.98	4436.30	4377.50	75.44	
18273.07	9790.68	9820.16	357.71	21.56	19.05	4515.75	4456.77	76.57	
18373.07	9785.47	9813.66	357.71	21.54	19.12	4595.91	4536.74	77.67	
18473.07	9780.38	9807.36	357.71	21.54	19.18	4676.76	4617.41	78.80	
18573.07	9775.41	9801.26	357.70	21.55	19.24	4758.26	4698.75	79.97	
18673.07	9770.47	9795.24	357.70	21.55	19.29	4840.38	4780.74	81.17	
18773.07	9765.60	9789.35	357.70	21.54	19.34	4923.09	4863.35	82.40	
18873.07	9760.84	9783.64	357.70	21.53	19.39	5006.37	4946.48	83.59	
18973.07	9756.20	9778.09	357.69	21.52	19.44	5090.19	5030.10	84.72	
19073.07	9751.66	9772.70	357.69	21.50	19.49	5174.53	5114.24	85.83	
19173.07	9747.11	9767.34	357.69	21.51	19.55	5259.36	5198.89	86.98	
19273.07	9741.68	9760.96	357.69	21.51	19.60	5344.66	5284.03	88.15	
19373.07	9736.36	9754.76	357.68	21.51	19.66	5430.40	5369.62	89.34	
19473.07	9731.17	9748.73	357.68	21.51	19.71	5516.57	5455.65	90.55	
19573.07	9726.10	9742.86	357.68	21.51	19.76	5603.14	5542.09	91.79	
19673.07	9721.14	9737.16	357.67	21.50	19.80	5690.10	5628.89	92.96	
19773.07	9717.05	9732.47	357.67	21.50	19.85	5777.44	5716.07	94.15	
19873.07	9713.24	9728.12	357.67	21.49	19.90	5865.14	5803.64	95.37	
19973.07	9709.52	9723.90	357.67	21.49	19.94	5953.20	5891.57	96.59	
20073.07	9705.89	9719.78	357.67	21.49	19.98	6041.60	5979.84	97.82	
20173.07	9702.34	9715.78	357.66	21.48	20.02	6130.32	6068.44	99.06	
20273.07	9698.87	9711.88	357.66	21.48	20.06	6219.36	6157.36	100.31	
20373.07	9695.48	9708.08	357.66	21.48	20.09	6308.70	6246.59	101.57	
20473.07	9692.13	9704.33	357.66	21.47	20.12	6398.33	6336.10	102.83	
20573.07	9688.66	9700.48	357.66	21.47	20.16	6488.23	6425.90	104.10	
20673.07	9685.28	9696.72	357.66	21.47	20.19	6578.40	6515.97	105.37	
20773.07	9681.96	9693.05	357.65	21.46	20.21	6668.83	6606.30	106.65	
20873.07	9678.72	9689.47	357.65	21.46	20.25	6759.50	6696.88	107.93	
20973.07	9675.55	9685.98	357.65	21.46	20.27	6850.42	6787.69	109.22	
21073.07	9672.45	9682.58	357.65	21.46	20.29	6941.56	6878.74	110.51	
21173.07	9669.41	9679.25	357.65	21.46	20.32	7032.92	6970.01	111.80	
21273.07	9666.44	9676.01	357.65	21.46	20.34	7124.50	7061.50	113.09	
21373.07	9663.54	9672.84	357.65	21.46	20.36	7216.28	7153.20	114.39	
21473.07	9660.84	9669.91	357.65	21.46	20.38	7308.26	7245.09	115.69	
21573.07	9658.20	9667.04	357.65	21.46	20.40	7400.43	7337.18	117.00	
21673.07	9655.62	9664.24	357.65	21.46	20.42	7492.79	7429.46	118.30	
21773.07	9653.09	9661.50	357.65	21.46	20.43	7585.33	7521.92	119.61	
21873.07	9650.61	9658.83	357.64	21.46	20.45	7678.05	7614.55	120.92	
21973.07	9648.18	9656.21	357.64	21.46	20.46	7770.93	7707.35	122.23	

5D Anti-Collision Report

Secondary Well : Fighting Okra Federal Com 1H ST00 (s) (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
22073.07	9645.80	9653.65	357.64	21.46	20.48	7863.97	7800.32	123.54	
22173.07	9643.46	9651.15	357.64	21.46	20.49	7957.17	7893.44	124.85	
22273.07	9641.18	9648.70	357.64	21.46	20.51	8050.53	7986.72	126.16	
22347.61	9639.50	9646.91	357.64	21.46	20.51	8120.21	8056.34	127.14	

Secondary Well : Fighting Okra 18-19 Fed 41H Lateral (p) (TVD Relative to Kelly Bushing (Primary) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
11973.07	10176.67	10207.61	184.84	22.62	20.08	2860.67	2815.76	63.69	
12073.07	10186.28	10220.10	340.71	22.67	19.93	2916.85	2871.99	65.02	
12173.07	10196.28	10233.38	342.30	22.70	19.76	2959.54	2914.86	66.24	
12273.07	10206.38	10247.11	343.19	22.73	19.58	2987.70	2943.14	67.05	
12373.07	10216.32	10260.95	343.51	22.76	19.39	3000.68	2956.35	67.69	
12473.07	10225.87	10274.60	343.34	22.79	19.26	2998.20	2954.04	67.89	
12573.07	10234.92	10287.90	345.88	22.81	19.13	2980.58	2936.65	67.85	
12673.07	10243.75	10301.25	350.54	22.84	18.98	2949.36	2905.65	67.47	
12773.07	10252.22	10314.43	355.04	22.86	18.82	2905.45	2861.94	66.77	
12873.07	10260.11	10327.08	359.91	22.89	18.66	2849.98	2806.68	65.83	
12973.07	10267.62	10339.50	0.18	22.94	18.48	2789.51	2746.46	64.81	
13073.07	10275.15	10352.38	0.17	22.98	18.30	2730.97	2688.22	63.88	
13173.07	10282.68	10365.72	0.16	23.03	18.18	2674.49	2631.86	62.73	
13273.07	10290.17	10379.53	0.15	23.07	18.04	2620.18	2577.66	61.62	
13373.07	10297.60	10393.81	0.14	23.12	17.88	2568.16	2525.80	60.64	
13473.07	10304.92	10408.58	0.13	23.18	17.70	2518.53	2476.33	59.67	
13573.07	10312.10	10423.82	0.12	23.25	17.50	2471.43	2429.28	58.64	
13673.07	10319.09	10439.54	0.11	23.32	17.34	2426.96	2384.88	57.68	
13773.07	10325.83	10455.73	0.10	23.39	17.21	2385.26	2343.13	56.62	
13873.07	10332.29	10472.37	0.09	23.46	17.06	2346.44	2304.23	55.60	
13973.07	10338.41	10489.45	0.08	23.53	16.89	2310.61	2268.38	54.70	
14073.07	10344.13	10506.95	0.07	23.61	16.72	2277.91	2235.52	53.74	
14173.07	10349.40	10524.85	0.07	23.71	16.63	2248.43	2205.80	52.74	
14273.07	10354.17	10543.11	0.06	23.81	16.52	2222.28	2179.47	51.90	
14373.07	10358.40	10561.70	0.05	23.91	16.39	2199.56	2156.40	50.96	
14473.07	10362.02	10580.57	0.05	24.01	16.31	2180.35	2136.82	50.09	
14573.07	10365.01	10599.70	0.04	24.11	16.27	2164.73	2120.77	49.25	
14673.07	10367.32	10619.02	0.04	24.23	16.22	2152.76	2108.41	48.54	
14773.07	10368.93	10638.49	0.04	24.36	16.15	2144.48	2099.65	47.83	
14873.07	10369.82	10658.05	0.04	24.48	16.20	2139.78	2094.31	47.06	
14973.07	10370.00	10701.05	0.04	24.77	16.26	2138.61	2092.65	46.53	
15073.07	10370.00	10801.05	0.04	25.53	16.42	2138.39	2091.70	45.80	
15173.07	10370.00	10901.05	0.04	26.39	16.61	2138.16	2090.77	45.12	
15273.07	10370.00	11001.05	0.04	27.34	16.83	2137.94	2089.85	44.46	
15373.07	10370.00	11101.05	0.04	28.38	17.08	2137.71	2088.92	43.81	
15473.07	10370.00	11201.05	0.03	29.50	17.35	2137.49	2087.92	43.12	
15573.07	10370.00	11301.05	0.03	30.68	17.65	2137.26	2086.82	42.37	
15673.07	10370.00	11401.05	0.03	31.93	17.97	2137.03	2085.71	41.64	
15773.07	10370.00	11501.05	0.03	33.23	18.31	2136.81	2084.58	40.91	
15873.07	10370.00	11601.05	0.03	34.57	18.67	2136.58	2083.44	40.20	
15973.07	10370.00	11701.05	0.03	35.96	19.05	2136.36	2082.28	39.50	
16073.07	10370.00	11801.05	0.03	37.39	19.48	2136.13	2081.06	38.79	
16173.07	10370.00	11901.05	0.03	38.85	19.93	2135.91	2079.81	38.08	
16273.07	10370.00	12001.05	0.03	40.34	20.40	2135.68	2078.55	37.38	
16373.07	10370.00	12101.05	0.03	41.85	20.88	2135.46	2077.28	36.70	
16473.07	10370.00	12201.05	0.03	43.39	21.34	2135.23	2076.02	36.06	
16573.07	10370.00	12301.05	0.03	44.96	21.82	2135.01	2074.74	35.42	
16673.07	10370.00	12401.05	0.03	46.54	22.33	2134.78	2073.41	34.79	
16773.07	10370.00	12501.05	0.03	48.14	22.82	2134.56	2072.11	34.18	
16873.07	10370.00	12601.05	0.03	49.75	23.42	2134.33	2070.70	33.54	
16973.07	10370.00	12701.05	0.03	51.38	23.93	2134.11	2069.36	32.96	

SD Anti-Collision Report

Secondary Well : Fighting Okra 18-19 Fed 41H Lateral (p) (TVD Relative to Kelly Bushing (Primary) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
17073.07	10370.00	12801.05	0.03	53.02	24.51	2133.88	2067.96	32.37	
17173.07	10370.00	12901.05	0.03	54.68	25.00	2133.66	2066.65	31.84	
17273.07	10370.00	13001.05	0.03	56.34	25.64	2133.43	2065.17	31.25	
17373.07	10370.00	13101.04	0.03	58.01	26.22	2133.21	2063.72	30.70	
17473.07	10370.00	13201.04	0.02	59.70	26.79	2132.98	2062.28	30.17	
17573.07	10370.00	13301.04	0.02	61.39	27.37	2132.75	2060.85	29.66	
17673.07	10370.00	13401.04	0.02	63.09	27.94	2132.53	2059.40	29.16	
17773.07	10370.00	13501.04	0.02	64.79	28.52	2132.30	2057.95	28.68	
17873.07	10370.00	13601.04	0.02	66.51	29.11	2132.08	2056.49	28.21	
17973.07	10370.00	13701.04	0.02	68.22	29.74	2131.85	2054.98	27.73	
18073.07	10370.00	13801.04	0.02	69.95	30.38	2131.63	2053.47	27.27	
18173.07	10370.00	13901.04	0.02	71.68	31.02	2131.40	2051.95	26.83	
18273.07	10370.00	14001.04	0.02	73.41	31.66	2131.18	2050.43	26.39	
18373.07	10370.00	14101.04	0.02	75.15	32.30	2130.95	2048.90	25.97	
18473.07	10370.00	14201.04	0.02	76.89	32.95	2130.73	2047.37	25.56	
18573.07	10370.00	14301.04	0.02	78.64	33.60	2130.50	2045.83	25.16	
18673.07	10370.00	14401.04	0.02	80.39	34.25	2130.28	2044.29	24.78	
18773.07	10370.00	14501.04	0.02	82.14	34.90	2130.05	2042.75	24.40	
18873.07	10370.00	14601.04	0.02	83.90	35.56	2129.83	2041.20	24.03	
18973.07	10370.00	14701.04	0.02	85.66	36.22	2129.60	2039.64	23.67	
19073.07	10370.00	14801.04	0.02	87.42	36.88	2129.38	2038.09	23.33	
19173.07	10370.00	14901.04	0.02	89.18	37.55	2129.15	2036.52	22.99	
19273.07	10370.00	15001.04	0.02	90.95	38.22	2128.93	2034.96	22.66	
19373.07	10370.00	15101.04	0.02	92.72	38.88	2128.70	2033.39	22.33	
19473.07	10370.00	15201.04	0.01	94.49	39.56	2128.47	2031.82	22.02	
19573.07	10370.00	15301.04	0.01	96.26	40.23	2128.25	2030.24	21.71	
19673.07	10370.00	15401.04	0.01	98.04	40.91	2128.02	2028.66	21.42	
19773.07	10370.00	15501.04	0.01	99.82	41.58	2127.80	2027.08	21.13	
19873.07	10370.00	15601.04	0.01	101.60	42.26	2127.57	2025.49	20.84	
19973.07	10370.00	15701.04	0.01	103.38	42.94	2127.35	2023.90	20.56	
20073.07	10370.00	15801.04	0.01	105.16	43.63	2127.12	2022.31	20.29	
20173.07	10370.00	15901.04	0.01	106.94	44.31	2126.90	2020.72	20.03	
20273.07	10370.00	16001.04	0.01	108.73	45.00	2126.67	2019.12	19.77	
20373.07	10370.00	16101.04	0.01	110.52	45.68	2126.45	2017.52	19.52	
20473.07	10370.00	16201.04	0.01	112.31	46.37	2126.22	2015.92	19.28	
20573.07	10370.00	16301.04	0.01	114.09	47.06	2126.00	2014.31	19.04	
20673.07	10370.00	16401.04	0.01	115.89	47.75	2125.77	2012.71	18.80	
20773.07	10370.00	16501.04	0.01	117.68	48.45	2125.55	2011.10	18.57	
20873.07	10370.00	16601.04	0.01	119.47	49.14	2125.32	2009.49	18.35	
20973.07	10370.00	16701.04	0.01	121.26	49.83	2125.10	2007.88	18.13	
21073.07	10370.00	16801.04	0.01	123.06	50.53	2124.87	2006.26	17.92	
21173.07	10370.00	16901.04	0.01	124.85	51.23	2124.65	2004.65	17.71	
21273.07	10370.00	17001.03	0.01	126.65	51.92	2124.42	2003.03	17.50	
21373.07	10370.00	17101.03	0.00	128.45	52.62	2124.19	2001.41	17.30	
21473.07	10370.00	17201.03	0.00	130.25	53.32	2123.97	1999.79	17.10	
21573.07	10370.00	17301.03	0.00	132.05	54.02	2123.74	1998.17	16.91	
21673.07	10370.00	17401.03	0.00	133.85	54.73	2123.52	1996.54	16.72	
21773.07	10370.00	17501.03	0.00	135.65	55.43	2123.29	1994.91	16.54	
21873.07	10370.00	17601.03	0.00	137.45	56.13	2123.07	1993.29	16.36	
21973.07	10370.00	17701.03	0.00	139.25	56.83	2122.84	1991.66	16.18	
22073.07	10370.00	17801.03	0.00	141.05	57.54	2122.62	1990.03	16.01	
22173.07	10370.00	17901.03	0.00	142.86	58.24	2122.39	1988.40	15.84	
22273.07	10370.00	18001.03	0.00	144.66	58.95	2122.17	1986.76	15.67	
22347.61	10370.00	18075.58	0.00	146.01	59.48	2122.00	1985.55	15.55	
Secondary Well : Fighting Okra 18-19 Fed 41H 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
11973.07	10650.00	10654.00	185.48	23.84	23.84	2493.63	2446.12	52.48	

5D Anti-Collision Report

Secondary Well : Fighting Okra 18-19 Fed 41H 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
12073.07	10650.00	10654.00	340.75	23.84	23.84	2540.00	2492.62	53.61	
12173.07	10650.00	10654.00	341.99	23.84	23.84	2573.08	2525.93	54.57	
12273.07	10650.00	10654.00	342.64	23.84	23.84	2592.19	2545.29	55.27	
12373.07	10650.00	10654.00	342.80	23.84	23.84	2596.92	2550.36	55.78	
12473.07	10650.00	10654.00	342.47	23.84	23.84	2587.20	2540.93	55.91	
12573.07	10650.00	10654.00	345.18	23.84	23.84	2563.40	2517.52	55.86	
12673.07	10650.00	10654.00	350.25	23.84	23.84	2526.99	2481.42	55.45	
12773.07	10650.00	10654.00	355.16	23.84	23.84	2478.91	2433.72	54.85	
12873.07	10650.00	10654.00	0.46	23.84	23.84	2420.30	2375.38	53.88	
12973.07	10650.00	10654.00	0.77	23.84	23.84	2357.55	2312.96	52.87	
13073.07	10650.00	10654.00	0.77	23.84	23.84	2297.41	2253.24	52.01	
13173.07	10650.00	10654.00	0.77	23.84	23.84	2240.12	2196.25	51.05	
13273.07	10650.00	10654.00	0.77	23.84	23.84	2185.91	2142.27	50.08	
13373.07	10650.00	10654.00	0.77	23.84	23.84	2135.02	2091.71	49.30	
13473.07	10650.00	10654.00	0.77	23.84	23.84	2087.67	2044.59	48.46	
13573.07	10650.00	10654.00	0.77	23.84	23.84	2044.12	2001.21	47.64	
13673.07	10650.00	10654.00	0.77	23.84	23.84	2004.62	1961.82	46.83	
13773.07	10650.00	10654.00	0.77	23.84	23.84	1969.41	1926.70	46.12	
13873.07	10650.00	10654.00	0.77	23.84	23.84	1938.72	1895.98	45.36	
13973.07	10650.00	10654.00	0.77	23.84	23.84	1912.77	1869.96	44.68	
14073.07	10650.00	10654.00	0.77	23.84	23.84	1891.76	1848.78	44.01	
14173.07	10650.00	10654.00	0.77	23.84	23.84	1875.86	1832.57	43.34	
14273.07	10650.00	10654.00	0.77	23.84	23.84	1865.18	1821.63	42.83	
14373.07	10650.00	10654.00	0.77	23.84	23.84	1859.83	1815.78	42.22	
14473.07	10650.00	10654.00	0.77	23.84	23.84	1859.85	1815.25	41.71	
14573.07	10650.00	10654.00	0.77	23.84	23.84	1865.24	1820.06	41.29	
14673.07	10650.00	10654.00	0.77	23.84	23.84	1875.95	1830.11	40.93	
14773.07	10650.00	10654.00	0.77	23.84	23.84	1891.89	1845.47	40.76	
14873.07	10650.00	10654.00	0.77	23.84	23.84	1912.77	1865.62	40.57	
14973.07	10650.00	10654.00	0.77	23.84	23.84	1938.54	1890.61	40.45	
15073.07	10650.00	10654.00	0.77	23.84	23.84	1969.05	1920.52	40.57	
15173.07	10650.00	10654.00	0.77	23.84	23.84	2004.09	1954.71	40.58	
15273.07	10650.00	10654.00	0.77	23.84	23.84	2043.43	1993.45	40.88	
15373.07	10650.00	10654.00	0.77	23.84	23.84	2086.83	2036.16	41.18	
15473.07	10650.00	10654.00	0.77	23.84	23.84	2134.03	2082.65	41.53	
15573.07	10650.00	10654.00	0.77	23.84	23.84	2184.79	2132.87	42.07	
15673.07	10650.00	10654.00	0.77	23.84	23.84	2238.87	2186.41	42.68	
15773.07	10650.00	10654.00	0.77	23.84	23.84	2296.04	2243.01	43.30	
15873.07	10650.00	10654.00	0.77	23.84	23.84	2356.06	2302.49	43.98	
15973.07	10650.00	10654.00	0.77	23.84	23.84	2418.73	2364.71	44.78	
16073.07	10650.00	10654.00	0.77	23.84	23.84	2483.84	2429.47	45.69	
16173.07	10650.00	10654.00	0.77	23.84	23.84	2551.22	2496.46	46.59	
16273.07	10650.00	10654.00	0.77	23.84	23.84	2620.67	2565.54	47.54	
16373.07	10650.00	10654.00	0.77	23.84	23.84	2692.06	2636.56	48.51	
16473.07	10650.00	10654.00	0.77	23.84	23.84	2765.21	2709.37	49.52	
16573.07	10650.00	10654.00	0.77	23.84	23.84	2840.00	2783.88	50.60	
16673.07	10650.00	10654.00	0.77	23.84	23.84	2916.31	2859.94	51.74	
16773.07	10650.00	10654.00	0.77	23.84	23.84	2994.01	2937.44	52.93	
16873.07	10650.00	10654.00	0.77	23.84	23.84	3073.00	3016.26	54.16	
16973.07	10650.00	10654.00	0.77	23.84	23.84	3153.18	3096.23	55.37	
17073.07	10650.00	10654.00	0.77	23.84	23.84	3234.47	3177.31	56.59	
17173.07	10650.00	10654.00	0.77	23.84	23.84	3316.78	3259.44	57.85	
17273.07	10650.00	10654.00	0.77	23.84	23.84	3400.03	3342.53	59.12	
17373.07	10650.00	10654.00	0.77	23.84	23.84	3484.17	3426.48	60.39	
17473.07	10650.00	10654.00	0.77	23.84	23.84	3569.13	3511.27	61.68	
17573.07	10650.00	10654.00	0.77	23.84	23.84	3654.85	3596.84	63.00	
17673.07	10650.00	10654.00	0.77	23.84	23.84	3741.28	3683.13	64.34	
17773.07	10650.00	10654.00	0.77	23.84	23.84	3828.37	3770.10	65.70	

SD Anti-Collision Report

Secondary Well : Fighting Okra 18-19 Fed 41H 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
17873.07	10650.00	10654.00	0.77	23.84	23.84	3916.07	3857.69	67.08	
17973.07	10650.00	10654.00	0.77	23.84	23.84	4004.35	3945.88	68.48	
18073.07	10650.00	10654.00	0.77	23.84	23.84	4093.17	4034.61	69.89	
18173.07	10650.00	10654.00	0.77	23.84	23.84	4182.50	4123.86	71.32	
18273.07	10650.00	10654.00	0.77	23.84	23.84	4272.30	4213.58	72.76	
18373.07	10650.00	10654.00	0.77	23.84	23.84	4362.54	4303.76	74.22	
18473.07	10650.00	10654.00	0.77	23.84	23.84	4453.20	4394.34	75.66	
18573.07	10650.00	10654.00	0.77	23.84	23.84	4544.25	4485.29	77.07	
18673.07	10650.00	10654.00	0.77	23.84	23.84	4635.67	4576.61	78.49	
18773.07	10650.00	10654.00	0.77	23.84	23.84	4727.44	4668.29	79.92	
18873.07	10650.00	10654.00	0.77	23.84	23.84	4819.54	4760.30	81.36	
18973.07	10650.00	10654.00	0.77	23.84	23.84	4911.94	4852.62	82.80	
19073.07	10650.00	10654.00	0.77	23.84	23.84	5004.64	4945.24	84.25	
19173.07	10650.00	10654.00	0.77	23.84	23.84	5097.61	5038.13	85.71	
19273.07	10650.00	10654.00	0.77	23.84	23.84	5190.84	5131.29	87.17	
19373.07	10650.00	10654.00	0.77	23.84	23.84	5284.32	5224.69	88.62	
19473.07	10650.00	10654.00	0.77	23.84	23.84	5378.04	5318.32	90.06	
19573.07	10650.00	10654.00	0.77	23.84	23.84	5471.98	5412.17	91.50	
19673.07	10650.00	10654.00	0.77	23.84	23.84	5566.13	5506.24	92.94	
19773.07	10650.00	10654.00	0.77	23.84	23.84	5660.48	5600.51	94.39	
19873.07	10650.00	10654.00	0.77	23.84	23.84	5755.02	5694.97	95.84	
19973.07	10650.00	10654.00	0.77	23.84	23.84	5849.74	5789.61	97.29	
20073.07	10650.00	10654.00	0.77	23.84	23.84	5944.64	5884.43	98.74	
20173.07	10650.00	10654.00	0.77	23.84	23.84	6039.70	5979.42	100.20	
20273.07	10650.00	10654.00	0.77	23.84	23.84	6134.91	6074.56	101.65	
20373.07	10650.00	10654.00	0.77	23.84	23.84	6230.28	6169.86	103.11	
20473.07	10650.00	10654.00	0.77	23.84	23.84	6325.79	6265.29	104.57	
20573.07	10650.00	10654.00	0.77	23.84	23.84	6421.44	6360.87	106.02	
20673.07	10650.00	10654.00	0.77	23.84	23.84	6517.21	6456.58	107.48	
20773.07	10650.00	10654.00	0.77	23.84	23.84	6613.12	6552.41	108.93	
20873.07	10650.00	10654.00	0.77	23.84	23.84	6709.14	6648.36	110.39	
20973.07	10650.00	10654.00	0.77	23.84	23.84	6805.27	6744.43	111.84	
21073.07	10650.00	10654.00	0.77	23.84	23.84	6901.52	6840.60	113.30	
21173.07	10650.00	10654.00	0.77	23.84	23.84	6997.87	6936.89	114.75	
21273.07	10650.00	10654.00	0.77	23.84	23.84	7094.33	7033.27	116.20	
21373.07	10650.00	10654.00	0.77	23.84	23.84	7190.87	7129.75	117.65	
21473.07	10650.00	10654.00	0.77	23.84	23.84	7287.52	7226.33	119.10	
21573.07	10650.00	10654.00	0.77	23.84	23.84	7384.25	7322.99	120.54	
21673.07	10650.00	10654.00	0.77	23.84	23.84	7481.07	7419.74	121.99	
21773.07	10650.00	10654.00	0.77	23.84	23.84	7577.97	7516.57	123.43	
21873.07	10650.00	10654.00	0.77	23.84	23.84	7674.95	7613.48	124.87	
21973.07	10650.00	10654.00	0.77	23.84	23.84	7772.01	7710.47	126.31	
22073.07	10650.00	10654.00	0.77	23.84	23.84	7869.14	7807.53	127.73	
22173.07	10650.00	10654.00	0.77	23.84	23.84	7966.34	7904.64	129.12	
22273.07	10650.00	10654.00	0.77	23.84	23.84	8063.61	8001.82	130.50	
22347.61	10650.00	10654.00	0.77	23.84	23.84	8136.16	8074.31	131.54	
Secondary Well : Fighting Okra 18-19 Fed 21H (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
11973.07	9643.13	9691.29	184.17	21.16	17.98	3354.61	3312.27	79.23	
12073.07	9650.46	9701.56	340.65	21.19	17.85	3417.76	3375.43	80.73	
12173.07	9658.28	9712.75	342.62	21.24	17.72	3467.78	3425.55	82.12	
12273.07	9666.33	9724.52	343.78	21.28	17.62	3503.34	3461.15	83.05	
12373.07	9674.37	9736.58	344.34	21.33	17.51	3523.55	3481.52	83.84	
12473.07	9682.18	9748.62	344.41	21.38	17.39	3527.92	3486.05	84.24	
12573.07	9689.66	9760.46	346.91	21.43	17.26	3516.64	3474.90	84.24	
12673.07	9696.99	9772.39	351.27	21.48	17.11	3491.36	3449.78	83.98	
12773.07	9704.01	9784.18	355.40	21.53	16.97	3452.91	3411.55	83.49	

SD Anti-Collision Report

Secondary Well : Fighting Okra 18-19 Fed 21H (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
12873.07	9710.55	9795.50	359.77	21.58	16.82	3402.32	3361.18	82.70	
12973.07	9716.75	9806.58	0.02	21.64	16.70	3346.34	3305.39	81.71	
13073.07	9722.93	9817.98	0.02	21.71	16.60	3292.14	3251.25	80.51	
13173.07	9729.06	9829.70	0.02	21.78	16.49	3239.82	3199.02	79.41	
13273.07	9735.13	9841.75	0.02	21.85	16.37	3189.46	3148.78	78.41	
13373.07	9741.11	9854.12	0.02	21.92	16.24	3141.13	3100.58	77.46	
13473.07	9746.97	9866.82	0.02	21.99	16.09	3094.93	3054.37	76.32	
13573.07	9752.70	9879.83	0.02	22.06	15.94	3050.92	3010.42	75.32	
13673.07	9758.26	9893.16	0.02	22.14	15.84	3009.21	2968.72	74.32	
13773.07	9763.63	9906.81	0.02	22.22	15.74	2969.86	2929.20	73.04	
13873.07	9768.77	9920.75	0.02	22.32	15.63	2932.95	2892.21	71.99	
13973.07	9773.67	9934.98	0.02	22.42	15.50	2898.58	2857.71	70.93	
14073.07	9778.28	9949.49	0.02	22.52	15.36	2866.81	2825.79	69.89	
14173.07	9782.57	9964.27	0.02	22.62	15.27	2837.72	2796.44	68.75	
14273.07	9786.53	9979.29	0.02	22.72	15.20	2811.37	2769.87	67.75	
14373.07	9790.12	9994.53	0.02	22.82	15.11	2787.84	2745.96	66.57	
14473.07	9793.31	10009.99	0.02	22.94	15.02	2767.18	2724.97	65.56	
14573.07	9796.08	10025.62	0.02	23.07	14.92	2749.46	2706.93	64.65	
14673.07	9798.41	10041.41	0.02	23.19	14.91	2734.70	2691.73	63.64	
14773.07	9800.28	10057.33	0.02	23.32	14.88	2722.97	2679.45	62.58	
14873.07	9801.67	10073.34	0.02	23.45	14.84	2714.12	2670.15	61.73	
14973.07	9802.57	10089.43	0.02	23.57	14.78	2708.29	2663.83	60.92	
15073.07	9802.98	10105.56	0.02	23.70	14.82	2705.54	2660.49	60.05	
15173.07	9803.00	10179.28	0.02	24.36	14.95	2705.16	2659.44	59.16	
15273.07	9803.00	10279.28	0.02	25.33	15.14	2704.94	2658.54	58.30	
15373.07	9803.00	10379.28	0.02	26.39	15.37	2704.71	2657.63	57.45	
15473.07	9803.00	10479.28	0.02	27.53	15.62	2704.49	2656.65	56.53	
15573.07	9803.00	10579.28	0.02	28.74	15.91	2704.26	2655.56	55.53	
15673.07	9803.00	10679.28	0.02	30.01	16.22	2704.04	2654.46	54.54	
15773.07	9803.00	10779.28	0.02	31.34	16.56	2703.81	2653.33	53.56	
15873.07	9803.00	10879.28	0.02	32.72	16.93	2703.59	2652.19	52.60	
15973.07	9803.00	10979.28	0.02	34.13	17.31	2703.36	2651.01	51.64	
16073.07	9803.00	11079.28	0.02	35.59	17.72	2703.14	2649.82	50.70	
16173.07	9803.00	11179.28	0.02	37.08	18.15	2702.91	2648.60	49.77	
16273.07	9803.00	11279.28	0.02	38.60	18.60	2702.68	2647.36	48.85	
16373.07	9803.00	11379.28	0.02	40.14	19.06	2702.46	2646.10	47.95	
16473.07	9803.00	11479.28	0.02	41.70	19.54	2702.23	2644.82	47.06	
16573.07	9803.00	11579.28	0.02	43.29	20.03	2702.01	2643.53	46.20	
16673.07	9803.00	11679.28	0.02	44.90	20.51	2701.78	2642.24	45.37	
16773.07	9803.00	11779.28	0.02	46.52	21.10	2701.56	2640.84	44.49	
16873.07	9803.00	11879.28	0.02	48.15	21.64	2701.33	2639.48	43.67	
16973.07	9803.00	11979.28	0.02	49.80	22.12	2701.11	2638.18	42.92	
17073.07	9803.00	12079.28	0.02	51.46	22.73	2700.88	2636.74	42.11	
17173.07	9803.00	12179.28	0.02	53.14	23.31	2700.66	2635.34	41.34	
17273.07	9803.00	12279.28	0.02	54.82	23.89	2700.43	2633.91	40.60	
17373.07	9803.00	12379.28	0.02	56.51	24.48	2700.21	2632.47	39.86	
17473.07	9803.00	12479.28	0.02	58.21	25.07	2699.98	2631.01	39.14	
17573.07	9803.00	12579.28	0.01	59.92	25.67	2699.76	2629.54	38.45	
17673.07	9803.00	12679.27	0.01	61.63	26.28	2699.53	2628.06	37.77	
17773.07	9803.00	12779.27	0.01	63.35	26.90	2699.31	2626.58	37.11	
17873.07	9803.00	12879.27	0.01	65.08	27.52	2699.08	2625.08	36.48	
17973.07	9803.00	12979.27	0.01	66.81	28.14	2698.86	2623.58	35.85	
18073.07	9803.00	13079.27	0.01	68.54	28.77	2698.63	2622.08	35.25	
18173.07	9803.00	13179.27	0.01	70.29	29.41	2698.41	2620.56	34.66	
18273.07	9803.00	13279.27	0.01	72.03	30.05	2698.18	2619.04	34.09	
18373.07	9803.00	13379.27	0.01	73.78	30.69	2697.95	2617.51	33.54	
18473.07	9803.00	13479.27	0.01	75.53	31.34	2697.73	2615.98	33.00	
18573.07	9803.00	13579.27	0.01	77.29	31.99	2697.50	2614.44	32.47	

5D Anti-Collision Report

Secondary Well : Fighting Okra 18-19 Fed 21H (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
18673.07	9803.00	13679.27	0.01	79.05	32.65	2697.28	2612.90	31.96	
18773.07	9803.00	13779.27	0.01	80.81	33.31	2697.05	2611.35	31.47	
18873.07	9803.00	13879.27	0.01	82.58	33.97	2696.83	2609.79	30.99	
18973.07	9803.00	13979.27	0.01	84.35	34.63	2696.60	2608.23	30.52	
19073.07	9803.00	14079.27	0.01	86.12	35.30	2696.38	2606.67	30.06	
19173.07	9803.00	14179.27	0.01	87.89	35.97	2696.15	2605.10	29.61	
19273.07	9803.00	14279.27	0.01	89.66	36.64	2695.93	2603.53	29.18	
19373.07	9803.00	14379.27	0.01	91.44	37.32	2695.70	2601.96	28.76	
19473.07	9803.00	14479.27	0.01	93.22	37.99	2695.48	2600.38	28.35	
19573.07	9803.00	14579.27	0.01	95.00	38.67	2695.25	2598.80	27.94	
19673.07	9803.00	14679.27	0.01	96.78	39.35	2695.03	2597.22	27.55	
19773.07	9803.00	14779.27	0.01	98.57	40.03	2694.80	2595.63	27.17	
19873.07	9803.00	14879.27	0.01	100.35	40.72	2694.58	2594.04	26.80	
19973.07	9803.00	14979.27	0.01	102.14	41.40	2694.35	2592.44	26.44	
20073.07	9803.00	15079.27	0.01	103.93	42.09	2694.13	2590.85	26.09	
20173.07	9803.00	15179.27	0.01	105.72	42.78	2693.90	2589.25	25.74	
20273.07	9803.00	15279.27	0.01	107.51	43.47	2693.67	2587.65	25.41	
20373.07	9803.00	15379.27	0.01	109.30	44.16	2693.45	2586.04	25.08	
20473.07	9803.00	15479.27	0.01	111.10	44.86	2693.22	2584.44	24.76	
20573.07	9803.00	15579.27	0.01	112.89	45.55	2693.00	2582.83	24.44	
20673.07	9803.00	15679.27	0.01	114.69	46.25	2692.77	2581.22	24.14	
20773.07	9803.00	15779.27	0.00	116.48	46.94	2692.55	2579.60	23.84	
20873.07	9803.00	15879.27	0.00	118.28	47.64	2692.32	2577.99	23.55	
20973.07	9803.00	15979.27	0.00	120.08	48.34	2692.10	2576.37	23.26	
21073.07	9803.00	16079.27	0.00	121.88	49.04	2691.87	2574.75	22.98	
21173.07	9803.00	16179.27	0.00	123.68	49.74	2691.65	2573.13	22.71	
21273.07	9803.00	16279.27	0.00	125.48	50.44	2691.42	2571.51	22.45	
21373.07	9803.00	16379.27	0.00	127.28	51.15	2691.20	2569.89	22.18	
21473.07	9803.00	16479.27	0.00	129.08	51.85	2690.97	2568.26	21.93	
21573.07	9803.00	16579.26	0.00	130.89	52.55	2690.75	2566.64	21.68	
21673.07	9803.00	16679.26	0.00	132.69	53.26	2690.52	2565.01	21.44	
21773.07	9803.00	16779.26	0.00	134.50	53.97	2690.30	2563.38	21.20	
21873.07	9803.00	16879.26	0.00	136.30	54.67	2690.07	2561.75	20.96	
21973.07	9803.00	16979.26	0.00	138.11	55.38	2689.85	2560.11	20.73	
22073.07	9803.00	17079.26	0.00	139.91	56.09	2689.62	2558.48	20.51	
22173.07	9803.00	17179.26	0.00	141.72	56.80	2689.39	2556.85	20.29	
22273.07	9803.00	17279.26	0.00	143.53	57.51	2689.17	2555.21	20.07	
22347.61	9803.00	17353.81	0.00	144.87	58.03	2689.00	2553.99	19.92	

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

GeoDec4 v2.1.0.0

Report Date: May 13, 2015
Job Number: _____
Customer: Devon Energy
Well Name: Fighting Okra 18-19 Fed 71H
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: 382937.52 US Survey Foot	Latitude: 32.050143 Degree
East: 794421.25 US Survey Foot	Longitude: -103.51647 Degree
Convergence: 0.43°	
Declination: 7.20°	
Total Correction: 6.77°	
Datum Transformation: none	

Geodetic Location WGS84

MSL Elevation = 0 m
Latitude = 32° 03' 00.52" N
Longitude = 103° 30' 59.29" W

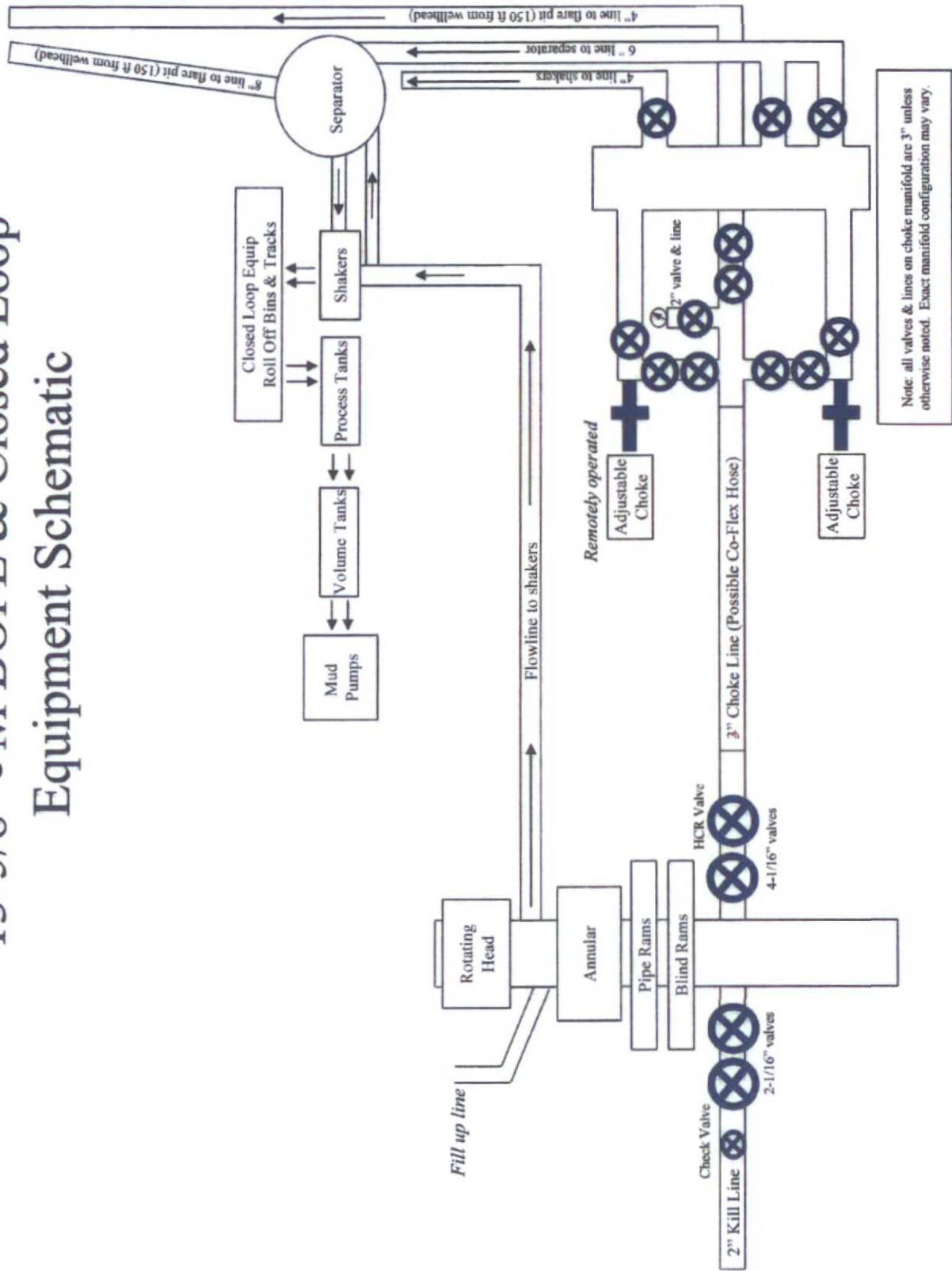
Magnetic Declination = 7.20 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6792
Local Field Strength = 48045 nT	Magnetic Vector X = 23894 nT
Magnetic Dip = 59.92 deg	Magnetic Vector Y = 3019 nT
Magnetic Model = bggm2014.dat	Magnetic Vector Z = 41573 nT
Run Date = October 15, 2015	Magnetic Vector H = 24084 nT

Signed: _____ Date: _____

© 2013 Weatherford

Warning: This information is controlled, and any printed version is deemed as uncontrolled unless suitably endorsed by a controlling authority or accompanied by a controlled table of contents in order to ensure adequate revision control.

13-5/8" 5M BOPE & Closed Loop Equipment Schematic





Fluid Technology

ContiTech Beattie Corp.
Website: www.contitechbeattie.com

Monday, June 14, 2010

RE: Drilling & Production Hoses
Lifting & Safety Equipment

To Helmerich & Payne,

A Continental ContiTech hose assembly can perform as intended and suitable for the application regardless of whether the hose is secured or unsecured in its configuration. As a manufacturer of High Pressure Hose Assemblies for use in Drilling & Production, we do offer the corresponding lifting and safety equipment, this has the added benefit of easing the lifting and handling of each hose assembly whilst affording hose longevity by ensuring correct handling methods and procedures as well as securing the hose in the unlikely event of a failure; but in no way does the lifting and safety equipment affect the performance of the hoses providing the hoses have been handled and installed correctly. It is good practice to use lifting & safety equipment but not mandatory.

Should you have any questions or require any additional information/clarifications then please do not hesitate to contact us.

ContiTech Beattie is part of the Continental AG Corporation and can offer the full support resources associated with a global organization.

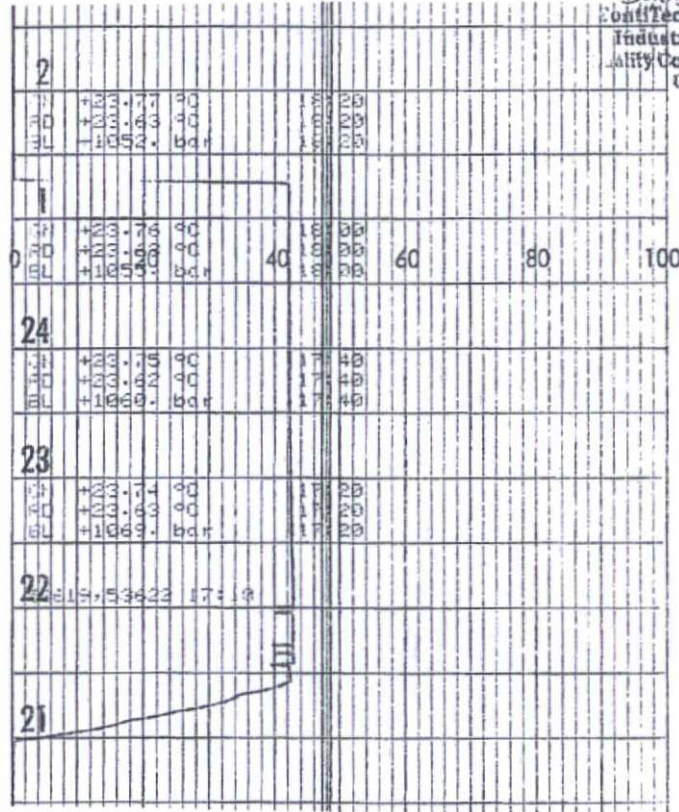
Best regards,

Robin Hodgson
Sales Manager
ContiTech Beattie Corp

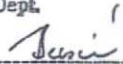
ContiTech Beattie Corp,
11535 Brittmoore Park Drive,
Houston, TX 77041
Phone: +1 (832) 327-0141
Fax: +1 (832) 327-0148
www.contitechbeattie.com

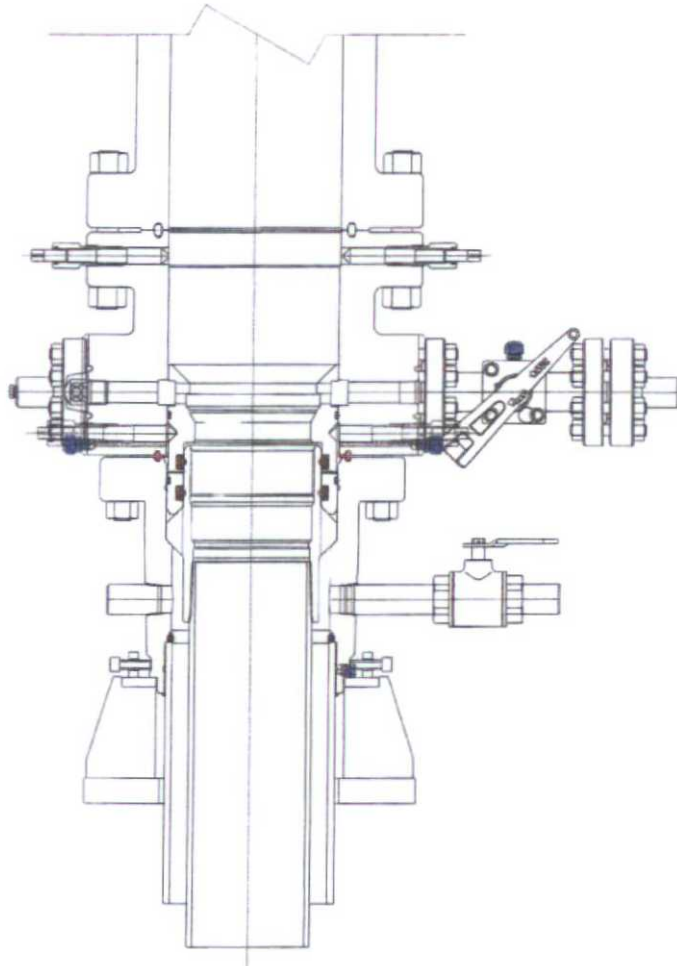


HARTMANN &



ContiTech Rubber
Industrial Kft.
Quality Control Dept.
(2)

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°: 1713	
PURCHASER: ContiTech Beattie Co.				P.O. N°: 002808	
CONTITECH ORDER N°: 426127		HOSE TYPE: 3" ID Choke and Kill Hose			
HOSE SERIAL N°: 53622		NOMINAL / ACTUAL LENGTH: 10,67 m			
W.P. 68,96 MPa 10000 psi		T.P. 103,4 MPa 15000 psi		Duration: 60 min.	
Pressure test with water at ambient temperature See attachment. (1 page) ↑ 10 mm = 10 Min. → 10 mm = 25 MPa					
COUPLINGS Type	Serial N°		Quality	Heat N°	
3" coupling with 4 1/16" Flange end	5503 2029		AISI 4130 AISI 4130	N1590P 27566	
INFOCHIP INSTALLED				API Spec 16 C Temperature rate:"B"	
All metal parts are flawless				Hose conform to NACE MR 01-75	
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.					
STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.					
COUNTRY OF ORIGIN HUNGARY/EU					
Date: 25. August. 2008	Inspector		Quality Control ContiTech Rubber Industrial Kft. Quality Control Dept.  		



PRIMARY MODE

DEVON ENERGY

ARTESIA
S.E.N.M

13 3/8 X 9 5/8

QUOTE LAYOUT
F18648
REF: DM100161737
DM100151315

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REVISIONS

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

DESCRIPTION

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

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

FMC Technologies

DRAWING NUMBER
DM100161771-2A

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

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

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

FMC Technologies

DRAWING NUMBER
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